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MEMORANDUM

To: Darlene Stringer, MDEQ
Matt Gamble, MDEQ

FROM: Jeni Quigley/eb/76/Pwl. *JQ*

CC: David Favero, RACER

REF. No.: 017360-T05Y14

DATE: December 19, 2014

RE: **Fall 2014 Semi-Annual Groundwater Monitoring Report
Former Grand Rapids Metal Plant
Wyoming, Michigan**

Conestoga-Rovers & Associates (CRA), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, conducted groundwater monitoring activities at the former Grand Rapids Metal Plant property located at 300 36th Street SW in Wyoming, Michigan (Site). The samples were collected during the field event conducted between October 3, 2014 and October 15, 2014. Sampling methodology was utilized 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. Modifications to the aforementioned Work Plan were proposed in a memorandum submitted to the MDEQ on June 3, 2014. The proposed changes included a reduction in the number of monitoring locations and sample analysis parameters. The MDEQ approved the proposed modifications on August 24, 2014. This memorandum (Memorandum) has been prepared to present the results of the Fall 2014 Semi-Annual Groundwater Monitoring activities.

Fall 2014 Monitoring Activities

The 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 MW27-11, MW58-13, MW59-14, and MW60-14; the measurement of static groundwater levels in all monitoring wells; and the monitoring for the potential presence and measurement of light non-aqueous phase liquid (LNAPL) levels, if present, in select Site monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, and MW52-12.

A total of 45 groundwater samples, including quality assurance/quality control (QA/QC) samples, were collected from 40 monitoring wells. A total of three surface water samples were collected from culvert locations C-1, C-2 and C-3. All samples were collected between October 7, 2014 and October 15, 2014 for analysis of TCL VOCs, TCL SVOCs, and/or TAL metals, for monitoring wells identified above. Table 1 presents a summary of the samples collected during the Fall 2014 semi-annual sampling event.

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 milliliters (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 an YSI® water quality meter 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. Groundwater quality measurements are presented in Table 2.

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.

Groundwater Elevations and LNAPL

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 LNAPL levels, if present, were measured relative to the top of each riser. Table 3 presents static water levels for October 3, 2014. Figure 1 presents the approximate groundwater flow direction for October 3, 2014. Based on the review of measured groundwater elevations before and after building demolition and slab removal, no significant changes in groundwater levels beneath the former building have occurred. Groundwater flow direction in the northeast portion of the former plant shows some deviation from previous monitoring events with some mounding in the area. The presence of sheet piles in the vicinity of the former plant basement area and the cessation of the operation of the former foundation drainage system along the eastern portion of the former Main Manufacturing Building may be the cause of altered groundwater flow patterns in this area.

No measurable thickness of LNAPL was detected in monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, or MW52-12. Sheen has historically been observed in monitoring wells in this area; however, no sheen was observed in any of the monitoring wells during this event.

Analytical Results

Analytical results for groundwater samples were evaluated against the Generic Residential and Non-Residential Cleanup Criteria and Screening Levels established in Part 7 of Administrative Rules, effective December 30, 2013, pursuant to Part 201, Environmental Remediation, 1994 PA 451, as amended. Analytical results for groundwater compared to the aforementioned criteria are presented in Table 4. Analytical results for surface water samples collected are presented in Table 5. Analytical results for groundwater samples are also presented on Figure 2.

A QA/QC data validation was conducted on the analytical data. Copies of analytical data and data validation memorandum summarizing the results of the data validation are presented in Attachment A and Attachment B, respectively. Estimated concentrations and rejected data are identified in the tables of the

memorandum which include qualifications due to contamination in the laboratory method blank, surrogate recoveries outside the laboratory control limits, laboratory control sample recovery, matrix spike/matrix spike duplicate percent recovery and relative percent difference, and field duplicate variability. Based on the review of the data validation memorandum, the data produced by ALS-MI were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted in the tables in the data validation memoranda. Data was qualified for zinc for the groundwater samples collected from MW58-13 and MW60-14 due to detection of these analytes in the method blank. Data was qualified for vinyl chloride for the groundwater sample collected from MW38-12 due to outlying laboratory control sample results. Data was qualified for acetone, 2-butanone and methylene chloride for the groundwater sample collected from MW52-12 due to outlying matrix spike/matrix spike duplicate results.

Analytical results for groundwater samples are generally consistent with concentrations and constituents identified during previous monitoring events, with the exception that concentrations of TCE in samples collected from MW35-12 have increased from pre-Main Manufacturing Building slab removal concentrations (i.e., prior to 2012). The detected concentrations only exceed the Part 201 Residential and Non-Residential Drinking Water Criteria. Figures presenting analytical groundwater results from the previous five semi-annual monitoring events are presented in Attachment C.

Tetrachloroethene and cis-1,2-Dichloroethene were detected in culvert samples at concentrations consistent with historical monitoring events. As a screening tool, the results of the surface water samples were compared to the Rule 57 Water Quality Values. Surface water sample results do not exceed any of the Rule 57 values.

Please contact David Favero at (734) 879-9525 or Jeni Quigley at (269) 685-5181 with any questions regarding this Memorandum or the enclosed information.

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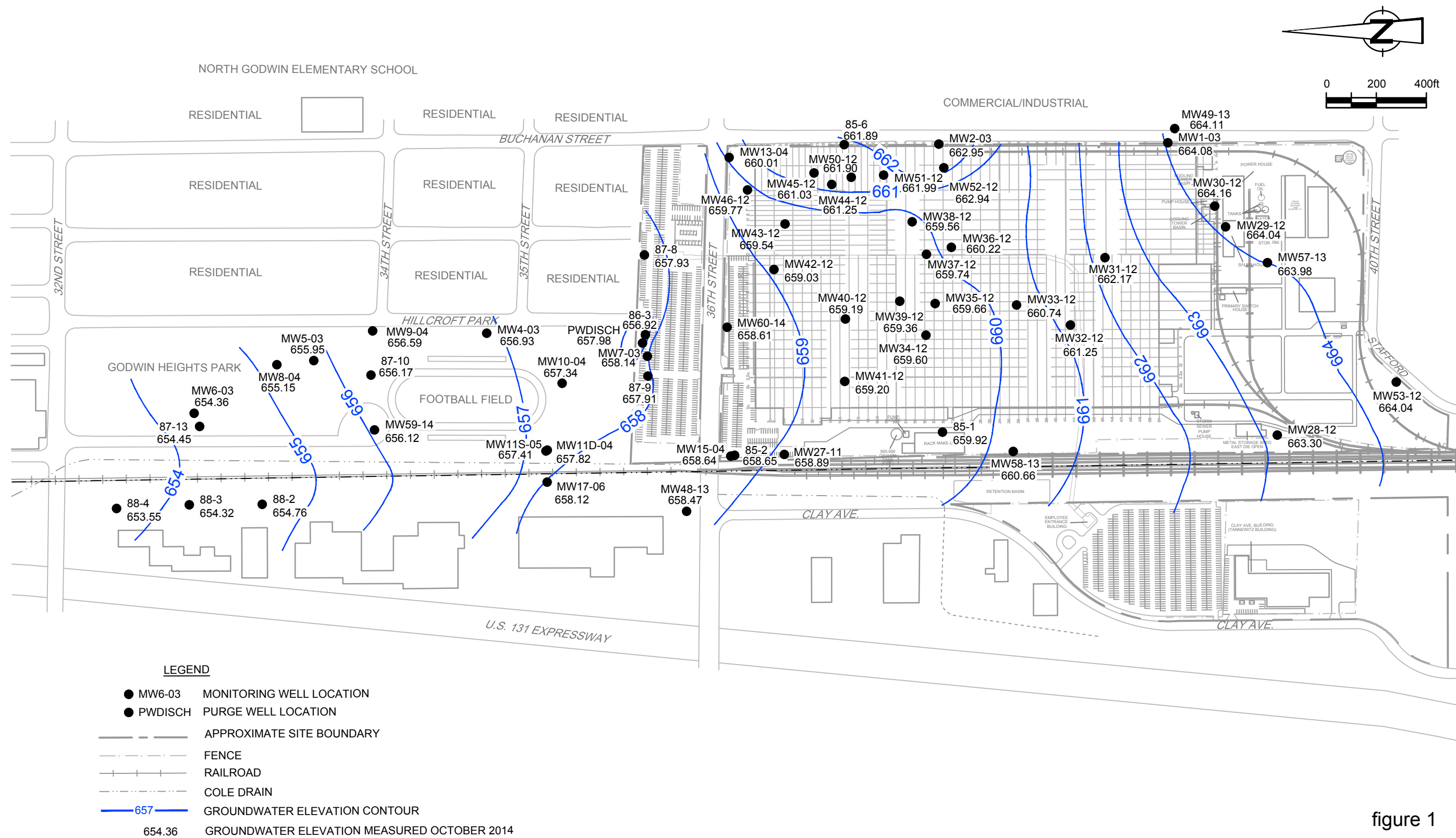


figure 1

GROUNDWATER CONTOURS - OCTOBER 2014
SEMI-ANNUAL GROUNDWATER MONITORING
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan



SAMPLE SUMMARY
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
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 (ft bgs)</u>			<u>QC Sample</u>	<u>Analysis</u>
10/7/2014	SW-017360-100714-MR-001	C-2	Surface Water	-	to	-		VOCs
10/7/2014	SW-017360-100714-MR-002	C-3	Surface Water	-	to	-		VOCs
10/7/2014	SW-017360-100714-MR-003	C-1	Surface Water	-	to	-		VOCs
10/7/2014	WG-017360-100714-MR-004	MW6-03	Groundwater	13	to	18		VOCs
10/7/2014	WG-017360-100714-MR-005	MW6-03	Groundwater	13	to	18	Duplicate (-005)	VOCs
10/7/2014	WG-017360-100714-MR-006	87-13	Groundwater	40	to	43	MS/MSD	VOCs
10/7/2014	WG-017360-100714-MR-007	MW11S-05	Groundwater	5	to	10		VOCs
10/7/2014	WG-017360-100714-MR-008	MW11D-04	Groundwater	40	to	45		VOCs
10/8/2014	WG-017360-100814-MR-009	MW10-04	Groundwater	33	to	38		VOCs
10/8/2014	WG-017360-100814-MR-010	MW4-03	Groundwater	52	to	57		VOCs
10/8/2014	WG-017360-100814-MR-011	MW59-14	Groundwater	30	to	35		VOCs, Metals
10/8/2014	WG-017360-100814-MR-012	87-10	Groundwater	29	to	32		VOCs
10/8/2014	WG-017360-100814-MR-013	MW7-03	Groundwater	36	to	41		VOCs
10/8/2014	WG-017360-100814-MR-014	86-3	Groundwater	41.5	to	46.5		VOCs
10/8/2014	WG-017360-100814-MR-015	87-8	Groundwater	19.7	to	22.7		VOCs
10/9/2014	WG-017360-100914-MR-016	MW9-04	Groundwater	43	to	48		VOCs
10/9/2014	WG-017360-100914-MR-017	MW8-04	Groundwater	30	to	35		VOCs
10/9/2014	WG-017360-100914-MR-018	MW8-04	Groundwater	30	to	35	Duplicate (-017)	VOCs
10/9/2014	WG-017360-100914-MR-019	MW2-03	Groundwater	22	to	27		VOCs
10/9/2014	WG-017360-100914-MR-020	MW49-13	Groundwater	34	to	39		VOCs
10/9/2014	WG-017360-100914-MR-021	MW28-12	Groundwater	14	to	19		VOCs
10/9/2014	WG-017360-100914-MR-022	85-6	Groundwater	19.5	to	24.5		VOCs, SVOCs
10/9/2014	WG-017360-100914-MR-023	MW30-12	Groundwater	25	to	30		VOCs
10/9/2014	WG-017360-100914-MR-024	MW32-12	Groundwater	13.9	to	23.9		VOCs
10/9/2014	TB-017360-100914-MR-025	Trip Blank	Groundwater	-	to	-		VOCs
10/13/2014	WG-017360-101314-MR-026	MW48-13	Groundwater	46	to	51		VOCs
10/13/2014	WG-017360-101314-MR-027	MW17-06	Groundwater	51	to	56		VOCs
10/13/2014	WG-017360-101314-MR-028	MW17-06	Groundwater	51	to	56	Duplicate (-027)	VOCs
10/13/2014	WG-017360-101314-MR-029	MW58-13	Groundwater	13.5	to	18.5		VOCs, Metals
10/13/2014	WG-017360-101314-MR-030	MW27-11	Groundwater	12.5	to	17.5		VOCs, Metals
10/13/2014	WG-017360-101314-MR-031	MW27-11	Groundwater	12.5	to	17.5	Duplicate (-031)	VOCs, Metals
10/13/2014	WG-017360-101314-MR-032	MW15-04	Groundwater	25	to	30		VOCs
10/13/2014	WG-017360-101314-MR-033	MW60-14	Groundwater	21	to	26		VOCs, Metals
10/13/2014	WG-017360-101314-MR-034	MW42-12	Groundwater	21	to	31		VOCs
10/13/2014	WG-017360-101314-MR-035	MW40-12	Groundwater	45	to	50		VOCs
10/13/2014	WG-017360-101314-MR-036	MW41-12	Groundwater	18.3	to	28.3		VOCs
10/14/2014	WG-017360-101414-MR-037	MW34-12	Groundwater	14.4	to	24.4		VOCs
10/14/2014	WG-017360-101414-MR-038	MW33-12	Groundwater	31	to	36		VOCs
10/14/2014	WG-017360-101414-MR-039	MW35-12	Groundwater	24.6	to	29.6	MS/MSD	VOCs
10/14/2014	WG-017360-101414-MR-040	MW37-12	Groundwater	19.4	to	29.4		VOCs
10/14/2014	WG-017360-101414-MR-041	MW38-12	Groundwater	20	to	30		VOCs
10/14/2014	WG-017360-101414-MR-042	MW43-12	Groundwater	15	to	25		VOCs
10/15/2014	WG-017360-101514-MR-043	MW52-12	Groundwater	16.7	to	26.7	MS/MSD	VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-044	MW51-12	Groundwater	17	to	27		VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-045	MW51-12	Groundwater	17	to	27	Duplicate (-044)	VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-046	MW50-12	Groundwater	17	to	27		VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-047	MW44-12	Groundwater	18.5	to	28.5		VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-048	MW45-12	Groundwater	19.1	to	29.1		VOCs, SVOCs
10/15/2014	WG-017360-101514-MR-049	MW46-12	Groundwater	20.2	to	30.2		VOCs, SVOCs
10/15/2014	TB-017360-101514-MR-050	Trip Blank	Groundwater	-	to	-		VOCs

Notes:

VOCs - Target Compound List Volatile Organic Compounds

SVOCs - Target Compound List Semi-Volatile Organic Compounds

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

QC - Quality Control

MS/MSD - Matrix Spike /Matrix Spike Duplicate

TABLE 2

GROUNDWATER QUALITY PARAMETERS
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

<i>Monitoring Well Location</i>	<i>Date</i>	<i>Time (hours:minutes)</i>	<i>Purge Rate (mL/per min.)</i>	<i>Water Level (ft. BTOR)</i>	<i>Temperature (°C)</i>	<i>Conductivity (mS/cm)</i>	<i>Turbidity (NTU)</i>	<i>DO (mg/L)</i>	<i>pH (Units)</i>	<i>ORP (mv)</i>
MW6-03	10/7/2014	12:46	160	11.40	14.90	1.134	0.67	5.82	7.33	159.5
		12:51	160	11.40	14.79	1.135	0.56	5.84	7.34	161.0
		12:56	160	11.40	15.07	1.130	0.79	5.78	7.35	162.8
MW87-13	10/7/2014	13:21	150	9.89	15.86	1.414	0.41	1.49	7.31	155.9
		13:26	150	9.89	15.66	1.416	0.47	1.49	7.31	150.6
		13:31	150	9.89	16.00	1.410	0.59	1.42	7.32	146.8
MW11s-05	10/7/2014	14:58	110	6.57	17.08	1.439	0.61	0.03	7.02	67.1
		15:03	110	6.57	17.37	1.435	0.68	0.07	7.02	64.0
		15:08	110	6.57	17.55	1.436	0.54	0.13	7.02	61.0
MW11d-04	10/7/2014	15:45	120	6.10	15.67	2.213	0.71	0.39	7.21	68.6
		15:50	120	6.10	15.81	2.213	0.70	0.38	7.21	68.2
		15:55	120	6.10	15.79	2.213	0.62	0.41	7.21	67.3
MW10-04	10/8/2014	11:16	120	9.07	15.84	1.893	0.43	0.21	7.32	186.8
		11:21	120	9.07	15.97	1.894	0.50	0.23	7.32	183.3
		11:26	120	9.07	15.95	1.893	0.41	0.23	7.32	179.1
MW4-03	10/8/2014	10:30	110	22.17	15.18	1.181	1.72	0.78	7.22	203.7
		10:35	110	22.17	15.16	1.181	1.32	0.83	7.24	198.9
		10:40	110	22.17	15.13	1.181	0.72	0.84	7.25	194.1
MW59-14	10/8/2014	12:27	100	10.77	16.57	1.567	0.89	0.07	7.35	180.8
		12:32	100	10.77	16.31	1.572	0.75	0.05	7.35	182.4
		12:37	100	10.77	16.53	1.565	0.70	0.06	7.35	176.1
MW87-10	10/8/2014	13:04	100	11.78	16.92	1.765	4.26	0.16	7.34	-12.2
		13:09	100	11.78	17.06	1.765	4.77	0.17	7.34	-18.8
		13:14	100	11.78	17.06	1.764	3.50	0.15	7.34	-22.0
MW7-03	10/8/2014	15:05	100	16.65	16.94	2.220	7.17	1.39	7.46	95.2
		15:10	100	16.65	16.99	2.219	7.54	1.37	7.46	94.3
		15:15	100	16.65	17.04	2.213	7.20	1.33	7.46	93.6
MW86-3	10/8/2014	15:53	100	19.05	18.53	1.300	1.36	0.02	7.53	61.3
		15:58	100	19.05	18.58	1.304	1.60	0.03	7.53	53.3
		16:03	100	19.05	18.55	1.308	1.51	0.02	7.53	52.1

TABLE 2

GROUNDWATER QUALITY PARAMETERS
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

<i>Monitoring Well Location</i>	<i>Date</i>	<i>Time (hours:minutes)</i>	<i>Purge Rate (mL/per min.)</i>	<i>Water Level (ft. BTOR)</i>	<i>Temperature (°C)</i>	<i>Conductivity (mS/cm)</i>	<i>Turbidity (NTU)</i>	<i>DO (mg/L)</i>	<i>pH (Units)</i>	<i>ORP (mv)</i>
MW87-8	10/8/2014	16:43	100	18.76	16.97	1.393	1.51	0.06	7.42	70.0
		16:48	100	18.76	17.14	1.388	1.41	0.09	7.42	68.5
		16:53	100	18.76	16.94	1.392	1.34	0.07	7.42	66.6
MW9-04	10/9/2014	10:05	100	21.68	14.12	1.248	0.66	3.88	7.31	198.7
		10:10	100	21.68	14.10	1.249	0.87	3.87	7.32	198.6
		10:15	100	21.68	14.11	1.250	0.74	3.85	7.32	198.5
MW8-04	10/9/2014	10:49	100	19.22	14.49	1.303	1.16	3.90	7.47	206.9
		10:54	100	19.22	14.57	1.303	1.20	3.87	7.48	205.5
		10:59	100	19.22	14.15	1.306	1.12	3.75	7.48	203.7
MW2-03	10/9/2014	11:56	100	17.40	15.81	1.914	1.01	6.33	7.51	229.1
		12:01	100	17.40	15.81	1.912	0.96	5.95	7.48	228.2
		12:06	100	17.40	15.65	1.907	0.80	5.88	7.48	226.3
MW49-13	10/9/2014	12:41	110	14.45	15.26	1.056	0.710	1.78	7.37	213.1
		12:46	110	14.45	15.28	1.053	0.600	1.84	7.37	210.3
		12:51	110	14.45	15.30	1.051	0.570	1.78	7.37	207.7
MW28-12	10/9/2014	15:15	100	13.40	16.71	0.927	1.14	6.90	7.49	200.7
		15:20	100	13.40	16.69	0.928	1.01	7.02	7.49	200.4
		15:25	100	13.40	16.73	0.928	1.10	7.18	7.48	198.8
MW85-6	10/9/2014	13:54	100	17.50	16.64	1.102	3.72	2.34	7.42	202.7
		13:59	100	17.50	16.70	1.095	3.42	2.24	7.41	199.2
		14:04	100	17.50	16.72	1.094	2.80	2.22	7.41	195.7
MW30-12	10/9/2014	15:59	100	12.71	16.27	1.288	1.25	3.32	7.47	191.4
		16:04	100	12.71	16.37	1.288	1.13	3.31	7.49	189.0
		16:09	100	12.71	16.46	1.290	1.10	3.34	7.48	185.8
MW32-12	10/9/2014	16:47	100	13.97	16.09	0.567	0.85	2.73	8.00	173.3
		16:51	100	13.97	16.36	0.565	0.79	2.80	8.01	171.4
		16:57	100	13.97	16.10	0.566	0.67	2.80	8.00	170.6
MW48-13	10/13/2014	10:10	100	12.90	14.91	1.772	0.89	0.45	7.09	138.9
		10:15	100	12.90	14.92	1.773	0.66	0.45	7.10	136.0
		10:20	100	12.90	14.86	1.774	0.70	0.42	7.10	133.1

TABLE 2

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FORMER GRAND RAPIDS METAL PLANT
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<i>Monitoring Well Location</i>	<i>Date</i>	<i>Time (hours:minutes)</i>	<i>Purge Rate (mL/per min.)</i>	<i>Water Level (ft. BTOR)</i>	<i>Temperature (°C)</i>	<i>Conductivity (mS/cm)</i>	<i>Turbidity (NTU)</i>	<i>DO (mg/L)</i>	<i>pH (Units)</i>	<i>ORP (mv)</i>
MW17-06	10/13/2014	10:49	100	7.12	14.54	1.952	1.27	0.26	7.26	146.8
		10:54	100	7.12	14.56	1.955	1.10	0.25	7.26	143.9
		10:59	100	7.12	14.65	1.955	1.20	0.26	7.26	141.5
MW58-13	10/13/2014	12:21	100	14.56	15.75	0.621	1.01	6.28	6.96	205.0
		12:26	100	14.56	15.69	0.626	1.04	6.27	6.97	207.8
		12:31	100	14.56	15.70	0.622	1.00	6.28	6.98	210.5
MW27-11	10/13/2014	13:17	100	12.76	17.14	1.084	1.72	0.46	6.70	206.6
		13:22	100	12.76	17.09	1.085	1.24	0.49	6.70	203.8
		13:27	100	12.76	17.06	1.082	1.22	0.48	6.70	201.3
MW15-04	10/13/2014	14:07	100	13.31	15.19	1.392	1.74	0.34	7.28	195.90
		14:12	100	13.31	15.16	1.392	1.97	0.32	7.28	191.20
		14:17	100	13.31	15.21	1.390	1.69	0.31	7.28	186.60
MW60-14	10/13/2014	14:45	100	18.98	16.58	1.148	9.01	1.33	7.37	185.1
		14:50	100	18.98	16.62	1.152	8.40	1.32	7.36	183.4
		14:55	100	18.98	16.61	1.156	8.71	1.32	7.35	181.5
MW42-12	10/13/2014	15:34	100	21.80	16.87	1.032	3.98	3.24	7.24	198.4
		15:39	100	21.80	16.97	1.031	2.75	3.41	7.23	197.3
		15:44	100	21.80	17.07	1.030	1.71	3.17	7.23	196.3
MW40-12	10/13/2014	16:25	100	21.95	17.39	1.217	1.98	0.28	7.40	180.7
		16:30	100	21.95	17.36	1.217	1.65	0.26	7.40	175.9
		16:35	100	21.95	17.33	1.219	1.62	0.28	7.40	171.3
MW41-12	10/13/2014	17:03	110	18.65	15.18	1.490	1.35	0.58	6.82	192.7
		17:08	110	18.65	15.21	1.493	1.28	0.54	6.82	188.8
		17:13	110	18.65	15.22	1.493	1.34	0.57	6.83	185.2
MW34-12	10/14/2014	9:46	100	14.86	16.01	0.525	1.55	7.62	7.35	98.4
		9:51	100	14.86	16.06	0.525	1.60	7.54	7.37	98.1
		9:56	100	14.86	15.97	0.524	1.41	7.46	7.41	99.4
MW33-12	10/14/2014	10:45	110	17.63	15.54	0.986	3.08	0.07	9.03	11.9
		10:50	110	17.63	15.53	0.988	3.18	0.06	9.03	17.3
		10:55	110	17.63	15.52	0.988	3.49	0.06	9.03	9.6

TABLE 2

**GROUNDWATER QUALITY PARAMETERS
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

<i>Monitoring Well Location</i>	<i>Date</i>	<i>Time (hours:minutes)</i>	<i>Purge Rate (mL/per min.)</i>	<i>Water Level (ft. BTOR)</i>	<i>Temperature (°C)</i>	<i>Conductivity (mS/cm)</i>	<i>Turbidity (NTU)</i>	<i>DO (mg/L)</i>	<i>pH (Units)</i>	<i>ORP (mv)</i>
MW35-12	10/14/2014	12:11	100	17.22	16.92	0.718	3.73	4.79	7.46	100.7
		12:16	100	17.22	16.58	0.720	3.86	4.94	7.47	104.3
		12:21	100	17.22	16.64	0.719	3.68	4.88	7.47	107.2
MW37-12	10/14/2014	13:25	100	20.28	15.61	0.947	1.74	2.76	7.52	87.6
		13:30	100	20.28	15.64	0.947	1.81	2.72	7.53	89.1
		13:35	100	20.28	15.67	0.948	1.61	2.78	7.53	89.8
MW38-12	10/14/2014	14:36	100	20.68	15.85	1.660	1.01	0.02	7.29	-114.2
		14:41	100	20.68	15.80	1.666	0.80	0.02	7.29	-115.5
		14:46	100	20.68	15.82	1.668	0.88	0.01	7.29	-116.2
MW43-12	10/14/2014	15:33	120	15.96	15.49	1.272	0.81	0.03	7.20	-19.0
		15:38	120	15.96	15.46	1.272	0.99	0.03	7.20	-16.1
		15:43	120	15.96	15.53	1.272	0.95	0.05	7.20	-13.8
MW52-12	10/15/2014	10:29	100	16.49	15.71	1.281	2.52	0.46	8.58	-298.2
		10:34	100	16.49	15.69	1.283	2.33	0.43	8.60	-302.3
		10:39	100	16.49	15.65	1.285	2.40	0.45	8.62	-306.1
MW51-12	10/15/2014	11:33	110	18.17	15.93	1.163	9.43	0.34	9.78	-171.9
		11:38	110	18.17	16.07	1.165	10.2	0.35	9.78	-170.2
		11:43	110	18.17	16.22	1.164	10.0	0.34	9.74	-167.2
MW50-12	10/15/2014	12:47	100	17.95	16.21	1.538	2.88	0.46	7.35	-34.7
		12:52	100	17.95	15.95	1.543	2.57	0.48	7.35	-32.4
		12:57	100	17.95	15.95	1.538	2.60	0.49	7.35	-30.4
MW44-12	10/15/2014	13:29	120	18.09	16.54	0.861	4.10	0.20	8.25	-178.2
		13:34	120	18.09	16.46	0.863	3.83	0.21	8.28	-179.7
		13:39	120	18.09	16.72	0.865	3.75	0.20	8.29	-181.4
MW45-12	10/15/2014	14:04	110	17.62	16.49	1.332	3.80	0.18	7.34	-130.5
		14:09	110	17.62	16.45	1.334	3.52	0.17	7.35	-132.1
		14:14	110	17.62	16.29	1.337	3.61	0.13	7.35	-132.8
MW46-12	10/15/2014	14:48	120	20.25	15.03	1.343	1.74	6.19	7.25	-14.1
		14:53	120	20.25	14.93	1.343	1.04	6.11	7.26	-8.9
		14:58	120	20.25	14.92	1.336	0.67	5.99	7.26	-4.5

**GROUNDWATER QUALITY PARAMETERS
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

<i>Monitoring Well Location</i>	<i>Date</i>	<i>Time (hours:minutes)</i>	<i>Purge Rate (mL/per min.)</i>	<i>Water Level (ft. BTOR)</i>	<i>Temperature (°C)</i>	<i>Conductivity (mS/cm)</i>	<i>Turbidity (NTU)</i>	<i>DO (mg/L)</i>	<i>pH (Units)</i>	<i>ORP (mv)</i>
Notes:										
ft. BTOR - feet below top of riser										
DO - dissolved oxygen										
ORP - oxidation-reduction potential										

TABLE 3

**GROUNDWATER ELEVATION DATA
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

<u>Location</u>	<u>LNAPL Thickness (ft.)</u>	<u>Groundwater Elevation</u> ⁽²⁾	<u>Depth Below Top of Riser</u>
85-1		659.92	15.11
85-2		658.65	12.98
85-6	(1)	661.89	17.7
86-3		656.92	18.88
87-8		657.93	18.85
87-9		657.91	15.22
88-2		654.76	11.04
88-3		654.32	10.04
88-4		653.55	7.65
87-10		656.17	11.59
87-13		654.45	9.12
MW1-03		664.08	14.6
MW2-03		662.95	17.65
MW4-03		656.93	22.19
MW5-03		655.95	19.87
MW6-03		654.36	11.03
MW7-03		658.14	16.65
MW8-04		655.15	19.17
MW9-04		656.59	21.7
MW10-04		657.34	8.95
MW11D-04		657.82	5.45
MW11S-05		657.41	6.17
MW13-04		660.01	18.25
MW15-04		658.64	13.05
MW17-06		658.12	6.59
MW27-11		658.89	12.42
MW28-12		663.30	13.24
MW29-12		664.04	11.65
MW30-12		664.16	12.5
MW31-12		662.17	13.25
MW32-12		661.25	14.52
MW33-12		660.74	17.97
MW34-12		659.60	14.98
MW35-12		659.66	17.4
MW36-12		660.22	19.77
MW37-12		659.74	20.56
MW38-12		659.56	20.95
MW39-12		659.36	19.82
MW40-12		659.19	22.07
MW41-12		659.20	18.67
MW42-12		659.03	21.91
MW43-12		659.54	16.18
MW44-12	(1)	661.25	18.24
MW45-12	(1)	661.03	17.8
MW46-12	(1)	659.77	20.48
MW48-13		658.47	12.63
MW49-13		664.11	14.67
MW50-12	(1)	661.90	18.21
MW51-12	(1)	661.99	18.45
MW52-12	(1)	662.94	16.75
MW53-12		664.04	13.2
MW57-13		663.98	13.5
MW58-13		660.66	14.57
MW59-14		656.12	10.43
MW60-14		658.61	19.02
PWDISCH		657.98	19.81

Notes:

⁽¹⁾ No measurable LNAPL was identified in the wells.

⁽²⁾ Groundwater elevations measured in feet above mean sea level.

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:

Sample Identification:

Sample Date:

Sample Type:

Segment Depth

MDEQ Generic Groundwater Cleanup Criteria: Residential and Nonresidential ⁽¹⁾

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface ⁽²⁾	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Water Solubility	Flammability and Explosivity Screening Levels
	a	b	c	d	e	f	g
Units							
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	ug/L 200	200	89	660000	1300000	1330000	ID
1,1,2,2-Tetrachloroethane	ug/L 8.5	35	78	12000	77000	2970000	ID
1,1,2-Trichloroethane	ug/L 5	5	330	17000	110000	4420000	NA
1,1-Dichloroethane	ug/L 880	2500	740	1000000	2300000	5060000	380000
1,1-Dichloroethene	ug/L 7	7	130	200	1300	2250000	97000
1,2,4-Trichlorobenzene	ug/L 70	70	99	300000	300000	300000	NA
1,2-Dibromo-3-chloropropane (DBCP)	ug/L 0.2	0.2	NA	220	1200	1230	NA
1,2-Dibromoethane (Ethylene dibromide)	ug/L 0.05	0.05	5.7	2400	15000	4200000	ID
1,2-Dichlorobenzene	ug/L 600	600	13	160000	160000	156000	NA
1,2-Dichloroethane	ug/L 5	5	360	9600	59000	8520000	2500000
1,2-Dichloropropane	ug/L 5	5	230	16000	36000	2800000	550000
1,3-Dichlorobenzene	ug/L 6.6	19	28	18000	41000	111000	ID
1,4-Dichlorobenzene	ug/L 75	75	17	16000	74000	73800	NA
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 13000	38000	2200	240000000	240000000	240000000	ID
2-Hexanone	ug/L 1000	2900	ID	4200000	8700000	16000000	NA
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 1800	5200	ID	20000000	20000000	20000000	ID
Acetone	ug/L 730	2100	1700	1000000000	1000000000	1000000000	15000000
Benzene	ug/L 5	5	200	5600	35000	1750000	68000
Bromodichloromethane	ug/L 80	80	ID	4800	37000	6740000	ID
Bromoform	ug/L 80	80	ID	470000	3100000	3100000	ID
Bromomethane (Methyl bromide)	ug/L 10	29	35	4000	9000	14500000	ID
Carbon disulfide	ug/L 800	2300	ID	250000	550000	1190000	13000
Carbon tetrachloride	ug/L 5	5	45	370	2400	793000	ID
Chlorobenzene	ug/L 100	100	25	210000	470000	472000	160000
Chloroethane	ug/L 430	1700	1100	5700000	5700000	5740000	110000
Chloroform (Trichloromethane)	ug/L 80	80	350	28000	180000	7920000	ID
Chloromethane (Methyl chloride)	ug/L 260	1100	ID	8600	45000	6340000	36000
cis-1,2-Dichloroethene	ug/L 70	70	620	93000	210000	3500000	530000
cis-1,3-Dichloropropene	ug/L NA	NA	NA	NA	NA	NA	NA
Cyclohexane	ug/L NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	ug/L 80	80	ID	14000	110000	2600000	ID
Dichlorodifluoromethane (CFC-12)	ug/L 1700	4800	ID	220000	300000	300000	ID
Ethylbenzene	ug/L 74	74	18	110000	170000	169000	43000
Isopropyl benzene	ug/L 800	2300	28	56000	56000	56000	29000
Methyl acetate	ug/L NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	ug/L NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	ug/L 40	40	7100	47000000	47000000	46800000	ID
Methylene chloride	ug/L 5	5	1500	220000	1400000	17000000	ID
Styrene	ug/L 100	100	80	170000	310000	310000	140000
Tetrachloroethene	ug/L 5	5	60	25000	170000	200000	ID
Toluene	ug/L 790	790	270	530000	530000	526000	61000
trans-1,2-Dichloroethene	ug/L 100	100	1500	85000	200000	6300000	230000
trans-1,3-Dichloropropene	ug/L NA	NA	NA	NA	NA	NA	NA
Trichloroethene	ug/L 5	5	200	2200	4900	1100000	ID
Trichlorofluoromethane (CFC-11)	ug/L 2600	7300	NA	1100000	1100000	1100000	ID
Trifluorotrichloroethane (Freon 113)	ug/L 170000	170000	32	170000	170000	170000	ID
Vinyl chloride	ug/L 2	2	13	1100	13000	2760000	33000
Xylenes (total)	ug/L 280	280	41	190000	190000	186000	70000

TABLE 4

**GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Sample Location:**Sample Identification:****Sample Date:****Sample Type:****Segment Depth****MDEQ Generic Groundwater Cleanup Criteria: Residential and Nonresidential⁽¹⁾**

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface ⁽²⁾	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Water Solubility	Flammability and Explosivity Screening Levels
	a	b	c	d	e	f	g
Units							
Semi-Volatile Organic Compounds (SVOCs)							
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/L	730	2100	NLV	NLV	1200000	ID
2,4,6-Trichlorophenol	ug/L	120	470	NLV	NLV	800000	ID
2,4-Dichlorophenol	ug/L	73	210	NLV	NLV	4500000	ID
2,4-Dimethylphenol	ug/L	370	1000	NLV	NLV	7870000	ID
2,4-Dinitrophenol	ug/L	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	ug/L	7.7	32	NLV	NLV	270000	ID
2,6-Dinitrotoluene	ug/L	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	ug/L	1800	5200	ID	ID	6740	ID
2-Chlorophenol	ug/L	45	130	ID	ID	22000000	ID
2-Methylnaphthalene	ug/L	260	750	25000	25000	24600	ID
2-Methylphenol	ug/L	370	1000	NLV	NLV	28000000	NA
2-Nitroaniline	ug/L	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ug/L	20	58	NLV	NLV	2500000	ID
3,3'-Dichlorobenzidine	ug/L	1.1	4.3	NLV	NLV	3110	ID
3-Nitroaniline	ug/L	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	ug/L	20	20	NLV	NLV	200000	ID
4-Bromophenyl phenyl ether	ug/L	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	ug/L	150	420	NLV	NLV	3900000	ID
4-Chloroaniline	ug/L	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ug/L	NA	NA	NA	NA	NA	NA
4-Methylphenol	ug/L	370	1000	NLV	NLV	28000000	NA
4-Nitroaniline	ug/L	NA	NA	NA	NA	NA	NA
4-Nitrophenol	ug/L	NA	NA	NA	NA	NA	NA
Acenaphthene	ug/L	1300	3800	4200	4200	4240	ID
Acenaphthylene	ug/L	52	150	3900	3900	3930	ID
Acetophenone	ug/L	1500	4400	6100000	6100000	6100000	ID
Anthracene	ug/L	43	43	43	43	43.4	ID
Atrazine	ug/L	3	3	NLV	NLV	70000	ID
Benzaldehyde	ug/L	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	ug/L	2.1	8.5	NLV	NLV	9.4	ID
Benzo(a)pyrene	ug/L	5	5	NLV	NLV	1.62	ID
Benzo(b)fluoranthene	ug/L	1.5	1.5	ID	ID	1.5	ID
Benzo(g,h,i)perylene	ug/L	1	1	NLV	NLV	0.26	ID
Benzo(k)fluoranthene	ug/L	1	1	NLV	NLV	0.8	ID
Biphenyl (1,1-Biphenyl)	ug/L	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	ug/L	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	ug/L	2	8.3	38000	210000	17200000	17000000
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	6	6	NLV	NLV	340	NA
Butyl benzylphthalate (BBP)	ug/L	1200	2700	NLV	NLV	2690	ID
Caprolactam	ug/L	5800	17000	NLV	NLV	5250000000	NA
Carbazole	ug/L	85	350	NLV	NLV	7480	ID
Chrysene	ug/L	1.6	1.6	ID	ID	1.6	ID
Dibenz(a,h)anthracene	ug/L	2	2	NLV	NLV	2.49	ID
Dibenzofuran	ug/L	ID	ID	10000	10000	10000	ID
Diethyl phthalate	ug/L	5500	16000	NLV	NLV	1080000	NA
Dimethyl phthalate	ug/L	73000	210000	NLV	NLV	4190000	NA
Di-n-butylphthalate (DBP)	ug/L	880	2500	NLV	NLV	11200	NA
Di-n-octyl phthalate (DnOP)	ug/L	130	380	NLV	NLV	3000	ID
Fluoranthene	ug/L	210	210	210	210	206	ID
Fluorene	ug/L	880	2000	2000	2000	1980	ID

TABLE 4

**GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Sample Location:**Sample Identification:****Sample Date:****Sample Type:****Segment Depth****MDEQ Generic Groundwater Cleanup Criteria: Residential and Nonresidential** ⁽¹⁾

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface ⁽²⁾	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Water Solubility	Flammability and Explosivity Screening Levels
	a	b	c	d	e	f	g
Units							
SVOCs (continued)							
Hexachlorobenzene	ug/L 1	1	0.2	440	3000	6200	ID
Hexachlorobutadiene	ug/L 15	42	0.053	1600	3200	3230	ID
Hexachlorocyclopentadiene	ug/L 50	50	ID	130	420	1800	ID
Hexachloroethane	ug/L 7.3	21	6.7	27000	50000	50000	ID
Indeno(1,2,3-cd)pyrene	ug/L 2	2	ID	NLV	NLV	0.022	ID
Isophorone	ug/L 770	3100	1300	NLV	NLV	12000000	NA
Naphthalene	ug/L 520	1500	11	31000	31000	31000	NA
Nitrobenzene	ug/L 3.4	9.6	180	280000	550000	2090000	NA
N-Nitrosodi-n-propylamine	ug/L 5	5	NA	NLV	NLV	9890000	ID
N-Nitrosodiphenylamine	ug/L 270	1100	NA	NLV	NLV	35100	ID
Pentachlorophenol	ug/L 1	1	2.8	NLV	NLV	1850000	ID
Phenanthrene	ug/L 52	150	2	1000	1000	1000	ID
Phenol	ug/L 4400	13000	450	NLV	NLV	82800000	NA
Pyrene	ug/L 140	140	ID	140	140	135	ID

Metals

Antimony	ug/L 6	6	130	NLV	NLV	NA	ID
Arsenic	ug/L 10	10	10	NLV	NLV	NA	ID
Barium	ug/L 2000	2000	1600	NLV	NLV	NA	ID
Beryllium	ug/L 4	4	54	NLV	NLV	NA	ID
Cadmium	ug/L 5	5	5.6	NLV	NLV	NA	ID
Chromium	ug/L 100	100	11	NLV	NLV	NA	ID
Cobalt	ug/L 40	100	100	NLV	NLV	NA	ID
Copper	ug/L 1000	1000	26	NLV	NLV	NA	ID
Lead	ug/L 4	4	54	NLV	NLV	NA	ID
Manganese	ug/L 50	50	5800	NLV	NLV	NA	ID
Mercury	ug/L 2	2	0.0013	56	56	56	ID
Molybdenum	ug/L 73	210	3200	NLV	NLV	NA	ID
Nickel	ug/L 100	100	150	NLV	NLV	NA	ID
Selenium	ug/L 50	50	5	NLV	NLV	NA	ID
Silver	ug/L 34	98	0.2	NLV	NLV	NA	ID
Thallium	ug/L 2	2	3.7	NLV	NLV	NA	ID
Vanadium	ug/L 4.5	62	27	NLV	NLV	NA	ID
Zinc	ug/L 2400	5000	340	NLV	NLV	NA	ID

Notes:

⁽¹⁾ Cleanup Criteria Requirements for Response Activity, Administrative Rules R299.1 to R299.50 effective December 30, 2013, pursuant to Part 201 of 1994 PA 451 as amended.

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

U - Not detected at the associated reporting limit.

J - Estimated concentration.

UJ - Not detected; associated reporting limit is estimated.

R - Rejected.

-- Parameter was not analyzed.

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

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	85-6	86-3	87-8	87-10	87-13	MW2-03
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015	WG-017360-100814-MR-012	WG-017360-100714-MR-006	WG-017360-100914-MR-019
Sample Date:	10/9/2014	10/8/2014	10/8/2014	10/8/2014	10/7/2014	10/9/2014
Sample Type:						
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS	(29-32) ft BGS	(40-43) ft BGS	(22-27) ft BGS
Units						
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 8.2 ^{ab}	1.0 U	1.0 U	1.0 U	1.0 U	5.8 ^{ab}
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.7	3.7	1.0 U	3.2	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	85-6	86-3	87-8	87-10	87-13	MW2-03
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015	WG-017360-100814-MR-012	WG-017360-100714-MR-006	WG-017360-100914-MR-019
Sample Date:	10/9/2014	10/8/2014	10/8/2014	10/8/2014	10/7/2014	10/9/2014
Sample Type:						
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS	(29-32) ft BGS	(40-43) ft BGS	(22-27) ft BGS
Units						
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L 5.3 U	--	--	--	--	--
2,4,5-Trichlorophenol	ug/L 5.3 U	--	--	--	--	--
2,4,6-Trichlorophenol	ug/L 5.3 U	--	--	--	--	--
2,4-Dichlorophenol	ug/L 11 U	--	--	--	--	--
2,4-Dimethylphenol	ug/L 5.3 U	--	--	--	--	--
2,4-Dinitrophenol	ug/L 5.3 U	--	--	--	--	--
2,4-Dinitrotoluene	ug/L 5.3 U	--	--	--	--	--
2,6-Dinitrotoluene	ug/L 5.3 U	--	--	--	--	--
2-Chloronaphthalene	ug/L 5.3 U	--	--	--	--	--
2-Chlorophenol	ug/L 5.3 U	--	--	--	--	--
2-Methylnaphthalene	ug/L 5.3 U	--	--	--	--	--
2-Methylphenol	ug/L 5.3 U	--	--	--	--	--
2-Nitroaniline	ug/L 21 U	--	--	--	--	--
2-Nitrophenol	ug/L 5.3 U	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/L 5.3 U	--	--	--	--	--
3-Nitroaniline	ug/L 21 U	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/L 21 U	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/L 5.3 U	--	--	--	--	--
4-Chloro-3-methylphenol	ug/L 5.3 U	--	--	--	--	--
4-Chloroaniline	ug/L 21 U	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/L 5.3 U	--	--	--	--	--
4-Methylphenol	ug/L 5.3 U	--	--	--	--	--
4-Nitroaniline	ug/L 21 U	--	--	--	--	--
4-Nitrophenol	ug/L 21 U	--	--	--	--	--
Acenaphthene	ug/L 5.3 U	--	--	--	--	--
Acenaphthylene	ug/L 5.3 U	--	--	--	--	--
Acetophenone	ug/L 1.1 U	--	--	--	--	--
Anthracene	ug/L 5.3 U	--	--	--	--	--
Atrazine	ug/L 1.1 U	--	--	--	--	--
Benzaldehyde	ug/L 1.1 U	--	--	--	--	--
Benzo(a)anthracene	ug/L 5.3 U	--	--	--	--	--
Benzo(a)pyrene	ug/L 5.3 U	--	--	--	--	--
Benzo(b)fluoranthene	ug/L 5.3 U	--	--	--	--	--
Benzo(g,h,i)perylene	ug/L 5.3 U	--	--	--	--	--
Benzo(k)fluoranthene	ug/L 5.3 U	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L 5.3 U	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/L 5.3 U	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/L 5.3 U	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L 5.3 U	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/L 5.3 U	--	--	--	--	--
Caprolactam	ug/L 11 U	--	--	--	--	--
Carbazole	ug/L 11 U	--	--	--	--	--
Chrysene	ug/L 5.3 U	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L 5.3 U	--	--	--	--	--
Dibenzofuran	ug/L 5.3 U	--	--	--	--	--
Diethyl phthalate	ug/L 21 U	--	--	--	--	--
Dimethyl phthalate	ug/L 21 U	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/L 5.3 U	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L 5.3 U	--	--	--	--	--
Fluoranthene	ug/L 5.3 U	--	--	--	--	--
Fluorene	ug/L 5.3 U	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	85-6	86-3	87-8	87-10	87-13	MW2-03
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015	WG-017360-100814-MR-012	WG-017360-100714-MR-006	WG-017360-100914-MR-019
Sample Date:	10/9/2014	10/8/2014	10/8/2014	10/8/2014	10/7/2014	10/9/2014
Sample Type:						
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS	(29-32) ft BGS	(40-43) ft BGS	(22-27) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L 5.3 U	--	--	--	--	--
Hexachlorobutadiene	ug/L 5.3 U	--	--	--	--	--
Hexachlorocyclopentadiene	ug/L 21 U	--	--	--	--	--
Hexachloroethane	ug/L 5.3 U	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L 5.3 U	--	--	--	--	--
Isophorone	ug/L 5.3 U	--	--	--	--	--
Naphthalene	ug/L 5.3 U	--	--	--	--	--
Nitrobenzene	ug/L 5.3 U	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/L 5.3 U	--	--	--	--	--
N-Nitrosodiphenylamine	ug/L 5.3 U	--	--	--	--	--
Pentachlorophenol	ug/L 21 U	--	--	--	--	--
Phenanthrene	ug/L 5.3 U	--	--	--	--	--
Phenol	ug/L 5.3 U	--	--	--	--	--
Pyrene	ug/L 5.3 U	--	--	--	--	--
Metals						
Antimony	ug/L --	--	--	--	--	--
Arsenic	ug/L --	--	--	--	--	--
Barium	ug/L --	--	--	--	--	--
Beryllium	ug/L --	--	--	--	--	--
Cadmium	ug/L --	--	--	--	--	--
Chromium	ug/L --	--	--	--	--	--
Cobalt	ug/L --	--	--	--	--	--
Copper	ug/L --	--	--	--	--	--
Lead	ug/L --	--	--	--	--	--
Manganese	ug/L --	--	--	--	--	--
Mercury	ug/L --	--	--	--	--	--
Molybdenum	ug/L --	--	--	--	--	--
Nickel	ug/L --	--	--	--	--	--
Selenium	ug/L --	--	--	--	--	--
Silver	ug/L --	--	--	--	--	--
Thallium	ug/L --	--	--	--	--	--
Vanadium	ug/L --	--	--	--	--	--
Zinc	ug/L --	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW4-03	MW6-03	MW6-03	MW7-03	MW8-04	MW8-04
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005	WG-017360-100814-MR-013	WG-017360-100914-MR-017	WG-017360-100914-MR-018
Sample Date:	10/8/2014	10/7/2014	10/7/2014	10/8/2014	10/9/2014	10/9/2014
Sample Type:			Duplicate			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS	(36-41) ft BGS	(30-35) ft BGS	(30-35) ft BGS
Units						
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.7	1.7
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.8	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW4-03	MW6-03	MW6-03	MW7-03	MW8-04	MW8-04
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005	WG-017360-100814-MR-013	WG-017360-100914-MR-017	WG-017360-100914-MR-018
Sample Date:	10/8/2014	10/7/2014	10/7/2014	10/8/2014	10/9/2014	10/9/2014
Sample Type:			Duplicate			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS	(36-41) ft BGS	(30-35) ft BGS	(30-35) ft BGS
Units						
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--	--	--	--
2,4,5-Trichlorophenol	ug/L	--	--	--	--	--
2,4,6-Trichlorophenol	ug/L	--	--	--	--	--
2,4-Dichlorophenol	ug/L	--	--	--	--	--
2,4-Dimethylphenol	ug/L	--	--	--	--	--
2,4-Dinitrophenol	ug/L	--	--	--	--	--
2,4-Dinitrotoluene	ug/L	--	--	--	--	--
2,6-Dinitrotoluene	ug/L	--	--	--	--	--
2-Chloronaphthalene	ug/L	--	--	--	--	--
2-Chlorophenol	ug/L	--	--	--	--	--
2-Methylnaphthalene	ug/L	--	--	--	--	--
2-Methylphenol	ug/L	--	--	--	--	--
2-Nitroaniline	ug/L	--	--	--	--	--
2-Nitrophenol	ug/L	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/L	--	--	--	--	--
3-Nitroaniline	ug/L	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/L	--	--	--	--	--
4-Chloro-3-methylphenol	ug/L	--	--	--	--	--
4-Chloroaniline	ug/L	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--	--	--	--
4-Methylphenol	ug/L	--	--	--	--	--
4-Nitroaniline	ug/L	--	--	--	--	--
4-Nitrophenol	ug/L	--	--	--	--	--
Acenaphthene	ug/L	--	--	--	--	--
Acenaphthylene	ug/L	--	--	--	--	--
Acetophenone	ug/L	--	--	--	--	--
Anthracene	ug/L	--	--	--	--	--
Atrazine	ug/L	--	--	--	--	--
Benzaldehyde	ug/L	--	--	--	--	--
Benzo(a)anthracene	ug/L	--	--	--	--	--
Benzo(a)pyrene	ug/L	--	--	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--	--	--
Caprolactam	ug/L	--	--	--	--	--
Carbazole	ug/L	--	--	--	--	--
Chrysene	ug/L	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--	--	--
Dibenzofuran	ug/L	--	--	--	--	--
Diethyl phthalate	ug/L	--	--	--	--	--
Dimethyl phthalate	ug/L	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--	--	--
Fluoranthene	ug/L	--	--	--	--	--
Fluorene	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW4-03	MW6-03	MW6-03	MW7-03	MW8-04	MW8-04
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005	WG-017360-100814-MR-013	WG-017360-100914-MR-017	WG-017360-100914-MR-018
Sample Date:	10/8/2014	10/7/2014	10/7/2014	10/8/2014	10/9/2014	10/9/2014
Sample Type:			Duplicate			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS	(36-41) ft BGS	(30-35) ft BGS	(30-35) ft BGS
	Units					
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	--	--	--	--
Hexachlorobutadiene	ug/L	--	--	--	--	--
Hexachlorocyclopentadiene	ug/L	--	--	--	--	--
Hexachloroethane	ug/L	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--	--	--	--
Isophorone	ug/L	--	--	--	--	--
Naphthalene	ug/L	--	--	--	--	--
Nitrobenzene	ug/L	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--	--	--	--
N-Nitrosodiphenylamine	ug/L	--	--	--	--	--
Pentachlorophenol	ug/L	--	--	--	--	--
Phenanthrene	ug/L	--	--	--	--	--
Phenol	ug/L	--	--	--	--	--
Pyrene	ug/L	--	--	--	--	--
Metals						
Antimony	ug/L	--	--	--	--	--
Arsenic	ug/L	--	--	--	--	--
Barium	ug/L	--	--	--	--	--
Beryllium	ug/L	--	--	--	--	--
Cadmium	ug/L	--	--	--	--	--
Chromium	ug/L	--	--	--	--	--
Cobalt	ug/L	--	--	--	--	--
Copper	ug/L	--	--	--	--	--
Lead	ug/L	--	--	--	--	--
Manganese	ug/L	--	--	--	--	--
Mercury	ug/L	--	--	--	--	--
Molybdenum	ug/L	--	--	--	--	--
Nickel	ug/L	--	--	--	--	--
Selenium	ug/L	--	--	--	--	--
Silver	ug/L	--	--	--	--	--
Thallium	ug/L	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--
Zinc	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW9-04	MW10-04	MW11D-04	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/9/2014	10/8/2014	10/7/2014	10/7/2014	10/13/2014	10/13/2014
Sample Type:						
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Units						
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	2.3	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 0.74 J	1.0 U	0.78 J	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	48
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	78 ^{abc}
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.0 U	3.6	1.5	1.0 U	1.0 U	7.1 ^{ab}
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrachloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW9-04	MW10-04	MW11D-04	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/9/2014	10/8/2014	10/7/2014	10/7/2014	10/13/2014	10/13/2014
Sample Type:						
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Units						
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--	--	--	--
2,4,5-Trichlorophenol	ug/L	--	--	--	--	--
2,4,6-Trichlorophenol	ug/L	--	--	--	--	--
2,4-Dichlorophenol	ug/L	--	--	--	--	--
2,4-Dimethylphenol	ug/L	--	--	--	--	--
2,4-Dinitrophenol	ug/L	--	--	--	--	--
2,4-Dinitrotoluene	ug/L	--	--	--	--	--
2,6-Dinitrotoluene	ug/L	--	--	--	--	--
2-Chloronaphthalene	ug/L	--	--	--	--	--
2-Chlorophenol	ug/L	--	--	--	--	--
2-Methylnaphthalene	ug/L	--	--	--	--	--
2-Methylphenol	ug/L	--	--	--	--	--
2-Nitroaniline	ug/L	--	--	--	--	--
2-Nitrophenol	ug/L	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/L	--	--	--	--	--
3-Nitroaniline	ug/L	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/L	--	--	--	--	--
4-Chloro-3-methylphenol	ug/L	--	--	--	--	--
4-Chloroaniline	ug/L	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--	--	--	--
4-Methylphenol	ug/L	--	--	--	--	--
4-Nitroaniline	ug/L	--	--	--	--	--
4-Nitrophenol	ug/L	--	--	--	--	--
Acenaphthene	ug/L	--	--	--	--	--
Acenaphthylene	ug/L	--	--	--	--	--
Acetophenone	ug/L	--	--	--	--	--
Anthracene	ug/L	--	--	--	--	--
Atrazine	ug/L	--	--	--	--	--
Benzaldehyde	ug/L	--	--	--	--	--
Benzo(a)anthracene	ug/L	--	--	--	--	--
Benzo(a)pyrene	ug/L	--	--	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--	--	--
Caprolactam	ug/L	--	--	--	--	--
Carbazole	ug/L	--	--	--	--	--
Chrysene	ug/L	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--	--	--
Dibenzofuran	ug/L	--	--	--	--	--
Diethyl phthalate	ug/L	--	--	--	--	--
Dimethyl phthalate	ug/L	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--	--	--
Fluoranthene	ug/L	--	--	--	--	--
Fluorene	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW9-04	MW10-04	MW11D-04	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/9/2014	10/8/2014	10/7/2014	10/7/2014	10/13/2014	10/13/2014
Sample Type:						
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	--	--	--	--
Hexachlorobutadiene	ug/L	--	--	--	--	--
Hexachlorocyclopentadiene	ug/L	--	--	--	--	--
Hexachloroethane	ug/L	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--	--	--	--
Isophorone	ug/L	--	--	--	--	--
Naphthalene	ug/L	--	--	--	--	--
Nitrobenzene	ug/L	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--	--	--	--
N-Nitrosodiphenylamine	ug/L	--	--	--	--	--
Pentachlorophenol	ug/L	--	--	--	--	--
Phenanthrene	ug/L	--	--	--	--	--
Phenol	ug/L	--	--	--	--	--
Pyrene	ug/L	--	--	--	--	--
Metals						
Antimony	ug/L	--	--	--	--	--
Arsenic	ug/L	--	--	--	--	--
Barium	ug/L	--	--	--	--	--
Beryllium	ug/L	--	--	--	--	--
Cadmium	ug/L	--	--	--	--	--
Chromium	ug/L	--	--	--	--	--
Cobalt	ug/L	--	--	--	--	--
Copper	ug/L	--	--	--	--	--
Lead	ug/L	--	--	--	--	--
Manganese	ug/L	--	--	--	--	--
Mercury	ug/L	--	--	--	--	--
Molybdenum	ug/L	--	--	--	--	--
Nickel	ug/L	--	--	--	--	--
Selenium	ug/L	--	--	--	--	--
Silver	ug/L	--	--	--	--	--
Thallium	ug/L	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--
Zinc	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW17-06	MW27-11	MW27-11	MW28-12	MW30-12	MW32-12
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031	WG-017360-100914-MR-021	WG-017360-100914-MR-023	WG-017360-100914-MR-024
Sample Date:	10/13/2014	10/13/2014	10/13/2014	10/9/2014	10/9/2014	10/9/2014
Sample Type:	Duplicate		Duplicate			
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS	(14-19) ft BGS	(25-30) ft BGS	(13.9-23.9) ft BGS
	Units					
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U	4.8	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 48	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 78 ^{abc}	1.0 U	1.0 U	1.0 U	3.5	2.6
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 7.5 ^{ab}	1.9	1.9	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW17-06	MW27-11	MW27-11	MW28-12	MW30-12	MW32-12
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031	WG-017360-100914-MR-021	WG-017360-100914-MR-023	WG-017360-100914-MR-024
Sample Date:	10/13/2014	10/13/2014	10/13/2014	10/9/2014	10/9/2014	10/9/2014
Sample Type:	Duplicate		Duplicate			
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS	(14-19) ft BGS	(25-30) ft BGS	(13.9-23.9) ft BGS
	Units					
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--	--	--	--
2,4,5-Trichlorophenol	ug/L	--	--	--	--	--
2,4,6-Trichlorophenol	ug/L	--	--	--	--	--
2,4-Dichlorophenol	ug/L	--	--	--	--	--
2,4-Dimethylphenol	ug/L	--	--	--	--	--
2,4-Dinitrophenol	ug/L	--	--	--	--	--
2,4-Dinitrotoluene	ug/L	--	--	--	--	--
2,6-Dinitrotoluene	ug/L	--	--	--	--	--
2-Chloronaphthalene	ug/L	--	--	--	--	--
2-Chlorophenol	ug/L	--	--	--	--	--
2-Methylnaphthalene	ug/L	--	--	--	--	--
2-Methylphenol	ug/L	--	--	--	--	--
2-Nitroaniline	ug/L	--	--	--	--	--
2-Nitrophenol	ug/L	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/L	--	--	--	--	--
3-Nitroaniline	ug/L	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/L	--	--	--	--	--
4-Chloro-3-methylphenol	ug/L	--	--	--	--	--
4-Chloroaniline	ug/L	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--	--	--	--
4-Methylphenol	ug/L	--	--	--	--	--
4-Nitroaniline	ug/L	--	--	--	--	--
4-Nitrophenol	ug/L	--	--	--	--	--
Acenaphthene	ug/L	--	--	--	--	--
Acenaphthylene	ug/L	--	--	--	--	--
Acetophenone	ug/L	--	--	--	--	--
Anthracene	ug/L	--	--	--	--	--
Atrazine	ug/L	--	--	--	--	--
Benzaldehyde	ug/L	--	--	--	--	--
Benzo(a)anthracene	ug/L	--	--	--	--	--
Benzo(a)pyrene	ug/L	--	--	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--	--	--
Caprolactam	ug/L	--	--	--	--	--
Carbazole	ug/L	--	--	--	--	--
Chrysene	ug/L	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--	--	--
Dibenzofuran	ug/L	--	--	--	--	--
Diethyl phthalate	ug/L	--	--	--	--	--
Dimethyl phthalate	ug/L	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--	--	--
Fluoranthene	ug/L	--	--	--	--	--
Fluorene	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW17-06	MW27-11	MW27-11	MW28-12	MW30-12	MW32-12
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031	WG-017360-100914-MR-021	WG-017360-100914-MR-023	WG-017360-100914-MR-024
Sample Date:	10/13/2014	10/13/2014	10/13/2014	10/9/2014	10/9/2014	10/9/2014
Sample Type:	Duplicate		Duplicate			
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS	(14-19) ft BGS	(25-30) ft BGS	(13.9-23.9) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	--	--	--	--
Hexachlorobutadiene	ug/L	--	--	--	--	--
Hexachlorocyclopentadiene	ug/L	--	--	--	--	--
Hexachloroethane	ug/L	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--	--	--	--
Isophorone	ug/L	--	--	--	--	--
Naphthalene	ug/L	--	--	--	--	--
Nitrobenzene	ug/L	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--	--	--	--
N-Nitrosodiphenylamine	ug/L	--	--	--	--	--
Pentachlorophenol	ug/L	--	--	--	--	--
Phenanthrene	ug/L	--	--	--	--	--
Phenol	ug/L	--	--	--	--	--
Pyrene	ug/L	--	--	--	--	--
Metals						
Antimony	ug/L	--	2.2 J	2.3 J	--	--
Arsenic	ug/L	--	5 U	5 U	--	--
Barium	ug/L	--	47	46	--	--
Beryllium	ug/L	--	2 U	2 U	--	--
Cadmium	ug/L	--	0.15 J	0.1 J	--	--
Chromium	ug/L	--	0.4 J	0.43 J	--	--
Cobalt	ug/L	--	0.37 J	0.36 J	--	--
Copper	ug/L	--	5.4	5.1	--	--
Lead	ug/L	--	5 U	5 U	--	--
Manganese	ug/L	--	0.98 J	0.87 J	--	--
Mercury	ug/L	--	0.2 U	0.2 U	--	--
Molybdenum	ug/L	--	15	14	--	--
Nickel	ug/L	--	8	7.4	--	--
Selenium	ug/L	--	2.1 J	2 J	--	--
Silver	ug/L	--	5 U	5 U	--	--
Thallium	ug/L	--	5 U	5 U	--	--
Vanadium	ug/L	--	3.3 J	3.3 J	--	--
Zinc	ug/L	--	24	22	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW33-12	MW34-12	MW35-12	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014
Sample Type:						
Segment Depth						
	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
Units						
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 1.4 J	50 U	50 U	50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 2.0	1.0 U	1.0 U	1.0 U	8.0	2.1
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 2.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 3.0	4.3	37 ^{ab}	14 ^{ab}	1.0 U	7.2 ^{ab}
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrachloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	13 J ^{ab}	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW33-12	MW34-12	MW35-12	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014
Sample Type:						
Segment Depth	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
	Units					
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--	--	--	--
2,4,5-Trichlorophenol	ug/L	--	--	--	--	--
2,4,6-Trichlorophenol	ug/L	--	--	--	--	--
2,4-Dichlorophenol	ug/L	--	--	--	--	--
2,4-Dimethylphenol	ug/L	--	--	--	--	--
2,4-Dinitrophenol	ug/L	--	--	--	--	--
2,4-Dinitrotoluene	ug/L	--	--	--	--	--
2,6-Dinitrotoluene	ug/L	--	--	--	--	--
2-Chloronaphthalene	ug/L	--	--	--	--	--
2-Chlorophenol	ug/L	--	--	--	--	--
2-Methylnaphthalene	ug/L	--	--	--	--	--
2-Methylphenol	ug/L	--	--	--	--	--
2-Nitroaniline	ug/L	--	--	--	--	--
2-Nitrophenol	ug/L	--	--	--	--	--
3,3'-Dichlorobenzidine	ug/L	--	--	--	--	--
3-Nitroaniline	ug/L	--	--	--	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--	--	--	--
4-Bromophenyl phenyl ether	ug/L	--	--	--	--	--
4-Chloro-3-methylphenol	ug/L	--	--	--	--	--
4-Chloroaniline	ug/L	--	--	--	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--	--	--	--
4-Methylphenol	ug/L	--	--	--	--	--
4-Nitroaniline	ug/L	--	--	--	--	--
4-Nitrophenol	ug/L	--	--	--	--	--
Acenaphthene	ug/L	--	--	--	--	--
Acenaphthylene	ug/L	--	--	--	--	--
Acetophenone	ug/L	--	--	--	--	--
Anthracene	ug/L	--	--	--	--	--
Atrazine	ug/L	--	--	--	--	--
Benzaldehyde	ug/L	--	--	--	--	--
Benzo(a)anthracene	ug/L	--	--	--	--	--
Benzo(a)pyrene	ug/L	--	--	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--	--	--
Caprolactam	ug/L	--	--	--	--	--
Carbazole	ug/L	--	--	--	--	--
Chrysene	ug/L	--	--	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--	--	--
Dibenzofuran	ug/L	--	--	--	--	--
Diethyl phthalate	ug/L	--	--	--	--	--
Dimethyl phthalate	ug/L	--	--	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--	--	--
Fluoranthene	ug/L	--	--	--	--	--
Fluorene	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW33-12	MW34-12	MW35-12	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014
Sample Type:						
Segment Depth	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	--	--	--	--
Hexachlorobutadiene	ug/L	--	--	--	--	--
Hexachlorocyclopentadiene	ug/L	--	--	--	--	--
Hexachloroethane	ug/L	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--	--	--	--
Isophorone	ug/L	--	--	--	--	--
Naphthalene	ug/L	--	--	--	--	--
Nitrobenzene	ug/L	--	--	--	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--	--	--	--
N-Nitrosodiphenylamine	ug/L	--	--	--	--	--
Pentachlorophenol	ug/L	--	--	--	--	--
Phenanthrene	ug/L	--	--	--	--	--
Phenol	ug/L	--	--	--	--	--
Pyrene	ug/L	--	--	--	--	--
Metals						
Antimony	ug/L	--	--	--	--	--
Arsenic	ug/L	--	--	--	--	--
Barium	ug/L	--	--	--	--	--
Beryllium	ug/L	--	--	--	--	--
Cadmium	ug/L	--	--	--	--	--
Chromium	ug/L	--	--	--	--	--
Cobalt	ug/L	--	--	--	--	--
Copper	ug/L	--	--	--	--	--
Lead	ug/L	--	--	--	--	--
Manganese	ug/L	--	--	--	--	--
Mercury	ug/L	--	--	--	--	--
Molybdenum	ug/L	--	--	--	--	--
Nickel	ug/L	--	--	--	--	--
Selenium	ug/L	--	--	--	--	--
Silver	ug/L	--	--	--	--	--
Thallium	ug/L	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--
Zinc	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW41-12	MW42-12	MW43-12	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/13/2014	10/13/2014	10/14/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:						
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
	Units					
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	0.83 J	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U	25 U	25 U	25 U
2-Hexanone	ug/L	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U	50 U	5.8 J	50 U
Acetone	ug/L	50 U	50 U	50 U	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.5	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U	1.4	1.0 U
Isopropyl benzene	ug/L	5.0 U	5.0 U	5.0 U	2.0 J	5.0 U
Methyl acetate	ug/L	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	2.8	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	3.0 U	3.0 U	3.0 U	4.7	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW41-12	MW42-12	MW43-12	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/13/2014	10/13/2014	10/14/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:						
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
Units						
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--	5.0 U	5.4 U	5.0 U
2,4,5-Trichlorophenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
2,4,6-Trichlorophenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
2,4-Dichlorophenol	ug/L	--	--	10 U	11 U	0.50 J
2,4-Dimethylphenol	ug/L	--	--	3.6 J	5.4 U	5.0 U
2,4-Dinitrophenol	ug/L	--	--	5.0 U	5.4 U	3.9 J
2,4-Dinitrotoluene	ug/L	--	--	5.0 U	5.4 U	5.0 U
2,6-Dinitrotoluene	ug/L	--	--	5.0 U	5.4 U	5.0 U
2-Chloronaphthalene	ug/L	--	--	5.0 U	5.4 U	5.0 U
2-Chlorophenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
2-Methylnaphthalene	ug/L	--	--	5.0 U	5.4 U	5.0 U
2-Methylphenol	ug/L	--	--	1.5 J	5.4 U	5.0 U
2-Nitroaniline	ug/L	--	--	20 U	22 U	20 U
2-Nitrophenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	--	--	5.0 U	5.4 U	5.0 U
3-Nitroaniline	ug/L	--	--	20 U	22 U	20 U
4,6-Dinitro-2-methylphenol	ug/L	--	--	20 U	22 U	20 U
4-Bromophenyl phenyl ether	ug/L	--	--	5.0 U	5.4 U	5.0 U
4-Chloro-3-methylphenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
4-Chloroaniline	ug/L	--	--	20 U	22 U	20 U
4-Chlorophenyl phenyl ether	ug/L	--	--	5.0 U	5.4 U	5.0 U
4-Methylphenol	ug/L	--	--	1.2 J	5.4 U	5.0 U
4-Nitroaniline	ug/L	--	--	20 U	22 U	20 U
4-Nitrophenol	ug/L	--	--	20 U	22 U	20 U
Acenaphthene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Acenaphthylene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Acetophenone	ug/L	--	--	1.0 U	1.1 U	1.0 U
Anthracene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Atrazine	ug/L	--	--	1.0 U	1.1 U	1.0 U
Benzaldehyde	ug/L	--	--	1.0 U	1.1 U	1.0 U
Benzo(a)anthracene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Benzo(a)pyrene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Benzo(b)fluoranthene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Benzo(g,h,i)perylene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Benzo(k)fluoranthene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Biphenyl (1,1-Biphenyl)	ug/L	--	--	0.15 J	5.4 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	--	--	5.0 U	5.4 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	--	--	5.0 U	5.4 U	5.0 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	5.0 U	5.4 U	0.50 J
Butyl benzylphthalate (BBP)	ug/L	--	--	5.0 U	5.4 U	5.0 U
Caprolactam	ug/L	--	--	10 U	11 U	10 U
Carbazole	ug/L	--	--	10 U	11 U	10 U
Chrysene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Dibenz(a,h)anthracene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Dibenzofuran	ug/L	--	--	5.0 U	5.4 U	5.0 U
Diethyl phthalate	ug/L	--	--	20 U	22 U	20 U
Dimethyl phthalate	ug/L	--	--	20 U	22 U	20 U
Di-n-butylphthalate (DBP)	ug/L	--	--	5.0 U	5.4 U	5.0 U
Di-n-octyl phthalate (DnOP)	ug/L	--	--	5.0 U	5.4 U	5.0 U
Fluoranthene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Fluorene	ug/L	--	--	5.0 U	5.4 U	5.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW41-12	MW42-12	MW43-12	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/13/2014	10/13/2014	10/14/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:						
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Hexachlorobutadiene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Hexachlorocyclopentadiene	ug/L	--	--	20 U	22 U	20 U
Hexachloroethane	ug/L	--	--	5.0 U	5.4 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Isophorone	ug/L	--	--	5.0 U	5.4 U	5.0 U
Naphthalene	ug/L	--	--	2.3 J	5.4 U	5.0 U
Nitrobenzene	ug/L	--	--	5.0 U	5.4 U	5.0 U
N-Nitrosodi-n-propylamine	ug/L	--	--	5.0 U	5.4 U	5.0 U
N-Nitrosodiphenylamine	ug/L	--	--	5.0 U	5.4 U	5.0 U
Pentachlorophenol	ug/L	--	--	20 U	22 U	20 U
Phenanthrene	ug/L	--	--	1.7 J	5.4 U	5.0 U
Phenol	ug/L	--	--	5.0 U	5.4 U	5.0 U
Pyrene	ug/L	--	--	5.0 U	5.4 U	5.0 U
Metals						
Antimony	ug/L	--	--	--	--	--
Arsenic	ug/L	--	--	--	--	--
Barium	ug/L	--	--	--	--	--
Beryllium	ug/L	--	--	--	--	--
Cadmium	ug/L	--	--	--	--	--
Chromium	ug/L	--	--	--	--	--
Cobalt	ug/L	--	--	--	--	--
Copper	ug/L	--	--	--	--	--
Lead	ug/L	--	--	--	--	--
Manganese	ug/L	--	--	--	--	--
Mercury	ug/L	--	--	--	--	--
Molybdenum	ug/L	--	--	--	--	--
Nickel	ug/L	--	--	--	--	--
Selenium	ug/L	--	--	--	--	--
Silver	ug/L	--	--	--	--	--
Thallium	ug/L	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--
Zinc	ug/L	--	--	--	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW48-13	MW49-13	MW50-12	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/13/2014	10/9/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:					Duplicate	
Segment Depth	(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
Units						
Volatile Organic Compounds (VOCs)						
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/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)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U	2.4 J	2.5 J	25 UJ
2-Hexanone	ug/L 50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U	50 U	50 U	5.0 J
Acetone	ug/L 50 U	50 U	50 U	10 J	8.9 J	50 UJ
Benzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0 U	1.4	0.97 J	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.5 J
Methyl acetate	ug/L 10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 1.1 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ
Styrene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.77 J
Tetrachloroethene	ug/L 1.0 U	220 ^{abc}	4.4	2.6	2.7	1.0 U
Toluene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.0 U	1.8	1.3	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.9 J

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW48-13	MW49-13	MW50-12	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/13/2014	10/9/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:					Duplicate	
Segment Depth	(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
Units						
Semi-Volatile Organic Compounds (SVOCs)						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2,4,5-Trichlorophenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2,4,6-Trichlorophenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2,4-Dichlorophenol	ug/L	--	11 U	11 U	11 U	11 U
2,4-Dimethylphenol	ug/L	--	5.4 U	5.3 U	5.3 U	2.3 J
2,4-Dinitrophenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2,4-Dinitrotoluene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2,6-Dinitrotoluene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2-Chloronaphthalene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2-Chlorophenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2-Methylnaphthalene	ug/L	--	5.4 U	5.3 U	0.16 J	0.21 J
2-Methylphenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
2-Nitroaniline	ug/L	--	22 U	21 U	21 U	21 U
2-Nitrophenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
3,3'-Dichlorobenzidine	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
3-Nitroaniline	ug/L	--	22 U	21 U	21 U	21 U
4,6-Dinitro-2-methylphenol	ug/L	--	22 U	21 U	21 U	21 U
4-Bromophenyl phenyl ether	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
4-Chloro-3-methylphenol	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
4-Chloroaniline	ug/L	--	22 U	21 U	21 U	21 U
4-Chlorophenyl phenyl ether	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
4-Methylphenol	ug/L	--	5.4 U	0.62 J	0.71 J	5.3 U
4-Nitroaniline	ug/L	--	22 U	21 U	21 U	21 U
4-Nitrophenol	ug/L	--	22 U	21 U	21 U	21 U
Acenaphthene	ug/L	--	5.4 U	0.51 J	0.51 J	0.67 J
Acenaphthylene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Acetophenone	ug/L	--	1.1 U	0.34 J	0.35 J	1.1 U
Anthracene	ug/L	--	5.4 U	5.3 U	5.3 U	0.96 J
Atrazine	ug/L	--	1.1 U	1.1 U	1.1 U	1.1 U
Benzaldehyde	ug/L	--	1.1 U	1.1 U	1.1 U	1.1 U
Benzo(a)anthracene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Benzo(a)pyrene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Benzo(b)fluoranthene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Benzo(g,h,i)perylene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Benzo(k)fluoranthene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Biphenyl (1,1-Biphenyl)	ug/L	--	5.4 U	0.11 J	0.13 J	0.57 J
bis(2-Chloroethoxy)methane	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
bis(2-Chloroethyl)ether	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	0.88 J	5.3 U	0.77 J	5.3 U
Butyl benzylphthalate (BBP)	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Caprolactam	ug/L	--	11 U	11 U	11 U	11 U
Carbazole	ug/L	--	11 U	11 U	11 U	0.74 J
Chrysene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Dibenz(a,h)anthracene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Dibenzofuran	ug/L	--	5.4 U	5.3 U	5.3 U	0.76 J
Diethyl phthalate	ug/L	--	22 U	21 U	21 U	21 U
Dimethyl phthalate	ug/L	--	22 U	21 U	21 U	21 U
Di-n-butylphthalate (DBP)	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Di-n-octyl phthalate (DnOP)	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Fluoranthene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Fluorene	ug/L	--	5.4 U	0.32 J	0.34 J	2.3 J

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW48-13	MW49-13	MW50-12	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/13/2014	10/9/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014
Sample Type:					Duplicate	
Segment Depth	(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
Units						
SVOCs (continued)						
Hexachlorobenzene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Hexachlorobutadiene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Hexachlorocyclopentadiene	ug/L	--	22 U	21 U	21 U	21 U
Hexachloroethane	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Indeno(1,2,3-cd)pyrene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Isophorone	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Naphthalene	ug/L	--	5.4 U	0.49 J	0.58 J	6.5
Nitrobenzene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
N-Nitrosodi-n-propylamine	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
N-Nitrosodiphenylamine	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Pentachlorophenol	ug/L	--	22 U	21 U	21 U	21 U
Phenanthrene	ug/L	--	5.4 U	5.3 U	5.3 U	1.3 J
Phenol	ug/L	--	5.4 U	1.7 J	1.6 J	0.72 J
Pyrene	ug/L	--	5.4 U	5.3 U	5.3 U	5.3 U
Metals						
Antimony	ug/L	--	--	--	--	--
Arsenic	ug/L	--	--	--	--	--
Barium	ug/L	--	--	--	--	--
Beryllium	ug/L	--	--	--	--	--
Cadmium	ug/L	--	--	--	--	--
Chromium	ug/L	--	--	--	--	--
Cobalt	ug/L	--	--	--	--	--
Copper	ug/L	--	--	--	--	--
Lead	ug/L	--	--	--	--	--
Manganese	ug/L	--	--	--	--	--
Mercury	ug/L	--	--	--	--	--
Molybdenum	ug/L	--	--	--	--	--
Nickel	ug/L	--	--	--	--	--
Selenium	ug/L	--	--	--	--	--
Silver	ug/L	--	--	--	--	--
Thallium	ug/L	--	--	--	--	--
Vanadium	ug/L	--	--	--	--	--
Zinc	ug/L	--	--	--	--	--

TABLE 4

**GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Sample Location:	MW58-13	MW59-14	MW60-14
Sample Identification:	WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Date:	10/13/2014	10/8/2014	10/13/2014
Sample Type:			
Segment Depth	(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
	Units		
Volatile Organic Compounds (VOCs)			
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L 5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0 U	15	1.0 U
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 1.0 U	1.0 U	1.0 U
Toluene	ug/L 1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.0 U	3.5	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW58-13	MW59-14	MW60-14
Sample Identification:	WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Date:	10/13/2014	10/8/2014	10/13/2014
Sample Type:			
Segment Depth	(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
Units			
Semi-Volatile Organic Compounds (SVOCs)			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--
2,4,5-Trichlorophenol	ug/L	--	--
2,4,6-Trichlorophenol	ug/L	--	--
2,4-Dichlorophenol	ug/L	--	--
2,4-Dimethylphenol	ug/L	--	--
2,4-Dinitrophenol	ug/L	--	--
2,4-Dinitrotoluene	ug/L	--	--
2,6-Dinitrotoluene	ug/L	--	--
2-Chloronaphthalene	ug/L	--	--
2-Chlorophenol	ug/L	--	--
2-Methylnaphthalene	ug/L	--	--
2-Methylphenol	ug/L	--	--
2-Nitroaniline	ug/L	--	--
2-Nitrophenol	ug/L	--	--
3,3'-Dichlorobenzidine	ug/L	--	--
3-Nitroaniline	ug/L	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--
4-Bromophenyl phenyl ether	ug/L	--	--
4-Chloro-3-methylphenol	ug/L	--	--
4-Chloroaniline	ug/L	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--
4-Methylphenol	ug/L	--	--
4-Nitroaniline	ug/L	--	--
4-Nitrophenol	ug/L	--	--
Acenaphthene	ug/L	--	--
Acenaphthylene	ug/L	--	--
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--

TABLE 4

GROUNDWATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location:	MW58-13	MW59-14	MW60-14
Sample Identification:	WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Date:	10/13/2014	10/8/2014	10/13/2014
Sample Type:			
Segment Depth	(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
Units			
SVOCs (continued)			
Hexachlorobenzene	ug/L --	--	--
Hexachlorobutadiene	ug/L --	--	--
Hexachlorocyclopentadiene	ug/L --	--	--
Hexachloroethane	ug/L --	--	--
Indeno(1,2,3-cd)pyrene	ug/L --	--	--
Isophorone	ug/L --	--	--
Naphthalene	ug/L --	--	--
Nitrobenzene	ug/L --	--	--
N-Nitrosodi-n-propylamine	ug/L --	--	--
N-Nitrosodiphenylamine	ug/L --	--	--
Pentachlorophenol	ug/L --	--	--
Phenanthrene	ug/L --	--	--
Phenol	ug/L --	--	--
Pyrene	ug/L --	--	--
Metals			
Antimony	ug/L 5 U	5 U	5 U
Arsenic	ug/L 5 U	0.83 J	0.65 J
Barium	ug/L 9.7	100	35
Beryllium	ug/L 2 U	2 U	2 U
Cadmium	ug/L 0.37 J	1.6 J	0.091 J
Chromium	ug/L 0.3 J	5 U	1.5 J
Cobalt	ug/L 0.17 J	0.6 J	3.2 J
Copper	ug/L 0.52 J	1.4 J	3 J
Lead	ug/L 5 U	0.98 J	1.1 J
Manganese	ug/L 0.5 J	51 ^{ab}	32
Mercury	ug/L 0.2 U	0.2 U	0.2 U
Molybdenum	ug/L 5 U	0.68 J	0.98 J
Nickel	ug/L 2.1 J	3.8 J	3.8 J
Selenium	ug/L 1.8 J	5 U	0.95 J
Silver	ug/L 5 U	5 U	5 U
Thallium	ug/L 5 U	5 U	5 U
Vanadium	ug/L 5 U	5 U	1.1 J
Zinc	ug/L 10 U	16	11 U

**SUMMARY OF SURFACE WATER SAMPLE ANALYTICAL RESULTS
FALL 2014 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Sample Location:	C-1	C-2	C-3
Sample Identification:	SW-017360-100714-MR-003	SW-017360-100714-MR-001	SW-017360-100714-MR-002
Sample Date:	10/7/2014	10/7/2014	10/7/2014
Sample Type:			
Segment Depth			
	Units		
Volatile Organic Compounds (VOCs)			
1,1,1-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L 5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L 1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L 1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L 25 U	25 U	25 U
2-Hexanone	ug/L 50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L 50 U	50 U	50 U
Acetone	ug/L 50 U	50 U	50 U
Benzene	ug/L 1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L 1.0 U	1.0 U	1.0 U
Bromoform	ug/L 1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L 5.0 U	5.0 U	5.0 U
Carbon disulfide	ug/L 5.0 U	5.0 U	5.0 U
Carbon tetrachloride	ug/L 1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L 1.0 U	1.0 U	1.0 U
Chloroethane	ug/L 5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L 1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L 5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L 1.0	1.1	1.5
cis-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L 1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L 5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L 5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L 1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L 5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L 10 U	10 U	10 U
Methyl cyclohexane	ug/L 1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L 5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L 5.0 U	5.0 U	5.0 U
Styrene	ug/L 1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L 3.7	2.5	4.4
Toluene	ug/L 1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L 1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L 1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L 1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L 1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L 1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L 1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L 3.0 U	3.0 U	3.0 U

Notes:

U - Not detected at the associated reporting limit.

J - Estimated concentration.

UJ - Not detected; associated reporting limit is estimated.

Attachment A

Analytical Laboratory Report



27-Oct-2014

Rawa Fleisher
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (17360-T05Y14-01Y14)**

Work Order: **1410899**

Dear Rawa,

ALS Environmental received 25 samples on 15-Oct-2014 04:05 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 111.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
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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Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Work Order: 1410899

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>
1410899-01	WG-017360-101314-MR-026	Groundwater		10/13/2014 10:20	10/15/2014 16:05	☐
1410899-02	WG-017360-101314-MR-027	Groundwater		10/13/2014 10:59	10/15/2014 16:05	☐
1410899-03	WG-017360-101314-MR-028	Groundwater		10/13/2014 11:20	10/15/2014 16:05	☐
1410899-04	WG-017360-101314-MR-029	Groundwater		10/13/2014 12:31	10/15/2014 16:05	☐
1410899-05	WG-017360-101314-MR-030	Groundwater		10/13/2014 13:27	10/15/2014 16:05	☐
1410899-06	WG-017360-101314-MR-031	Groundwater		10/13/2014 13:50	10/15/2014 16:05	☐
1410899-07	WG-017360-101314-MR-032	Groundwater		10/13/2014 14:17	10/15/2014 16:05	☐
1410899-08	WG-017360-101314-MR-033	Groundwater		10/13/2014 14:55	10/15/2014 16:05	☐
1410899-09	WG-017360-101314-MR-034	Groundwater		10/13/2014 15:44	10/15/2014 16:05	☐
1410899-10	WG-017360-101314-MR-035	Groundwater		10/13/2014 16:35	10/15/2014 16:05	☐
1410899-11	WG-017360-101314-MR-036	Groundwater		10/13/2014 17:13	10/15/2014 16:05	☐
1410899-12	WG-017360-101414-MR-037	Groundwater		10/14/2014 09:56	10/15/2014 16:05	☐
1410899-13	WG-017360-101414-MR-038	Groundwater		10/14/2014 10:55	10/15/2014 16:05	☐
1410899-14	WG-017360-101414-MR-039	Groundwater		10/14/2014 12:21	10/15/2014 16:05	☐
1410899-15	WG-017360-101414-MR-040	Groundwater		10/14/2014 13:35	10/15/2014 16:05	☐
1410899-16	WG-017360-101414-MR-041	Groundwater		10/14/2014 14:46	10/15/2014 16:05	☐
1410899-17	WG-017360-101414-MR-042	Groundwater		10/14/2014 15:43	10/15/2014 16:05	☐
1410899-18	WG-017360-101514-MR-043	Groundwater		10/15/2014 10:39	10/15/2014 16:05	☐
1410899-19	WG-017360-101514-MR-044	Groundwater		10/15/2014 11:43	10/15/2014 16:05	☐
1410899-20	WG-017360-101514-MR-045	Groundwater		10/15/2014 12:05	10/15/2014 16:05	☐
1410899-21	WG-017360-101514-MR-046	Groundwater		10/15/2014 12:57	10/15/2014 16:05	☐
1410899-22	WG-017360-101514-MR-047	Groundwater		10/15/2014 13:39	10/15/2014 16:05	☐
1410899-23	WG-017360-101514-MR-048	Groundwater		10/15/2014 14:14	10/15/2014 16:05	☐
1410899-24	WG-017360-101514-MR-049	Groundwater		10/15/2014 14:58	10/15/2014 16:05	☐
1410899-25	TB-017360-101514-MR-050	Water		10/15/2014	10/15/2014 16:05	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Work Order: 1410899

Case Narrative

Batch R150908, Method VOC_8260_W, CCV: 1,2-Dibromomethane recovery was low in the CCV; results may be biased low.

Batch R150911, Method VOC_8260_W, CCV: 1,2-Dibromoethane recovery was low in the CCV; results may be biased low.

Batch R150998A, Method VOC_8260_W, CCV: Methyl Iodide recovery was low in the CCV; results may be biased low.

Batch R150908, Method VOC_8260_W, Sample VLCSW1-141022: The LCS recoveries for Chloroethane and Vinyl Chloride were above the upper control limits. All sample results in the batch were non-detect. No qualification is required.

Batch R150998A, Method VOC_8260_W, Sample VLCSW1-141023: The LCS recovery for Chloroethane was above the upper control limit. All sample results in the batch were non-detect. No qualification is required.

Batch R150908, Method VOC_8260_W, Sample 1410899-14A MS: The MS recovery for Methylene Chloride was below the lower control limit. However, the MSD recovery and RPD were within control limits. No qualification is required.

Batch R150908, Method VOC_8260_W, Sample 1410899-14A MSD: The RPD between the MS and MSD for Acetone was outside of the control limit. The corresponding result should be considered estimated.

Batch R150998A, Method VOC_8260_W, Sample 1410899-18A MS/MSD: The MS and MSD recoveries for 2-Butanone, Acetone and Methylene Chloride were below the lower control limits. The corresponding results in the parent sample may be biased low.

Batch R150998A, Method VOC_8260_W, Sample 1410899-18A MSD: The RPD between the MS and MSD for Acetone was outside of the control limit. The corresponding result should be considered estimated.

Batch R150908, Method VOC_8260_W, Sample 1410899-04A, -08A and -11A: One or more surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
WorkOrder: 1410899

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 is present at an estimated concentration between the MDL and Report 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
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-026
Collection Date: 10/13/2014 10:20 AM

Work Order: 1410899
Lab ID: 1410899-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 19:41
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 19:41
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 19:41
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 19:41
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 19:41
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 19:41
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 19:41
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 19:41
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 19:41
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 19:41
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 19:41
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 19:41
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 19:41
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 19:41
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 19:41
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 19:41
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 19:41
Acetone	U		3.1	50	µg/L	1	10/22/2014 19:41
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 19:41
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 19:41
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 19:41
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 19:41
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 19:41
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 19:41
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 19:41
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 19:41
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 19:41
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 19:41
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 19:41
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 19:41
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 19:41
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 19:41
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 19:41
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 19:41
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 19:41
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 19:41
Methyl tert-butyl ether	1.1	J	0.12	5.0	µg/L	1	10/22/2014 19:41

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-026
Collection Date: 10/13/2014 10:20 AM

Work Order: 1410899
Lab ID: 1410899-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 19:41
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 19:41
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 19:41
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 19:41
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 19:41
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 19:41
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 19:41
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 19:41
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 19:41
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 19:41
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 19:41
Surr: 1,2-Dichloroethane-d4	95.8			75-120	%REC	1	10/22/2014 19:41
Surr: 4-Bromofluorobenzene	95.3			80-110	%REC	1	10/22/2014 19:41
Surr: Dibromofluoromethane	99.1			85-115	%REC	1	10/22/2014 19:41
Surr: Toluene-d8	97.8			85-110	%REC	1	10/22/2014 19:41

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-027
Collection Date: 10/13/2014 10:59 AM

Work Order: 1410899
Lab ID: 1410899-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK	
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 20:05
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 20:05
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 20:05
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 20:05
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 20:05
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 20:05
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 20:05
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 20:05
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 20:05
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:05
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 20:05
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 20:05
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 20:05
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 20:05
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 20:05
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 20:05
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 20:05
Acetone	U		3.1	50	µg/L	1	10/22/2014 20:05
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 20:05
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 20:05
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 20:05
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 20:05
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 20:05
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 20:05
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 20:05
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 20:05
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 20:05
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 20:05
cis-1,2-Dichloroethene	48		0.25	1.0	µg/L	1	10/22/2014 20:05
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 20:05
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 20:05
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 20:05
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 20:05
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:05
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 20:05
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 20:05
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 20:05

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-027
Collection Date: 10/13/2014 10:59 AM

Work Order: 1410899
Lab ID: 1410899-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 20:05
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 20:05
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 20:05
Tetrachloroethene	78		0.25	1.0	µg/L	1	10/22/2014 20:05
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 20:05
trans-1,2-Dichloroethene	1.0		0.29	1.0	µg/L	1	10/22/2014 20:05
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 20:05
Trichloroethene	7.1		0.34	1.0	µg/L	1	10/22/2014 20:05
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 20:05
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 20:05
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 20:05
Surr: 1,2-Dichloroethane-d4	95.1			75-120	%REC	1	10/22/2014 20:05
Surr: 4-Bromofluorobenzene	97.4			80-110	%REC	1	10/22/2014 20:05
Surr: Dibromofluoromethane	100			85-115	%REC	1	10/22/2014 20:05
Surr: Toluene-d8	96.8			85-110	%REC	1	10/22/2014 20:05

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-028
Collection Date: 10/13/2014 11:20 AM

Work Order: 1410899
Lab ID: 1410899-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 20:30
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 20:30
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 20:30
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 20:30
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 20:30
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 20:30
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 20:30
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 20:30
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 20:30
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:30
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 20:30
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 20:30
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 20:30
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 20:30
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 20:30
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 20:30
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 20:30
Acetone	U		3.1	50	µg/L	1	10/22/2014 20:30
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 20:30
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 20:30
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 20:30
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 20:30
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 20:30
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 20:30
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 20:30
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 20:30
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 20:30
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 20:30
cis-1,2-Dichloroethene	48		0.25	1.0	µg/L	1	10/22/2014 20:30
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 20:30
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 20:30
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 20:30
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 20:30
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:30
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 20:30
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 20:30
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 20:30

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-028
Collection Date: 10/13/2014 11:20 AM

Work Order: 1410899
Lab ID: 1410899-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 20:30
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 20:30
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 20:30
Tetrachloroethene	78		0.25	1.0	µg/L	1	10/22/2014 20:30
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 20:30
trans-1,2-Dichloroethene	1.3		0.29	1.0	µg/L	1	10/22/2014 20:30
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 20:30
Trichloroethene	7.5		0.34	1.0	µg/L	1	10/22/2014 20:30
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 20:30
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 20:30
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 20:30
Surr: 1,2-Dichloroethane-d4	95.7			75-120	%REC	1	10/22/2014 20:30
Surr: 4-Bromofluorobenzene	93.5			80-110	%REC	1	10/22/2014 20:30
Surr: Dibromofluoromethane	99.5			85-115	%REC	1	10/22/2014 20:30
Surr: Toluene-d8	95.0			85-110	%REC	1	10/22/2014 20:30

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-029
Collection Date: 10/13/2014 12:31 PM

Work Order: 1410899
Lab ID: 1410899-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470				
BatchID: 64090							
Mercury	U		0.000029	0.00020	mg/L	1	10/20/2014 14:10
METALS BY ICP-MS			SW6020A				
BatchID: 63974							
Antimony	U		0.00011	0.0050	mg/L	1	10/21/2014 05:28
Arsenic	U		0.00056	0.0050	mg/L	1	10/21/2014 05:28
Barium	0.0097		0.00030	0.0050	mg/L	1	10/21/2014 05:28
Beryllium	U		0.00017	0.0020	mg/L	1	10/21/2014 05:28
Cadmium	0.00037	J	0.000026	0.0020	mg/L	1	10/21/2014 05:28
Chromium	0.00030	J	0.00013	0.0050	mg/L	1	10/21/2014 05:28
Cobalt	0.00017	J	0.00010	0.0050	mg/L	1	10/21/2014 05:28
Copper	0.00052	J	0.00017	0.0050	mg/L	1	10/21/2014 05:28
Lead	U		0.00057	0.0050	mg/L	1	10/21/2014 05:28
Manganese	0.00050	J	0.00016	0.0050	mg/L	1	10/21/2014 05:28
Molybdenum	U		0.00040	0.0050	mg/L	1	10/21/2014 05:28
Nickel	0.0021	J	0.00031	0.0050	mg/L	1	10/21/2014 05:28
Selenium	0.0018	J	0.00075	0.0050	mg/L	1	10/21/2014 05:28
Silver	U		0.000020	0.0050	mg/L	1	10/21/2014 05:28
Thallium	U		0.00048	0.0050	mg/L	1	10/21/2014 05:28
Vanadium	U		0.00046	0.0050	mg/L	1	10/21/2014 05:28
Zinc	0.0060	J	0.0029	0.010	mg/L	1	10/21/2014 05:28
VOLATILE ORGANIC COMPOUNDS			SW8260				
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 20:54
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 20:54
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 20:54
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 20:54
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 20:54
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 20:54
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 20:54
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 20:54
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 20:54
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:54
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 20:54
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 20:54
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 20:54
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 20:54

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-029
Collection Date: 10/13/2014 12:31 PM

Work Order: 1410899
Lab ID: 1410899-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 20:54
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 20:54
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 20:54
Acetone	U		3.1	50	µg/L	1	10/22/2014 20:54
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 20:54
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 20:54
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 20:54
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 20:54
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 20:54
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 20:54
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 20:54
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 20:54
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 20:54
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 20:54
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 20:54
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 20:54
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 20:54
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 20:54
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 20:54
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 20:54
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 20:54
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 20:54
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 20:54
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 20:54
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 20:54
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 20:54
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 20:54
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 20:54
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 20:54
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 20:54
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 20:54
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 20:54
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 20:54
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 20:54
Surr: 1,2-Dichloroethane-d4	117			75-120	%REC	1	10/22/2014 20:54
Surr: 4-Bromofluorobenzene	97.7			80-110	%REC	1	10/22/2014 20:54
Surr: Dibromofluoromethane	123	S		85-115	%REC	1	10/22/2014 20:54
Surr: Toluene-d8	97.3			85-110	%REC	1	10/22/2014 20:54

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-030
Collection Date: 10/13/2014 01:27 PM

Work Order: 1410899
Lab ID: 1410899-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470		Prep: SW7470 / 10/20/14		Analyst: LR
<u>BatchID: 64090</u>							
Mercury	U		0.000029	0.00020	mg/L	1	10/20/2014 14:12
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/16/14		Analyst: RH
<u>BatchID: 63974</u>							
Antimony	0.0022	J	0.00011	0.0050	mg/L	1	10/21/2014 05:34
Arsenic	U		0.00056	0.0050	mg/L	1	10/21/2014 05:34
Barium	0.047		0.00030	0.0050	mg/L	1	10/21/2014 05:34
Beryllium	U		0.00017	0.0020	mg/L	1	10/21/2014 05:34
Cadmium	0.00015	J	0.000026	0.0020	mg/L	1	10/21/2014 05:34
Chromium	0.00040	J	0.00013	0.0050	mg/L	1	10/21/2014 05:34
Cobalt	0.00037	J	0.00010	0.0050	mg/L	1	10/21/2014 05:34
Copper	0.0054		0.00017	0.0050	mg/L	1	10/21/2014 05:34
Lead	U		0.00057	0.0050	mg/L	1	10/21/2014 05:34
Manganese	0.00098	J	0.00016	0.0050	mg/L	1	10/21/2014 05:34
Molybdenum	0.015		0.00040	0.0050	mg/L	1	10/21/2014 05:34
Nickel	0.0080		0.00031	0.0050	mg/L	1	10/21/2014 05:34
Selenium	0.0021	J	0.00075	0.0050	mg/L	1	10/21/2014 05:34
Silver	U		0.000020	0.0050	mg/L	1	10/21/2014 05:34
Thallium	U		0.00048	0.0050	mg/L	1	10/21/2014 05:34
Vanadium	0.0033	J	0.00046	0.0050	mg/L	1	10/21/2014 05:34
Zinc	0.024		0.0029	0.010	mg/L	1	10/21/2014 05:34
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
<u>BatchID: R150908</u>							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 21:19
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 21:19
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 21:19
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 21:19
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 21:19
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 21:19
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 21:19
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 21:19
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 21:19
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 21:19
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 21:19
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 21:19
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 21:19
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 21:19

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-030
Collection Date: 10/13/2014 01:27 PM

Work Order: 1410899
Lab ID: 1410899-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 21:19
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 21:19
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 21:19
Acetone	U		3.1	50	µg/L	1	10/22/2014 21:19
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 21:19
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 21:19
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 21:19
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 21:19
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 21:19
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 21:19
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 21:19
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 21:19
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 21:19
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 21:19
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 21:19
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 21:19
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 21:19
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 21:19
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 21:19
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 21:19
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 21:19
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 21:19
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 21:19
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 21:19
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 21:19
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 21:19
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 21:19
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 21:19
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 21:19
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 21:19
Trichloroethene	1.9		0.34	1.0	µg/L	1	10/22/2014 21:19
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 21:19
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 21:19
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 21:19
Surr: 1,2-Dichloroethane-d4	93.4			75-120	%REC	1	10/22/2014 21:19
Surr: 4-Bromofluorobenzene	95.5			80-110	%REC	1	10/22/2014 21:19
Surr: Dibromofluoromethane	99.2			85-115	%REC	1	10/22/2014 21:19
Surr: Toluene-d8	96.8			85-110	%REC	1	10/22/2014 21:19

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-031
Collection Date: 10/13/2014 01:50 PM

Work Order: 1410899
Lab ID: 1410899-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470				
BatchID: 64090							
Mercury	U		0.000029	0.00020	mg/L	1	10/20/2014 14:15
METALS BY ICP-MS							
			SW6020A				
BatchID: 63974							
Antimony	0.0023	J	0.00011	0.0050	mg/L	1	10/21/2014 05:59
Arsenic	U		0.00056	0.0050	mg/L	1	10/21/2014 05:59
Barium	0.046		0.00030	0.0050	mg/L	1	10/21/2014 05:59
Beryllium	U		0.00017	0.0020	mg/L	1	10/21/2014 05:59
Cadmium	0.00010	J	0.000026	0.0020	mg/L	1	10/21/2014 05:59
Chromium	0.00043	J	0.00013	0.0050	mg/L	1	10/21/2014 05:59
Cobalt	0.00036	J	0.00010	0.0050	mg/L	1	10/21/2014 05:59
Copper	0.0051		0.00017	0.0050	mg/L	1	10/21/2014 05:59
Lead	U		0.00057	0.0050	mg/L	1	10/21/2014 05:59
Manganese	0.00087	J	0.00016	0.0050	mg/L	1	10/21/2014 05:59
Molybdenum	0.014		0.00040	0.0050	mg/L	1	10/21/2014 05:59
Nickel	0.0074		0.00031	0.0050	mg/L	1	10/21/2014 05:59
Selenium	0.0020	J	0.00075	0.0050	mg/L	1	10/21/2014 05:59
Silver	U		0.000020	0.0050	mg/L	1	10/21/2014 05:59
Thallium	U		0.00048	0.0050	mg/L	1	10/21/2014 05:59
Vanadium	0.0033	J	0.00046	0.0050	mg/L	1	10/21/2014 05:59
Zinc	0.022		0.0029	0.010	mg/L	1	10/21/2014 05:59
VOLATILE ORGANIC COMPOUNDS							
			SW8260				
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 21:43
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 21:43
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 21:43
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 21:43
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 21:43
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 21:43
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 21:43
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 21:43
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 21:43
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 21:43
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 21:43
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 21:43
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 21:43
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 21:43

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-031
Collection Date: 10/13/2014 01:50 PM

Work Order: 1410899
Lab ID: 1410899-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 21:43
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 21:43
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 21:43
Acetone	U		3.1	50	µg/L	1	10/22/2014 21:43
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 21:43
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 21:43
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 21:43
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 21:43
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 21:43
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 21:43
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 21:43
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 21:43
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 21:43
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 21:43
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 21:43
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 21:43
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 21:43
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 21:43
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 21:43
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 21:43
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 21:43
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 21:43
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 21:43
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 21:43
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 21:43
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 21:43
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 21:43
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 21:43
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 21:43
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 21:43
Trichloroethene	1.9		0.34	1.0	µg/L	1	10/22/2014 21:43
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 21:43
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 21:43
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 21:43
Surr: 1,2-Dichloroethane-d4	91.5			75-120	%REC	1	10/22/2014 21:43
Surr: 4-Bromofluorobenzene	98.0			80-110	%REC	1	10/22/2014 21:43
Surr: Dibromofluoromethane	99.0			85-115	%REC	1	10/22/2014 21:43
Surr: Toluene-d8	97.4			85-110	%REC	1	10/22/2014 21:43

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-032
Collection Date: 10/13/2014 02:17 PM

Work Order: 1410899
Lab ID: 1410899-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK	
BatchID: R150908							
1,1,1-Trichloroethane	2.3		0.19	1.0	µg/L	1	10/22/2014 22:08
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 22:08
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 22:08
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 22:08
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 22:08
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 22:08
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 22:08
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 22:08
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 22:08
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:08
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 22:08
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 22:08
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 22:08
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 22:08
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 22:08
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 22:08
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 22:08
Acetone	U		3.1	50	µg/L	1	10/22/2014 22:08
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 22:08
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 22:08
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 22:08
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 22:08
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 22:08
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 22:08
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 22:08
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 22:08
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 22:08
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 22:08
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:08
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 22:08
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 22:08
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 22:08
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 22:08
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:08
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 22:08
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 22:08
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 22:08

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-032
Collection Date: 10/13/2014 02:17 PM

Work Order: 1410899
Lab ID: 1410899-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 22:08
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 22:08
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 22:08
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:08
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 22:08
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 22:08
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 22:08
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 22:08
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 22:08
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 22:08
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 22:08
Surr: 1,2-Dichloroethane-d4	93.1			75-120	%REC	1	10/22/2014 22:08
Surr: 4-Bromofluorobenzene	94.6			80-110	%REC	1	10/22/2014 22:08
Surr: Dibromofluoromethane	101			85-115	%REC	1	10/22/2014 22:08
Surr: Toluene-d8	95.8			85-110	%REC	1	10/22/2014 22:08

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-033
Collection Date: 10/13/2014 02:55 PM

Work Order: 1410899
Lab ID: 1410899-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470				
BatchID: 64090							
Mercury	U		0.000029	0.00020	mg/L	1	10/20/2014 14:17
METALS BY ICP-MS							
			SW6020A				
BatchID: 63974							
Antimony	U		0.00011	0.0050	mg/L	1	10/21/2014 06:05
Arsenic	0.00065	J	0.00056	0.0050	mg/L	1	10/21/2014 06:05
Barium	0.035		0.00030	0.0050	mg/L	1	10/21/2014 06:05
Beryllium	U		0.00017	0.0020	mg/L	1	10/21/2014 06:05
Cadmium	0.000091	J	0.000026	0.0020	mg/L	1	10/21/2014 06:05
Chromium	0.0015	J	0.00013	0.0050	mg/L	1	10/21/2014 06:05
Cobalt	0.0032	J	0.00010	0.0050	mg/L	1	10/21/2014 06:05
Copper	0.0030	J	0.00017	0.0050	mg/L	1	10/21/2014 06:05
Lead	0.0011	J	0.00057	0.0050	mg/L	1	10/21/2014 06:05
Manganese	0.032		0.00016	0.0050	mg/L	1	10/21/2014 06:05
Molybdenum	0.00098	J	0.00040	0.0050	mg/L	1	10/21/2014 06:05
Nickel	0.0038	J	0.00031	0.0050	mg/L	1	10/21/2014 06:05
Selenium	0.00095	J	0.00075	0.0050	mg/L	1	10/21/2014 06:05
Silver	U		0.000020	0.0050	mg/L	1	10/21/2014 06:05
Thallium	U		0.00048	0.0050	mg/L	1	10/21/2014 06:05
Vanadium	0.0011	J	0.00046	0.0050	mg/L	1	10/21/2014 06:05
Zinc	0.011		0.0029	0.010	mg/L	1	10/21/2014 06:05
VOLATILE ORGANIC COMPOUNDS							
			SW8260				
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 22:32
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 22:32
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 22:32
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 22:32
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 22:32
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 22:32
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 22:32
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 22:32
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 22:32
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:32
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 22:32
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 22:32
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 22:32
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 22:32

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-033
Collection Date: 10/13/2014 02:55 PM

Work Order: 1410899
Lab ID: 1410899-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 22:32
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 22:32
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 22:32
Acetone	U		3.1	50	µg/L	1	10/22/2014 22:32
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 22:32
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 22:32
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 22:32
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 22:32
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 22:32
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 22:32
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 22:32
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 22:32
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 22:32
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 22:32
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:32
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 22:32
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 22:32
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 22:32
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 22:32
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:32
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 22:32
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 22:32
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 22:32
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 22:32
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 22:32
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 22:32
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:32
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 22:32
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 22:32
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 22:32
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 22:32
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 22:32
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 22:32
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 22:32
Surr: 1,2-Dichloroethane-d4	118			75-120	%REC	1	10/22/2014 22:32
Surr: 4-Bromofluorobenzene	96.7			80-110	%REC	1	10/22/2014 22:32
Surr: Dibromofluoromethane	125	S		85-115	%REC	1	10/22/2014 22:32
Surr: Toluene-d8	98.3			85-110	%REC	1	10/22/2014 22:32

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-034
Collection Date: 10/13/2014 03:44 PM

Work Order: 1410899
Lab ID: 1410899-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 22:57
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 22:57
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 22:57
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 22:57
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 22:57
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 22:57
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 22:57
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 22:57
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 22:57
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:57
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 22:57
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 22:57
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 22:57
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 22:57
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 22:57
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 22:57
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 22:57
Acetone	U		3.1	50	µg/L	1	10/22/2014 22:57
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 22:57
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 22:57
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 22:57
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 22:57
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 22:57
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 22:57
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 22:57
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 22:57
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 22:57
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 22:57
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:57
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 22:57
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 22:57
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 22:57
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 22:57
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 22:57
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 22:57
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 22:57
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 22:57

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-034
Collection Date: 10/13/2014 03:44 PM

Work Order: 1410899
Lab ID: 1410899-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 22:57
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 22:57
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 22:57
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 22:57
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 22:57
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 22:57
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 22:57
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 22:57
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 22:57
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 22:57
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 22:57
Surr: 1,2-Dichloroethane-d4	93.4			75-120	%REC	1	10/22/2014 22:57
Surr: 4-Bromofluorobenzene	93.1			80-110	%REC	1	10/22/2014 22:57
Surr: Dibromofluoromethane	96.4			85-115	%REC	1	10/22/2014 22:57
Surr: Toluene-d8	96.4			85-110	%REC	1	10/22/2014 22:57

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-035
Collection Date: 10/13/2014 04:35 PM

Work Order: 1410899
Lab ID: 1410899-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
BatchID: R150940							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 14:48
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 14:48
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 14:48
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 14:48
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 14:48
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 14:48
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 14:48
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 14:48
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 14:48
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:48
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 14:48
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 14:48
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 14:48
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 14:48
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 14:48
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 14:48
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 14:48
Acetone	U		3.1	50	µg/L	1	10/23/2014 14:48
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 14:48
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 14:48
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 14:48
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 14:48
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 14:48
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 14:48
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 14:48
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 14:48
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 14:48
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 14:48
cis-1,2-Dichloroethene	2.1		0.25	1.0	µg/L	1	10/23/2014 14:48
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 14:48
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 14:48
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 14:48
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 14:48
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:48
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 14:48
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 14:48
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 14:48

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-035
Collection Date: 10/13/2014 04:35 PM

Work Order: 1410899
Lab ID: 1410899-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 14:48
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 14:48
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 14:48
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 14:48
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 14:48
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 14:48
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 14:48
Trichloroethene	7.2		0.34	1.0	µg/L	1	10/23/2014 14:48
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 14:48
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 14:48
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 14:48
Surr: 1,2-Dichloroethane-d4	102			75-120	%REC	1	10/23/2014 14:48
Surr: 4-Bromofluorobenzene	94.9			80-110	%REC	1	10/23/2014 14:48
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	10/23/2014 14:48
Surr: Toluene-d8	99.4			85-110	%REC	1	10/23/2014 14:48

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-036
Collection Date: 10/13/2014 05:13 PM

Work Order: 1410899
Lab ID: 1410899-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/22/2014 23:46
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/22/2014 23:46
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/22/2014 23:46
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/22/2014 23:46
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/22/2014 23:46
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/22/2014 23:46
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/22/2014 23:46
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/22/2014 23:46
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/22/2014 23:46
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/22/2014 23:46
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/22/2014 23:46
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/22/2014 23:46
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/22/2014 23:46
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/22/2014 23:46
2-Butanone	U		0.87	25	µg/L	1	10/22/2014 23:46
2-Hexanone	U		0.15	50	µg/L	1	10/22/2014 23:46
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/22/2014 23:46
Acetone	U		3.1	50	µg/L	1	10/22/2014 23:46
Benzene	U		0.25	1.0	µg/L	1	10/22/2014 23:46
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/22/2014 23:46
Bromoform	U		0.099	1.0	µg/L	1	10/22/2014 23:46
Bromomethane	U		1.0	5.0	µg/L	1	10/22/2014 23:46
Carbon disulfide	U		0.26	5.0	µg/L	1	10/22/2014 23:46
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/22/2014 23:46
Chlorobenzene	U		0.19	1.0	µg/L	1	10/22/2014 23:46
Chloroethane	U		0.21	5.0	µg/L	1	10/22/2014 23:46
Chloroform	U		0.25	1.0	µg/L	1	10/22/2014 23:46
Chloromethane	U		0.25	5.0	µg/L	1	10/22/2014 23:46
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/22/2014 23:46
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/22/2014 23:46
Cyclohexane	U		0.31	1.0	µg/L	1	10/22/2014 23:46
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/22/2014 23:46
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/22/2014 23:46
Ethylbenzene	U		0.22	1.0	µg/L	1	10/22/2014 23:46
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/22/2014 23:46
Methyl acetate	U		0.62	10	µg/L	1	10/22/2014 23:46
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/22/2014 23:46

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101314-MR-036
Collection Date: 10/13/2014 05:13 PM

Work Order: 1410899
Lab ID: 1410899-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/22/2014 23:46
Methylene chloride	U		0.64	5.0	µg/L	1	10/22/2014 23:46
Styrene	U		0.18	1.0	µg/L	1	10/22/2014 23:46
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/22/2014 23:46
Toluene	U		0.20	1.0	µg/L	1	10/22/2014 23:46
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/22/2014 23:46
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/22/2014 23:46
Trichloroethene	U		0.34	1.0	µg/L	1	10/22/2014 23:46
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/22/2014 23:46
Vinyl chloride	U		0.19	1.0	µg/L	1	10/22/2014 23:46
Xylenes, Total	U		0.62	3.0	µg/L	1	10/22/2014 23:46
Surr: 1,2-Dichloroethane-d4	96.6			75-120	%REC	1	10/22/2014 23:46
Surr: 4-Bromofluorobenzene	94.8			80-110	%REC	1	10/22/2014 23:46
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	10/22/2014 23:46
Surr: Toluene-d8	113	S		85-110	%REC	1	10/22/2014 23:46

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-037
Collection Date: 10/14/2014 09:56 AM

Work Order: 1410899
Lab ID: 1410899-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150998							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 13:41
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 13:41
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 13:41
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 13:41
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 13:41
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 13:41
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 13:41
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 13:41
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 13:41
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 13:41
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 13:41
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 13:41
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 13:41
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 13:41
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 13:41
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 13:41
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 13:41
Acetone	U		3.1	50	µg/L	1	10/23/2014 13:41
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 13:41
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 13:41
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 13:41
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 13:41
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 13:41
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 13:41
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 13:41
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 13:41
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 13:41
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 13:41
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 13:41
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 13:41
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 13:41
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 13:41
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 13:41
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 13:41
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 13:41
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 13:41
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 13:41

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-037
Collection Date: 10/14/2014 09:56 AM

Work Order: 1410899
Lab ID: 1410899-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 13:41
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 13:41
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 13:41
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 13:41
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 13:41
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 13:41
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 13:41
Trichloroethene	4.3		0.34	1.0	µg/L	1	10/23/2014 13:41
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 13:41
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 13:41
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 13:41
Surr: 1,2-Dichloroethane-d4	95.8			75-120	%REC	1	10/23/2014 13:41
Surr: 4-Bromofluorobenzene	91.6			80-110	%REC	1	10/23/2014 13:41
Surr: Dibromofluoromethane	98.4			85-115	%REC	1	10/23/2014 13:41
Surr: Toluene-d8	103			85-110	%REC	1	10/23/2014 13:41

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-038
Collection Date: 10/14/2014 10:55 AM

Work Order: 1410899
Lab ID: 1410899-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK	
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 12:35
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 12:35
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 12:35
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 12:35
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 12:35
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 12:35
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 12:35
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 12:35
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 12:35
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 12:35
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 12:35
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 12:35
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 12:35
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 12:35
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 12:35
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 12:35
4-Methyl-2-pentanone	1.4	J	0.15	50	µg/L	1	10/23/2014 12:35
Acetone	U		3.1	50	µg/L	1	10/23/2014 12:35
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 12:35
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 12:35
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 12:35
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 12:35
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 12:35
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 12:35
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 12:35
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 12:35
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 12:35
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 12:35
cis-1,2-Dichloroethene	2.0		0.25	1.0	µg/L	1	10/23/2014 12:35
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 12:35
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 12:35
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 12:35
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 12:35
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 12:35
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 12:35
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 12:35
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 12:35

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-038
Collection Date: 10/14/2014 10:55 AM

Work Order: 1410899
Lab ID: 1410899-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 12:35
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 12:35
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 12:35
Tetrachloroethene	2.3		0.25	1.0	µg/L	1	10/23/2014 12:35
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 12:35
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 12:35
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 12:35
Trichloroethene	3.0		0.34	1.0	µg/L	1	10/23/2014 12:35
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 12:35
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 12:35
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 12:35
Surr: 1,2-Dichloroethane-d4	95.3			75-120	%REC	1	10/23/2014 12:35
Surr: 4-Bromofluorobenzene	96.8			80-110	%REC	1	10/23/2014 12:35
Surr: Dibromofluoromethane	98.0			85-115	%REC	1	10/23/2014 12:35
Surr: Toluene-d8	97.4			85-110	%REC	1	10/23/2014 12:35

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-039
Collection Date: 10/14/2014 12:21 PM

Work Order: 1410899
Lab ID: 1410899-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK	
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 12:59
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 12:59
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 12:59
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 12:59
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 12:59
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 12:59
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 12:59
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 12:59
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 12:59
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 12:59
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 12:59
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 12:59
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 12:59
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 12:59
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 12:59
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 12:59
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 12:59
Acetone	U		3.1	50	µg/L	1	10/23/2014 12:59
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 12:59
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 12:59
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 12:59
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 12:59
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 12:59
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 12:59
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 12:59
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 12:59
Chloroform	0.58	J	0.25	1.0	µg/L	1	10/23/2014 12:59
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 12:59
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 12:59
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 12:59
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 12:59
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 12:59
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 12:59
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 12:59
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 12:59
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 12:59
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 12:59

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-039
Collection Date: 10/14/2014 12:21 PM

Work Order: 1410899
Lab ID: 1410899-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 12:59
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 12:59
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 12:59
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 12:59
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 12:59
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 12:59
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 12:59
Trichloroethene	37		0.34	1.0	µg/L	1	10/23/2014 12:59
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 12:59
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 12:59
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 12:59
Surr: 1,2-Dichloroethane-d4	97.4			75-120	%REC	1	10/23/2014 12:59
Surr: 4-Bromofluorobenzene	96.2			80-110	%REC	1	10/23/2014 12:59
Surr: Dibromofluoromethane	101			85-115	%REC	1	10/23/2014 12:59
Surr: Toluene-d8	96.5			85-110	%REC	1	10/23/2014 12:59

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-040
Collection Date: 10/14/2014 01:35 PM

Work Order: 1410899
Lab ID: 1410899-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 01:24
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 01:24
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 01:24
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 01:24
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 01:24
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 01:24
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 01:24
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 01:24
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 01:24
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 01:24
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 01:24
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 01:24
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 01:24
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 01:24
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 01:24
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 01:24
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 01:24
Acetone	U		3.1	50	µg/L	1	10/23/2014 01:24
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 01:24
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 01:24
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 01:24
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 01:24
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 01:24
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 01:24
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 01:24
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 01:24
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 01:24
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 01:24
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 01:24
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 01:24
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 01:24
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 01:24
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 01:24
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 01:24
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 01:24
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 01:24
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 01:24

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-040
Collection Date: 10/14/2014 01:35 PM

Work Order: 1410899
Lab ID: 1410899-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 01:24
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 01:24
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 01:24
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 01:24
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 01:24
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 01:24
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 01:24
Trichloroethene	14		0.34	1.0	µg/L	1	10/23/2014 01:24
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 01:24
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 01:24
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 01:24
Surr: 1,2-Dichloroethane-d4	96.3			75-120	%REC	1	10/23/2014 01:24
Surr: 4-Bromofluorobenzene	95.2			80-110	%REC	1	10/23/2014 01:24
Surr: Dibromofluoromethane	98.6			85-115	%REC	1	10/23/2014 01:24
Surr: Toluene-d8	98.7			85-110	%REC	1	10/23/2014 01:24

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-041
Collection Date: 10/14/2014 02:46 PM

Work Order: 1410899
Lab ID: 1410899-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
BatchID: R150940							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 15:15
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 15:15
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 15:15
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 15:15
1,1-Dichloroethane	1.0		0.21	1.0	µg/L	1	10/23/2014 15:15
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 15:15
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 15:15
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 15:15
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 15:15
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 15:15
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 15:15
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 15:15
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 15:15
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 15:15
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 15:15
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 15:15
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 15:15
Acetone	U		3.1	50	µg/L	1	10/23/2014 15:15
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 15:15
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 15:15
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 15:15
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 15:15
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 15:15
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 15:15
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 15:15
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 15:15
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 15:15
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 15:15
cis-1,2-Dichloroethene	8.0		0.25	1.0	µg/L	1	10/23/2014 15:15
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 15:15
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 15:15
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 15:15
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 15:15
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 15:15
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 15:15
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 15:15
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 15:15

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-041
Collection Date: 10/14/2014 02:46 PM

Work Order: 1410899
Lab ID: 1410899-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 15:15
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 15:15
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 15:15
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 15:15
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 15:15
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 15:15
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 15:15
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 15:15
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 15:15
Vinyl chloride	13		0.19	1.0	µg/L	1	10/23/2014 15:15
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 15:15
Surr: 1,2-Dichloroethane-d4	102			75-120	%REC	1	10/23/2014 15:15
Surr: 4-Bromofluorobenzene	92.3			80-110	%REC	1	10/23/2014 15:15
Surr: Dibromofluoromethane	104			85-115	%REC	1	10/23/2014 15:15
Surr: Toluene-d8	98.5			85-110	%REC	1	10/23/2014 15:15

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-042
Collection Date: 10/14/2014 03:43 PM

Work Order: 1410899
Lab ID: 1410899-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: R150908							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 02:13
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 02:13
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 02:13
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 02:13
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 02:13
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 02:13
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 02:13
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 02:13
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 02:13
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 02:13
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 02:13
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 02:13
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 02:13
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 02:13
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 02:13
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 02:13
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 02:13
Acetone	U		3.1	50	µg/L	1	10/23/2014 02:13
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 02:13
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 02:13
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 02:13
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 02:13
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 02:13
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 02:13
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 02:13
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 02:13
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 02:13
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 02:13
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 02:13
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 02:13
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 02:13
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 02:13
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 02:13
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 02:13
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 02:13
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 02:13
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 02:13

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101414-MR-042
Collection Date: 10/14/2014 03:43 PM

Work Order: 1410899
Lab ID: 1410899-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 02:13
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 02:13
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 02:13
Tetrachloroethene	2.8		0.25	1.0	µg/L	1	10/23/2014 02:13
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 02:13
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 02:13
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 02:13
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 02:13
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 02:13
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 02:13
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 02:13
Surr: 1,2-Dichloroethane-d4	94.8			75-120	%REC	1	10/23/2014 02:13
Surr: 4-Bromofluorobenzene	99.6			80-110	%REC	1	10/23/2014 02:13
Surr: Dibromofluoromethane	98.2			85-115	%REC	1	10/23/2014 02:13
Surr: Toluene-d8	97.0			85-110	%REC	1	10/23/2014 02:13

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-043
Collection Date: 10/15/2014 10:39 AM

Work Order: 1410899
Lab ID: 1410899-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1'-Biphenyl	0.57	J	0.10	5.3	µg/L	1	10/24/2014 12:54
2,4,5-Trichlorophenol	U		0.26	5.3	µg/L	1	10/24/2014 12:54
2,4,6-Trichlorophenol	U		0.29	5.3	µg/L	1	10/24/2014 12:54
2,4-Dichlorophenol	U		0.23	11	µg/L	1	10/24/2014 12:54
2,4-Dimethylphenol	2.3	J	1.9	5.3	µg/L	1	10/24/2014 12:54
2,4-Dinitrophenol	U		0.70	5.3	µg/L	1	10/24/2014 12:54
2,4-Dinitrotoluene	U		0.28	5.3	µg/L	1	10/24/2014 12:54
2,6-Dinitrotoluene	U		0.24	5.3	µg/L	1	10/24/2014 12:54
2-Chloronaphthalene	U		0.13	5.3	µg/L	1	10/24/2014 12:54
2-Chlorophenol	U		0.34	5.3	µg/L	1	10/24/2014 12:54
2-Methylnaphthalene	0.21	J	0.14	5.3	µg/L	1	10/24/2014 12:54
2-Methylphenol	U		0.21	5.3	µg/L	1	10/24/2014 12:54
2-Nitroaniline	U		0.36	21	µg/L	1	10/24/2014 12:54
2-Nitrophenol	U		0.29	5.3	µg/L	1	10/24/2014 12:54
3,3'-Dichlorobenzidine	U		4.1	5.3	µg/L	1	10/24/2014 12:54
3-Nitroaniline	U		0.36	21	µg/L	1	10/24/2014 12:54
4,6-Dinitro-2-methylphenol	U		1.3	21	µg/L	1	10/24/2014 12:54
4-Bromophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/24/2014 12:54
4-Chloro-3-methylphenol	U		0.33	5.3	µg/L	1	10/24/2014 12:54
4-Chloroaniline	U		0.33	21	µg/L	1	10/24/2014 12:54
4-Chlorophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/24/2014 12:54
4-Methylphenol	U		0.21	5.3	µg/L	1	10/24/2014 12:54
4-Nitroaniline	U		0.31	21	µg/L	1	10/24/2014 12:54
4-Nitrophenol	U		0.54	21	µg/L	1	10/24/2014 12:54
Acenaphthene	0.67	J	0.12	5.3	µg/L	1	10/24/2014 12:54
Acenaphthylene	U		0.13	5.3	µg/L	1	10/24/2014 12:54
Acetophenone	U		0.095	1.1	µg/L	1	10/24/2014 12:54
Anthracene	0.96	J	0.76	5.3	µg/L	1	10/24/2014 12:54
Atrazine	U		0.14	1.1	µg/L	1	10/24/2014 12:54
Benzaldehyde	U		0.48	1.1	µg/L	1	10/24/2014 12:54
Benzo(a)anthracene	U		0.60	5.3	µg/L	1	10/24/2014 12:54
Benzo(a)pyrene	U		0.11	5.3	µg/L	1	10/24/2014 12:54
Benzo(b)fluoranthene	U		0.78	5.3	µg/L	1	10/24/2014 12:54
Benzo(g,h,i)perylene	U		0.74	5.3	µg/L	1	10/24/2014 12:54
Benzo(k)fluoranthene	U		0.18	5.3	µg/L	1	10/24/2014 12:54
Bis(2-chloroethoxy)methane	U		0.35	5.3	µg/L	1	10/24/2014 12:54
Bis(2-chloroethyl)ether	U		0.36	5.3	µg/L	1	10/24/2014 12:54

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-043
Collection Date: 10/15/2014 10:39 AM

Work Order: 1410899
Lab ID: 1410899-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.34	5.3	µg/L	1	10/24/2014 12:54
Bis(2-ethylhexyl)phthalate	U		0.16	5.3	µg/L	1	10/24/2014 12:54
Butyl benzyl phthalate	U		0.11	5.3	µg/L	1	10/24/2014 12:54
Caprolactam	U		5.0	11	µg/L	1	10/24/2014 12:54
Carbazole	0.74	J	0.17	11	µg/L	1	10/24/2014 12:54
Chrysene	U		0.75	5.3	µg/L	1	10/24/2014 12:54
Dibenzo(a,h)anthracene	U		0.71	5.3	µg/L	1	10/24/2014 12:54
Dibenzofuran	0.76	J	0.29	5.3	µg/L	1	10/24/2014 12:54
Diethyl phthalate	U		0.26	21	µg/L	1	10/24/2014 12:54
Dimethyl phthalate	U		0.29	21	µg/L	1	10/24/2014 12:54
Di-n-butyl phthalate	U		0.14	5.3	µg/L	1	10/24/2014 12:54
Di-n-octyl phthalate	U		0.12	5.3	µg/L	1	10/24/2014 12:54
Fluoranthene	U		0.81	5.3	µg/L	1	10/24/2014 12:54
Fluorene	2.3	J	0.11	5.3	µg/L	1	10/24/2014 12:54
Hexachlorobenzene	U		0.23	5.3	µg/L	1	10/24/2014 12:54
Hexachlorobutadiene	U		0.25	5.3	µg/L	1	10/24/2014 12:54
Hexachlorocyclopentadiene	U		0.19	21	µg/L	1	10/24/2014 12:54
Hexachloroethane	U		0.50	5.3	µg/L	1	10/24/2014 12:54
Indeno(1,2,3-cd)pyrene	U		0.73	5.3	µg/L	1	10/24/2014 12:54
Isophorone	U		0.31	5.3	µg/L	1	10/24/2014 12:54
Naphthalene	6.5		0.13	5.3	µg/L	1	10/24/2014 12:54
Nitrobenzene	U		0.35	5.3	µg/L	1	10/24/2014 12:54
N-Nitrosodi-n-propylamine	U		0.34	5.3	µg/L	1	10/24/2014 12:54
N-Nitrosodiphenylamine	U		0.85	5.3	µg/L	1	10/24/2014 12:54
Pentachlorophenol	U		0.23	21	µg/L	1	10/24/2014 12:54
Phenanthrene	1.3	J	0.91	5.3	µg/L	1	10/24/2014 12:54
Phenol	0.72	J	0.34	5.3	µg/L	1	10/24/2014 12:54
Pyrene	U		0.69	5.3	µg/L	1	10/24/2014 12:54
Surr: 2,4,6-Tribromophenol	82.1			32-115	%REC	1	10/24/2014 12:54
Surr: 2-Fluorobiphenyl	61.5			32-100	%REC	1	10/24/2014 12:54
Surr: 2-Fluorophenol	35.1			22-59	%REC	1	10/24/2014 12:54
Surr: 4-Terphenyl-d14	81.1			23-112	%REC	1	10/24/2014 12:54
Surr: Nitrobenzene-d5	57.0			31-93	%REC	1	10/24/2014 12:54
Surr: Phenol-d6	25.3			13-36	%REC	1	10/24/2014 12:54

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: AK

BatchID: R150998

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 16:58
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 16:58
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 16:58

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-043
Collection Date: 10/15/2014 10:39 AM

Work Order: 1410899
Lab ID: 1410899-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 16:58
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 16:58
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 16:58
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 16:58
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 16:58
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 16:58
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 16:58
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 16:58
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 16:58
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 16:58
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 16:58
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 16:58
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 16:58
4-Methyl-2-pentanone	5.0	J	0.15	50	µg/L	1	10/23/2014 16:58
Acetone	U		3.1	50	µg/L	1	10/23/2014 16:58
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 16:58
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 16:58
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 16:58
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 16:58
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 16:58
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 16:58
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 16:58
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 16:58
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 16:58
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 16:58
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 16:58
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 16:58
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 16:58
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 16:58
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 16:58
Ethylbenzene	1.3		0.22	1.0	µg/L	1	10/23/2014 16:58
Isopropylbenzene	1.5	J	0.25	5.0	µg/L	1	10/23/2014 16:58
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 16:58
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 16:58
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 16:58
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 16:58
Styrene	0.77	J	0.18	1.0	µg/L	1	10/23/2014 16:58
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 16:58
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 16:58
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 16:58

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-043
Collection Date: 10/15/2014 10:39 AM

Work Order: 1410899
Lab ID: 1410899-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 16:58
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 16:58
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 16:58
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 16:58
Xylenes, Total	1.9	J	0.62	3.0	µg/L	1	10/23/2014 16:58
Surr: 1,2-Dichloroethane-d4	100			75-120	%REC	1	10/23/2014 16:58
Surr: 4-Bromofluorobenzene	95.6			80-110	%REC	1	10/23/2014 16:58
Surr: Dibromofluoromethane	102			85-115	%REC	1	10/23/2014 16:58
Surr: Toluene-d8	102			85-110	%REC	1	10/23/2014 16:58

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-044
Collection Date: 10/15/2014 11:43 AM

Work Order: 1410899
Lab ID: 1410899-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1'-Biphenyl	0.11	J	0.10	5.3	µg/L	1	10/22/2014 12:48
2,4,5-Trichlorophenol	U		0.26	5.3	µg/L	1	10/22/2014 12:48
2,4,6-Trichlorophenol	U		0.29	5.3	µg/L	1	10/22/2014 12:48
2,4-Dichlorophenol	U		0.23	11	µg/L	1	10/22/2014 12:48
2,4-Dimethylphenol	U		1.9	5.3	µg/L	1	10/22/2014 12:48
2,4-Dinitrophenol	U		0.70	5.3	µg/L	1	10/22/2014 12:48
2,4-Dinitrotoluene	U		0.28	5.3	µg/L	1	10/22/2014 12:48
2,6-Dinitrotoluene	U		0.24	5.3	µg/L	1	10/22/2014 12:48
2-Chloronaphthalene	U		0.13	5.3	µg/L	1	10/22/2014 12:48
2-Chlorophenol	U		0.34	5.3	µg/L	1	10/22/2014 12:48
2-Methylnaphthalene	U		0.14	5.3	µg/L	1	10/22/2014 12:48
2-Methylphenol	U		0.21	5.3	µg/L	1	10/22/2014 12:48
2-Nitroaniline	U		0.36	21	µg/L	1	10/22/2014 12:48
2-Nitrophenol	U		0.29	5.3	µg/L	1	10/22/2014 12:48
3,3'-Dichlorobenzidine	U		4.1	5.3	µg/L	1	10/22/2014 12:48
3-Nitroaniline	U		0.36	21	µg/L	1	10/22/2014 12:48
4,6-Dinitro-2-methylphenol	U		1.3	21	µg/L	1	10/22/2014 12:48
4-Bromophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/22/2014 12:48
4-Chloro-3-methylphenol	U		0.33	5.3	µg/L	1	10/22/2014 12:48
4-Chloroaniline	U		0.33	21	µg/L	1	10/22/2014 12:48
4-Chlorophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/22/2014 12:48
4-Methylphenol	0.62	J	0.21	5.3	µg/L	1	10/22/2014 12:48
4-Nitroaniline	U		0.31	21	µg/L	1	10/22/2014 12:48
4-Nitrophenol	U		0.54	21	µg/L	1	10/22/2014 12:48
Acenaphthene	0.51	J	0.12	5.3	µg/L	1	10/22/2014 12:48
Acenaphthylene	U		0.13	5.3	µg/L	1	10/22/2014 12:48
Acetophenone	0.34	J	0.095	1.1	µg/L	1	10/22/2014 12:48
Anthracene	U		0.76	5.3	µg/L	1	10/22/2014 12:48
Atrazine	U		0.14	1.1	µg/L	1	10/22/2014 12:48
Benzaldehyde	U		0.48	1.1	µg/L	1	10/22/2014 12:48
Benzo(a)anthracene	U		0.60	5.3	µg/L	1	10/22/2014 12:48
Benzo(a)pyrene	U		0.11	5.3	µg/L	1	10/22/2014 12:48
Benzo(b)fluoranthene	U		0.78	5.3	µg/L	1	10/22/2014 12:48
Benzo(g,h,i)perylene	U		0.74	5.3	µg/L	1	10/22/2014 12:48
Benzo(k)fluoranthene	U		0.18	5.3	µg/L	1	10/22/2014 12:48
Bis(2-chloroethoxy)methane	U		0.35	5.3	µg/L	1	10/22/2014 12:48
Bis(2-chloroethyl)ether	U		0.36	5.3	µg/L	1	10/22/2014 12:48

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-044
Collection Date: 10/15/2014 11:43 AM

Work Order: 1410899
Lab ID: 1410899-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.34	5.3	µg/L	1	10/22/2014 12:48
Bis(2-ethylhexyl)phthalate	U		0.16	5.3	µg/L	1	10/22/2014 12:48
Butyl benzyl phthalate	U		0.11	5.3	µg/L	1	10/22/2014 12:48
Caprolactam	U		5.0	11	µg/L	1	10/22/2014 12:48
Carbazole	U		0.17	11	µg/L	1	10/22/2014 12:48
Chrysene	U		0.75	5.3	µg/L	1	10/22/2014 12:48
Dibenzo(a,h)anthracene	U		0.71	5.3	µg/L	1	10/22/2014 12:48
Dibenzofuran	U		0.29	5.3	µg/L	1	10/22/2014 12:48
Diethyl phthalate	U		0.26	21	µg/L	1	10/22/2014 12:48
Dimethyl phthalate	U		0.29	21	µg/L	1	10/22/2014 12:48
Di-n-butyl phthalate	U		0.14	5.3	µg/L	1	10/22/2014 12:48
Di-n-octyl phthalate	U		0.12	5.3	µg/L	1	10/22/2014 12:48
Fluoranthene	U		0.81	5.3	µg/L	1	10/22/2014 12:48
Fluorene	0.32	J	0.11	5.3	µg/L	1	10/22/2014 12:48
Hexachlorobenzene	U		0.23	5.3	µg/L	1	10/22/2014 12:48
Hexachlorobutadiene	U		0.25	5.3	µg/L	1	10/22/2014 12:48
Hexachlorocyclopentadiene	U		0.19	21	µg/L	1	10/22/2014 12:48
Hexachloroethane	U		0.50	5.3	µg/L	1	10/22/2014 12:48
Indeno(1,2,3-cd)pyrene	U		0.73	5.3	µg/L	1	10/22/2014 12:48
Isophorone	U		0.31	5.3	µg/L	1	10/22/2014 12:48
Naphthalene	0.49	J	0.13	5.3	µg/L	1	10/22/2014 12:48
Nitrobenzene	U		0.35	5.3	µg/L	1	10/22/2014 12:48
N-Nitrosodi-n-propylamine	U		0.34	5.3	µg/L	1	10/22/2014 12:48
N-Nitrosodiphenylamine	U		0.85	5.3	µg/L	1	10/22/2014 12:48
Pentachlorophenol	U		0.23	21	µg/L	1	10/22/2014 12:48
Phenanthrene	U		0.91	5.3	µg/L	1	10/22/2014 12:48
Phenol	1.7	J	0.34	5.3	µg/L	1	10/22/2014 12:48
Pyrene	U		0.69	5.3	µg/L	1	10/22/2014 12:48
Surr: 2,4,6-Tribromophenol	79.6			32-115	%REC	1	10/22/2014 12:48
Surr: 2-Fluorobiphenyl	60.9			32-100	%REC	1	10/22/2014 12:48
Surr: 2-Fluorophenol	31.3			22-59	%REC	1	10/22/2014 12:48
Surr: 4-Terphenyl-d14	84.1			23-112	%REC	1	10/22/2014 12:48
Surr: Nitrobenzene-d5	47.0			31-93	%REC	1	10/22/2014 12:48
Surr: Phenol-d6	23.3			13-36	%REC	1	10/22/2014 12:48

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: AK

BatchID: R150998

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 14:05
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 14:05
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 14:05

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-044
Collection Date: 10/15/2014 11:43 AM

Work Order: 1410899
Lab ID: 1410899-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 14:05
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 14:05
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 14:05
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 14:05
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 14:05
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 14:05
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:05
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 14:05
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 14:05
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 14:05
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 14:05
2-Butanone	2.4	J	0.87	25	µg/L	1	10/23/2014 14:05
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 14:05
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 14:05
Acetone	10	J	3.1	50	µg/L	1	10/23/2014 14:05
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 14:05
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 14:05
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 14:05
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 14:05
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 14:05
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 14:05
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 14:05
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 14:05
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 14:05
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 14:05
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 14:05
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 14:05
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 14:05
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 14:05
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 14:05
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:05
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 14:05
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 14:05
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 14:05
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 14:05
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 14:05
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 14:05
Tetrachloroethene	2.6		0.25	1.0	µg/L	1	10/23/2014 14:05
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 14:05
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 14:05

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-044
Collection Date: 10/15/2014 11:43 AM

Work Order: 1410899
Lab ID: 1410899-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 14:05
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 14:05
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 14:05
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 14:05
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 14:05
Surr: 1,2-Dichloroethane-d4	99.0			75-120	%REC	1	10/23/2014 14:05
Surr: 4-Bromofluorobenzene	94.6			80-110	%REC	1	10/23/2014 14:05
Surr: Dibromofluoromethane	103			85-115	%REC	1	10/23/2014 14:05
Surr: Toluene-d8	102			85-110	%REC	1	10/23/2014 14:05

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-045
Collection Date: 10/15/2014 12:05 PM

Work Order: 1410899
Lab ID: 1410899-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14	Analyst: JG	
BatchID: 64131							
1,1'-Biphenyl	0.13	J	0.10	5.3	µg/L	1	10/22/2014 01:11
2,4,5-Trichlorophenol	U		0.26	5.3	µg/L	1	10/22/2014 01:11
2,4,6-Trichlorophenol	U		0.29	5.3	µg/L	1	10/22/2014 01:11
2,4-Dichlorophenol	U		0.23	11	µg/L	1	10/22/2014 01:11
2,4-Dimethylphenol	U		1.9	5.3	µg/L	1	10/22/2014 01:11
2,4-Dinitrophenol	U		0.70	5.3	µg/L	1	10/22/2014 01:11
2,4-Dinitrotoluene	U		0.28	5.3	µg/L	1	10/22/2014 01:11
2,6-Dinitrotoluene	U		0.24	5.3	µg/L	1	10/22/2014 01:11
2-Chloronaphthalene	U		0.13	5.3	µg/L	1	10/22/2014 01:11
2-Chlorophenol	U		0.34	5.3	µg/L	1	10/22/2014 01:11
2-Methylnaphthalene	0.16	J	0.14	5.3	µg/L	1	10/22/2014 01:11
2-Methylphenol	U		0.21	5.3	µg/L	1	10/22/2014 01:11
2-Nitroaniline	U		0.36	21	µg/L	1	10/22/2014 01:11
2-Nitrophenol	U		0.29	5.3	µg/L	1	10/22/2014 01:11
3,3'-Dichlorobenzidine	U		4.1	5.3	µg/L	1	10/22/2014 01:11
3-Nitroaniline	U		0.36	21	µg/L	1	10/22/2014 01:11
4,6-Dinitro-2-methylphenol	U		1.3	21	µg/L	1	10/22/2014 01:11
4-Bromophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/22/2014 01:11
4-Chloro-3-methylphenol	U		0.33	5.3	µg/L	1	10/22/2014 01:11
4-Chloroaniline	U		0.33	21	µg/L	1	10/22/2014 01:11
4-Chlorophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/22/2014 01:11
4-Methylphenol	0.71	J	0.21	5.3	µg/L	1	10/22/2014 01:11
4-Nitroaniline	U		0.31	21	µg/L	1	10/22/2014 01:11
4-Nitrophenol	U		0.54	21	µg/L	1	10/22/2014 01:11
Acenaphthene	0.51	J	0.12	5.3	µg/L	1	10/22/2014 01:11
Acenaphthylene	U		0.13	5.3	µg/L	1	10/22/2014 01:11
Acetophenone	0.35	J	0.095	1.1	µg/L	1	10/22/2014 01:11
Anthracene	U		0.76	5.3	µg/L	1	10/22/2014 01:11
Atrazine	U		0.14	1.1	µg/L	1	10/22/2014 01:11
Benzaldehyde	U		0.48	1.1	µg/L	1	10/22/2014 01:11
Benzo(a)anthracene	U		0.60	5.3	µg/L	1	10/22/2014 01:11
Benzo(a)pyrene	U		0.11	5.3	µg/L	1	10/22/2014 01:11
Benzo(b)fluoranthene	U		0.78	5.3	µg/L	1	10/22/2014 01:11
Benzo(g,h,i)perylene	U		0.74	5.3	µg/L	1	10/22/2014 01:11
Benzo(k)fluoranthene	U		0.18	5.3	µg/L	1	10/22/2014 01:11
Bis(2-chloroethoxy)methane	U		0.35	5.3	µg/L	1	10/22/2014 01:11
Bis(2-chloroethyl)ether	U		0.36	5.3	µg/L	1	10/22/2014 01:11

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-045
Collection Date: 10/15/2014 12:05 PM

Work Order: 1410899
Lab ID: 1410899-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.34	5.3	µg/L	1	10/22/2014 01:11
Bis(2-ethylhexyl)phthalate	0.77	J	0.16	5.3	µg/L	1	10/22/2014 01:11
Butyl benzyl phthalate	U		0.11	5.3	µg/L	1	10/22/2014 01:11
Caprolactam	U		5.0	11	µg/L	1	10/22/2014 01:11
Carbazole	U		0.17	11	µg/L	1	10/22/2014 01:11
Chrysene	U		0.75	5.3	µg/L	1	10/22/2014 01:11
Dibenzo(a,h)anthracene	U		0.71	5.3	µg/L	1	10/22/2014 01:11
Dibenzofuran	U		0.29	5.3	µg/L	1	10/22/2014 01:11
Diethyl phthalate	U		0.26	21	µg/L	1	10/22/2014 01:11
Dimethyl phthalate	U		0.29	21	µg/L	1	10/22/2014 01:11
Di-n-butyl phthalate	U		0.14	5.3	µg/L	1	10/22/2014 01:11
Di-n-octyl phthalate	U		0.12	5.3	µg/L	1	10/22/2014 01:11
Fluoranthene	U		0.81	5.3	µg/L	1	10/22/2014 01:11
Fluorene	0.34	J	0.11	5.3	µg/L	1	10/22/2014 01:11
Hexachlorobenzene	U		0.23	5.3	µg/L	1	10/22/2014 01:11
Hexachlorobutadiene	U		0.25	5.3	µg/L	1	10/22/2014 01:11
Hexachlorocyclopentadiene	U		0.19	21	µg/L	1	10/22/2014 01:11
Hexachloroethane	U		0.50	5.3	µg/L	1	10/22/2014 01:11
Indeno(1,2,3-cd)pyrene	U		0.73	5.3	µg/L	1	10/22/2014 01:11
Isophorone	U		0.31	5.3	µg/L	1	10/22/2014 01:11
Naphthalene	0.58	J	0.13	5.3	µg/L	1	10/22/2014 01:11
Nitrobenzene	U		0.35	5.3	µg/L	1	10/22/2014 01:11
N-Nitrosodi-n-propylamine	U		0.34	5.3	µg/L	1	10/22/2014 01:11
N-Nitrosodiphenylamine	U		0.85	5.3	µg/L	1	10/22/2014 01:11
Pentachlorophenol	U		0.23	21	µg/L	1	10/22/2014 01:11
Phenanthrene	U		0.91	5.3	µg/L	1	10/22/2014 01:11
Phenol	1.6	J	0.34	5.3	µg/L	1	10/22/2014 01:11
Pyrene	U		0.69	5.3	µg/L	1	10/22/2014 01:11
Surr: 2,4,6-Tribromophenol	90.1			32-115	%REC	1	10/22/2014 01:11
Surr: 2-Fluorobiphenyl	66.4			32-100	%REC	1	10/22/2014 01:11
Surr: 2-Fluorophenol	38.0			22-59	%REC	1	10/22/2014 01:11
Surr: 4-Terphenyl-d14	86.8			23-112	%REC	1	10/22/2014 01:11
Surr: Nitrobenzene-d5	54.7			31-93	%REC	1	10/22/2014 01:11
Surr: Phenol-d6	26.2			13-36	%REC	1	10/22/2014 01:11

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: AK

BatchID: R150998

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 14:30
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 14:30
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 14:30

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-045
Collection Date: 10/15/2014 12:05 PM

Work Order: 1410899
Lab ID: 1410899-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 14:30
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 14:30
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 14:30
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 14:30
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 14:30
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 14:30
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:30
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 14:30
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 14:30
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 14:30
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 14:30
2-Butanone	2.5	J	0.87	25	µg/L	1	10/23/2014 14:30
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 14:30
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 14:30
Acetone	8.9	J	3.1	50	µg/L	1	10/23/2014 14:30
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 14:30
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 14:30
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 14:30
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 14:30
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 14:30
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 14:30
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 14:30
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 14:30
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 14:30
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 14:30
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 14:30
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 14:30
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 14:30
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 14:30
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 14:30
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:30
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 14:30
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 14:30
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 14:30
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 14:30
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 14:30
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 14:30
Tetrachloroethene	2.7		0.25	1.0	µg/L	1	10/23/2014 14:30
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 14:30
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 14:30

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

ALS Group USA, Corp**Date:** 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-045
Collection Date: 10/15/2014 12:05 PM

Work Order: 1410899
Lab ID: 1410899-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 14:30
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 14:30
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 14:30
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 14:30
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 14:30
Surr: 1,2-Dichloroethane-d4	98.9			75-120	%REC	1	10/23/2014 14:30
Surr: 4-Bromofluorobenzene	95.8			80-110	%REC	1	10/23/2014 14:30
Surr: Dibromofluoromethane	102			85-115	%REC	1	10/23/2014 14:30
Surr: Toluene-d8	103			85-110	%REC	1	10/23/2014 14:30

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-046
Collection Date: 10/15/2014 12:57 PM

Work Order: 1410899
Lab ID: 1410899-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1`-Biphenyl	U		0.10	5.4	µg/L	1	10/22/2014 01:34
2,4,5-Trichlorophenol	U		0.27	5.4	µg/L	1	10/22/2014 01:34
2,4,6-Trichlorophenol	U		0.29	5.4	µg/L	1	10/22/2014 01:34
2,4-Dichlorophenol	U		0.24	11	µg/L	1	10/22/2014 01:34
2,4-Dimethylphenol	U		1.9	5.4	µg/L	1	10/22/2014 01:34
2,4-Dinitrophenol	U		0.72	5.4	µg/L	1	10/22/2014 01:34
2,4-Dinitrotoluene	U		0.29	5.4	µg/L	1	10/22/2014 01:34
2,6-Dinitrotoluene	U		0.24	5.4	µg/L	1	10/22/2014 01:34
2-Chloronaphthalene	U		0.14	5.4	µg/L	1	10/22/2014 01:34
2-Chlorophenol	U		0.35	5.4	µg/L	1	10/22/2014 01:34
2-Methylnaphthalene	U		0.14	5.4	µg/L	1	10/22/2014 01:34
2-Methylphenol	U		0.21	5.4	µg/L	1	10/22/2014 01:34
2-Nitroaniline	U		0.37	22	µg/L	1	10/22/2014 01:34
2-Nitrophenol	U		0.30	5.4	µg/L	1	10/22/2014 01:34
3,3`-Dichlorobenzidine	U		4.2	5.4	µg/L	1	10/22/2014 01:34
3-Nitroaniline	U		0.37	22	µg/L	1	10/22/2014 01:34
4,6-Dinitro-2-methylphenol	U		1.3	22	µg/L	1	10/22/2014 01:34
4-Bromophenyl phenyl ether	U		0.25	5.4	µg/L	1	10/22/2014 01:34
4-Chloro-3-methylphenol	U		0.34	5.4	µg/L	1	10/22/2014 01:34
4-Chloroaniline	U		0.34	22	µg/L	1	10/22/2014 01:34
4-Chlorophenyl phenyl ether	U		0.25	5.4	µg/L	1	10/22/2014 01:34
4-Methylphenol	U		0.21	5.4	µg/L	1	10/22/2014 01:34
4-Nitroaniline	U		0.32	22	µg/L	1	10/22/2014 01:34
4-Nitrophenol	U		0.55	22	µg/L	1	10/22/2014 01:34
Acenaphthene	U		0.12	5.4	µg/L	1	10/22/2014 01:34
Acenaphthylene	U		0.13	5.4	µg/L	1	10/22/2014 01:34
Acetophenone	U		0.097	1.1	µg/L	1	10/22/2014 01:34
Anthracene	U		0.78	5.4	µg/L	1	10/22/2014 01:34
Atrazine	U		0.14	1.1	µg/L	1	10/22/2014 01:34
Benzaldehyde	U		0.50	1.1	µg/L	1	10/22/2014 01:34
Benzo(a)anthracene	U		0.62	5.4	µg/L	1	10/22/2014 01:34
Benzo(a)pyrene	U		0.11	5.4	µg/L	1	10/22/2014 01:34
Benzo(b)fluoranthene	U		0.80	5.4	µg/L	1	10/22/2014 01:34
Benzo(g,h,i)perylene	U		0.76	5.4	µg/L	1	10/22/2014 01:34
Benzo(k)fluoranthene	U		0.19	5.4	µg/L	1	10/22/2014 01:34
Bis(2-chloroethoxy)methane	U		0.36	5.4	µg/L	1	10/22/2014 01:34
Bis(2-chloroethyl)ether	U		0.37	5.4	µg/L	1	10/22/2014 01:34

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-046
Collection Date: 10/15/2014 12:57 PM

Work Order: 1410899
Lab ID: 1410899-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.35	5.4	µg/L	1	10/22/2014 01:34
Bis(2-ethylhexyl)phthalate	0.88	J	0.16	5.4	µg/L	1	10/22/2014 01:34
Butyl benzyl phthalate	U		0.11	5.4	µg/L	1	10/22/2014 01:34
Caprolactam	U		5.1	11	µg/L	1	10/22/2014 01:34
Carbazole	U		0.17	11	µg/L	1	10/22/2014 01:34
Chrysene	U		0.77	5.4	µg/L	1	10/22/2014 01:34
Dibenzo(a,h)anthracene	U		0.73	5.4	µg/L	1	10/22/2014 01:34
Dibenzofuran	U		0.30	5.4	µg/L	1	10/22/2014 01:34
Diethyl phthalate	U		0.26	22	µg/L	1	10/22/2014 01:34
Dimethyl phthalate	U		0.30	22	µg/L	1	10/22/2014 01:34
Di-n-butyl phthalate	U		0.15	5.4	µg/L	1	10/22/2014 01:34
Di-n-octyl phthalate	U		0.13	5.4	µg/L	1	10/22/2014 01:34
Fluoranthene	U		0.84	5.4	µg/L	1	10/22/2014 01:34
Fluorene	U		0.11	5.4	µg/L	1	10/22/2014 01:34
Hexachlorobenzene	U		0.24	5.4	µg/L	1	10/22/2014 01:34
Hexachlorobutadiene	U		0.26	5.4	µg/L	1	10/22/2014 01:34
Hexachlorocyclopentadiene	U		0.20	22	µg/L	1	10/22/2014 01:34
Hexachloroethane	U		0.51	5.4	µg/L	1	10/22/2014 01:34
Indeno(1,2,3-cd)pyrene	U		0.75	5.4	µg/L	1	10/22/2014 01:34
Isophorone	U		0.32	5.4	µg/L	1	10/22/2014 01:34
Naphthalene	U		0.13	5.4	µg/L	1	10/22/2014 01:34
Nitrobenzene	U		0.36	5.4	µg/L	1	10/22/2014 01:34
N-Nitrosodi-n-propylamine	U		0.35	5.4	µg/L	1	10/22/2014 01:34
N-Nitrosodiphenylamine	U		0.88	5.4	µg/L	1	10/22/2014 01:34
Pentachlorophenol	U		0.24	22	µg/L	1	10/22/2014 01:34
Phenanthrene	U		0.93	5.4	µg/L	1	10/22/2014 01:34
Phenol	U		0.35	5.4	µg/L	1	10/22/2014 01:34
Pyrene	U		0.70	5.4	µg/L	1	10/22/2014 01:34
Surr: 2,4,6-Tribromophenol	88.1			32-115	%REC	1	10/22/2014 01:34
Surr: 2-Fluorobiphenyl	62.6			32-100	%REC	1	10/22/2014 01:34
Surr: 2-Fluorophenol	34.4			22-59	%REC	1	10/22/2014 01:34
Surr: 4-Terphenyl-d14	87.6			23-112	%REC	1	10/22/2014 01:34
Surr: Nitrobenzene-d5	52.2			31-93	%REC	1	10/22/2014 01:34
Surr: Phenol-d6	24.6			13-36	%REC	1	10/22/2014 01:34

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: AK

BatchID: R150998

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 14:55
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 14:55
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 14:55

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-046
Collection Date: 10/15/2014 12:57 PM

Work Order: 1410899
Lab ID: 1410899-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 14:55
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 14:55
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 14:55
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 14:55
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 14:55
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 14:55
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:55
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 14:55
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 14:55
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 14:55
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 14:55
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 14:55
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 14:55
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 14:55
Acetone	U		3.1	50	µg/L	1	10/23/2014 14:55
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 14:55
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 14:55
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 14:55
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 14:55
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 14:55
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 14:55
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 14:55
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 14:55
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 14:55
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 14:55
cis-1,2-Dichloroethene	0.97	J	0.25	1.0	µg/L	1	10/23/2014 14:55
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 14:55
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 14:55
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 14:55
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 14:55
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 14:55
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 14:55
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 14:55
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 14:55
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 14:55
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 14:55
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 14:55
Tetrachloroethene	4.4		0.25	1.0	µg/L	1	10/23/2014 14:55
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 14:55
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 14:55

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-046
Collection Date: 10/15/2014 12:57 PM

Work Order: 1410899
Lab ID: 1410899-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 14:55
Trichloroethene	1.3		0.34	1.0	µg/L	1	10/23/2014 14:55
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 14:55
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 14:55
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 14:55
Surr: 1,2-Dichloroethane-d4	95.2			75-120	%REC	1	10/23/2014 14:55
Surr: 4-Bromofluorobenzene	93.8			80-110	%REC	1	10/23/2014 14:55
Surr: Dibromofluoromethane	101			85-115	%REC	1	10/23/2014 14:55
Surr: Toluene-d8	102			85-110	%REC	1	10/23/2014 14:55

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-047
Collection Date: 10/15/2014 01:39 PM

Work Order: 1410899
Lab ID: 1410899-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1'-Biphenyl	0.15	J	0.095	5.0	µg/L	1	10/24/2014 01:16
2,4,5-Trichlorophenol	U		0.25	5.0	µg/L	1	10/24/2014 01:16
2,4,6-Trichlorophenol	U		0.27	5.0	µg/L	1	10/24/2014 01:16
2,4-Dichlorophenol	U		0.22	10	µg/L	1	10/24/2014 01:16
2,4-Dimethylphenol	3.6	J	1.8	5.0	µg/L	1	10/24/2014 01:16
2,4-Dinitrophenol	U		0.67	5.0	µg/L	1	10/24/2014 01:16
2,4-Dinitrotoluene	U		0.27	5.0	µg/L	1	10/24/2014 01:16
2,6-Dinitrotoluene	U		0.23	5.0	µg/L	1	10/24/2014 01:16
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	10/24/2014 01:16
2-Chlorophenol	U		0.32	5.0	µg/L	1	10/24/2014 01:16
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	10/24/2014 01:16
2-Methylphenol	1.5	J	0.20	5.0	µg/L	1	10/24/2014 01:16
2-Nitroaniline	U		0.34	20	µg/L	1	10/24/2014 01:16
2-Nitrophenol	U		0.28	5.0	µg/L	1	10/24/2014 01:16
3,3'-Dichlorobenzidine	U		3.9	5.0	µg/L	1	10/24/2014 01:16
3-Nitroaniline	U		0.34	20	µg/L	1	10/24/2014 01:16
4,6-Dinitro-2-methylphenol	U		1.2	20	µg/L	1	10/24/2014 01:16
4-Bromophenyl phenyl ether	U		0.23	5.0	µg/L	1	10/24/2014 01:16
4-Chloro-3-methylphenol	U		0.31	5.0	µg/L	1	10/24/2014 01:16
4-Chloroaniline	U		0.32	20	µg/L	1	10/24/2014 01:16
4-Chlorophenyl phenyl ether	U		0.23	5.0	µg/L	1	10/24/2014 01:16
4-Methylphenol	1.2	J	0.20	5.0	µg/L	1	10/24/2014 01:16
4-Nitroaniline	U		0.30	20	µg/L	1	10/24/2014 01:16
4-Nitrophenol	U		0.51	20	µg/L	1	10/24/2014 01:16
Acenaphthene	U		0.11	5.0	µg/L	1	10/24/2014 01:16
Acenaphthylene	U		0.12	5.0	µg/L	1	10/24/2014 01:16
Acetophenone	U		0.090	1.0	µg/L	1	10/24/2014 01:16
Anthracene	U		0.72	5.0	µg/L	1	10/24/2014 01:16
Atrazine	U		0.13	1.0	µg/L	1	10/24/2014 01:16
Benzaldehyde	U		0.46	1.0	µg/L	1	10/24/2014 01:16
Benzo(a)anthracene	U		0.57	5.0	µg/L	1	10/24/2014 01:16
Benzo(a)pyrene	U		0.10	5.0	µg/L	1	10/24/2014 01:16
Benzo(b)fluoranthene	U		0.74	5.0	µg/L	1	10/24/2014 01:16
Benzo(g,h,i)perylene	U		0.70	5.0	µg/L	1	10/24/2014 01:16
Benzo(k)fluoranthene	U		0.17	5.0	µg/L	1	10/24/2014 01:16
Bis(2-chloroethoxy)methane	U		0.33	5.0	µg/L	1	10/24/2014 01:16
Bis(2-chloroethyl)ether	U		0.34	5.0	µg/L	1	10/24/2014 01:16

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-047
Collection Date: 10/15/2014 01:39 PM

Work Order: 1410899
Lab ID: 1410899-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.32	5.0	µg/L	1	10/24/2014 01:16
Bis(2-ethylhexyl)phthalate	U		0.15	5.0	µg/L	1	10/24/2014 01:16
Butyl benzyl phthalate	U		0.10	5.0	µg/L	1	10/24/2014 01:16
Caprolactam	U		4.7	10	µg/L	1	10/24/2014 01:16
Carbazole	U		0.16	10	µg/L	1	10/24/2014 01:16
Chrysene	U		0.71	5.0	µg/L	1	10/24/2014 01:16
Dibenzo(a,h)anthracene	U		0.67	5.0	µg/L	1	10/24/2014 01:16
Dibenzofuran	U		0.28	5.0	µg/L	1	10/24/2014 01:16
Diethyl phthalate	U		0.24	20	µg/L	1	10/24/2014 01:16
Dimethyl phthalate	U		0.27	20	µg/L	1	10/24/2014 01:16
Di-n-butyl phthalate	U		0.14	5.0	µg/L	1	10/24/2014 01:16
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	10/24/2014 01:16
Fluoranthene	U		0.77	5.0	µg/L	1	10/24/2014 01:16
Fluorene	U		0.10	5.0	µg/L	1	10/24/2014 01:16
Hexachlorobenzene	U		0.22	5.0	µg/L	1	10/24/2014 01:16
Hexachlorobutadiene	U		0.24	5.0	µg/L	1	10/24/2014 01:16
Hexachlorocyclopentadiene	U		0.18	20	µg/L	1	10/24/2014 01:16
Hexachloroethane	U		0.47	5.0	µg/L	1	10/24/2014 01:16
Indeno(1,2,3-cd)pyrene	U		0.69	5.0	µg/L	1	10/24/2014 01:16
Isophorone	U		0.30	5.0	µg/L	1	10/24/2014 01:16
Naphthalene	2.3	J	0.12	5.0	µg/L	1	10/24/2014 01:16
Nitrobenzene	U		0.33	5.0	µg/L	1	10/24/2014 01:16
N-Nitrosodi-n-propylamine	U		0.32	5.0	µg/L	1	10/24/2014 01:16
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	10/24/2014 01:16
Pentachlorophenol	U		0.22	20	µg/L	1	10/24/2014 01:16
Phenanthrene	1.7	J	0.86	5.0	µg/L	1	10/24/2014 01:16
Phenol	U		0.32	5.0	µg/L	1	10/24/2014 01:16
Pyrene	U		0.65	5.0	µg/L	1	10/24/2014 01:16
Surr: 2,4,6-Tribromophenol	90.4			32-115	%REC	1	10/24/2014 01:16
Surr: 2-Fluorobiphenyl	72.6			32-100	%REC	1	10/24/2014 01:16
Surr: 2-Fluorophenol	39.9			22-59	%REC	1	10/24/2014 01:16
Surr: 4-Terphenyl-d14	92.2			23-112	%REC	1	10/24/2014 01:16
Surr: Nitrobenzene-d5	63.5			31-93	%REC	1	10/24/2014 01:16
Surr: Phenol-d6	27.5			13-36	%REC	1	10/24/2014 01:16

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: RS

BatchID: R150911

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 07:02
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 07:02
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 07:02

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-047
Collection Date: 10/15/2014 01:39 PM

Work Order: 1410899
Lab ID: 1410899-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 07:02
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 07:02
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 07:02
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 07:02
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 07:02
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 07:02
1,2-Dichlorobenzene	0.83	J	0.22	1.0	µg/L	1	10/23/2014 07:02
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 07:02
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 07:02
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 07:02
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 07:02
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 07:02
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 07:02
4-Methyl-2-pentanone	5.8	J	0.15	50	µg/L	1	10/23/2014 07:02
Acetone	U		3.1	50	µg/L	1	10/23/2014 07:02
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 07:02
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 07:02
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 07:02
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 07:02
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 07:02
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 07:02
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 07:02
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 07:02
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 07:02
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 07:02
cis-1,2-Dichloroethene	1.5		0.25	1.0	µg/L	1	10/23/2014 07:02
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 07:02
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 07:02
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 07:02
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 07:02
Ethylbenzene	1.4		0.22	1.0	µg/L	1	10/23/2014 07:02
Isopropylbenzene	2.0	J	0.25	5.0	µg/L	1	10/23/2014 07:02
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 07:02
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 07:02
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 07:02
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 07:02
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 07:02
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 07:02
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 07:02
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 07:02

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-047
Collection Date: 10/15/2014 01:39 PM

Work Order: 1410899
Lab ID: 1410899-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 07:02
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 07:02
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 07:02
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 07:02
Xylenes, Total	4.7		0.62	3.0	µg/L	1	10/23/2014 07:02
Surr: 1,2-Dichloroethane-d4	98.8			75-120	%REC	1	10/23/2014 07:02
Surr: 4-Bromofluorobenzene	99.0			80-110	%REC	1	10/23/2014 07:02
Surr: Dibromofluoromethane	99.2			85-115	%REC	1	10/23/2014 07:02
Surr: Toluene-d8	95.2			85-110	%REC	1	10/23/2014 07:02

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-048
Collection Date: 10/15/2014 02:14 PM

Work Order: 1410899
Lab ID: 1410899-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1`-Biphenyl	U		0.10	5.4	µg/L	1	10/22/2014 02:20
2,4,5-Trichlorophenol	U		0.27	5.4	µg/L	1	10/22/2014 02:20
2,4,6-Trichlorophenol	U		0.29	5.4	µg/L	1	10/22/2014 02:20
2,4-Dichlorophenol	U		0.24	11	µg/L	1	10/22/2014 02:20
2,4-Dimethylphenol	U		1.9	5.4	µg/L	1	10/22/2014 02:20
2,4-Dinitrophenol	U		0.72	5.4	µg/L	1	10/22/2014 02:20
2,4-Dinitrotoluene	U		0.29	5.4	µg/L	1	10/22/2014 02:20
2,6-Dinitrotoluene	U		0.24	5.4	µg/L	1	10/22/2014 02:20
2-Chloronaphthalene	U		0.14	5.4	µg/L	1	10/22/2014 02:20
2-Chlorophenol	U		0.35	5.4	µg/L	1	10/22/2014 02:20
2-Methylnaphthalene	U		0.14	5.4	µg/L	1	10/22/2014 02:20
2-Methylphenol	U		0.21	5.4	µg/L	1	10/22/2014 02:20
2-Nitroaniline	U		0.37	22	µg/L	1	10/22/2014 02:20
2-Nitrophenol	U		0.30	5.4	µg/L	1	10/22/2014 02:20
3,3`-Dichlorobenzidine	U		4.2	5.4	µg/L	1	10/22/2014 02:20
3-Nitroaniline	U		0.37	22	µg/L	1	10/22/2014 02:20
4,6-Dinitro-2-methylphenol	U		1.3	22	µg/L	1	10/22/2014 02:20
4-Bromophenyl phenyl ether	U		0.25	5.4	µg/L	1	10/22/2014 02:20
4-Chloro-3-methylphenol	U		0.34	5.4	µg/L	1	10/22/2014 02:20
4-Chloroaniline	U		0.34	22	µg/L	1	10/22/2014 02:20
4-Chlorophenyl phenyl ether	U		0.25	5.4	µg/L	1	10/22/2014 02:20
4-Methylphenol	U		0.21	5.4	µg/L	1	10/22/2014 02:20
4-Nitroaniline	U		0.32	22	µg/L	1	10/22/2014 02:20
4-Nitrophenol	U		0.55	22	µg/L	1	10/22/2014 02:20
Acenaphthene	U		0.12	5.4	µg/L	1	10/22/2014 02:20
Acenaphthylene	U		0.13	5.4	µg/L	1	10/22/2014 02:20
Acetophenone	U		0.097	1.1	µg/L	1	10/22/2014 02:20
Anthracene	U		0.78	5.4	µg/L	1	10/22/2014 02:20
Atrazine	U		0.14	1.1	µg/L	1	10/22/2014 02:20
Benzaldehyde	U		0.50	1.1	µg/L	1	10/22/2014 02:20
Benzo(a)anthracene	U		0.62	5.4	µg/L	1	10/22/2014 02:20
Benzo(a)pyrene	U		0.11	5.4	µg/L	1	10/22/2014 02:20
Benzo(b)fluoranthene	U		0.80	5.4	µg/L	1	10/22/2014 02:20
Benzo(g,h,i)perylene	U		0.76	5.4	µg/L	1	10/22/2014 02:20
Benzo(k)fluoranthene	U		0.19	5.4	µg/L	1	10/22/2014 02:20
Bis(2-chloroethoxy)methane	U		0.36	5.4	µg/L	1	10/22/2014 02:20
Bis(2-chloroethyl)ether	U		0.37	5.4	µg/L	1	10/22/2014 02:20

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-048
Collection Date: 10/15/2014 02:14 PM

Work Order: 1410899
Lab ID: 1410899-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.35	5.4	µg/L	1	10/22/2014 02:20
Bis(2-ethylhexyl)phthalate	U		0.16	5.4	µg/L	1	10/22/2014 02:20
Butyl benzyl phthalate	U		0.11	5.4	µg/L	1	10/22/2014 02:20
Caprolactam	U		5.1	11	µg/L	1	10/22/2014 02:20
Carbazole	U		0.17	11	µg/L	1	10/22/2014 02:20
Chrysene	U		0.77	5.4	µg/L	1	10/22/2014 02:20
Dibenzo(a,h)anthracene	U		0.73	5.4	µg/L	1	10/22/2014 02:20
Dibenzofuran	U		0.30	5.4	µg/L	1	10/22/2014 02:20
Diethyl phthalate	U		0.26	22	µg/L	1	10/22/2014 02:20
Dimethyl phthalate	U		0.30	22	µg/L	1	10/22/2014 02:20
Di-n-butyl phthalate	U		0.15	5.4	µg/L	1	10/22/2014 02:20
Di-n-octyl phthalate	U		0.13	5.4	µg/L	1	10/22/2014 02:20
Fluoranthene	U		0.84	5.4	µg/L	1	10/22/2014 02:20
Fluorene	U		0.11	5.4	µg/L	1	10/22/2014 02:20
Hexachlorobenzene	U		0.24	5.4	µg/L	1	10/22/2014 02:20
Hexachlorobutadiene	U		0.26	5.4	µg/L	1	10/22/2014 02:20
Hexachlorocyclopentadiene	U		0.20	22	µg/L	1	10/22/2014 02:20
Hexachloroethane	U		0.51	5.4	µg/L	1	10/22/2014 02:20
Indeno(1,2,3-cd)pyrene	U		0.75	5.4	µg/L	1	10/22/2014 02:20
Isophorone	U		0.32	5.4	µg/L	1	10/22/2014 02:20
Naphthalene	U		0.13	5.4	µg/L	1	10/22/2014 02:20
Nitrobenzene	U		0.36	5.4	µg/L	1	10/22/2014 02:20
N-Nitrosodi-n-propylamine	U		0.35	5.4	µg/L	1	10/22/2014 02:20
N-Nitrosodiphenylamine	U		0.88	5.4	µg/L	1	10/22/2014 02:20
Pentachlorophenol	U		0.24	22	µg/L	1	10/22/2014 02:20
Phenanthrene	U		0.93	5.4	µg/L	1	10/22/2014 02:20
Phenol	U		0.35	5.4	µg/L	1	10/22/2014 02:20
Pyrene	U		0.70	5.4	µg/L	1	10/22/2014 02:20
Surr: 2,4,6-Tribromophenol	83.9			32-115	%REC	1	10/22/2014 02:20
Surr: 2-Fluorobiphenyl	66.2			32-100	%REC	1	10/22/2014 02:20
Surr: 2-Fluorophenol	38.6			22-59	%REC	1	10/22/2014 02:20
Surr: 4-Terphenyl-d14	85.8			23-112	%REC	1	10/22/2014 02:20
Surr: Nitrobenzene-d5	59.7			31-93	%REC	1	10/22/2014 02:20
Surr: Phenol-d6	27.7			13-36	%REC	1	10/22/2014 02:20

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: RS

BatchID: R150911

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 07:26
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 07:26
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 07:26

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-048
Collection Date: 10/15/2014 02:14 PM

Work Order: 1410899
Lab ID: 1410899-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 07:26
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 07:26
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 07:26
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 07:26
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 07:26
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 07:26
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 07:26
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 07:26
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 07:26
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 07:26
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 07:26
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 07:26
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 07:26
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 07:26
Acetone	U		3.1	50	µg/L	1	10/23/2014 07:26
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 07:26
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 07:26
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 07:26
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 07:26
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 07:26
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 07:26
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 07:26
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 07:26
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 07:26
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 07:26
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 07:26
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 07:26
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 07:26
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 07:26
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 07:26
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 07:26
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 07:26
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 07:26
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 07:26
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 07:26
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 07:26
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 07:26
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 07:26
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 07:26
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 07:26

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

ALS Group USA, Corp**Date:** 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-048
Collection Date: 10/15/2014 02:14 PM

Work Order: 1410899
Lab ID: 1410899-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 07:26
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 07:26
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 07:26
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 07:26
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 07:26
Surr: 1,2-Dichloroethane-d4	91.0			75-120	%REC	1	10/23/2014 07:26
Surr: 4-Bromofluorobenzene	90.4			80-110	%REC	1	10/23/2014 07:26
Surr: Dibromofluoromethane	92.8			85-115	%REC	1	10/23/2014 07:26
Surr: Toluene-d8	95.0			85-110	%REC	1	10/23/2014 07:26

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-049
Collection Date: 10/15/2014 02:58 PM

Work Order: 1410899
Lab ID: 1410899-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/21/14		Analyst: JG
BatchID: 64131							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	10/22/2014 02:43
2,4,5-Trichlorophenol	U		0.25	5.0	µg/L	1	10/22/2014 02:43
2,4,6-Trichlorophenol	U		0.27	5.0	µg/L	1	10/22/2014 02:43
2,4-Dichlorophenol	0.50	J	0.22	10	µg/L	1	10/22/2014 02:43
2,4-Dimethylphenol	U		1.8	5.0	µg/L	1	10/22/2014 02:43
2,4-Dinitrophenol	3.9	J	0.67	5.0	µg/L	1	10/22/2014 02:43
2,4-Dinitrotoluene	U		0.27	5.0	µg/L	1	10/22/2014 02:43
2,6-Dinitrotoluene	U		0.23	5.0	µg/L	1	10/22/2014 02:43
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	10/22/2014 02:43
2-Chlorophenol	U		0.32	5.0	µg/L	1	10/22/2014 02:43
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	10/22/2014 02:43
2-Methylphenol	U		0.20	5.0	µg/L	1	10/22/2014 02:43
2-Nitroaniline	U		0.34	20	µg/L	1	10/22/2014 02:43
2-Nitrophenol	U		0.28	5.0	µg/L	1	10/22/2014 02:43
3,3'-Dichlorobenzidine	U		3.9	5.0	µg/L	1	10/22/2014 02:43
3-Nitroaniline	U		0.34	20	µg/L	1	10/22/2014 02:43
4,6-Dinitro-2-methylphenol	U		1.2	20	µg/L	1	10/22/2014 02:43
4-Bromophenyl phenyl ether	U		0.23	5.0	µg/L	1	10/22/2014 02:43
4-Chloro-3-methylphenol	U		0.31	5.0	µg/L	1	10/22/2014 02:43
4-Chloroaniline	U		0.32	20	µg/L	1	10/22/2014 02:43
4-Chlorophenyl phenyl ether	U		0.23	5.0	µg/L	1	10/22/2014 02:43
4-Methylphenol	U		0.20	5.0	µg/L	1	10/22/2014 02:43
4-Nitroaniline	U		0.30	20	µg/L	1	10/22/2014 02:43
4-Nitrophenol	U		0.51	20	µg/L	1	10/22/2014 02:43
Acenaphthene	U		0.11	5.0	µg/L	1	10/22/2014 02:43
Acenaphthylene	U		0.12	5.0	µg/L	1	10/22/2014 02:43
Acetophenone	U		0.090	1.0	µg/L	1	10/22/2014 02:43
Anthracene	U		0.72	5.0	µg/L	1	10/22/2014 02:43
Atrazine	U		0.13	1.0	µg/L	1	10/22/2014 02:43
Benzaldehyde	U		0.46	1.0	µg/L	1	10/22/2014 02:43
Benzo(a)anthracene	U		0.57	5.0	µg/L	1	10/22/2014 02:43
Benzo(a)pyrene	U		0.10	5.0	µg/L	1	10/22/2014 02:43
Benzo(b)fluoranthene	U		0.74	5.0	µg/L	1	10/22/2014 02:43
Benzo(g,h,i)perylene	U		0.70	5.0	µg/L	1	10/22/2014 02:43
Benzo(k)fluoranthene	U		0.17	5.0	µg/L	1	10/22/2014 02:43
Bis(2-chloroethoxy)methane	U		0.33	5.0	µg/L	1	10/22/2014 02:43
Bis(2-chloroethyl)ether	U		0.34	5.0	µg/L	1	10/22/2014 02:43

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-049
Collection Date: 10/15/2014 02:58 PM

Work Order: 1410899
Lab ID: 1410899-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.32	5.0	µg/L	1	10/22/2014 02:43
Bis(2-ethylhexyl)phthalate	0.50	J	0.15	5.0	µg/L	1	10/22/2014 02:43
Butyl benzyl phthalate	U		0.10	5.0	µg/L	1	10/22/2014 02:43
Caprolactam	U		4.7	10	µg/L	1	10/22/2014 02:43
Carbazole	U		0.16	10	µg/L	1	10/22/2014 02:43
Chrysene	U		0.71	5.0	µg/L	1	10/22/2014 02:43
Dibenzo(a,h)anthracene	U		0.67	5.0	µg/L	1	10/22/2014 02:43
Dibenzofuran	U		0.28	5.0	µg/L	1	10/22/2014 02:43
Diethyl phthalate	U		0.24	20	µg/L	1	10/22/2014 02:43
Dimethyl phthalate	U		0.27	20	µg/L	1	10/22/2014 02:43
Di-n-butyl phthalate	U		0.14	5.0	µg/L	1	10/22/2014 02:43
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	10/22/2014 02:43
Fluoranthene	U		0.77	5.0	µg/L	1	10/22/2014 02:43
Fluorene	U		0.10	5.0	µg/L	1	10/22/2014 02:43
Hexachlorobenzene	U		0.22	5.0	µg/L	1	10/22/2014 02:43
Hexachlorobutadiene	U		0.24	5.0	µg/L	1	10/22/2014 02:43
Hexachlorocyclopentadiene	U		0.18	20	µg/L	1	10/22/2014 02:43
Hexachloroethane	U		0.47	5.0	µg/L	1	10/22/2014 02:43
Indeno(1,2,3-cd)pyrene	U		0.69	5.0	µg/L	1	10/22/2014 02:43
Isophorone	U		0.30	5.0	µg/L	1	10/22/2014 02:43
Naphthalene	U		0.12	5.0	µg/L	1	10/22/2014 02:43
Nitrobenzene	U		0.33	5.0	µg/L	1	10/22/2014 02:43
N-Nitrosodi-n-propylamine	U		0.32	5.0	µg/L	1	10/22/2014 02:43
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	10/22/2014 02:43
Pentachlorophenol	U		0.22	20	µg/L	1	10/22/2014 02:43
Phenanthrene	U		0.86	5.0	µg/L	1	10/22/2014 02:43
Phenol	U		0.32	5.0	µg/L	1	10/22/2014 02:43
Pyrene	U		0.65	5.0	µg/L	1	10/22/2014 02:43
Surr: 2,4,6-Tribromophenol	81.4			32-115	%REC	1	10/22/2014 02:43
Surr: 2-Fluorobiphenyl	66.0			32-100	%REC	1	10/22/2014 02:43
Surr: 2-Fluorophenol	40.9			22-59	%REC	1	10/22/2014 02:43
Surr: 4-Terphenyl-d14	84.7			23-112	%REC	1	10/22/2014 02:43
Surr: Nitrobenzene-d5	60.7			31-93	%REC	1	10/22/2014 02:43
Surr: Phenol-d6	26.0			13-36	%REC	1	10/22/2014 02:43

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: RS

BatchID: R150911

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 07:50
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 07:50
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 07:50

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-049
Collection Date: 10/15/2014 02:58 PM

Work Order: 1410899
Lab ID: 1410899-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 07:50
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 07:50
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 07:50
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 07:50
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 07:50
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 07:50
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 07:50
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 07:50
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 07:50
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 07:50
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 07:50
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 07:50
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 07:50
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 07:50
Acetone	U		3.1	50	µg/L	1	10/23/2014 07:50
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 07:50
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 07:50
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 07:50
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 07:50
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 07:50
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 07:50
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 07:50
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 07:50
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 07:50
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 07:50
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 07:50
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 07:50
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 07:50
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 07:50
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 07:50
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 07:50
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 07:50
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 07:50
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 07:50
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 07:50
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 07:50
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 07:50
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 07:50
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 07:50
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 07:50

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

ALS Group USA, Corp**Date:** 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-101514-MR-049
Collection Date: 10/15/2014 02:58 PM

Work Order: 1410899
Lab ID: 1410899-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 07:50
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 07:50
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 07:50
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 07:50
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 07:50
Surr: 1,2-Dichloroethane-d4	96.9			75-120	%REC	1	10/23/2014 07:50
Surr: 4-Bromofluorobenzene	91.3			80-110	%REC	1	10/23/2014 07:50
Surr: Dibromofluoromethane	105			85-115	%REC	1	10/23/2014 07:50
Surr: Toluene-d8	93.5			85-110	%REC	1	10/23/2014 07:50

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: TB-017360-101514-MR-050
Collection Date: 10/15/2014

Work Order: 1410899
Lab ID: 1410899-25
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
BatchID: R150911							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/23/2014 06:14
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/23/2014 06:14
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/23/2014 06:14
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/23/2014 06:14
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/23/2014 06:14
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/23/2014 06:14
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/23/2014 06:14
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/23/2014 06:14
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/23/2014 06:14
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/23/2014 06:14
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/23/2014 06:14
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/23/2014 06:14
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/23/2014 06:14
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/23/2014 06:14
2-Butanone	U		0.87	25	µg/L	1	10/23/2014 06:14
2-Hexanone	U		0.15	50	µg/L	1	10/23/2014 06:14
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/23/2014 06:14
Acetone	U		3.1	50	µg/L	1	10/23/2014 06:14
Benzene	U		0.25	1.0	µg/L	1	10/23/2014 06:14
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/23/2014 06:14
Bromoform	U		0.099	1.0	µg/L	1	10/23/2014 06:14
Bromomethane	U		1.0	5.0	µg/L	1	10/23/2014 06:14
Carbon disulfide	U		0.26	5.0	µg/L	1	10/23/2014 06:14
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/23/2014 06:14
Chlorobenzene	U		0.19	1.0	µg/L	1	10/23/2014 06:14
Chloroethane	U		0.21	5.0	µg/L	1	10/23/2014 06:14
Chloroform	U		0.25	1.0	µg/L	1	10/23/2014 06:14
Chloromethane	U		0.25	5.0	µg/L	1	10/23/2014 06:14
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/23/2014 06:14
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/23/2014 06:14
Cyclohexane	U		0.31	1.0	µg/L	1	10/23/2014 06:14
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/23/2014 06:14
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/23/2014 06:14
Ethylbenzene	U		0.22	1.0	µg/L	1	10/23/2014 06:14
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/23/2014 06:14
Methyl acetate	U		0.62	10	µg/L	1	10/23/2014 06:14
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/23/2014 06:14

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

ALS Group USA, Corp

Date: 27-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: TB-017360-101514-MR-050
Collection Date: 10/15/2014

Work Order: 1410899
Lab ID: 1410899-25
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/23/2014 06:14
Methylene chloride	U		0.64	5.0	µg/L	1	10/23/2014 06:14
Styrene	U		0.18	1.0	µg/L	1	10/23/2014 06:14
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/23/2014 06:14
Toluene	U		0.20	1.0	µg/L	1	10/23/2014 06:14
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/23/2014 06:14
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/23/2014 06:14
Trichloroethene	U		0.34	1.0	µg/L	1	10/23/2014 06:14
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/23/2014 06:14
Vinyl chloride	U		0.19	1.0	µg/L	1	10/23/2014 06:14
Xylenes, Total	U		0.62	3.0	µg/L	1	10/23/2014 06:14
Surr: 1,2-Dichloroethane-d4	95.5			75-120	%REC	1	10/23/2014 06:14
Surr: 4-Bromofluorobenzene	89.7			80-110	%REC	1	10/23/2014 06:14
Surr: Dibromofluoromethane	103			85-115	%REC	1	10/23/2014 06:14
Surr: Toluene-d8	94.2			85-110	%REC	1	10/23/2014 06:14

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64090** Instrument ID **HG1** Method: **SW7470**

MBLK		Sample ID: MBLK-64090-64090				Units: mg/L		Analysis Date: 10/20/2014 01:34 PM		
Client ID:		Run ID: HG1_141020A				SeqNo: 2990041		Prep Date: 10/20/2014		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-64090-64090				Units: mg/L		Analysis Date: 10/20/2014 01:36 PM		
Client ID:		Run ID: HG1_141020A				SeqNo: 2990042		Prep Date: 10/20/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001962 0.00020 0.002 0 98.1 80-120 0

MS		Sample ID: 1410902-01AMS				Units: mg/L		Analysis Date: 10/20/2014 02:21 PM		
Client ID:		Run ID: HG1_141020A				SeqNo: 2990080		Prep Date: 10/20/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.02111 0.0020 0.02 -0.00018 106 75-125 0

MSD		Sample ID: 1410902-01AMSD				Units: mg/L		Analysis Date: 10/20/2014 02:24 PM		
Client ID:		Run ID: HG1_141020A				SeqNo: 2990081		Prep Date: 10/20/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.02146 0.0020 0.02 -0.00018 108 75-125 0.02111 1.64 20

The following samples were analyzed in this batch:

1410899-04B	1410899-05B	1410899-06B
1410899-08B		

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63974** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: MBLK-63974-63974				Units: mg/L		Analysis Date: 10/21/2014 02:00 A		
Client ID:		Run ID: ICPMS2_141020A				SeqNo: 2991161		Prep Date: 10/16/2014		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	U	0.0050								
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	0.002897	0.010								J

MBLK		Sample ID: MBLK-63974-63974				Units: mg/L		Analysis Date: 10/21/2014 11:16 A		
Client ID:		Run ID: ICPMS2_141021A				SeqNo: 2992301		Prep Date: 10/16/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	U	0.0020								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63974** Instrument ID **ICPMS2** Method: **SW6020A**

LCS		Sample ID: LCS-63974-63974				Units: mg/L		Analysis Date: 10/21/2014 02:06 A		
Client ID:		Run ID: ICPMS2_141020A				SeqNo: 2991162		Prep Date: 10/16/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09695	0.0050	0.1	0	97	80-120	0			
Arsenic	0.09547	0.0050	0.1	0	95.5	80-120	0			
Barium	0.09274	0.0050	0.1	0	92.7	80-120	0			
Cadmium	0.09473	0.0020	0.1	0	94.7	80-120	0			
Chromium	0.09442	0.0050	0.1	0	94.4	80-120	0			
Cobalt	0.09832	0.0050	0.1	0	98.3	80-120	0			
Copper	0.09653	0.0050	0.1	0	96.5	80-120	0			
Lead	0.09483	0.0050	0.1	0	94.8	80-120	0			
Manganese	0.09798	0.0050	0.1	0	98	80-120	0			
Molybdenum	0.09563	0.0050	0.1	0	95.6	80-120	0			
Nickel	0.09647	0.0050	0.1	0	96.5	80-120	0			
Selenium	0.09582	0.0050	0.1	0	95.8	80-120	0			
Silver	0.09583	0.0050	0.1	0	95.8	80-120	0			
Thallium	0.0899	0.0050	0.1	0	89.9	80-120	0			
Vanadium	0.09858	0.0050	0.1	0	98.6	80-120	0			
Zinc	0.09822	0.010	0.1	0	98.2	80-120	0			

LCS		Sample ID: LCS-63974-63974				Units: mg/L		Analysis Date: 10/21/2014 11:27 A		
Client ID:		Run ID: ICPMS2_141021A				SeqNo: 2992302		Prep Date: 10/16/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.1017	0.0020	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: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63974** Instrument ID **ICPMS2** Method: **SW6020A**

MS				Sample ID: 1410878-01CMS			Units: mg/L		Analysis Date: 10/21/2014 04:39 A	
Client ID:		Run ID: ICPMS2_141020A			SeqNo: 2991186		Prep Date: 10/16/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09104	0.0050	0.1	0.00005621	91	75-125	0			
Arsenic	0.08948	0.0050	0.1	0.0009885	88.5	75-125	0			
Barium	0.1485	0.0050	0.1	0.05348	95	75-125	0			
Beryllium	0.09707	0.0020	0.1	0.00001411	97.1	75-125	0			
Cadmium	0.095	0.0020	0.1	0.0000566	94.9	75-125	0			
Chromium	0.08686	0.0050	0.1	0.0005753	86.3	75-125	0			
Cobalt	0.09439	0.0050	0.1	0.0002203	94.2	75-125	0			
Copper	0.09379	0.0050	0.1	0.01292	80.9	75-125	0			
Lead	0.09527	0.0050	0.1	0.0004073	94.9	75-125	0			
Manganese	0.1002	0.0050	0.1	0.005138	95.1	75-125	0			
Molybdenum	0.09685	0.0050	0.1	0.001699	95.2	75-125	0			
Nickel	0.09304	0.0050	0.1	0.002486	90.6	75-125	0			
Selenium	0.08828	0.0050	0.1	0.0004973	87.8	75-125	0			
Silver	0.0888	0.0050	0.1	4.765E-06	88.8	75-125	0			
Thallium	0.09172	0.0050	0.1	-0.0002695	92	75-125	0			
Vanadium	0.09935	0.0050	0.1	0.0007699	98.6	75-125	0			
Zinc	0.1081	0.010	0.1	0.01325	94.8	75-125	0			

MSD				Sample ID: 1410878-01CMSD			Units: mg/L		Analysis Date: 10/21/2014 04:45 A	
Client ID:		Run ID: ICPMS2_141020A			SeqNo: 2991187		Prep Date: 10/16/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.0925	0.0050	0.1	0.00005621	92.4	75-125	0.09104	1.59	20	
Arsenic	0.08967	0.0050	0.1	0.0009885	88.7	75-125	0.08948	0.212	20	
Barium	0.1525	0.0050	0.1	0.05348	99	75-125	0.1485	2.66	20	
Beryllium	0.09624	0.0020	0.1	0.00001411	96.2	75-125	0.09707	0.859	20	
Cadmium	0.09593	0.0020	0.1	0.0000566	95.9	75-125	0.095	0.974	20	
Chromium	0.08754	0.0050	0.1	0.0005753	87	75-125	0.08686	0.78	20	
Cobalt	0.09531	0.0050	0.1	0.0002203	95.1	75-125	0.09439	0.97	20	
Copper	0.09482	0.0050	0.1	0.01292	81.9	75-125	0.09379	1.09	20	
Lead	0.09611	0.0050	0.1	0.0004073	95.7	75-125	0.09527	0.878	20	
Manganese	0.1007	0.0050	0.1	0.005138	95.6	75-125	0.1002	0.498	20	
Molybdenum	0.09867	0.0050	0.1	0.001699	97	75-125	0.09685	1.86	20	
Nickel	0.09373	0.0050	0.1	0.002486	91.2	75-125	0.09304	0.739	20	
Selenium	0.08978	0.0050	0.1	0.0004973	89.3	75-125	0.08828	1.68	20	
Silver	0.09009	0.0050	0.1	4.765E-06	90.1	75-125	0.0888	1.44	20	
Thallium	0.09178	0.0050	0.1	-0.0002695	92	75-125	0.09172	0.0654	20	
Vanadium	0.1003	0.0050	0.1	0.0007699	99.5	75-125	0.09935	0.952	20	
Zinc	0.1068	0.010	0.1	0.01325	93.6	75-125	0.1081	1.21	20	

The following samples were analyzed in this batch:

1410899-04B 1410899-05B 1410899-06B
1410899-08B

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64131** Instrument ID **SVMS5** Method: **SW846 8270D**

MBLK				Sample ID: SBLKW1-64131-64131			Units: µg/L		Analysis Date: 10/21/2014 07:33 PM		
Client ID:			Run ID: SVMS5_141021A			SeqNo: 2996940		Prep Date: 10/21/2014		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: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 64131	Instrument ID SVMS5	Method: SW846 8270D						
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>	<i>31.51</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>63</i>	<i>38-115</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>29.93</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>59.9</i>	<i>32-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>19.43</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>38.9</i>	<i>22-59</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>47.05</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>94.1</i>	<i>23-112</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>28.21</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>56.4</i>	<i>31-93</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>12.69</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>25.4</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: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64131** Instrument ID **SVMS5** Method: **SW846 8270D**

LCS		Sample ID: SLCSW1-64131-64131				Units: µg/L		Analysis Date: 10/21/2014 07:55 PM		
Client ID:		Run ID: SVMS5_141021A				SeqNo: 2996941		Prep Date: 10/21/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	14.07	5.0	20	0	70.4	50-110	0			
2,4,6-Trichlorophenol	14.04	5.0	20	0	70.2	50-115	0			
2,4-Dichlorophenol	13.9	10	20	0	69.5	50-105	0			
2,4-Dimethylphenol	11.78	5.0	20	0	58.9	30-110	0			
2,4-Dinitrophenol	8.6	5.0	20	0	43	15-140	0			
2,4-Dinitrotoluene	15.53	5.0	20	0	77.6	50-120	0			
2,6-Dinitrotoluene	16.39	5.0	20	0	82	50-115	0			
2-Chloronaphthalene	15.57	5.0	20	0	77.8	50-105	0			
2-Chlorophenol	12.65	5.0	20	0	63.2	35-105	0			
2-Methylnaphthalene	13.9	5.0	20	0	69.5	45-105	0			
2-Methylphenol	11.08	5.0	20	0	55.4	40-110	0			
2-Nitroaniline	15.6	20	20	0	78	50-115	0			J
2-Nitrophenol	14.05	5.0	20	0	70.2	40-115	0			
3-Nitroaniline	14.37	20	20	0	71.8	20-125	0			J
4,6-Dinitro-2-methylphenol	13.09	20	20	0	65.4	40-130	0			J
4-Bromophenyl phenyl ether	16.51	5.0	20	0	82.6	50-115	0			
4-Chloro-3-methylphenol	13.37	5.0	20	0	66.8	45-110	0			
4-Chloroaniline	14.91	20	20	0	74.6	15-110	0			J
4-Chlorophenyl phenyl ether	15.28	5.0	20	0	76.4	50-110	0			
4-Methylphenol	10.13	5.0	20	0	50.6	30-110	0			
4-Nitroaniline	13.19	20	20	0	66	35-150	0			J
4-Nitrophenol	5.45	20	20	0	27.2	1-58	0			J
Acenaphthene	14.56	5.0	20	0	72.8	45-110	0			
Acenaphthylene	15.27	5.0	20	0	76.4	50-105	0			
Anthracene	17.43	5.0	20	0	87.2	55-110	0			
Benzo(a)anthracene	17.07	5.0	20	0	85.4	55-110	0			
Benzo(a)pyrene	18.32	5.0	20	0	91.6	55-110	0			
Benzo(b)fluoranthene	17.79	5.0	20	0	89	45-120	0			
Benzo(g,h,i)perylene	17.95	5.0	20	0	89.8	40-125	0			
Benzo(k)fluoranthene	18.52	5.0	20	0	92.6	45-125	0			
Bis(2-chloroethoxy)methane	15.47	5.0	20	0	77.4	45-105	0			
Bis(2-chloroethyl)ether	13.66	5.0	20	0	68.3	35-110	0			
Bis(2-chloroisopropyl)ether	14.53	5.0	20	0	72.6	25-130	0			
Bis(2-ethylhexyl)phthalate	16.69	5.0	20	0	83.4	40-125	0			
Butyl benzyl phthalate	17.69	5.0	20	0	88.4	45-115	0			
Carbazole	16.66	10	20	0	83.3	50-150	0			
Chrysene	18.21	5.0	20	0	91	55-110	0			
Dibenzo(a,h)anthracene	17.98	5.0	20	0	89.9	40-125	0			
Dibenzofuran	15.34	5.0	20	0	76.7	55-105	0			
Diethyl phthalate	16.49	20	20	0	82.4	40-120	0			J
Dimethyl phthalate	16.2	20	20	0	81	25-125	0			J
Di-n-butyl phthalate	18.48	5.0	20	0	92.4	55-115	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 64131		Instrument ID SVMS5		Method: SW846 8270D			
Di-n-octyl phthalate	15.55	5.0	20	0	77.8	35-135	0
Fluoranthene	17.51	5.0	20	0	87.6	55-115	0
Fluorene	15.58	5.0	20	0	77.9	50-110	0
Hexachlorobenzene	16	5.0	20	0	80	50-110	0
Hexachlorobutadiene	13.39	5.0	20	0	67	25-105	0
Hexachlorocyclopentadiene	9.43	20	20	0	47.2	25-105	0 J
Hexachloroethane	13.66	5.0	20	0	68.3	30-95	0
Indeno(1,2,3-cd)pyrene	17.51	5.0	20	0	87.6	45-125	0
Isophorone	16.01	5.0	20	0	80	50-110	0
Naphthalene	14.96	5.0	20	0	74.8	40-100	0
Nitrobenzene	14.93	5.0	20	0	74.6	45-110	0
N-Nitrosodi-n-propylamine	14.61	5.0	20	0	73	35-130	0
N-Nitrosodiphenylamine	15.67	5.0	20	0	78.4	50-110	0
Pentachlorophenol	9.96	20	20	0	49.8	40-115	0 J
Phenanthrene	15.75	5.0	20	0	78.8	50-115	0
Phenol	5.28	5.0	20	0	26.4	12-43	0
Pyrene	17.89	5.0	20	0	89.4	50-130	0
Surr: 2,4,6-Tribromophenol	38.66	0	50	0	77.3	38-115	0
Surr: 2-Fluorobiphenyl	34.5	0	50	0	69	32-100	0
Surr: 2-Fluorophenol	20.56	0	50	0	41.1	22-59	0
Surr: 4-Terphenyl-d14	46.34	0	50	0	92.7	23-112	0
Surr: Nitrobenzene-d5	33.38	0	50	0	66.8	31-93	0
Surr: Phenol-d6	13.37	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: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64131** Instrument ID **SVMS5** Method: **SW846 8270D**

MS				Sample ID: 1410899-18B MS			Units: µg/L		Analysis Date: 10/21/2014 10:10 PM	
Client ID: WG-017360-101514-MR-043				Run ID: SVMS5_141021A			SeqNo: 2996942		Prep Date: 10/21/2014	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	155.3	50	200	0	77.6	50-110	0			
2,4,6-Trichlorophenol	146.9	50	200	0	73.4	50-115	0			
2,4-Dichlorophenol	139.9	100	200	0	70	50-105	0			
2,4-Dimethylphenol	139.6	50	200	3.55	68	30-110	0			
2,4-Dinitrophenol	150.2	50	200	0	75.1	15-140	0			
2,4-Dinitrotoluene	162	50	200	0	81	50-120	0			
2,6-Dinitrotoluene	170.1	50	200	0	85	50-115	0			
2-Chloronaphthalene	150.5	50	200	0	75.2	50-105	0			
2-Chlorophenol	129.5	50	200	0	64.8	35-105	0			
2-Methylnaphthalene	136.8	50	200	0	68.4	45-105	0			
2-Methylphenol	113.9	50	200	1.5	56.2	40-110	0			
2-Nitroaniline	164.3	200	200	0	82.2	50-115	0			J
2-Nitrophenol	137.9	50	200	0	69	40-115	0			
3-Nitroaniline	148.5	200	200	0	74.2	20-125	0			J
4,6-Dinitro-2-methylphenol	137.2	200	200	0	68.6	40-130	0			J
4-Bromophenyl phenyl ether	161.6	50	200	0	80.8	50-115	0			
4-Chloro-3-methylphenol	141.2	50	200	0	70.6	45-110	0			
4-Chloroaniline	143.9	200	200	0	72	15-110	0			J
4-Chlorophenyl phenyl ether	154.3	50	200	0	77.2	50-110	0			
4-Methylphenol	106.1	50	200	1.21	52.4	30-110	0			
4-Nitroaniline	132.7	200	200	0	66.4	35-150	0			J
4-Nitrophenol	72.7	200	200	0	36.4	1-58	0			J
Acenaphthene	149.6	50	200	0	74.8	45-110	0			
Acenaphthylene	146	50	200	0	73	50-105	0			
Anthracene	175.4	50	200	0	87.7	55-110	0			
Benzo(a)anthracene	172.6	50	200	0	86.3	55-110	0			
Benzo(a)pyrene	187.3	50	200	0	93.6	55-110	0			
Benzo(b)fluoranthene	179.1	50	200	0	89.6	45-120	0			
Benzo(g,h,i)perylene	170.1	50	200	0	85	40-125	0			
Benzo(k)fluoranthene	182	50	200	0	91	45-125	0			
Bis(2-chloroethoxy)methane	145	50	200	0	72.5	45-105	0			
Bis(2-chloroethyl)ether	130.6	50	200	0	65.3	35-110	0			
Bis(2-chloroisopropyl)ether	137.3	50	200	0	68.6	25-130	0			
Bis(2-ethylhexyl)phthalate	191	50	200	0	95.5	40-125	0			
Butyl benzyl phthalate	185.9	50	200	0	93	45-115	0			
Carbazole	203.2	100	200	0	102	50-150	0			
Chrysene	173.9	50	200	0	87	55-110	0			
Dibenzo(a,h)anthracene	171.9	50	200	0	86	40-125	0			
Dibenzofuran	153.5	50	200	0	76.8	55-105	0			
Diethyl phthalate	171.8	200	200	0	85.9	40-120	0			J
Dimethyl phthalate	161.1	200	200	0	80.6	25-125	0			J
Di-n-butyl phthalate	187.2	50	200	0	93.6	55-115	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 64131		Instrument ID SVMS5		Method: SW846 8270D				
Di-n-octyl phthalate	173.1	50	200	0	86.6	35-135	0	
Fluoranthene	177.7	50	200	0	88.8	55-115	0	
Fluorene	160.7	50	200	0	80.4	50-110	0	
Hexachlorobenzene	157	50	200	0	78.5	50-110	0	
Hexachlorobutadiene	130.8	50	200	0	65.4	25-105	0	
Hexachlorocyclopentadiene	107.7	200	200	0	53.8	25-105	0	J
Hexachloroethane	141.2	50	200	0	70.6	30-95	0	
Indeno(1,2,3-cd)pyrene	179.3	50	200	0	89.6	45-125	0	
Isophorone	156.2	50	200	0	78.1	50-110	0	
Naphthalene	151.1	50	200	2.31	74.4	40-100	0	
Nitrobenzene	144.8	50	200	0	72.4	45-110	0	
N-Nitrosodi-n-propylamine	143.4	50	200	0	71.7	35-130	0	
N-Nitrosodiphenylamine	159.9	50	200	0	80	50-110	0	
Pentachlorophenol	217	200	200	0	108	40-115	0	
Phenanthrene	155.3	50	200	1.66	76.8	50-115	0	
Phenol	52.2	50	200	0	26.1	12-43	0	
Pyrene	172.2	50	200	0	86.1	50-130	0	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>418.3</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>83.7</i>	<i>38-115</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>332.9</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>66.6</i>	<i>32-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>205.8</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>41.2</i>	<i>22-59</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>441.3</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>88.3</i>	<i>23-112</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>320.9</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>64.2</i>	<i>31-93</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>132.5</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>26.5</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: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64131** Instrument ID **SVMS5** Method: **SW846 8270D**

MSD				Sample ID: 1410899-18B MSD			Units: µg/L		Analysis Date: 10/21/2014 10:32 PM	
Client ID: WG-017360-101514-MR-043				Run ID: SVMS5_141021A			SeqNo: 2996943		Prep Date: 10/21/2014	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	158.2	50	200	0	79.1	50-110	155.3	1.85	30	
2,4,6-Trichlorophenol	148.1	50	200	0	74	50-115	146.9	0.814	30	
2,4-Dichlorophenol	142.2	100	200	0	71.1	50-105	139.9	1.63	30	
2,4-Dimethylphenol	140.4	50	200	3.55	68.4	30-110	139.6	0.571	30	
2,4-Dinitrophenol	157.6	50	200	0	78.8	15-140	150.2	4.81	30	
2,4-Dinitrotoluene	165.8	50	200	0	82.9	50-120	162	2.32	30	
2,6-Dinitrotoluene	170.1	50	200	0	85	50-115	170.1	0	30	
2-Chloronaphthalene	153.2	50	200	0	76.6	50-105	150.5	1.78	30	
2-Chlorophenol	130.4	50	200	0	65.2	35-105	129.5	0.693	30	
2-Methylnaphthalene	139.9	50	200	0	70	45-105	136.8	2.24	30	
2-Methylphenol	113.5	50	200	1.5	56	40-110	113.9	0.352	30	
2-Nitroaniline	166.5	200	200	0	83.2	50-115	164.3	0	30	J
2-Nitrophenol	141.3	50	200	0	70.6	40-115	137.9	2.44	30	
3-Nitroaniline	151	200	200	0	75.5	20-125	148.5	0	30	J
4,6-Dinitro-2-methylphenol	133.4	200	200	0	66.7	40-130	137.2	0	30	J
4-Bromophenyl phenyl ether	158.4	50	200	0	79.2	50-115	161.6	2	30	
4-Chloro-3-methylphenol	146.2	50	200	0	73.1	45-110	141.2	3.48	30	
4-Chloroaniline	146.1	200	200	0	73	15-110	143.9	0	30	J
4-Chlorophenyl phenyl ether	156.2	50	200	0	78.1	50-110	154.3	1.22	30	
4-Methylphenol	108.7	50	200	1.21	53.7	30-110	106.1	2.42	30	
4-Nitroaniline	131.2	200	200	0	65.6	35-150	132.7	0	30	J
4-Nitrophenol	75.9	200	200	0	38	1-58	72.7	0	0	J
Acenaphthene	152	50	200	0	76	45-110	149.6	1.59	30	
Acenaphthylene	146.6	50	200	0	73.3	50-105	146	0.41	30	
Anthracene	173.2	50	200	0	86.6	55-110	175.4	1.26	30	
Benzo(a)anthracene	173.1	50	200	0	86.6	55-110	172.6	0.289	30	
Benzo(a)pyrene	185.1	50	200	0	92.6	55-110	187.3	1.18	30	
Benzo(b)fluoranthene	179.3	50	200	0	89.6	45-120	179.1	0.112	30	
Benzo(g,h,i)perylene	165.3	50	200	0	82.6	40-125	170.1	2.86	30	
Benzo(k)fluoranthene	178.5	50	200	0	89.2	45-125	182	1.94	30	
Bis(2-chloroethoxy)methane	148.3	50	200	0	74.2	45-105	145	2.25	30	
Bis(2-chloroethyl)ether	129.9	50	200	0	65	35-110	130.6	0.537	30	
Bis(2-chloroisopropyl)ether	136.5	50	200	0	68.2	25-130	137.3	0.584	30	
Bis(2-ethylhexyl)phthalate	171.4	50	200	0	85.7	40-125	191	10.8	30	
Butyl benzyl phthalate	182.2	50	200	0	91.1	45-115	185.9	2.01	30	
Carbazole	184.1	100	200	0	92	50-150	203.2	9.86	30	
Chrysene	172.3	50	200	0	86.2	55-110	173.9	0.924	30	
Dibenzo(a,h)anthracene	169.1	50	200	0	84.6	40-125	171.9	1.64	30	
Dibenzofuran	155.5	50	200	0	77.8	55-105	153.5	1.29	30	
Diethyl phthalate	171.2	200	200	0	85.6	40-120	171.8	0	30	J
Dimethyl phthalate	162	200	200	0	81	25-125	161.1	0	30	J
Di-n-butyl phthalate	191.1	50	200	0	95.6	55-115	187.2	2.06	30	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 64131		Instrument ID SVMS5		Method: SW846 8270D					
Di-n-octyl phthalate	175.3	50	200	0	87.6	35-135	173.1	1.26	30
Fluoranthene	177.8	50	200	0	88.9	55-115	177.7	0.0563	30
Fluorene	161.2	50	200	0	80.6	50-110	160.7	0.311	30
Hexachlorobenzene	151.8	50	200	0	75.9	50-110	157	3.37	30
Hexachlorobutadiene	131.6	50	200	0	65.8	25-105	130.8	0.61	30
Hexachlorocyclopentadiene	110.5	200	200	0	55.2	25-105	107.7	0	30 J
Hexachloroethane	150.7	50	200	0	75.4	30-95	141.2	6.51	30
Indeno(1,2,3-cd)pyrene	176.6	50	200	0	88.3	45-125	179.3	1.52	30
Isophorone	158.8	50	200	0	79.4	50-110	156.2	1.65	30
Naphthalene	153.1	50	200	2.31	75.4	40-100	151.1	1.31	30
Nitrobenzene	146.9	50	200	0	73.4	45-110	144.8	1.44	30
N-Nitrosodi-n-propylamine	144.4	50	200	0	72.2	35-130	143.4	0.695	30
N-Nitrosodiphenylamine	156.4	50	200	0	78.2	50-110	159.9	2.21	30
Pentachlorophenol	221.6	200	200	0	111	40-115	217	2.1	30
Phenanthrene	155.9	50	200	1.66	77.1	50-115	155.3	0.386	30
Phenol	53.3	50	200	0	26.6	12-43	52.2	2.09	30
Pyrene	170.8	50	200	0	85.4	50-130	172.2	0.816	30
<i>Surr: 2,4,6-Tribromophenol</i>	<i>407.5</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>81.5</i>	<i>38-115</i>	<i>418.3</i>	<i>2.62</i>	<i>40</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>330.3</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>66.1</i>	<i>32-100</i>	<i>332.9</i>	<i>0.784</i>	<i>40</i>
<i>Surr: 2-Fluorophenol</i>	<i>209.6</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>41.9</i>	<i>22-59</i>	<i>205.8</i>	<i>1.83</i>	<i>40</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>428.5</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>85.7</i>	<i>23-112</i>	<i>441.3</i>	<i>2.94</i>	<i>40</i>
<i>Surr: Nitrobenzene-d5</i>	<i>325.9</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>65.2</i>	<i>31-93</i>	<i>320.9</i>	<i>1.55</i>	<i>40</i>
<i>Surr: Phenol-d6</i>	<i>134.7</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>26.9</i>	<i>13-36</i>	<i>132.5</i>	<i>1.65</i>	<i>40</i>

The following samples were analyzed in this batch:

1410899-18B	1410899-19B	1410899-20B
1410899-21B	1410899-22B	1410899-23B
1410899-24B		

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150908** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: VBLKW1-141022-R150908				Units: µg/L		Analysis Date: 10/22/2014 07:16 PM		
Client ID:		Run ID: VMS8_141022A				SeqNo: 2995864		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150908	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
Surr: 1,2-Dichloroethane-d4	19.36	0 20 0 96.8 75-120 0
Surr: 4-Bromofluorobenzene	19.78	0 20 0 98.9 80-110 0
Surr: Dibromofluoromethane	19.62	0 20 0 98.1 85-115 0
Surr: Toluene-d8	19.29	0 20 0 96.4 85-110 0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150908** Instrument ID **VMS8** Method: **SW8260**

LCS		Sample ID: VLCSW1-141022-R150908				Units: µg/L		Analysis Date: 10/22/2014 06:03 PM		
Client ID:		Run ID: VMS8_141022A				SeqNo: 2995863		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	21.17	1.0	20	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	21.75	1.0	20	0	109	75-130	0			
1,1,2-Trichloroethane	20.07	1.0	20	0	100	75-125	0			
1,1-Dichloroethane	19.94	1.0	20	0	99.7	75-133	0			
1,1-Dichloroethene	24.65	1.0	20	0	123	70-145	0			
1,2,4-Trichlorobenzene	20.4	1.0	20	0	102	70-135	0			
1,2-Dibromo-3-chloropropane	18.64	1.0	20	0	93.2	60-130	0			
1,2-Dibromoethane	24.69	1.0	20	0	123	80-150	0			
1,2-Dichlorobenzene	20.7	1.0	20	0	104	70-130	0			
1,2-Dichloroethane	20.42	1.0	20	0	102	78-125	0			
1,2-Dichloropropane	20.24	1.0	20	0	101	75-125	0			
1,3-Dichlorobenzene	21.23	1.0	20	0	106	75-130	0			
1,4-Dichlorobenzene	21.11	1.0	20	0	106	75-130	0			
2-Butanone	23.36	5.0	20	0	117	55-150	0			
2-Hexanone	21.37	5.0	20	0	107	60-135	0			
4-Methyl-2-pentanone	29.16	1.0	20	0	146	77-178	0			
Acetone	24.46	10	20	0	122	60-160	0			
Benzene	20.06	1.0	20	0	100	85-125	0			
Bromodichloromethane	21.06	1.0	20	0	105	75-125	0			
Bromoform	16.5	1.0	20	0	82.5	60-125	0			
Bromomethane	25.78	1.0	20	0	129	30-185	0			
Carbon disulfide	20.15	1.0	20	0	101	60-165	0			
Carbon tetrachloride	19.11	1.0	20	0	95.6	65-140	0			
Chlorobenzene	21.19	1.0	20	0	106	80-120	0			
Chloroethane	28.11	1.0	20	0	141	50-140	0			S
Chloroform	21.21	1.0	20	0	106	80-130	0			
Chloromethane	21.11	1.0	20	0	106	50-130	0			
cis-1,2-Dichloroethene	21.88	1.0	20	0	109	75-134	0			
cis-1,3-Dichloropropene	21.31	1.0	20	0	107	70-130	0			
Dibromochloromethane	18.65	1.0	20	0	93.2	60-115	0			
Dichlorodifluoromethane	17.53	1.0	20	0	87.6	20-120	0			
Ethylbenzene	20.81	1.0	20	0	104	85-125	0			
Isopropylbenzene	20.91	1.0	20	0	105	80-127	0			
Methyl tert-butyl ether	21.72	1.0	20	0	109	80-130	0			
Methylene chloride	18.61	5.0	20	0	93	75-140	0			
Styrene	20.96	1.0	20	0	105	85-125	0			
Tetrachloroethene	21.17	1.0	20	0	106	77-138	0			
Toluene	19.72	1.0	20	0	98.6	85-125	0			
trans-1,2-Dichloroethene	20.51	1.0	20	0	103	80-140	0			
trans-1,3-Dichloropropene	20.06	1.0	20	0	100	81-123	0			
Trichloroethene	20.53	1.0	20	0	103	84-130	0			
Trichlorofluoromethane	25.59	1.0	20	0	128	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150908		Instrument ID VMS8		Method: SW8260				
Vinyl chloride	28.35	1.0	20	0	142	50-136	0	S
Xylenes, Total	62.43	3.0	60	0	104	80-126	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.4</i>	0	<i>20</i>	0	<i>97</i>	<i>75-120</i>	0	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.84</i>	0	<i>20</i>	0	<i>99.2</i>	<i>80-110</i>	0	
<i>Surr: Dibromofluoromethane</i>	<i>20.41</i>	0	<i>20</i>	0	<i>102</i>	<i>85-115</i>	0	
<i>Surr: Toluene-d8</i>	<i>19.06</i>	0	<i>20</i>	0	<i>95.3</i>	<i>85-110</i>	0	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150908** Instrument ID **VMS8** Method: **SW8260**

MS					Sample ID: 1410899-14A MS		Units: µg/L		Analysis Date: 10/23/2014 03:51 A		
Client ID: WG-017360-101414-MR-039			Run ID: VMS8_141022A		SeqNo: 2995882		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	23.85	1.0	20	0	119	75-130		0			
1,1,2,2-Tetrachloroethane	19.57	1.0	20	0	97.8	75-130		0			
1,1,2-Trichloroethane	18.1	1.0	20	0	90.5	75-125		0			
1,1-Dichloroethane	17.96	1.0	20	0	89.8	75-133		0			
1,1-Dichloroethene	18.48	1.0	20	0	92.4	70-145		0			
1,2,4-Trichlorobenzene	17.26	1.0	20	0	86.3	70-135		0			
1,2-Dibromo-3-chloropropane	16.41	1.0	20	0	82	60-130		0			
1,2-Dibromoethane	22.14	1.0	20	0	111	80-150		0			
1,2-Dichlorobenzene	18.24	1.0	20	0	91.2	70-130		0			
1,2-Dichloroethane	19.01	1.0	20	0	95	78-125		0			
1,2-Dichloropropane	18.17	1.0	20	0	90.8	75-125		0			
1,3-Dichlorobenzene	17.64	1.0	20	0	88.2	75-130		0			
1,4-Dichlorobenzene	17.62	1.0	20	0	88.1	75-130		0			
2-Butanone	19.74	5.0	20	0	98.7	55-150		0			
2-Hexanone	18.82	5.0	20	0	94.1	60-135		0			
4-Methyl-2-pentanone	26.52	1.0	20	0	133	77-178		0			
Acetone	23.99	10	20	0	120	60-160		0			
Benzene	18.54	1.0	20	0	92.7	85-125		0			
Bromodichloromethane	18.57	1.0	20	0	92.8	75-125		0			
Bromoform	14.35	1.0	20	0	71.8	60-125		0			
Bromomethane	19.03	1.0	20	0	95.2	30-185		0			
Carbon disulfide	16.99	1.0	20	0	85	60-165		0			
Carbon tetrachloride	17.72	1.0	20	0	88.6	65-140		0			
Chlorobenzene	18.64	1.0	20	0	93.2	80-120		0			
Chloroethane	21.96	1.0	20	0	110	50-140		0			
Chloroform	19.14	1.0	20	0.58	92.8	80-130		0			
Chloromethane	15.12	1.0	20	0	75.6	50-130		0			
cis-1,2-Dichloroethene	18.7	1.0	20	0	93.5	75-134		0			
cis-1,3-Dichloropropene	17.6	1.0	20	0	88	70-130		0			
Dibromochloromethane	16.14	1.0	20	0	80.7	60-115		0			
Dichlorodifluoromethane	14.53	1.0	20	0	72.6	20-120		0			
Ethylbenzene	18.76	1.0	20	0	93.8	85-125		0			
Isopropylbenzene	19.58	1.0	20	0	97.9	80-127		0			
Methyl tert-butyl ether	18.49	1.0	20	0	92.4	80-130		0			
Methylene chloride	14.97	5.0	20	0	74.8	75-140		0		S	
Styrene	18.47	1.0	20	0	92.4	85-125		0			
Tetrachloroethene	20.26	1.0	20	0	101	77-138		0			
Toluene	17.68	1.0	20	0	88.4	85-125		0			
trans-1,2-Dichloroethene	18.7	1.0	20	0	93.5	80-140		0			
trans-1,3-Dichloropropene	16.88	1.0	20	0	84.4	81-123		0			
Trichloroethene	55.48	1.0	20	36.85	93.2	84-130		0			
Trichlorofluoromethane	21.63	1.0	20	0	108	60-140		0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150908	Instrument ID VMS8		Method: SW8260				
Vinyl chloride	19.56	1.0	20	0	97.8	50-136	0
Xylenes, Total	61.54	3.0	60	0	103	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</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: 4-Bromofluorobenzene</i>	<i>20.46</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.4</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>18.96</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.8</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150908** Instrument ID **VMS8** Method: **SW8260**

MSD				Sample ID: 1410899-14A MSD			Units: µg/L		Analysis Date: 10/23/2014 04:16 A	
Client ID: WG-017360-101414-MR-039				Run ID: VMS8_141022A			SeqNo: 2995883		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	19.32	1.0	20	0	96.6	75-130	23.85	21	30	
1,1,2,2-Tetrachloroethane	16.24	1.0	20	0	81.2	75-130	19.57	18.6	30	
1,1,2-Trichloroethane	17.94	1.0	20	0	89.7	75-125	18.1	0.888	30	
1,1-Dichloroethane	17.82	1.0	20	0	89.1	75-133	17.96	0.783	30	
1,1-Dichloroethene	18.3	1.0	20	0	91.5	70-145	18.48	0.979	30	
1,2,4-Trichlorobenzene	17.01	1.0	20	0	85	70-135	17.26	1.46	30	
1,2-Dibromo-3-chloropropane	15.38	1.0	20	0	76.9	60-130	16.41	6.48	30	
1,2-Dibromoethane	21.34	1.0	20	0	107	80-150	22.14	3.68	30	
1,2-Dichlorobenzene	17.81	1.0	20	0	89	70-130	18.24	2.39	30	
1,2-Dichloroethane	18.51	1.0	20	0	92.6	78-125	19.01	2.67	30	
1,2-Dichloropropane	17.78	1.0	20	0	88.9	75-125	18.17	2.17	30	
1,3-Dichlorobenzene	18.11	1.0	20	0	90.6	75-130	17.64	2.63	30	
1,4-Dichlorobenzene	17.71	1.0	20	0	88.6	75-130	17.62	0.509	30	
2-Butanone	19.08	5.0	20	0	95.4	55-150	19.74	3.4	30	
2-Hexanone	18.4	5.0	20	0	92	60-135	18.82	2.26	30	
4-Methyl-2-pentanone	25.72	1.0	20	0	129	77-178	26.52	3.06	30	
Acetone	17.26	10	20	0	86.3	60-160	23.99	32.6	30	R
Benzene	18.63	1.0	20	0	93.2	85-125	18.54	0.484	30	
Bromodichloromethane	17.83	1.0	20	0	89.2	75-125	18.57	4.07	30	
Bromoform	13.48	1.0	20	0	67.4	60-125	14.35	6.25	30	
Bromomethane	18.69	1.0	20	0	93.4	30-185	19.03	1.8	30	
Carbon disulfide	17.53	1.0	20	0	87.6	60-165	16.99	3.13	30	
Carbon tetrachloride	17.41	1.0	20	0	87	65-140	17.72	1.76	30	
Chlorobenzene	18.46	1.0	20	0	92.3	80-120	18.64	0.97	30	
Chloroethane	21.42	1.0	20	0	107	50-140	21.96	2.49	30	
Chloroform	19.08	1.0	20	0.58	92.5	80-130	19.14	0.314	30	
Chloromethane	15.89	1.0	20	0	79.4	50-130	15.12	4.97	30	
cis-1,2-Dichloroethene	18.45	1.0	20	0	92.2	75-134	18.7	1.35	30	
cis-1,3-Dichloropropene	17.36	1.0	20	0	86.8	70-130	17.6	1.37	30	
Dibromochloromethane	16.04	1.0	20	0	80.2	60-115	16.14	0.622	30	
Dichlorodifluoromethane	12.6	1.0	20	0	63	20-120	14.53	14.2	30	
Ethylbenzene	18.48	1.0	20	0	92.4	85-125	18.76	1.5	30	
Isopropylbenzene	16.04	1.0	20	0	80.2	80-127	19.58	19.9	30	
Methyl tert-butyl ether	18.73	1.0	20	0	93.6	80-130	18.49	1.29	30	
Methylene chloride	15.04	5.0	20	0	75.2	75-140	14.97	0.467	30	
Styrene	17.52	1.0	20	0	87.6	85-125	18.47	5.28	30	
Tetrachloroethene	19.5	1.0	20	0	97.5	77-138	20.26	3.82	30	
Toluene	18.03	1.0	20	0	90.2	85-125	17.68	1.96	30	
trans-1,2-Dichloroethene	18.73	1.0	20	0	93.6	80-140	18.7	0.16	30	
trans-1,3-Dichloropropene	16.78	1.0	20	0	83.9	81-123	16.88	0.594	30	
Trichloroethene	53.66	1.0	20	36.85	84	84-130	55.48	3.34	30	
Trichlorofluoromethane	23.11	1.0	20	0	116	60-140	21.63	6.62	30	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150908	Instrument ID VMS8			Method: SW8260					
Vinyl chloride	19.39	1.0	20	0	97	50-136	19.56	0.873	30
Xylenes, Total	54.18	3.0	60	0	90.3	80-126	61.54	12.7	30
Surr: 1,2-Dichloroethane-d4	19.25	0	20	0	96.2	75-120	19.62	1.9	30
Surr: 4-Bromofluorobenzene	17.55	0	20	0	87.8	80-110	20.46	15.3	30
Surr: Dibromofluoromethane	20.31	0	20	0	102	85-115	20.4	0.442	30
Surr: Toluene-d8	19.66	0	20	0	98.3	85-110	18.96	3.63	30

The following samples were analyzed in this batch:	1410899-01A	1410899-02A	1410899-03A
	1410899-04A	1410899-05A	1410899-06A
	1410899-07A	1410899-08A	1410899-09A
	1410899-10A	1410899-11A	1410899-12A
	1410899-13A	1410899-14A	1410899-15A
	1410899-16A	1410899-17A	1410899-19A
	1410899-20A	1410899-21A	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150911** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: VLKW2-141022-R150911				Units: µg/L		Analysis Date: 10/23/2014 05:50 A		
Client ID:		Run ID: VMS9_141022B				SeqNo: 2996035		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150911	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>18.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.5</i>	<i>75-120</i>	<i>0</i>		
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.37</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>91.8</i>	<i>80-110</i>	<i>0</i>		
<i>Surr: Dibromofluoromethane</i>	<i>20.04</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>19.12</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.6</i>	<i>85-110</i>	<i>0</i>		

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150911** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: VLCSW2-141022-R150911				Units: µg/L		Analysis Date: 10/23/2014 04:37 A		
Client ID:		Run ID: VMS9_141022B				SeqNo: 2996034		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	19.58	1.0	20	0	97.9	75-130	0			
1,1,2,2-Tetrachloroethane	21.02	1.0	20	0	105	75-130	0			
1,1,2-Trichloroethane	19.58	1.0	20	0	97.9	75-125	0			
1,1-Dichloroethane	16.35	1.0	20	0	81.8	75-133	0			
1,1-Dichloroethene	16.41	1.0	20	0	82	70-145	0			
1,2,4-Trichlorobenzene	19.83	1.0	20	0	99.2	70-135	0			
1,2-Dibromo-3-chloropropane	19.1	1.0	20	0	95.5	60-130	0			
1,2-Dibromoethane	24.35	1.0	20	0	122	80-150	0			
1,2-Dichlorobenzene	21.06	1.0	20	0	105	70-130	0			
1,2-Dichloroethane	18.46	1.0	20	0	92.3	78-125	0			
1,2-Dichloropropane	18.77	1.0	20	0	93.8	75-125	0			
1,3-Dichlorobenzene	21.41	1.0	20	0	107	75-130	0			
1,4-Dichlorobenzene	21.73	1.0	20	0	109	75-130	0			
2-Butanone	20.54	5.0	20	0	103	55-150	0			
2-Hexanone	23.37	5.0	20	0	117	60-135	0			
4-Methyl-2-pentanone	29.24	1.0	20	0	146	77-178	0			
Acetone	20.96	10	20	0	105	60-160	0			
Benzene	18.64	1.0	20	0	93.2	85-125	0			
Bromodichloromethane	19.17	1.0	20	0	95.8	75-125	0			
Bromoform	19.84	1.0	20	0	99.2	60-125	0			
Bromomethane	14.33	1.0	20	0	71.6	30-185	0			
Carbon disulfide	17.03	1.0	20	0	85.2	60-165	0			
Carbon tetrachloride	20.77	1.0	20	0	104	65-140	0			
Chlorobenzene	19.98	1.0	20	0	99.9	80-120	0			
Chloroethane	14.92	1.0	20	0	74.6	50-140	0			
Chloroform	18.02	1.0	20	0	90.1	80-130	0			
Chloromethane	11.43	1.0	20	0	57.2	50-130	0			
cis-1,2-Dichloroethene	17.12	1.0	20	0	85.6	75-134	0			
cis-1,3-Dichloropropene	19.53	1.0	20	0	97.6	70-130	0			
Dibromochloromethane	16.88	1.0	20	0	84.4	60-115	0			
Dichlorodifluoromethane	10.18	1.0	20	0	50.9	20-120	0			
Ethylbenzene	20.83	1.0	20	0	104	85-125	0			
Isopropylbenzene	22.33	1.0	20	0	112	80-127	0			
Methyl tert-butyl ether	19.81	1.0	20	0	99	80-130	0			
Methylene chloride	16.52	5.0	20	0	82.6	75-140	0			
Styrene	20.27	1.0	20	0	101	85-125	0			
Tetrachloroethene	21.32	1.0	20	0	107	77-138	0			
Toluene	19.98	1.0	20	0	99.9	85-125	0			
trans-1,2-Dichloroethene	16.66	1.0	20	0	83.3	80-140	0			
trans-1,3-Dichloropropene	17.32	1.0	20	0	86.6	81-123	0			
Trichloroethene	18.97	1.0	20	0	94.8	84-130	0			
Trichlorofluoromethane	15.57	1.0	20	0	77.8	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150911	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	16.02	1.0	20	0	80.1	50-136	0
Xylenes, Total	64.94	3.0	60	0	108	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.32</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>91.6</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.68</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.19</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>19.95</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.8</i>	<i>85-110</i>	<i>0</i>

The following samples were analyzed in this batch:

1410899-18A	1410899-22A	1410899-23A
1410899-24A	1410899-25A	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150940** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW1-141023-R150940				Units: µg/L		Analysis Date: 10/23/2014 01:53 PM		
Client ID:		Run ID: VMS5_141023A				SeqNo: 2997699		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150940	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
Surr: 1,2-Dichloroethane-d4	20.24	0 20 0 101 75-120 0
Surr: 4-Bromofluorobenzene	19.96	0 20 0 99.8 80-110 0
Surr: Dibromofluoromethane	21.05	0 20 0 105 85-115 0
Surr: Toluene-d8	20.24	0 20 0 101 85-110 0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150940** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-141023-R150940				Units: µg/L		Analysis Date: 10/23/2014 12:33 PM		
Client ID:		Run ID: VMS5_141023A				SeqNo: 2997698		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	20.05	1.0	20	0	100	75-130	0			
1,1,2,2-Tetrachloroethane	18.78	1.0	20	0	93.9	75-130	0			
1,1,2-Trichloroethane	18.77	1.0	20	0	93.8	75-125	0			
1,1-Dichloroethane	19.27	1.0	20	0	96.4	75-133	0			
1,1-Dichloroethene	22.8	1.0	20	0	114	70-145	0			
1,2,4-Trichlorobenzene	21.78	1.0	20	0	109	70-135	0			
1,2-Dibromo-3-chloropropane	18.78	1.0	20	0	93.9	60-130	0			
1,2-Dibromoethane	24.4	1.0	20	0	122	80-150	0			
1,2-Dichlorobenzene	18.8	1.0	20	0	94	70-130	0			
1,2-Dichloroethane	19.1	1.0	20	0	95.5	78-125	0			
1,2-Dichloropropane	19.85	1.0	20	0	99.2	75-125	0			
1,3-Dichlorobenzene	18.83	1.0	20	0	94.2	75-130	0			
1,4-Dichlorobenzene	18.25	1.0	20	0	91.2	75-130	0			
2-Butanone	22.12	5.0	20	0	111	55-150	0			
2-Hexanone	18.94	5.0	20	0	94.7	60-135	0			
4-Methyl-2-pentanone	27.52	1.0	20	0	138	77-178	0			
Acetone	20.34	10	20	0	102	60-160	0			
Benzene	20.11	1.0	20	0	101	85-125	0			
Bromodichloromethane	18.16	1.0	20	0	90.8	75-125	0			
Bromoform	15.19	1.0	20	0	76	60-125	0			
Bromomethane	32.89	1.0	20	0	164	30-185	0			
Carbon disulfide	21.68	1.0	20	0	108	60-165	0			
Carbon tetrachloride	19.88	1.0	20	0	99.4	65-140	0			
Chlorobenzene	18.78	1.0	20	0	93.9	80-120	0			
Chloroethane	19.82	1.0	20	0	99.1	50-140	0			
Chloroform	19.66	1.0	20	0	98.3	80-130	0			
Chloromethane	19.85	1.0	20	0	99.2	50-130	0			
cis-1,2-Dichloroethene	22.15	1.0	20	0	111	75-134	0			
cis-1,3-Dichloropropene	19.97	1.0	20	0	99.8	70-130	0			
Dibromochloromethane	17.13	1.0	20	0	85.6	60-115	0			
Dichlorodifluoromethane	15.21	1.0	20	0	76	20-120	0			
Ethylbenzene	19.46	1.0	20	0	97.3	85-125	0			
Isopropylbenzene	19.98	1.0	20	0	99.9	80-127	0			
Methyl tert-butyl ether	20.57	1.0	20	0	103	80-130	0			
Methylene chloride	22.98	5.0	20	0	115	75-140	0			
Styrene	19.09	1.0	20	0	95.4	85-125	0			
Tetrachloroethene	18.44	1.0	20	0	92.2	77-138	0			
Toluene	19.82	1.0	20	0	99.1	85-125	0			
trans-1,2-Dichloroethene	22.39	1.0	20	0	112	80-140	0			
trans-1,3-Dichloropropene	18.57	1.0	20	0	92.8	81-123	0			
Trichloroethene	20.47	1.0	20	0	102	84-130	0			
Trichlorofluoromethane	20.94	1.0	20	0	105	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150940	Instrument ID VMS5		Method: SW8260				
Vinyl chloride	18.68	1.0	20	0	93.4	50-136	0
Xylenes, Total	57.51	3.0	60	0	95.8	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	19.02	0	20	0	95.1	75-120	0
<i>Surr: 4-Bromofluorobenzene</i>	19.82	0	20	0	99.1	80-110	0
<i>Surr: Dibromofluoromethane</i>	19.64	0	20	0	98.2	85-115	0
<i>Surr: Toluene-d8</i>	20.22	0	20	0	101	85-110	0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150940** Instrument ID **VMS5** Method: **SW8260**

MS				Sample ID: 1410996-02A MS			Units: µg/L		Analysis Date: 10/23/2014 11:09 PM	
Client ID:				Run ID: VMS5_141023A			SeqNo: 2997728		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	20.81	1.0	20	0	104	75-130	0			
1,1,2,2-Tetrachloroethane	19.14	1.0	20	0	95.7	75-130	0			
1,1,2-Trichloroethane	21.92	1.0	20	0	110	75-125	0			
1,1-Dichloroethane	20.12	1.0	20	0	101	75-133	0			
1,1-Dichloroethene	21.25	1.0	20	0	106	70-145	0			
1,2,4-Trichlorobenzene	19.88	1.0	20	0	99.4	70-135	0			
1,2-Dibromo-3-chloropropane	17.84	1.0	20	0	89.2	60-130	0			
1,2-Dibromoethane	26.79	1.0	20	0	134	80-150	0			
1,2-Dichlorobenzene	19.49	1.0	20	0	97.4	70-130	0			
1,2-Dichloroethane	19.46	1.0	20	0	97.3	78-125	0			
1,2-Dichloropropane	18.38	1.0	20	0	91.9	75-125	0			
1,3-Dichlorobenzene	19.63	1.0	20	0	98.2	75-130	0			
1,4-Dichlorobenzene	19.38	1.0	20	0	96.9	75-130	0			
2-Butanone	20.13	5.0	20	0	101	55-150	0			
2-Hexanone	20.88	5.0	20	0	104	60-135	0			
4-Methyl-2-pentanone	27.85	1.0	20	0	139	77-178	0			
Acetone	21.12	10	20	0	106	60-160	0			
Benzene	20.18	1.0	20	0	101	85-125	0			
Bromodichloromethane	18.38	1.0	20	0	91.9	75-125	0			
Bromoform	15.65	1.0	20	0	78.2	60-125	0			
Bromomethane	28.16	1.0	20	0	141	30-185	0			
Carbon disulfide	20.98	1.0	20	0	105	60-165	0			
Carbon tetrachloride	20.73	1.0	20	0	104	65-140	0			
Chlorobenzene	19.44	1.0	20	0	97.2	80-120	0			
Chloroethane	16.69	1.0	20	0	83.4	50-140	0			
Chloroform	19.45	1.0	20	0	97.2	80-130	0			
Chloromethane	15.41	1.0	20	0	77	50-130	0			
cis-1,2-Dichloroethene	29.64	1.0	20	0	148	75-134	0			S
cis-1,3-Dichloropropene	18.83	1.0	20	0	94.2	70-130	0			
Dibromochloromethane	19.04	1.0	20	0	95.2	60-115	0			
Dichlorodifluoromethane	12.31	1.0	20	0	61.6	20-120	0			
Ethylbenzene	20.46	1.0	20	0	102	85-125	0			
Isopropylbenzene	20.97	1.0	20	0	105	80-127	0			
Methyl tert-butyl ether	17.88	1.0	20	0	89.4	80-130	0			
Methylene chloride	21.02	5.0	20	0	105	75-140	0			
Styrene	18.41	1.0	20	0	92	85-125	0			
Tetrachloroethene	34.55	1.0	20	0	173	77-138	0			S
Toluene	22.2	1.0	20	0	111	85-125	0			
trans-1,2-Dichloroethene	20.08	1.0	20	0	100	80-140	0			
trans-1,3-Dichloropropene	20.77	1.0	20	0	104	81-123	0			
Trichloroethene	22.79	1.0	20	0	114	84-130	0			
Trichlorofluoromethane	19.16	1.0	20	0	95.8	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150940		Instrument ID VMS5		Method: SW8260				
Vinyl chloride	17.44	1.0	20	0	87.2	50-136	0	
Xylenes, Total	60.46	3.0	60	0	101	80-126	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.67</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.48</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>21.22</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>106</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>22.92</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>115</i>	<i>85-110</i>	<i>0</i>	<i>S</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150940** Instrument ID **VMS5** Method: **SW8260**

MSD				Sample ID: 1410996-02A MSD				Units: µg/L		Analysis Date: 10/23/2014 11:35 PM	
Client ID:			Run ID: VMS5_141023A			SeqNo: 2997732		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	20.26	1.0	20	0	101	75-130	20.81	2.68	30		
1,1,2,2-Tetrachloroethane	18.95	1.0	20	0	94.8	75-130	19.14	0.998	30		
1,1,2-Trichloroethane	20.86	1.0	20	0	104	75-125	21.92	4.96	30		
1,1-Dichloroethane	19.28	1.0	20	0	96.4	75-133	20.12	4.26	30		
1,1-Dichloroethene	20.9	1.0	20	0	104	70-145	21.25	1.66	30		
1,2,4-Trichlorobenzene	21.44	1.0	20	0	107	70-135	19.88	7.55	30		
1,2-Dibromo-3-chloropropane	17.88	1.0	20	0	89.4	60-130	17.84	0.224	30		
1,2-Dibromoethane	25.65	1.0	20	0	128	80-150	26.79	4.35	30		
1,2-Dichlorobenzene	21.02	1.0	20	0	105	70-130	19.49	7.55	30		
1,2-Dichloroethane	19.53	1.0	20	0	97.6	78-125	19.46	0.359	30		
1,2-Dichloropropane	18.8	1.0	20	0	94	75-125	18.38	2.26	30		
1,3-Dichlorobenzene	20.77	1.0	20	0	104	75-130	19.63	5.64	30		
1,4-Dichlorobenzene	20.16	1.0	20	0	101	75-130	19.38	3.95	30		
2-Butanone	19.79	5.0	20	0	99	55-150	20.13	1.7	30		
2-Hexanone	19.98	5.0	20	0	99.9	60-135	20.88	4.41	30		
4-Methyl-2-pentanone	27.15	1.0	20	0	136	77-178	27.85	2.55	30		
Acetone	19.38	10	20	0	96.9	60-160	21.12	8.59	30		
Benzene	20.02	1.0	20	0	100	85-125	20.18	0.796	30		
Bromodichloromethane	18.38	1.0	20	0	91.9	75-125	18.38	0	30		
Bromoform	16.82	1.0	20	0	84.1	60-125	15.65	7.21	30		
Bromomethane	27.31	1.0	20	0	137	30-185	28.16	3.06	30		
Carbon disulfide	18.03	1.0	20	0	90.2	60-165	20.98	15.1	30		
Carbon tetrachloride	20.75	1.0	20	0	104	65-140	20.73	0.0964	30		
Chlorobenzene	18.85	1.0	20	0	94.2	80-120	19.44	3.08	30		
Chloroethane	16.8	1.0	20	0	84	50-140	16.69	0.657	30		
Chloroform	19.1	1.0	20	0	95.5	80-130	19.45	1.82	30		
Chloromethane	14.88	1.0	20	0	74.4	50-130	15.41	3.5	30		
cis-1,2-Dichloroethene	22.8	1.0	20	0	114	75-134	29.64	26.1	30		
cis-1,3-Dichloropropene	18.86	1.0	20	0	94.3	70-130	18.83	0.159	30		
Dibromochloromethane	18.43	1.0	20	0	92.2	60-115	19.04	3.26	30		
Dichlorodifluoromethane	12.06	1.0	20	0	60.3	20-120	12.31	2.05	30		
Ethylbenzene	21.23	1.0	20	0	106	85-125	20.46	3.69	30		
Isopropylbenzene	23.21	1.0	20	0	116	80-127	20.97	10.1	30		
Methyl tert-butyl ether	17.96	1.0	20	0	89.8	80-130	17.88	0.446	30		
Methylene chloride	19.7	5.0	20	0	98.5	75-140	21.02	6.48	30		
Styrene	19.74	1.0	20	0	98.7	85-125	18.41	6.97	30		
Tetrachloroethene	24.75	1.0	20	0	124	77-138	34.55	33.1	30	R	
Toluene	21.25	1.0	20	0	106	85-125	22.2	4.37	30		
trans-1,2-Dichloroethene	19.55	1.0	20	0	97.8	80-140	20.08	2.67	30		
trans-1,3-Dichloropropene	19.99	1.0	20	0	100	81-123	20.77	3.83	30		
Trichloroethene	20.33	1.0	20	0	102	84-130	22.79	11.4	30		
Trichlorofluoromethane	19.02	1.0	20	0	95.1	60-140	19.16	0.733	30		

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150940		Instrument ID VMS5		Method: SW8260						
Vinyl chloride	16.57	1.0	20	0	82.8	50-136	17.44	5.12	30	
Xylenes, Total	65	3.0	60	0	108	80-126	60.46	7.24	30	
Surr: 1,2-Dichloroethane-d4	21.51	0	20	0	108	75-120	20.67	3.98	30	
Surr: 4-Bromofluorobenzene	20.97	0	20	0	105	80-110	19.48	7.37	30	
Surr: Dibromofluoromethane	21.4	0	20	0	107	85-115	21.22	0.845	30	
Surr: Toluene-d8	22.06	0	20	0	110	85-110	22.92	3.82	30	S

The following samples were analyzed in this batch: | 1410899-10A | 1410899-16A |

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150998A** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: VLKW1-141023-R150998A				Units: µg/L		Analysis Date: 10/23/2014 12:03 PM		
Client ID:		Run ID: VMS8_141023A				SeqNo: 2997638		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150998A	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						
Surr: 1,2-Dichloroethane-d4	19.43	0	20	0	97.2	75-120	0	
Surr: 4-Bromofluorobenzene	19.06	0	20	0	95.3	80-110	0	
Surr: Dibromofluoromethane	20.36	0	20	0	102	85-115	0	
Surr: Toluene-d8	20.59	0	20	0	103	85-110	0	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150998A** Instrument ID **VMS8** Method: **SW8260**

LCS		Sample ID: VLCSW1-141023-R150998A				Units: µg/L		Analysis Date: 10/23/2014 10:49 A		
Client ID:		Run ID: VMS8_141023A				SeqNo: 2997637		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	19.92	1.0	20	0	99.6	75-130	0			
1,1,2,2-Tetrachloroethane	20.88	1.0	20	0	104	75-130	0			
1,1,2-Trichloroethane	20.53	1.0	20	0	103	75-125	0			
1,1-Dichloroethane	18.94	1.0	20	0	94.7	75-133	0			
1,1-Dichloroethene	22.83	1.0	20	0	114	70-145	0			
1,2,4-Trichlorobenzene	22.86	1.0	20	0	114	70-135	0			
1,2-Dibromo-3-chloropropane	18.8	1.0	20	0	94	60-130	0			
1,2-Dibromoethane	24.54	1.0	20	0	123	80-150	0			
1,2-Dichlorobenzene	22.67	1.0	20	0	113	70-130	0			
1,2-Dichloroethane	18.84	1.0	20	0	94.2	78-125	0			
1,2-Dichloropropane	19.1	1.0	20	0	95.5	75-125	0			
1,3-Dichlorobenzene	22.55	1.0	20	0	113	75-130	0			
1,4-Dichlorobenzene	22.74	1.0	20	0	114	75-130	0			
2-Butanone	18.06	5.0	20	0	90.3	55-150	0			
2-Hexanone	19.35	5.0	20	0	96.8	60-135	0			
4-Methyl-2-pentanone	26.22	1.0	20	0	131	77-178	0			
Acetone	22.31	10	20	0	112	60-160	0			
Benzene	19.01	1.0	20	0	95	85-125	0			
Bromodichloromethane	19.56	1.0	20	0	97.8	75-125	0			
Bromoform	16.79	1.0	20	0	84	60-125	0			
Bromomethane	24.9	1.0	20	0	124	30-185	0			
Carbon disulfide	19.14	1.0	20	0	95.7	60-165	0			
Carbon tetrachloride	18.85	1.0	20	0	94.2	65-140	0			
Chlorobenzene	20.9	1.0	20	0	104	80-120	0			
Chloroethane	28.03	1.0	20	0	140	50-140	0			S
Chloroform	19.53	1.0	20	0	97.6	80-130	0			
Chloromethane	24.61	1.0	20	0	123	50-130	0			
cis-1,2-Dichloroethene	19.83	1.0	20	0	99.2	75-134	0			
cis-1,3-Dichloropropene	19.86	1.0	20	0	99.3	70-130	0			
Dibromochloromethane	19.01	1.0	20	0	95	60-115	0			
Dichlorodifluoromethane	19.26	1.0	20	0	96.3	20-120	0			
Ethylbenzene	21.35	1.0	20	0	107	85-125	0			
Isopropylbenzene	21.85	1.0	20	0	109	80-127	0			
Methyl tert-butyl ether	19.45	1.0	20	0	97.2	80-130	0			
Methylene chloride	16.39	5.0	20	0	82	75-140	0			
Styrene	20.75	1.0	20	0	104	85-125	0			
Tetrachloroethene	22.45	1.0	20	0	112	77-138	0			
Toluene	19.55	1.0	20	0	97.8	85-125	0			
trans-1,2-Dichloroethene	18.94	1.0	20	0	94.7	80-140	0			
trans-1,3-Dichloropropene	20.81	1.0	20	0	104	81-123	0			
Trichloroethene	19.97	1.0	20	0	99.8	84-130	0			
Trichlorofluoromethane	27.95	1.0	20	0	140	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150998A		Instrument ID VMS8		Method: SW8260			
Vinyl chloride	26.77	1.0	20	0	134	50-136	0
Xylenes, Total	64.19	3.0	60	0	107	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.68</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.4</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.04</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.2</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.59</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>20.68</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150998A** Instrument ID **VMS8** Method: **SW8260**

MS				Sample ID: 1410899-18A MS			Units: µg/L		Analysis Date: 10/23/2014 08:40 PM	
Client ID: WG-017360-101514-MR-043				Run ID: VMS8_141023A			SeqNo: 2997703		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	18.76	1.0	20	0	93.8	75-130	0			
1,1,2,2-Tetrachloroethane	19.64	1.0	20	0	98.2	75-130	0			
1,1,2-Trichloroethane	18.82	1.0	20	0	94.1	75-125	0			
1,1-Dichloroethane	17.39	1.0	20	0	87	75-133	0			
1,1-Dichloroethene	27.47	1.0	20	0	137	70-145	0			
1,2,4-Trichlorobenzene	18.65	1.0	20	0	93.2	70-135	0			
1,2-Dibromo-3-chloropropane	18.44	1.0	20	0	92.2	60-130	0			
1,2-Dibromoethane	22.69	1.0	20	0	113	80-150	0			
1,2-Dichlorobenzene	19.82	1.0	20	0	99.1	70-130	0			
1,2-Dichloroethane	17.6	1.0	20	0	88	78-125	0			
1,2-Dichloropropane	17.26	1.0	20	0	86.3	75-125	0			
1,3-Dichlorobenzene	20.31	1.0	20	0	102	75-130	0			
1,4-Dichlorobenzene	19.31	1.0	20	0	96.6	75-130	0			
2-Butanone	10.5	5.0	20	0	52.5	55-150	0			S
2-Hexanone	21.4	5.0	20	0	107	60-135	0			
4-Methyl-2-pentanone	33.55	1.0	20	4.99	143	77-178	0			
Acetone	11.51	10	20	0	57.6	60-160	0			S
Benzene	18.14	1.0	20	0	90.7	85-125	0			
Bromodichloromethane	17.56	1.0	20	0	87.8	75-125	0			
Bromoform	13.68	1.0	20	0	68.4	60-125	0			
Bromomethane	12.36	1.0	20	0	61.8	30-185	0			
Carbon disulfide	27.96	1.0	20	0	140	60-165	0			
Carbon tetrachloride	17.62	1.0	20	0	88.1	65-140	0			
Chlorobenzene	19.24	1.0	20	0	96.2	80-120	0			
Chloroethane	18.85	1.0	20	0	94.2	50-140	0			
Chloroform	18.7	1.0	20	0	93.5	80-130	0			
Chloromethane	17.29	1.0	20	0	86.4	50-130	0			
cis-1,2-Dichloroethene	18.74	1.0	20	0	93.7	75-134	0			
cis-1,3-Dichloropropene	17.78	1.0	20	0	88.9	70-130	0			
Dibromochloromethane	16.8	1.0	20	0	84	60-115	0			
Dichlorodifluoromethane	13.07	1.0	20	0	65.4	20-120	0			
Ethylbenzene	20.97	1.0	20	1.27	98.5	85-125	0			
Isopropylbenzene	21.24	1.0	20	1.54	98.5	80-127	0			
Methyl tert-butyl ether	17.94	1.0	20	0	89.7	80-130	0			
Methylene chloride	14.84	5.0	20	0	74.2	75-140	0			S
Styrene	19.69	1.0	20	0.77	94.6	85-125	0			
Tetrachloroethene	20.21	1.0	20	0	101	77-138	0			
Toluene	18.63	1.0	20	0	93.2	85-125	0			
trans-1,2-Dichloroethene	17.91	1.0	20	0	89.6	80-140	0			
trans-1,3-Dichloropropene	17.3	1.0	20	0	86.5	81-123	0			
Trichloroethene	18.25	1.0	20	0	91.2	84-130	0			
Trichlorofluoromethane	23.43	1.0	20	0	117	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150998A	Instrument ID VMS8		Method: SW8260				
Vinyl chloride	22.9	1.0	20	0	114	50-136	0
Xylenes, Total	59.66	3.0	60	1.89	96.3	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.55</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.37</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>80-110</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>19.99</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150998A** Instrument ID **VMS8** Method: **SW8260**

MSD				Sample ID: 1410899-18A MSD			Units: µg/L		Analysis Date: 10/23/2014 09:04 PM	
Client ID: WG-017360-101514-MR-043				Run ID: VMS8_141023A			SeqNo: 2997707		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	18.34	1.0	20	0	91.7	75-130	18.76	2.26	30	
1,1,2,2-Tetrachloroethane	18.91	1.0	20	0	94.6	75-130	19.64	3.79	30	
1,1,2-Trichloroethane	18.01	1.0	20	0	90	75-125	18.82	4.4	30	
1,1-Dichloroethane	17.14	1.0	20	0	85.7	75-133	17.39	1.45	30	
1,1-Dichloroethene	27.37	1.0	20	0	137	70-145	27.47	0.365	30	
1,2,4-Trichlorobenzene	19.04	1.0	20	0	95.2	70-135	18.65	2.07	30	
1,2-Dibromo-3-chloropropane	17.81	1.0	20	0	89	60-130	18.44	3.48	30	
1,2-Dibromoethane	22.52	1.0	20	0	113	80-150	22.69	0.752	30	
1,2-Dichlorobenzene	19.73	1.0	20	0	98.6	70-130	19.82	0.455	30	
1,2-Dichloroethane	16.96	1.0	20	0	84.8	78-125	17.6	3.7	30	
1,2-Dichloropropane	17.3	1.0	20	0	86.5	75-125	17.26	0.231	30	
1,3-Dichlorobenzene	19.56	1.0	20	0	97.8	75-130	20.31	3.76	30	
1,4-Dichlorobenzene	18.95	1.0	20	0	94.8	75-130	19.31	1.88	30	
2-Butanone	7.74	5.0	20	0	38.7	55-150	10.5	30.3	30	SR
2-Hexanone	20.5	5.0	20	0	102	60-135	21.4	4.3	30	
4-Methyl-2-pentanone	32.57	1.0	20	4.99	138	77-178	33.55	2.96	30	
Acetone	8.1	10	20	0	40.5	60-160	11.51	0	30	JS
Benzene	17.71	1.0	20	0	88.6	85-125	18.14	2.4	30	
Bromodichloromethane	17.16	1.0	20	0	85.8	75-125	17.56	2.3	30	
Bromoform	12.95	1.0	20	0	64.8	60-125	13.68	5.48	30	
Bromomethane	10.59	1.0	20	0	53	30-185	12.36	15.4	30	
Carbon disulfide	24.96	1.0	20	0	125	60-165	27.96	11.3	30	
Carbon tetrachloride	16.96	1.0	20	0	84.8	65-140	17.62	3.82	30	
Chlorobenzene	19.07	1.0	20	0	95.4	80-120	19.24	0.887	30	
Chloroethane	18.24	1.0	20	0	91.2	50-140	18.85	3.29	30	
Chloroform	18.32	1.0	20	0	91.6	80-130	18.7	2.05	30	
Chloromethane	15.11	1.0	20	0	75.6	50-130	17.29	13.5	30	
cis-1,2-Dichloroethene	18.68	1.0	20	0	93.4	75-134	18.74	0.321	30	
cis-1,3-Dichloropropene	17.52	1.0	20	0	87.6	70-130	17.78	1.47	30	
Dibromochloromethane	16.35	1.0	20	0	81.8	60-115	16.8	2.71	30	
Dichlorodifluoromethane	12.86	1.0	20	0	64.3	20-120	13.07	1.62	30	
Ethylbenzene	20.95	1.0	20	1.27	98.4	85-125	20.97	0.0954	30	
Isopropylbenzene	21.12	1.0	20	1.54	97.9	80-127	21.24	0.567	30	
Methyl tert-butyl ether	17.74	1.0	20	0	88.7	80-130	17.94	1.12	30	
Methylene chloride	14.51	5.0	20	0	72.6	75-140	14.84	2.25	30	S
Styrene	19.33	1.0	20	0.77	92.8	85-125	19.69	1.85	30	
Tetrachloroethene	19.63	1.0	20	0	98.2	77-138	20.21	2.91	30	
Toluene	18.64	1.0	20	0	93.2	85-125	18.63	0.0537	30	
trans-1,2-Dichloroethene	17.78	1.0	20	0	88.9	80-140	17.91	0.728	30	
trans-1,3-Dichloropropene	17.39	1.0	20	0	87	81-123	17.3	0.519	30	
Trichloroethene	17.79	1.0	20	0	89	84-130	18.25	2.55	30	
Trichlorofluoromethane	24.78	1.0	20	0	124	60-140	23.43	5.6	30	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410899
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150998A	Instrument ID VMS8			Method: SW8260					
Vinyl chloride	21.06	1.0	20	0	105	50-136	22.9	8.37	30
Xylenes, Total	59.64	3.0	60	1.89	96.2	80-126	59.66	0.0335	30
Surr: 1,2-Dichloroethane-d4	19.52	0	20	0	97.6	75-120	19.55	0.154	30
Surr: 4-Bromofluorobenzene	19.52	0	20	0	97.6	80-110	19.37	0.771	30
Surr: Dibromofluoromethane	20.71	0	20	0	104	85-115	20.29	2.05	30
Surr: Toluene-d8	19.87	0	20	0	99.4	85-110	19.99	0.602	30

The following samples were analyzed in this batch:	1410899-12A	1410899-18A	1410899-19A	
	1410899-20A	1410899-21A		

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



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

Fax: (734) 453-5201

1410097
COC NO.: **PL-12739**
PAGE 1 OF 2

(See Reverse Side for Instructions)

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

CBA Form COC-10A (20110804)



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

Phone: (734) 453-5123

Fax: (734) 453-5201

COC NO.: PL-12740

PAGE 2 OF 2

(See Reverse Side for Instructions)

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: **15-Oct-14 16:05**

Work Order: **1410899**

Received by: **DS**

Checklist completed by Diane Shaw
eSignature

15-Oct-14
Date

Reviewed by: Chad Whelton
eSignature

15-Oct-14
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 ☐	
Sample(s) received on ice?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>10/15/2014 4:22:32 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-Oct-2014

Rawa Fleisher
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (17360-T05Y14-01Y14)**

Work Order: **1410663**

Dear Rawa,

ALS Environmental received 25 samples on 10-Oct-2014 02:00 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 95.

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

Sincerely,

Chad Whelton

Electronically approved by: Chad Whelton

Chad Whelton
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 Laboratory Group A Campbell Brothers Limited Company

Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Work Order: 1410663

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>
1410663-01	SW-017360-100714-MR-001	Surface Wate		10/7/2014 10:20	10/10/2014 14:00	☐
1410663-02	SW-017360-100714-MR-002	Surface Wate		10/7/2014 10:30	10/10/2014 14:00	☐
1410663-03	SW-017360-100714-MR-003	Surface Wate		10/7/2014 10:50	10/10/2014 14:00	☐
1410663-04	WG-017360-100714-MR-004	Groundwater		10/7/2014 12:56	10/10/2014 14:00	☐
1410663-05	WG-017360-100714-MR-005	Groundwater		10/7/2014 13:15	10/10/2014 14:00	☐
1410663-06	WG-017360-100714-MR-006	Groundwater		10/7/2014 13:31	10/10/2014 14:00	☐
1410663-07	WG-017360-100714-MR-007	Groundwater		10/7/2014 15:08	10/10/2014 14:00	☐
1410663-08	WG-017360-100714-MR-008	Groundwater		10/7/2014 15:55	10/10/2014 14:00	☐
1410663-09	WG-017360-100814-MR-009	Groundwater		10/8/2014 11:26	10/10/2014 14:00	☐
1410663-10	WG-017360-100814-MR-010	Groundwater		10/8/2014 10:40	10/10/2014 14:00	☐
1410663-11	WG-017360-100814-MR-011	Groundwater		10/8/2014 12:37	10/10/2014 14:00	☐
1410663-12	WG-017360-100814-MR-012	Groundwater		10/8/2014 13:14	10/10/2014 14:00	☐
1410663-13	WG-017360-100814-MR-013	Groundwater		10/8/2014 15:15	10/10/2014 14:00	☐
1410663-14	WG-017360-100814-MR-014	Groundwater		10/8/2014 16:03	10/10/2014 14:00	☐
1410663-15	WG-017360-100814-MR-015	Groundwater		10/8/2014 16:53	10/10/2014 14:00	☐
1410663-16	WG-017360-100914-MR-016	Groundwater		10/9/2014 10:15	10/10/2014 14:00	☐
1410663-17	WG-017360-100914-MR-017	Groundwater		10/9/2014 10:59	10/10/2014 14:00	☐
1410663-18	WG-017360-100914-MR-018	Groundwater		10/9/2014 11:30	10/10/2014 14:00	☐
1410663-19	WG-017360-100914-MR-019	Groundwater		10/9/2014 12:06	10/10/2014 14:00	☐
1410663-20	WG-017360-100914-MR-020	Groundwater		10/9/2014 12:51	10/10/2014 14:00	☐
1410663-21	WG-017360-100914-MR-021	Groundwater		10/9/2014 15:25	10/10/2014 14:00	☐
1410663-22	WG-017360-100914-MR-022	Groundwater		10/9/2014 14:04	10/10/2014 14:00	☐
1410663-23	WG-017360-100914-MR-023	Groundwater		10/9/2014 16:09	10/10/2014 14:00	☐
1410663-24	WG-017360-100914-MR-024	Groundwater		10/9/2014 16:57	10/10/2014 14:00	☐
1410663-25	TB-017360-100914-MR-025	Water		10/9/2014	10/10/2014 14:00	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Work Order: 1410663

Case Narrative

Batch 63956, Method SVO_8270_W, Sample 1410663-22B: One or more acid surrogate recoveries were below the lower control limits. The acidic sample results may be biased low.

Batch R150473, Method VOC_8260_W, Sample VLCS3-141016: The LCS recovery for Bromomethane was above the upper control limit. All samples results were non-detect. No qualification is required.

Batch R150473, Method VOC_8260_W, Sample 1410663-21A MSD: The MSD recovery for trans-1,3-Dichloropropene was below the lower control limit. However, the MS recovery and RPD were within control limits. No qualification is required.

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
WorkOrder: 1410663

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 is present at an estimated concentration between the MDL and Report 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
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-001
Collection Date: 10/7/2014 10:20 AM

Work Order: 1410663
Lab ID: 1410663-01
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/16/2014 23:53
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/16/2014 23:53
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/16/2014 23:53
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/16/2014 23:53
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/16/2014 23:53
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/16/2014 23:53
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/16/2014 23:53
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/16/2014 23:53
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/16/2014 23:53
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/16/2014 23:53
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/16/2014 23:53
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/16/2014 23:53
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/16/2014 23:53
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/16/2014 23:53
2-Butanone	U		0.87	25	µg/L	1	10/16/2014 23:53
2-Hexanone	U		0.15	50	µg/L	1	10/16/2014 23:53
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/16/2014 23:53
Acetone	U		3.1	50	µg/L	1	10/16/2014 23:53
Benzene	U		0.25	1.0	µg/L	1	10/16/2014 23:53
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/16/2014 23:53
Bromoform	U		0.099	1.0	µg/L	1	10/16/2014 23:53
Bromomethane	U		1.0	5.0	µg/L	1	10/16/2014 23:53
Carbon disulfide	U		0.26	5.0	µg/L	1	10/16/2014 23:53
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/16/2014 23:53
Chlorobenzene	U		0.19	1.0	µg/L	1	10/16/2014 23:53
Chloroethane	U		0.21	5.0	µg/L	1	10/16/2014 23:53
Chloroform	U		0.25	1.0	µg/L	1	10/16/2014 23:53
Chloromethane	U		0.25	5.0	µg/L	1	10/16/2014 23:53
cis-1,2-Dichloroethene	1.1		0.25	1.0	µg/L	1	10/16/2014 23:53
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/16/2014 23:53
Cyclohexane	U		0.31	1.0	µg/L	1	10/16/2014 23:53
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/16/2014 23:53
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/16/2014 23:53
Ethylbenzene	U		0.22	1.0	µg/L	1	10/16/2014 23:53
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/16/2014 23:53
Methyl acetate	U		0.62	10	µg/L	1	10/16/2014 23:53
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/16/2014 23:53

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-001
Collection Date: 10/7/2014 10:20 AM

Work Order: 1410663
Lab ID: 1410663-01
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/16/2014 23:53
Methylene chloride	U		0.64	5.0	µg/L	1	10/16/2014 23:53
Styrene	U		0.18	1.0	µg/L	1	10/16/2014 23:53
Tetrachloroethene	2.5		0.25	1.0	µg/L	1	10/16/2014 23:53
Toluene	U		0.20	1.0	µg/L	1	10/16/2014 23:53
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/16/2014 23:53
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/16/2014 23:53
Trichloroethene	U		0.34	1.0	µg/L	1	10/16/2014 23:53
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/16/2014 23:53
Vinyl chloride	U		0.19	1.0	µg/L	1	10/16/2014 23:53
Xylenes, Total	U		0.62	3.0	µg/L	1	10/16/2014 23:53
Surr: 1,2-Dichloroethane-d4	98.3			75-120	%REC	1	10/16/2014 23:53
Surr: 4-Bromofluorobenzene	99.0			80-110	%REC	1	10/16/2014 23:53
Surr: Dibromofluoromethane	96.2			85-115	%REC	1	10/16/2014 23:53
Surr: Toluene-d8	94.4			85-110	%REC	1	10/16/2014 23:53

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-002
Collection Date: 10/7/2014 10:30 AM

Work Order: 1410663
Lab ID: 1410663-02
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 12:19
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 12:19
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 12:19
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 12:19
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 12:19
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 12:19
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 12:19
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 12:19
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 12:19
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 12:19
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 12:19
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 12:19
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 12:19
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 12:19
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 12:19
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 12:19
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 12:19
Acetone	U		3.1	50	µg/L	1	10/17/2014 12:19
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 12:19
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 12:19
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 12:19
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 12:19
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 12:19
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 12:19
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 12:19
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 12:19
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 12:19
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 12:19
cis-1,2-Dichloroethene	1.5		0.25	1.0	µg/L	1	10/17/2014 12:19
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 12:19
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 12:19
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 12:19
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 12:19
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 12:19
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 12:19
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 12:19
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 12:19

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-002
Collection Date: 10/7/2014 10:30 AM

Work Order: 1410663
Lab ID: 1410663-02
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 12:19
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 12:19
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 12:19
Tetrachloroethene	4.4		0.25	1.0	µg/L	1	10/17/2014 12:19
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 12:19
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 12:19
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 12:19
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 12:19
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 12:19
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 12:19
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 12:19
Surr: 1,2-Dichloroethane-d4	97.5			75-120	%REC	1	10/17/2014 12:19
Surr: 4-Bromofluorobenzene	97.3			80-110	%REC	1	10/17/2014 12:19
Surr: Dibromofluoromethane	97.9			85-115	%REC	1	10/17/2014 12:19
Surr: Toluene-d8	93.8			85-110	%REC	1	10/17/2014 12:19

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-003
Collection Date: 10/7/2014 10:50 AM

Work Order: 1410663
Lab ID: 1410663-03
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JDW	
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 12:44
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 12:44
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 12:44
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 12:44
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 12:44
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 12:44
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 12:44
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 12:44
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 12:44
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 12:44
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 12:44
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 12:44
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 12:44
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 12:44
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 12:44
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 12:44
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 12:44
Acetone	U		3.1	50	µg/L	1	10/17/2014 12:44
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 12:44
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 12:44
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 12:44
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 12:44
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 12:44
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 12:44
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 12:44
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 12:44
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 12:44
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 12:44
cis-1,2-Dichloroethene	1.0		0.25	1.0	µg/L	1	10/17/2014 12:44
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 12:44
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 12:44
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 12:44
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 12:44
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 12:44
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 12:44
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 12:44
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 12:44

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: SW-017360-100714-MR-003
Collection Date: 10/7/2014 10:50 AM

Work Order: 1410663
Lab ID: 1410663-03
Matrix: SURFACE WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 12:44
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 12:44
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 12:44
Tetrachloroethene	3.7		0.25	1.0	µg/L	1	10/17/2014 12:44
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 12:44
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 12:44
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 12:44
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 12:44
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 12:44
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 12:44
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 12:44
Surr: 1,2-Dichloroethane-d4	97.4			75-120	%REC	1	10/17/2014 12:44
Surr: 4-Bromofluorobenzene	98.3			80-110	%REC	1	10/17/2014 12:44
Surr: Dibromofluoromethane	95.4			85-115	%REC	1	10/17/2014 12:44
Surr: Toluene-d8	93.5			85-110	%REC	1	10/17/2014 12:44

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-004
Collection Date: 10/7/2014 12:56 PM

Work Order: 1410663
Lab ID: 1410663-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 01:10
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 01:10
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 01:10
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 01:10
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 01:10
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 01:10
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 01:10
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 01:10
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 01:10
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 01:10
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 01:10
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 01:10
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 01:10
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 01:10
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 01:10
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 01:10
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 01:10
Acetone	U		3.1	50	µg/L	1	10/17/2014 01:10
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 01:10
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 01:10
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 01:10
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 01:10
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 01:10
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 01:10
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 01:10
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 01:10
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 01:10
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 01:10
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 01:10
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 01:10
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 01:10
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 01:10
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 01:10
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 01:10
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 01:10
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 01:10
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 01:10

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-004
Collection Date: 10/7/2014 12:56 PM

Work Order: 1410663
Lab ID: 1410663-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 01:10
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 01:10
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 01:10
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 01:10
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 01:10
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 01:10
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 01:10
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 01:10
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 01:10
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 01:10
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 01:10
Surr: 1,2-Dichloroethane-d4	98.9			75-120	%REC	1	10/17/2014 01:10
Surr: 4-Bromofluorobenzene	97.4			80-110	%REC	1	10/17/2014 01:10
Surr: Dibromofluoromethane	96.0			85-115	%REC	1	10/17/2014 01:10
Surr: Toluene-d8	93.3			85-110	%REC	1	10/17/2014 01:10

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-005
Collection Date: 10/7/2014 01:15 PM

Work Order: 1410663
Lab ID: 1410663-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 01:36
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 01:36
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 01:36
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 01:36
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 01:36
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 01:36
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 01:36
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 01:36
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 01:36
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 01:36
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 01:36
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 01:36
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 01:36
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 01:36
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 01:36
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 01:36
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 01:36
Acetone	U		3.1	50	µg/L	1	10/17/2014 01:36
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 01:36
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 01:36
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 01:36
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 01:36
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 01:36
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 01:36
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 01:36
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 01:36
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 01:36
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 01:36
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 01:36
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 01:36
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 01:36
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 01:36
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 01:36
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 01:36
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 01:36
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 01:36
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 01:36

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-005
Collection Date: 10/7/2014 01:15 PM

Work Order: 1410663
Lab ID: 1410663-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 01:36
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 01:36
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 01:36
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 01:36
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 01:36
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 01:36
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 01:36
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 01:36
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 01:36
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 01:36
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 01:36
Surr: 1,2-Dichloroethane-d4	95.6			75-120	%REC	1	10/17/2014 01:36
Surr: 4-Bromofluorobenzene	98.4			80-110	%REC	1	10/17/2014 01:36
Surr: Dibromofluoromethane	94.8			85-115	%REC	1	10/17/2014 01:36
Surr: Toluene-d8	94.8			85-110	%REC	1	10/17/2014 01:36

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-006
Collection Date: 10/7/2014 01:31 PM

Work Order: 1410663
Lab ID: 1410663-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 02:02
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 02:02
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 02:02
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 02:02
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 02:02
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 02:02
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 02:02
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 02:02
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 02:02
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:02
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 02:02
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 02:02
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 02:02
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 02:02
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 02:02
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 02:02
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 02:02
Acetone	U		3.1	50	µg/L	1	10/17/2014 02:02
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 02:02
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 02:02
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 02:02
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 02:02
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 02:02
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 02:02
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 02:02
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 02:02
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 02:02
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 02:02
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:02
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 02:02
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 02:02
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 02:02
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 02:02
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:02
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 02:02
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 02:02
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 02:02

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-006
Collection Date: 10/7/2014 01:31 PM

Work Order: 1410663
Lab ID: 1410663-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 02:02
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 02:02
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 02:02
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:02
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 02:02
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 02:02
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 02:02
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 02:02
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 02:02
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 02:02
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 02:02
Surr: 1,2-Dichloroethane-d4	96.3			75-120	%REC	1	10/17/2014 02:02
Surr: 4-Bromofluorobenzene	98.6			80-110	%REC	1	10/17/2014 02:02
Surr: Dibromofluoromethane	96.4			85-115	%REC	1	10/17/2014 02:02
Surr: Toluene-d8	95.4			85-110	%REC	1	10/17/2014 02:02

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-007
Collection Date: 10/7/2014 03:08 PM

Work Order: 1410663
Lab ID: 1410663-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 02:28
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 02:28
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 02:28
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 02:28
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 02:28
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 02:28
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 02:28
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 02:28
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 02:28
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:28
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 02:28
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 02:28
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 02:28
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 02:28
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 02:28
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 02:28
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 02:28
Acetone	U		3.1	50	µg/L	1	10/17/2014 02:28
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 02:28
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 02:28
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 02:28
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 02:28
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 02:28
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 02:28
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 02:28
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 02:28
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 02:28
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 02:28
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:28
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 02:28
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 02:28
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 02:28
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 02:28
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:28
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 02:28
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 02:28
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 02:28

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-007
Collection Date: 10/7/2014 03:08 PM

Work Order: 1410663
Lab ID: 1410663-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 02:28
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 02:28
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 02:28
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:28
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 02:28
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 02:28
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 02:28
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 02:28
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 02:28
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 02:28
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 02:28
Surr: 1,2-Dichloroethane-d4	96.1			75-120	%REC	1	10/17/2014 02:28
Surr: 4-Bromofluorobenzene	97.6			80-110	%REC	1	10/17/2014 02:28
Surr: Dibromofluoromethane	96.0			85-115	%REC	1	10/17/2014 02:28
Surr: Toluene-d8	94.0			85-110	%REC	1	10/17/2014 02:28

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-008
Collection Date: 10/7/2014 03:55 PM

Work Order: 1410663
Lab ID: 1410663-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 02:54
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 02:54
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 02:54
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 02:54
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 02:54
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 02:54
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 02:54
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 02:54
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 02:54
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:54
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 02:54
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 02:54
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 02:54
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 02:54
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 02:54
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 02:54
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 02:54
Acetone	U		3.1	50	µg/L	1	10/17/2014 02:54
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 02:54
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 02:54
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 02:54
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 02:54
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 02:54
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 02:54
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 02:54
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 02:54
Chloroform	0.78	J	0.25	1.0	µg/L	1	10/17/2014 02:54
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 02:54
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:54
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 02:54
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 02:54
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 02:54
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 02:54
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 02:54
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 02:54
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 02:54
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 02:54

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100714-MR-008
Collection Date: 10/7/2014 03:55 PM

Work Order: 1410663
Lab ID: 1410663-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 02:54
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 02:54
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 02:54
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 02:54
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 02:54
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 02:54
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 02:54
Trichloroethene	1.5		0.34	1.0	µg/L	1	10/17/2014 02:54
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 02:54
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 02:54
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 02:54
Surr: 1,2-Dichloroethane-d4	94.9			75-120	%REC	1	10/17/2014 02:54
Surr: 4-Bromofluorobenzene	97.7			80-110	%REC	1	10/17/2014 02:54
Surr: Dibromofluoromethane	96.0			85-115	%REC	1	10/17/2014 02:54
Surr: Toluene-d8	95.2			85-110	%REC	1	10/17/2014 02:54

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-009
Collection Date: 10/8/2014 11:26 AM

Work Order: 1410663
Lab ID: 1410663-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 03:20
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 03:20
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 03:20
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 03:20
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 03:20
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 03:20
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 03:20
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 03:20
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 03:20
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 03:20
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 03:20
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 03:20
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 03:20
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 03:20
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 03:20
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 03:20
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 03:20
Acetone	U		3.1	50	µg/L	1	10/17/2014 03:20
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 03:20
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 03:20
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 03:20
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 03:20
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 03:20
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 03:20
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 03:20
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 03:20
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 03:20
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 03:20
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 03:20
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 03:20
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 03:20
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 03:20
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 03:20
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 03:20
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 03:20
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 03:20
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 03:20

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-009
Collection Date: 10/8/2014 11:26 AM

Work Order: 1410663
Lab ID: 1410663-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 03:20
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 03:20
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 03:20
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 03:20
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 03:20
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 03:20
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 03:20
Trichloroethene	3.6		0.34	1.0	µg/L	1	10/17/2014 03:20
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 03:20
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 03:20
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 03:20
Surr: 1,2-Dichloroethane-d4	96.2			75-120	%REC	1	10/17/2014 03:20
Surr: 4-Bromofluorobenzene	97.6			80-110	%REC	1	10/17/2014 03:20
Surr: Dibromofluoromethane	96.5			85-115	%REC	1	10/17/2014 03:20
Surr: Toluene-d8	93.6			85-110	%REC	1	10/17/2014 03:20

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-010
Collection Date: 10/8/2014 10:40 AM

Work Order: 1410663
Lab ID: 1410663-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 03:46
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 03:46
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 03:46
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 03:46
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 03:46
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 03:46
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 03:46
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 03:46
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 03:46
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 03:46
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 03:46
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 03:46
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 03:46
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 03:46
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 03:46
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 03:46
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 03:46
Acetone	U		3.1	50	µg/L	1	10/17/2014 03:46
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 03:46
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 03:46
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 03:46
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 03:46
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 03:46
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 03:46
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 03:46
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 03:46
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 03:46
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 03:46
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 03:46
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 03:46
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 03:46
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 03:46
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 03:46
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 03:46
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 03:46
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 03:46
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 03:46

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-010
Collection Date: 10/8/2014 10:40 AM

Work Order: 1410663
Lab ID: 1410663-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 03:46
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 03:46
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 03:46
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 03:46
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 03:46
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 03:46
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 03:46
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 03:46
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 03:46
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 03:46
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 03:46
Surr: 1,2-Dichloroethane-d4	98.7			75-120	%REC	1	10/17/2014 03:46
Surr: 4-Bromofluorobenzene	97.8			80-110	%REC	1	10/17/2014 03:46
Surr: Dibromofluoromethane	95.5			85-115	%REC	1	10/17/2014 03:46
Surr: Toluene-d8	94.2			85-110	%REC	1	10/17/2014 03:46

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-011
Collection Date: 10/8/2014 12:37 PM

Work Order: 1410663
Lab ID: 1410663-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470				
BatchID: 63824							
Mercury	U		0.000029	0.00020	mg/L	1	10/13/2014 13:22
METALS BY ICP-MS							
			SW6020A				
BatchID: 63822							
Antimony	U		0.00011	0.0050	mg/L	1	10/17/2014 18:45
Arsenic	0.00083	J	0.00056	0.0050	mg/L	1	10/17/2014 18:45
Barium	0.10		0.00030	0.0050	mg/L	1	10/17/2014 18:45
Beryllium	U		0.00017	0.0020	mg/L	1	10/17/2014 18:45
Cadmium	0.0016	J	0.000026	0.0020	mg/L	1	10/17/2014 18:45
Chromium	U		0.00013	0.0050	mg/L	1	10/17/2014 18:45
Cobalt	0.00060	J	0.00010	0.0050	mg/L	1	10/17/2014 18:45
Copper	0.0014	J	0.00017	0.0050	mg/L	1	10/17/2014 18:45
Lead	0.00098	J	0.00057	0.0050	mg/L	1	10/17/2014 18:45
Manganese	0.051		0.00016	0.0050	mg/L	1	10/17/2014 18:45
Molybdenum	0.00068	J	0.00040	0.0050	mg/L	1	10/17/2014 18:45
Nickel	0.0038	J	0.00031	0.0050	mg/L	1	10/17/2014 18:45
Selenium	U		0.00075	0.0050	mg/L	1	10/17/2014 18:45
Silver	U		0.000020	0.0050	mg/L	1	10/17/2014 18:45
Thallium	U		0.00048	0.0050	mg/L	1	10/17/2014 18:45
Vanadium	U		0.00046	0.0050	mg/L	1	10/17/2014 18:45
Zinc	0.016		0.0029	0.010	mg/L	1	10/20/2014 19:54
VOLATILE ORGANIC COMPOUNDS							
			SW8260				
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 04:13
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 04:13
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 04:13
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 04:13
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 04:13
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 04:13
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 04:13
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 04:13
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 04:13
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 04:13
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 04:13
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 04:13
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 04:13
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 04:13

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-011
Collection Date: 10/8/2014 12:37 PM

Work Order: 1410663
Lab ID: 1410663-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 04:13
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 04:13
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 04:13
Acetone	U		3.1	50	µg/L	1	10/17/2014 04:13
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 04:13
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 04:13
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 04:13
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 04:13
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 04:13
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 04:13
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 04:13
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 04:13
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 04:13
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 04:13
cis-1,2-Dichloroethene	15		0.25	1.0	µg/L	1	10/17/2014 04:13
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 04:13
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 04:13
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 04:13
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 04:13
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 04:13
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 04:13
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 04:13
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 04:13
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 04:13
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 04:13
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 04:13
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 04:13
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 04:13
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 04:13
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 04:13
Trichloroethene	3.5		0.34	1.0	µg/L	1	10/17/2014 04:13
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 04:13
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 04:13
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 04:13
Surr: 1,2-Dichloroethane-d4	98.3			75-120	%REC	1	10/17/2014 04:13
Surr: 4-Bromofluorobenzene	96.7			80-110	%REC	1	10/17/2014 04:13
Surr: Dibromofluoromethane	97.8			85-115	%REC	1	10/17/2014 04:13
Surr: Toluene-d8	94.5			85-110	%REC	1	10/17/2014 04:13

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-012
Collection Date: 10/8/2014 01:14 PM

Work Order: 1410663
Lab ID: 1410663-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 04:39
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 04:39
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 04:39
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 04:39
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 04:39
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 04:39
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 04:39
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 04:39
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 04:39
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 04:39
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 04:39
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 04:39
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 04:39
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 04:39
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 04:39
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 04:39
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 04:39
Acetone	U		3.1	50	µg/L	1	10/17/2014 04:39
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 04:39
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 04:39
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 04:39
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 04:39
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 04:39
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 04:39
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 04:39
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 04:39
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 04:39
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 04:39
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 04:39
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 04:39
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 04:39
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 04:39
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 04:39
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 04:39
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 04:39
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 04:39
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 04:39

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-012
Collection Date: 10/8/2014 01:14 PM

Work Order: 1410663
Lab ID: 1410663-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 04:39
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 04:39
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 04:39
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 04:39
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 04:39
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 04:39
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 04:39
Trichloroethene	3.2		0.34	1.0	µg/L	1	10/17/2014 04:39
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 04:39
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 04:39
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 04:39
Surr: 1,2-Dichloroethane-d4	98.0			75-120	%REC	1	10/17/2014 04:39
Surr: 4-Bromofluorobenzene	98.2			80-110	%REC	1	10/17/2014 04:39
Surr: Dibromofluoromethane	94.2			85-115	%REC	1	10/17/2014 04:39
Surr: Toluene-d8	94.2			85-110	%REC	1	10/17/2014 04:39

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-013
Collection Date: 10/8/2014 03:15 PM

Work Order: 1410663
Lab ID: 1410663-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 05:05
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 05:05
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 05:05
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 05:05
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 05:05
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 05:05
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 05:05
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 05:05
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 05:05
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:05
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 05:05
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 05:05
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 05:05
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 05:05
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 05:05
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 05:05
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 05:05
Acetone	U		3.1	50	µg/L	1	10/17/2014 05:05
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 05:05
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 05:05
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 05:05
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 05:05
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 05:05
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 05:05
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 05:05
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 05:05
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 05:05
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 05:05
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 05:05
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 05:05
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 05:05
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 05:05
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 05:05
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:05
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 05:05
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 05:05
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 05:05

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-013
Collection Date: 10/8/2014 03:15 PM

Work Order: 1410663
Lab ID: 1410663-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 05:05
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 05:05
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 05:05
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 05:05
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 05:05
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 05:05
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 05:05
Trichloroethene	1.8		0.34	1.0	µg/L	1	10/17/2014 05:05
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 05:05
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 05:05
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 05:05
Surr: 1,2-Dichloroethane-d4	97.1			75-120	%REC	1	10/17/2014 05:05
Surr: 4-Bromofluorobenzene	97.0			80-110	%REC	1	10/17/2014 05:05
Surr: Dibromofluoromethane	95.2			85-115	%REC	1	10/17/2014 05:05
Surr: Toluene-d8	93.1			85-110	%REC	1	10/17/2014 05:05

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-014
Collection Date: 10/8/2014 04:03 PM

Work Order: 1410663
Lab ID: 1410663-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 05:31
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 05:31
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 05:31
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 05:31
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 05:31
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 05:31
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 05:31
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 05:31
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 05:31
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:31
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 05:31
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 05:31
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 05:31
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 05:31
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 05:31
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 05:31
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 05:31
Acetone	U		3.1	50	µg/L	1	10/17/2014 05:31
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 05:31
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 05:31
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 05:31
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 05:31
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 05:31
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 05:31
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 05:31
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 05:31
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 05:31
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 05:31
cis-1,2-Dichloroethene	1.2		0.25	1.0	µg/L	1	10/17/2014 05:31
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 05:31
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 05:31
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 05:31
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 05:31
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:31
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 05:31
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 05:31
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 05:31

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-014
Collection Date: 10/8/2014 04:03 PM

Work Order: 1410663
Lab ID: 1410663-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 05:31
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 05:31
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 05:31
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 05:31
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 05:31
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 05:31
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 05:31
Trichloroethene	3.7		0.34	1.0	µg/L	1	10/17/2014 05:31
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 05:31
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 05:31
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 05:31
Surr: 1,2-Dichloroethane-d4	97.0			75-120	%REC	1	10/17/2014 05:31
Surr: 4-Bromofluorobenzene	98.4			80-110	%REC	1	10/17/2014 05:31
Surr: Dibromofluoromethane	94.6			85-115	%REC	1	10/17/2014 05:31
Surr: Toluene-d8	92.8			85-110	%REC	1	10/17/2014 05:31

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-015
Collection Date: 10/8/2014 04:53 PM

Work Order: 1410663
Lab ID: 1410663-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 05:57
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 05:57
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 05:57
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 05:57
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 05:57
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 05:57
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 05:57
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 05:57
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 05:57
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:57
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 05:57
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 05:57
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 05:57
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 05:57
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 05:57
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 05:57
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 05:57
Acetone	U		3.1	50	µg/L	1	10/17/2014 05:57
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 05:57
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 05:57
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 05:57
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 05:57
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 05:57
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 05:57
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 05:57
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 05:57
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 05:57
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 05:57
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 05:57
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 05:57
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 05:57
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 05:57
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 05:57
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 05:57
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 05:57
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 05:57
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 05:57

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100814-MR-015
Collection Date: 10/8/2014 04:53 PM

Work Order: 1410663
Lab ID: 1410663-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 05:57
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 05:57
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 05:57
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 05:57
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 05:57
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 05:57
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 05:57
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 05:57
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 05:57
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 05:57
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 05:57
Surr: 1,2-Dichloroethane-d4	99.0			75-120	%REC	1	10/17/2014 05:57
Surr: 4-Bromofluorobenzene	98.2			80-110	%REC	1	10/17/2014 05:57
Surr: Dibromofluoromethane	95.8			85-115	%REC	1	10/17/2014 05:57
Surr: Toluene-d8	94.1			85-110	%REC	1	10/17/2014 05:57

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-016
Collection Date: 10/9/2014 10:15 AM

Work Order: 1410663
Lab ID: 1410663-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 06:23
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 06:23
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 06:23
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 06:23
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 06:23
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 06:23
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 06:23
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 06:23
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 06:23
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 06:23
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 06:23
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 06:23
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 06:23
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 06:23
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 06:23
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 06:23
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 06:23
Acetone	U		3.1	50	µg/L	1	10/17/2014 06:23
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 06:23
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 06:23
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 06:23
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 06:23
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 06:23
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 06:23
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 06:23
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 06:23
Chloroform	0.74	J	0.25	1.0	µg/L	1	10/17/2014 06:23
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 06:23
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 06:23
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 06:23
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 06:23
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 06:23
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 06:23
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 06:23
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 06:23
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 06:23
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 06:23

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-016
Collection Date: 10/9/2014 10:15 AM

Work Order: 1410663
Lab ID: 1410663-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 06:23
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 06:23
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 06:23
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 06:23
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 06:23
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 06:23
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 06:23
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 06:23
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 06:23
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 06:23
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 06:23
Surr: 1,2-Dichloroethane-d4	97.6			75-120	%REC	1	10/17/2014 06:23
Surr: 4-Bromofluorobenzene	97.6			80-110	%REC	1	10/17/2014 06:23
Surr: Dibromofluoromethane	96.3			85-115	%REC	1	10/17/2014 06:23
Surr: Toluene-d8	92.7			85-110	%REC	1	10/17/2014 06:23

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-017
Collection Date: 10/9/2014 10:59 AM

Work Order: 1410663
Lab ID: 1410663-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 06:49
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 06:49
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 06:49
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 06:49
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 06:49
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 06:49
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 06:49
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 06:49
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 06:49
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 06:49
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 06:49
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 06:49
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 06:49
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 06:49
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 06:49
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 06:49
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 06:49
Acetone	U		3.1	50	µg/L	1	10/17/2014 06:49
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 06:49
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 06:49
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 06:49
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 06:49
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 06:49
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 06:49
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 06:49
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 06:49
Chloroform	1.7		0.25	1.0	µg/L	1	10/17/2014 06:49
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 06:49
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 06:49
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 06:49
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 06:49
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 06:49
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 06:49
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 06:49
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 06:49
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 06:49
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 06:49

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-017
Collection Date: 10/9/2014 10:59 AM

Work Order: 1410663
Lab ID: 1410663-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 06:49
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 06:49
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 06:49
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 06:49
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 06:49
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 06:49
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 06:49
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 06:49
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 06:49
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 06:49
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 06:49
Surr: 1,2-Dichloroethane-d4	98.0			75-120	%REC	1	10/17/2014 06:49
Surr: 4-Bromofluorobenzene	96.4			80-110	%REC	1	10/17/2014 06:49
Surr: Dibromofluoromethane	96.0			85-115	%REC	1	10/17/2014 06:49
Surr: Toluene-d8	92.7			85-110	%REC	1	10/17/2014 06:49

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-018
Collection Date: 10/9/2014 11:30 AM

Work Order: 1410663
Lab ID: 1410663-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 07:16
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 07:16
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 07:16
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 07:16
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 07:16
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 07:16
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 07:16
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 07:16
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 07:16
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 07:16
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 07:16
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 07:16
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 07:16
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 07:16
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 07:16
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 07:16
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 07:16
Acetone	U		3.1	50	µg/L	1	10/17/2014 07:16
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 07:16
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 07:16
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 07:16
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 07:16
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 07:16
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 07:16
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 07:16
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 07:16
Chloroform	1.7		0.25	1.0	µg/L	1	10/17/2014 07:16
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 07:16
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 07:16
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 07:16
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 07:16
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 07:16
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 07:16
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 07:16
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 07:16
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 07:16
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 07:16

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-018
Collection Date: 10/9/2014 11:30 AM

Work Order: 1410663
Lab ID: 1410663-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 07:16
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 07:16
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 07:16
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 07:16
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 07:16
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 07:16
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 07:16
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 07:16
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 07:16
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 07:16
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 07:16
Surr: 1,2-Dichloroethane-d4	99.6			75-120	%REC	1	10/17/2014 07:16
Surr: 4-Bromofluorobenzene	97.2			80-110	%REC	1	10/17/2014 07:16
Surr: Dibromofluoromethane	95.2			85-115	%REC	1	10/17/2014 07:16
Surr: Toluene-d8	92.7			85-110	%REC	1	10/17/2014 07:16

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-019
Collection Date: 10/9/2014 12:06 PM

Work Order: 1410663
Lab ID: 1410663-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 07:42
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 07:42
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 07:42
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 07:42
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 07:42
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 07:42
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 07:42
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 07:42
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 07:42
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 07:42
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 07:42
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 07:42
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 07:42
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 07:42
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 07:42
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 07:42
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 07:42
Acetone	U		3.1	50	µg/L	1	10/17/2014 07:42
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 07:42
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 07:42
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 07:42
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 07:42
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 07:42
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 07:42
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 07:42
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 07:42
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 07:42
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 07:42
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 07:42
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 07:42
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 07:42
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 07:42
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 07:42
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 07:42
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 07:42
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 07:42
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 07:42

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-019
Collection Date: 10/9/2014 12:06 PM

Work Order: 1410663
Lab ID: 1410663-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 07:42
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 07:42
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 07:42
Tetrachloroethene	5.8		0.25	1.0	µg/L	1	10/17/2014 07:42
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 07:42
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 07:42
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 07:42
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 07:42
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 07:42
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 07:42
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 07:42
Surr: 1,2-Dichloroethane-d4	97.4			75-120	%REC	1	10/17/2014 07:42
Surr: 4-Bromofluorobenzene	99.0			80-110	%REC	1	10/17/2014 07:42
Surr: Dibromofluoromethane	95.0			85-115	%REC	1	10/17/2014 07:42
Surr: Toluene-d8	93.2			85-110	%REC	1	10/17/2014 07:42

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-020
Collection Date: 10/9/2014 12:51 PM

Work Order: 1410663
Lab ID: 1410663-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: JDW
BatchID: R150474							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 08:08
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 08:08
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 08:08
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 08:08
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 08:08
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 08:08
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 08:08
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 08:08
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 08:08
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:08
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 08:08
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 08:08
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 08:08
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 08:08
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 08:08
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 08:08
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 08:08
Acetone	U		3.1	50	µg/L	1	10/17/2014 08:08
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 08:08
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 08:08
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 08:08
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 08:08
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 08:08
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 08:08
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 08:08
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 08:08
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 08:08
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 08:08
cis-1,2-Dichloroethene	1.4		0.25	1.0	µg/L	1	10/17/2014 08:08
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 08:08
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 08:08
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 08:08
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 08:08
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:08
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 08:08
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 08:08
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 08:08

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-020
Collection Date: 10/9/2014 12:51 PM

Work Order: 1410663
Lab ID: 1410663-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 08:08
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 08:08
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 08:08
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 08:08
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 08:08
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 08:08
Trichloroethene	1.8		0.34	1.0	µg/L	1	10/17/2014 08:08
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 08:08
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 08:08
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 08:08
Surr: 1,2-Dichloroethane-d4	97.3			75-120	%REC	1	10/17/2014 08:08
Surr: 4-Bromofluorobenzene	97.1			80-110	%REC	1	10/17/2014 08:08
Surr: Dibromofluoromethane	96.3			85-115	%REC	1	10/17/2014 08:08
Surr: Toluene-d8	92.8			85-110	%REC	1	10/17/2014 08:08
BatchID: R150584							
Tetrachloroethene	220		1.2	5.0	µg/L	5	10/18/2014 23:01
Surr: 1,2-Dichloroethane-d4	102			75-120	%REC	5	10/18/2014 23:01
Surr: 4-Bromofluorobenzene	96.4			80-110	%REC	5	10/18/2014 23:01
Surr: Dibromofluoromethane	99.2			85-115	%REC	5	10/18/2014 23:01
Surr: Toluene-d8	98.2			85-110	%REC	5	10/18/2014 23:01

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-021
Collection Date: 10/9/2014 03:25 PM

Work Order: 1410663
Lab ID: 1410663-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R150473</u>							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 08:06
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 08:06
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 08:06
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 08:06
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 08:06
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 08:06
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 08:06
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 08:06
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 08:06
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:06
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 08:06
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 08:06
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 08:06
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 08:06
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 08:06
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 08:06
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 08:06
Acetone	U		3.1	50	µg/L	1	10/17/2014 08:06
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 08:06
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 08:06
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 08:06
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 08:06
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 08:06
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 08:06
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 08:06
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 08:06
Chloroform	4.8		0.25	1.0	µg/L	1	10/17/2014 08:06
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 08:06
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 08:06
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 08:06
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 08:06
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 08:06
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 08:06
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:06
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 08:06
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 08:06
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 08:06

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-021
Collection Date: 10/9/2014 03:25 PM

Work Order: 1410663
Lab ID: 1410663-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 08:06
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 08:06
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 08:06
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 08:06
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 08:06
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 08:06
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 08:06
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 08:06
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 08:06
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 08:06
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 08:06
Surr: 1,2-Dichloroethane-d4	87.2			75-120	%REC	1	10/17/2014 08:06
Surr: 4-Bromofluorobenzene	98.8			80-110	%REC	1	10/17/2014 08:06
Surr: Dibromofluoromethane	94.0			85-115	%REC	1	10/17/2014 08:06
Surr: Toluene-d8	92.2			85-110	%REC	1	10/17/2014 08:06

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-022
Collection Date: 10/9/2014 02:04 PM

Work Order: 1410663
Lab ID: 1410663-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW846 8270D		Prep: SW3510 / 10/16/14		Analyst: JG
BatchID: 63956							
1,1'-Biphenyl	U		0.10	5.3	µg/L	1	10/17/2014 12:50
2,4,5-Trichlorophenol	U		0.26	5.3	µg/L	1	10/17/2014 12:50
2,4,6-Trichlorophenol	U		0.29	5.3	µg/L	1	10/17/2014 12:50
2,4-Dichlorophenol	U		0.23	11	µg/L	1	10/17/2014 12:50
2,4-Dimethylphenol	U		1.9	5.3	µg/L	1	10/17/2014 12:50
2,4-Dinitrophenol	U		0.70	5.3	µg/L	1	10/17/2014 12:50
2,4-Dinitrotoluene	U		0.28	5.3	µg/L	1	10/17/2014 12:50
2,6-Dinitrotoluene	U		0.24	5.3	µg/L	1	10/17/2014 12:50
2-Chloronaphthalene	U		0.13	5.3	µg/L	1	10/17/2014 12:50
2-Chlorophenol	U		0.34	5.3	µg/L	1	10/17/2014 12:50
2-Methylnaphthalene	U		0.14	5.3	µg/L	1	10/17/2014 12:50
2-Methylphenol	U		0.21	5.3	µg/L	1	10/17/2014 12:50
2-Nitroaniline	U		0.36	21	µg/L	1	10/17/2014 12:50
2-Nitrophenol	U		0.29	5.3	µg/L	1	10/17/2014 12:50
3,3'-Dichlorobenzidine	U		4.1	5.3	µg/L	1	10/17/2014 12:50
3-Nitroaniline	U		0.36	21	µg/L	1	10/17/2014 12:50
4,6-Dinitro-2-methylphenol	U		1.3	21	µg/L	1	10/17/2014 12:50
4-Bromophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/17/2014 12:50
4-Chloro-3-methylphenol	U		0.33	5.3	µg/L	1	10/17/2014 12:50
4-Chloroaniline	U		0.33	21	µg/L	1	10/17/2014 12:50
4-Chlorophenyl phenyl ether	U		0.25	5.3	µg/L	1	10/17/2014 12:50
4-Methylphenol	U		0.21	5.3	µg/L	1	10/17/2014 12:50
4-Nitroaniline	U		0.31	21	µg/L	1	10/17/2014 12:50
4-Nitrophenol	U		0.54	21	µg/L	1	10/17/2014 12:50
Acenaphthene	U		0.12	5.3	µg/L	1	10/17/2014 12:50
Acenaphthylene	U		0.13	5.3	µg/L	1	10/17/2014 12:50
Acetophenone	U		0.095	1.1	µg/L	1	10/17/2014 12:50
Anthracene	U		0.76	5.3	µg/L	1	10/17/2014 12:50
Atrazine	U		0.14	1.1	µg/L	1	10/17/2014 12:50
Benzaldehyde	U		0.48	1.1	µg/L	1	10/17/2014 12:50
Benzo(a)anthracene	U		0.60	5.3	µg/L	1	10/17/2014 12:50
Benzo(a)pyrene	U		0.11	5.3	µg/L	1	10/17/2014 12:50
Benzo(b)fluoranthene	U		0.78	5.3	µg/L	1	10/17/2014 12:50
Benzo(g,h,i)perylene	U		0.74	5.3	µg/L	1	10/17/2014 12:50
Benzo(k)fluoranthene	U		0.18	5.3	µg/L	1	10/17/2014 12:50
Bis(2-chloroethoxy)methane	U		0.35	5.3	µg/L	1	10/17/2014 12:50
Bis(2-chloroethyl)ether	U		0.36	5.3	µg/L	1	10/17/2014 12:50

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-022
Collection Date: 10/9/2014 02:04 PM

Work Order: 1410663
Lab ID: 1410663-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.34	5.3	µg/L	1	10/17/2014 12:50
Bis(2-ethylhexyl)phthalate	U		0.16	5.3	µg/L	1	10/17/2014 12:50
Butyl benzyl phthalate	U		0.11	5.3	µg/L	1	10/17/2014 12:50
Caprolactam	U		5.0	11	µg/L	1	10/17/2014 12:50
Carbazole	U		0.17	11	µg/L	1	10/17/2014 12:50
Chrysene	U		0.75	5.3	µg/L	1	10/17/2014 12:50
Dibenzo(a,h)anthracene	U		0.71	5.3	µg/L	1	10/17/2014 12:50
Dibenzofuran	U		0.29	5.3	µg/L	1	10/17/2014 12:50
Diethyl phthalate	U		0.26	21	µg/L	1	10/17/2014 12:50
Dimethyl phthalate	U		0.29	21	µg/L	1	10/17/2014 12:50
Di-n-butyl phthalate	U		0.14	5.3	µg/L	1	10/17/2014 12:50
Di-n-octyl phthalate	U		0.12	5.3	µg/L	1	10/17/2014 12:50
Fluoranthene	U		0.81	5.3	µg/L	1	10/17/2014 12:50
Fluorene	U		0.11	5.3	µg/L	1	10/17/2014 12:50
Hexachlorobenzene	U		0.23	5.3	µg/L	1	10/17/2014 12:50
Hexachlorobutadiene	U		0.25	5.3	µg/L	1	10/17/2014 12:50
Hexachlorocyclopentadiene	U		0.19	21	µg/L	1	10/17/2014 12:50
Hexachloroethane	U		0.50	5.3	µg/L	1	10/17/2014 12:50
Indeno(1,2,3-cd)pyrene	U		0.73	5.3	µg/L	1	10/17/2014 12:50
Isophorone	U		0.31	5.3	µg/L	1	10/17/2014 12:50
Naphthalene	U		0.13	5.3	µg/L	1	10/17/2014 12:50
Nitrobenzene	U		0.35	5.3	µg/L	1	10/17/2014 12:50
N-Nitrosodi-n-propylamine	U		0.34	5.3	µg/L	1	10/17/2014 12:50
N-Nitrosodiphenylamine	U		0.85	5.3	µg/L	1	10/17/2014 12:50
Pentachlorophenol	U		0.23	21	µg/L	1	10/17/2014 12:50
Phenanthrene	U		0.91	5.3	µg/L	1	10/17/2014 12:50
Phenol	U		0.34	5.3	µg/L	1	10/17/2014 12:50
Pyrene	U		0.69	5.3	µg/L	1	10/17/2014 12:50
Surr: 2,4,6-Tribromophenol	46.5			32-115	%REC	1	10/17/2014 12:50
Surr: 2-Fluorobiphenyl	39.3			32-100	%REC	1	10/17/2014 12:50
Surr: 2-Fluorophenol	21.8	S		22-59	%REC	1	10/17/2014 12:50
Surr: 4-Terphenyl-d14	72.5			23-112	%REC	1	10/17/2014 12:50
Surr: Nitrobenzene-d5	42.1			31-93	%REC	1	10/17/2014 12:50
Surr: Phenol-d6	13.8			13-36	%REC	1	10/17/2014 12:50

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: BG

BatchID: R150473

1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 08:32
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 08:32
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 08:32

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-022
Collection Date: 10/9/2014 02:04 PM

Work Order: 1410663
Lab ID: 1410663-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 08:32
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 08:32
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 08:32
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 08:32
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 08:32
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 08:32
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:32
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 08:32
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 08:32
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 08:32
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 08:32
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 08:32
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 08:32
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 08:32
Acetone	U		3.1	50	µg/L	1	10/17/2014 08:32
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 08:32
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 08:32
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 08:32
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 08:32
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 08:32
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 08:32
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 08:32
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 08:32
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 08:32
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 08:32
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 08:32
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 08:32
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 08:32
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 08:32
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 08:32
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:32
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 08:32
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 08:32
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 08:32
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 08:32
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 08:32
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 08:32
Tetrachloroethene	8.2		0.25	1.0	µg/L	1	10/17/2014 08:32
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 08:32
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 08:32

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-022
Collection Date: 10/9/2014 02:04 PM

Work Order: 1410663
Lab ID: 1410663-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 08:32
Trichloroethene	1.7		0.34	1.0	µg/L	1	10/17/2014 08:32
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 08:32
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 08:32
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 08:32
Surr: 1,2-Dichloroethane-d4	88.4			75-120	%REC	1	10/17/2014 08:32
Surr: 4-Bromofluorobenzene	99.7			80-110	%REC	1	10/17/2014 08:32
Surr: Dibromofluoromethane	95.0			85-115	%REC	1	10/17/2014 08:32
Surr: Toluene-d8	91.5			85-110	%REC	1	10/17/2014 08:32

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-023
Collection Date: 10/9/2014 04:09 PM

Work Order: 1410663
Lab ID: 1410663-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R150473</u>							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 08:58
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 08:58
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 08:58
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 08:58
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 08:58
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 08:58
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 08:58
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 08:58
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 08:58
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:58
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 08:58
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 08:58
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 08:58
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 08:58
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 08:58
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 08:58
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 08:58
Acetone	U		3.1	50	µg/L	1	10/17/2014 08:58
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 08:58
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 08:58
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 08:58
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 08:58
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 08:58
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 08:58
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 08:58
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 08:58
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 08:58
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 08:58
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 08:58
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 08:58
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 08:58
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 08:58
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 08:58
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 08:58
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 08:58
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 08:58
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 08:58

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-023
Collection Date: 10/9/2014 04:09 PM

Work Order: 1410663
Lab ID: 1410663-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 08:58
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 08:58
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 08:58
Tetrachloroethene	3.5		0.25	1.0	µg/L	1	10/17/2014 08:58
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 08:58
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 08:58
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 08:58
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 08:58
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 08:58
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 08:58
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 08:58
Surr: 1,2-Dichloroethane-d4	87.9			75-120	%REC	1	10/17/2014 08:58
Surr: 4-Bromofluorobenzene	99.4			80-110	%REC	1	10/17/2014 08:58
Surr: Dibromofluoromethane	96.2			85-115	%REC	1	10/17/2014 08:58
Surr: Toluene-d8	91.6			85-110	%REC	1	10/17/2014 08:58

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-024
Collection Date: 10/9/2014 04:57 PM

Work Order: 1410663
Lab ID: 1410663-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
BatchID: R150473							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 09:24
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 09:24
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 09:24
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 09:24
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 09:24
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 09:24
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 09:24
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 09:24
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 09:24
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 09:24
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 09:24
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 09:24
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 09:24
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 09:24
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 09:24
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 09:24
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 09:24
Acetone	U		3.1	50	µg/L	1	10/17/2014 09:24
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 09:24
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 09:24
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 09:24
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 09:24
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 09:24
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 09:24
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 09:24
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 09:24
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 09:24
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 09:24
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 09:24
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 09:24
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 09:24
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 09:24
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 09:24
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 09:24
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 09:24
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 09:24
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 09:24

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: WG-017360-100914-MR-024
Collection Date: 10/9/2014 04:57 PM

Work Order: 1410663
Lab ID: 1410663-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 09:24
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 09:24
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 09:24
Tetrachloroethene	2.6		0.25	1.0	µg/L	1	10/17/2014 09:24
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 09:24
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 09:24
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 09:24
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 09:24
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 09:24
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 09:24
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 09:24
Surr: 1,2-Dichloroethane-d4	86.7			75-120	%REC	1	10/17/2014 09:24
Surr: 4-Bromofluorobenzene	98.8			80-110	%REC	1	10/17/2014 09:24
Surr: Dibromofluoromethane	97.2			85-115	%REC	1	10/17/2014 09:24
Surr: Toluene-d8	91.2			85-110	%REC	1	10/17/2014 09:24

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: TB-017360-100914-MR-025
Collection Date: 10/9/2014

Work Order: 1410663
Lab ID: 1410663-25
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
BatchID: R150517							
1,1,1-Trichloroethane	U		0.19	1.0	µg/L	1	10/17/2014 17:10
1,1,2,2-Tetrachloroethane	U		0.34	1.0	µg/L	1	10/17/2014 17:10
1,1,2-Trichloroethane	U		0.25	1.0	µg/L	1	10/17/2014 17:10
1,1,2-Trichlorotrifluoroethane	U		0.47	1.0	µg/L	1	10/17/2014 17:10
1,1-Dichloroethane	U		0.21	1.0	µg/L	1	10/17/2014 17:10
1,1-Dichloroethene	U		0.24	1.0	µg/L	1	10/17/2014 17:10
1,2,4-Trichlorobenzene	U		0.19	5.0	µg/L	1	10/17/2014 17:10
1,2-Dibromo-3-chloropropane	U		0.42	1.0	µg/L	1	10/17/2014 17:10
1,2-Dibromoethane	U		0.34	1.0	µg/L	1	10/17/2014 17:10
1,2-Dichlorobenzene	U		0.22	1.0	µg/L	1	10/17/2014 17:10
1,2-Dichloroethane	U		0.26	1.0	µg/L	1	10/17/2014 17:10
1,2-Dichloropropane	U		0.26	1.0	µg/L	1	10/17/2014 17:10
1,3-Dichlorobenzene	U		0.21	1.0	µg/L	1	10/17/2014 17:10
1,4-Dichlorobenzene	U		0.20	1.0	µg/L	1	10/17/2014 17:10
2-Butanone	U		0.87	25	µg/L	1	10/17/2014 17:10
2-Hexanone	U		0.15	50	µg/L	1	10/17/2014 17:10
4-Methyl-2-pentanone	U		0.15	50	µg/L	1	10/17/2014 17:10
Acetone	U		3.1	50	µg/L	1	10/17/2014 17:10
Benzene	U		0.25	1.0	µg/L	1	10/17/2014 17:10
Bromodichloromethane	U		0.16	1.0	µg/L	1	10/17/2014 17:10
Bromoform	U		0.099	1.0	µg/L	1	10/17/2014 17:10
Bromomethane	U		1.0	5.0	µg/L	1	10/17/2014 17:10
Carbon disulfide	U		0.26	5.0	µg/L	1	10/17/2014 17:10
Carbon tetrachloride	U		0.14	1.0	µg/L	1	10/17/2014 17:10
Chlorobenzene	U		0.19	1.0	µg/L	1	10/17/2014 17:10
Chloroethane	U		0.21	5.0	µg/L	1	10/17/2014 17:10
Chloroform	U		0.25	1.0	µg/L	1	10/17/2014 17:10
Chloromethane	U		0.25	5.0	µg/L	1	10/17/2014 17:10
cis-1,2-Dichloroethene	U		0.25	1.0	µg/L	1	10/17/2014 17:10
cis-1,3-Dichloropropene	U		0.24	1.0	µg/L	1	10/17/2014 17:10
Cyclohexane	U		0.31	1.0	µg/L	1	10/17/2014 17:10
Dibromochloromethane	U		0.17	5.0	µg/L	1	10/17/2014 17:10
Dichlorodifluoromethane	U		0.41	5.0	µg/L	1	10/17/2014 17:10
Ethylbenzene	U		0.22	1.0	µg/L	1	10/17/2014 17:10
Isopropylbenzene	U		0.25	5.0	µg/L	1	10/17/2014 17:10
Methyl acetate	U		0.62	10	µg/L	1	10/17/2014 17:10
Methyl tert-butyl ether	U		0.12	5.0	µg/L	1	10/17/2014 17:10

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

ALS Group USA, Corp

Date: 21-Oct-14

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y14-01Y14)
Sample ID: TB-017360-100914-MR-025
Collection Date: 10/9/2014

Work Order: 1410663
Lab ID: 1410663-25
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.32	1.0	µg/L	1	10/17/2014 17:10
Methylene chloride	U		0.64	5.0	µg/L	1	10/17/2014 17:10
Styrene	U		0.18	1.0	µg/L	1	10/17/2014 17:10
Tetrachloroethene	U		0.25	1.0	µg/L	1	10/17/2014 17:10
Toluene	U		0.20	1.0	µg/L	1	10/17/2014 17:10
trans-1,2-Dichloroethene	U		0.29	1.0	µg/L	1	10/17/2014 17:10
trans-1,3-Dichloropropene	U		0.19	1.0	µg/L	1	10/17/2014 17:10
Trichloroethene	U		0.34	1.0	µg/L	1	10/17/2014 17:10
Trichlorofluoromethane	U		0.39	1.0	µg/L	1	10/17/2014 17:10
Vinyl chloride	U		0.19	1.0	µg/L	1	10/17/2014 17:10
Xylenes, Total	U		0.62	3.0	µg/L	1	10/17/2014 17:10
Surr: 1,2-Dichloroethane-d4	87.2			75-120	%REC	1	10/17/2014 17:10
Surr: 4-Bromofluorobenzene	100			80-110	%REC	1	10/17/2014 17:10
Surr: Dibromofluoromethane	95.7			85-115	%REC	1	10/17/2014 17:10
Surr: Toluene-d8	91.8			85-110	%REC	1	10/17/2014 17:10

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63824** Instrument ID **HG1** Method: **SW7470**

MBLK		Sample ID: MBLK-63824-63824				Units: mg/L		Analysis Date: 10/13/2014 01:18 PM		
Client ID:		Run ID: HG1_141013A				SeqNo: 2978890		Prep Date: 10/13/2014		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-63824-63824				Units: mg/L		Analysis Date: 10/13/2014 01:20 PM		
Client ID:		Run ID: HG1_141013A				SeqNo: 2978891		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001734 0.00020 0.002 0 86.7 80-120 0

MS		Sample ID: 1410663-11BMS				Units: mg/L		Analysis Date: 10/13/2014 01:25 PM		
Client ID: WG-017360-100814-MR-011		Run ID: HG1_141013A				SeqNo: 2978893		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001807 0.00020 0.002 0.000002 90.2 75-125 0

MS		Sample ID: 1410570-01AMS				Units: mg/L		Analysis Date: 10/13/2014 02:17 PM		
Client ID:		Run ID: HG1_141013A				SeqNo: 2979362		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.02199 0.0020 0.02 0.00005 110 75-125 0

MSD		Sample ID: 1410663-11BMSD				Units: mg/L		Analysis Date: 10/13/2014 01:27 PM		
Client ID: WG-017360-100814-MR-011		Run ID: HG1_141013A				SeqNo: 2978894		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001875 0.00020 0.002 0.000002 93.6 75-125 0.001807 3.69 20

MSD		Sample ID: 1410570-01AMSD				Units: mg/L		Analysis Date: 10/13/2014 02:19 PM		
Client ID:		Run ID: HG1_141013A				SeqNo: 2979363		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.02204 0.0020 0.02 0.00005 110 75-125 0.02199 0.227 20

The following samples were analyzed in this batch: 1410663-11B

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63822** Instrument ID **ICPMS2** Method: **SW6020A**

Sample ID: MBLK-63822-63822				Units: mg/L			Analysis Date: 10/15/2014 02:03 PM			
Client ID:		Run ID: ICPMS2_141015A			SeqNo: 2982771		Prep Date: 10/13/2014		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	U	0.0050								
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	0.01087	0.010								

MBLK				Sample ID: MBLK-63822-63822				Units: mg/L			Analysis Date: 10/16/2014 05:23 PM		
Client ID:				Run ID: ICPMS2_141016A				SeqNo: 2985073		Prep Date: 10/13/2014		DF: 1	
Analyte		Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Beryllium		U	0.0020										

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63822** Instrument ID **ICPMS2** Method: **SW6020A**

LCS		Sample ID: LCS-63822-63822				Units: mg/L		Analysis Date: 10/15/2014 02:10 PM		
Client ID:		Run ID: ICPMS2_141015A				SeqNo: 2982777		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09356	0.0050	0.1	0	93.6	80-120	0			
Arsenic	0.09017	0.0050	0.1	0	90.2	80-120	0			
Barium	0.09107	0.0050	0.1	0	91.1	80-120	0			
Cadmium	0.09196	0.0020	0.1	0	92	80-120	0			
Chromium	0.09356	0.0050	0.1	0	93.6	80-120	0			
Cobalt	0.09361	0.0050	0.1	0	93.6	80-120	0			
Copper	0.09366	0.0050	0.1	0	93.7	80-120	0			
Lead	0.08898	0.0050	0.1	0	89	80-120	0			
Manganese	0.09316	0.0050	0.1	0	93.2	80-120	0			
Molybdenum	0.09207	0.0050	0.1	0	92.1	80-120	0			
Nickel	0.09165	0.0050	0.1	0	91.6	80-120	0			
Selenium	0.09123	0.0050	0.1	0	91.2	80-120	0			
Silver	0.09012	0.0050	0.1	0	90.1	80-120	0			
Thallium	0.08822	0.0050	0.1	0	88.2	80-120	0			
Vanadium	0.09553	0.0050	0.1	0	95.5	80-120	0			
Zinc	0.09521	0.010	0.1	0	95.2	80-120	0			B

LCS		Sample ID: LCS-63822-63822				Units: mg/L		Analysis Date: 10/16/2014 05:30 PM		
Client ID:		Run ID: ICPMS2_141016A				SeqNo: 2985074		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.1036	0.0020	0.1	0	104	80-120	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63822** Instrument ID **ICPMS2** Method: **SW6020A**

MS		Sample ID: 1410480-01AMS				Units: mg/L		Analysis Date: 10/15/2014 02:28 PM		
Client ID:		Run ID: ICPMS2_141015A				SeqNo: 2982780		Prep Date: 10/13/2014		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	0.00003841	93.3	75-125	0			
Arsenic	0.09274	0.0050	0.1	0.001182	91.6	75-125	0			
Barium	0.1959	0.0050	0.1	0.1064	89.5	75-125	0			
Cadmium	0.09147	0.0020	0.1	-2.539E-05	91.5	75-125	0			
Chromium	0.09207	0.0050	0.1	-0.0001208	92.2	75-125	0			
Cobalt	0.09166	0.0050	0.1	0.0004378	91.2	75-125	0			
Copper	0.08905	0.0050	0.1	-1.922E-05	89.1	75-125	0			
Lead	0.09078	0.0050	0.1	-3.168E-05	90.8	75-125	0			
Manganese	1.05	0.0050	0.1	0.9649	85.1	75-125	0			O
Molybdenum	0.09448	0.0050	0.1	0.001146	93.3	75-125	0			
Nickel	0.08928	0.0050	0.1	0.001358	87.9	75-125	0			
Selenium	0.09231	0.0050	0.1	0.0005131	91.8	75-125	0			
Silver	0.08623	0.0050	0.1	-0.0000156	86.2	75-125	0			
Thallium	0.08979	0.0050	0.1	-0.0001776	90	75-125	0			
Vanadium	0.09544	0.0050	0.1	0.001273	94.2	75-125	0			
Zinc	0.09311	0.010	0.1	0.002944	90.2	75-125	0			B

MS		Sample ID: 1410480-01AMS				Units: mg/L		Analysis Date: 10/16/2014 05:42 PM		
Client ID:		Run ID: ICPMS2_141016A				SeqNo: 2985076		Prep Date: 10/13/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.09703	0.0020	0.1	0.00006624	97	75-125	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63822** Instrument ID **ICPMS2** Method: **SW6020A**

MSD				Sample ID: 1410480-01AMSD			Units: mg/L		Analysis Date: 10/15/2014 02:34 PM		
Client ID:			Run ID: ICPMS2_141015A			SeqNo: 2982781		Prep Date: 10/13/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Antimony	0.09216	0.0050	0.1	0.00003841	92.1	75-125	0.09329	1.22	20		
Arsenic	0.09227	0.0050	0.1	0.001182	91.1	75-125	0.09274	0.508	20		
Barium	0.1942	0.0050	0.1	0.1064	87.8	75-125	0.1959	0.872	20		
Cadmium	0.08972	0.0020	0.1	-2.539E-05	89.7	75-125	0.09147	1.93	20		
Chromium	0.09209	0.0050	0.1	-0.0001208	92.2	75-125	0.09207	0.0217	20		
Cobalt	0.09247	0.0050	0.1	0.0004378	92	75-125	0.09166	0.88	20		
Copper	0.08934	0.0050	0.1	-1.922E-05	89.4	75-125	0.08905	0.325	20		
Lead	0.08998	0.0050	0.1	-3.168E-05	90	75-125	0.09078	0.885	20		
Manganese	1.054	0.0050	0.1	0.9649	89.1	75-125	1.05	0.38	20	O	
Molybdenum	0.09395	0.0050	0.1	0.001146	92.8	75-125	0.09448	0.563	20		
Nickel	0.08934	0.0050	0.1	0.001358	88	75-125	0.08928	0.0672	20		
Selenium	0.09231	0.0050	0.1	0.0005131	91.8	75-125	0.09231	0	20		
Silver	0.08523	0.0050	0.1	-0.0000156	85.2	75-125	0.08623	1.17	20		
Thallium	0.08953	0.0050	0.1	-0.0001776	89.7	75-125	0.08979	0.29	20		
Vanadium	0.09571	0.0050	0.1	0.001273	94.4	75-125	0.09544	0.283	20		
Zinc	0.0933	0.010	0.1	0.002944	90.4	75-125	0.09311	0.204	20	B	

MSD				Sample ID: 1410480-01AMSD				Units: mg/L			Analysis Date: 10/16/2014 05:48 PM			
Client ID:				Run ID: ICPMS2_141016A				SeqNo: 2985077			Prep Date: 10/13/2014		DF: 1	
Analyte				Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium				0.09626		0.0020	0.1	0.00006624	96.2	75-125	0.09703	0.797	20	

The following samples were analyzed in this batch:

1410663-11B

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64108** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-64108-64108				Units: mg/L		Analysis Date: 10/20/2014 05:14 PM		
Client ID:		Run ID: ICPMS1_141020A				SeqNo: 2991282		Prep Date: 10/20/2014		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	U	0.0050								
Beryllium	U	0.0020								
Cadmium	0.00007158	0.0020								J
Chromium	0.001809	0.0050								J
Cobalt	U	0.0050								
Copper	0.0002069	0.0050								J
Lead	U	0.0050								
Manganese	0.001314	0.0050								J
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-64108-64108				Units: mg/L		Analysis Date: 10/20/2014 05:20 PM		
Client ID:		Run ID: ICPMS1_141020A				SeqNo: 2991283		Prep Date: 10/20/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09751	0.0050	0.1	0	97.5	80-120	0			
Arsenic	0.09538	0.0050	0.1	0	95.4	80-120	0			
Barium	0.09703	0.0050	0.1	0	97	80-120	0			
Beryllium	0.1001	0.0020	0.1	0	100	80-120	0			
Cadmium	0.09791	0.0020	0.1	0	97.9	80-120	0			
Chromium	0.09659	0.0050	0.1	0	96.6	80-120	0			
Cobalt	0.09382	0.0050	0.1	0	93.8	80-120	0			
Copper	0.09357	0.0050	0.1	0	93.6	80-120	0			
Lead	0.09655	0.0050	0.1	0	96.6	80-120	0			
Manganese	0.09577	0.0050	0.1	0	95.8	80-120	0			
Molybdenum	0.09632	0.0050	0.1	0	96.3	80-120	0			
Nickel	0.09377	0.0050	0.1	0	93.8	80-120	0			
Selenium	0.09574	0.0050	0.1	0	95.7	80-120	0			
Silver	0.0961	0.0050	0.1	0	96.1	80-120	0			
Thallium	0.09347	0.0050	0.1	0	93.5	80-120	0			
Vanadium	0.09489	0.0050	0.1	0	94.9	80-120	0			
Zinc	0.09963	0.010	0.1	0	99.6	80-120	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **64108** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 14101023-01CMS			Units: mg/L		Analysis Date: 10/20/2014 06:09 PM	
Client ID:				Run ID: ICPMS1_141020A			SeqNo: 2991291		Prep Date: 10/20/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09684	0.0050	0.1	0.00008274	96.8	75-125	0			
Arsenic	0.1027	0.0050	0.1	0.006769	95.9	75-125	0			
Barium	0.1867	0.0050	0.1	0.09139	95.3	75-125	0			
Beryllium	0.09681	0.0020	0.1	-3.685E-05	96.8	75-125	0			
Cadmium	0.09621	0.0020	0.1	0.0001225	96.1	75-125	0			
Chromium	0.09533	0.0050	0.1	0.001139	94.2	75-125	0			
Cobalt	0.09155	0.0050	0.1	0.000649	90.9	75-125	0			
Copper	0.08887	0.0050	0.1	0.0003056	88.6	75-125	0			
Lead	0.09844	0.0050	0.1	0.0001308	98.3	75-125	0			
Manganese	0.2116	0.0050	0.1	0.14	71.6	75-125	0			S
Molybdenum	0.1197	0.0050	0.1	0.0224	97.3	75-125	0			
Nickel	0.09331	0.0050	0.1	0.00183	91.5	75-125	0			
Selenium	0.09648	0.0050	0.1	0.0003763	96.1	75-125	0			
Silver	0.09114	0.0050	0.1	0.00002115	91.1	75-125	0			
Thallium	0.09607	0.0050	0.1	-6.126E-05	96.1	75-125	0			
Vanadium	0.09655	0.0050	0.1	0.0000591	96.5	75-125	0			
Zinc	0.09495	0.010	0.1	0.004903	90	75-125	0			

MSD				Sample ID: 14101023-01CMSD			Units: mg/L		Analysis Date: 10/20/2014 06:15 PM	
Client ID:				Run ID: ICPMS1_141020A			SeqNo: 2991292		Prep Date: 10/20/2014	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.095	0.0050	0.1	0.00008274	94.9	75-125	0.09684	1.92	20	
Arsenic	0.1015	0.0050	0.1	0.006769	94.7	75-125	0.1027	1.18	20	
Barium	0.1847	0.0050	0.1	0.09139	93.3	75-125	0.1867	1.08	20	
Beryllium	0.09621	0.0020	0.1	-3.685E-05	96.2	75-125	0.09681	0.622	20	
Cadmium	0.09542	0.0020	0.1	0.0001225	95.3	75-125	0.09621	0.825	20	
Chromium	0.09286	0.0050	0.1	0.001139	91.7	75-125	0.09533	2.63	20	
Cobalt	0.09026	0.0050	0.1	0.000649	89.6	75-125	0.09155	1.42	20	
Copper	0.08766	0.0050	0.1	0.0003056	87.4	75-125	0.08887	1.37	20	
Lead	0.09667	0.0050	0.1	0.0001308	96.5	75-125	0.09844	1.81	20	
Manganese	0.209	0.0050	0.1	0.14	69	75-125	0.2116	1.24	20	S
Molybdenum	0.1175	0.0050	0.1	0.0224	95.1	75-125	0.1197	1.85	20	
Nickel	0.09073	0.0050	0.1	0.00183	88.9	75-125	0.09331	2.8	20	
Selenium	0.09534	0.0050	0.1	0.0003763	95	75-125	0.09648	1.19	20	
Silver	0.08963	0.0050	0.1	0.00002115	89.6	75-125	0.09114	1.67	20	
Thallium	0.09444	0.0050	0.1	-6.126E-05	94.5	75-125	0.09607	1.71	20	
Vanadium	0.09421	0.0050	0.1	0.0000591	94.2	75-125	0.09655	2.45	20	
Zinc	0.09605	0.010	0.1	0.004903	91.1	75-125	0.09495	1.15	20	

The following samples were analyzed in this batch: 1410663-11B

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63956** Instrument ID **SVMS4** Method: **SW846 8270D**

MBLK				Sample ID: SBLKW1-63956-63956		Units: µg/L		Analysis Date: 10/16/2014 07:33 PM		
Client ID:			Run ID: SVMS4_141016A		SeqNo: 2986236		Prep Date: 10/16/2014		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	2.43	5.0								J
Butyl benzyl phthalate	2.26	5.0								J
Caprolactam	U	10								
Carbazole	U	10								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 63956	Instrument ID SVMS4	Method: SW846 8270D						
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	1.36	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>	26.82	0	50	0	53.6	38-115	0	
<i>Surr: 2-Fluorobiphenyl</i>	30.34	0	50	0	60.7	32-100	0	
<i>Surr: 2-Fluorophenol</i>	16.89	0	50	0	33.8	22-59	0	
<i>Surr: 4-Terphenyl-d14</i>	49.15	0	50	0	98.3	23-112	0	
<i>Surr: Nitrobenzene-d5</i>	31.89	0	50	0	63.8	31-93	0	
<i>Surr: Phenol-d6</i>	10.12	0	50	0	20.2	13-36	0	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63956** Instrument ID **SVMS4** Method: **SW846 8270D**

LCS		Sample ID: SLCSW1-63956-63956				Units: µg/L		Analysis Date: 10/16/2014 07:59 PM		
Client ID:		Run ID: SVMS4_141016A				SeqNo: 2986237		Prep Date: 10/16/2014		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	11.6	5.0	20	0	58	50-110	0			
2,4,6-Trichlorophenol	10.82	5.0	20	0	54.1	50-115	0			
2,4-Dichlorophenol	10.37	10	20	0	51.8	50-105	0			
2,4-Dimethylphenol	10.8	5.0	20	0	54	30-110	0			
2,4-Dinitrophenol	9.73	5.0	20	0	48.6	15-140	0			
2,4-Dinitrotoluene	14.27	5.0	20	0	71.4	50-120	0			
2,6-Dinitrotoluene	13.79	5.0	20	0	69	50-115	0			
2-Chloronaphthalene	12.18	5.0	20	0	60.9	50-105	0			
2-Chlorophenol	10.73	5.0	20	0	53.6	35-105	0			
2-Methylnaphthalene	11.17	5.0	20	0	55.8	45-105	0			
2-Methylphenol	8.34	5.0	20	0	41.7	40-110	0			
2-Nitroaniline	13.34	20	20	0	66.7	50-115	0			J
2-Nitrophenol	10.92	5.0	20	0	54.6	40-115	0			
3-Nitroaniline	14.49	20	20	0	72.4	20-125	0			J
4,6-Dinitro-2-methylphenol	12.05	20	20	0	60.2	40-130	0			J
4-Bromophenyl phenyl ether	13.99	5.0	20	0	70	50-115	0			
4-Chloro-3-methylphenol	10.81	5.0	20	0	54	45-110	0			
4-Chloroaniline	14.08	20	20	0	70.4	15-110	0			J
4-Chlorophenyl phenyl ether	13.4	5.0	20	0	67	50-110	0			
4-Nitroaniline	13.22	20	20	0	66.1	35-150	0			J
4-Nitrophenol	7.98	20	20	0	39.9	1-58	0			J
Acenaphthene	11.56	5.0	20	0	57.8	45-110	0			
Acenaphthylene	12.84	5.0	20	0	64.2	50-105	0			
Anthracene	15.22	5.0	20	0	76.1	55-110	0			
Benzo(a)anthracene	14.79	5.0	20	0	74	55-110	0			
Benzo(a)pyrene	14.57	5.0	20	0	72.8	55-110	0			
Benzo(b)fluoranthene	15.5	5.0	20	0	77.5	45-120	0			
Benzo(g,h,i)perylene	13.19	5.0	20	0	66	40-125	0			
Benzo(k)fluoranthene	16.15	5.0	20	0	80.8	45-125	0			
Bis(2-chloroethoxy)methane	12.27	5.0	20	0	61.4	45-105	0			
Bis(2-chloroethyl)ether	14.38	5.0	20	0	71.9	35-110	0			
Bis(2-chloroisopropyl)ether	9.32	5.0	20	0	46.6	25-130	0			
Bis(2-ethylhexyl)phthalate	16.16	5.0	20	0	80.8	40-125	0			
Butyl benzyl phthalate	16.15	5.0	20	0	80.8	45-115	0			
Carbazole	13.96	10	20	0	69.8	50-150	0			
Chrysene	15.47	5.0	20	0	77.4	55-110	0			
Dibenzo(a,h)anthracene	14.16	5.0	20	0	70.8	40-125	0			
Dibenzofuran	12.31	5.0	20	0	61.6	55-105	0			
Diethyl phthalate	15.55	20	20	0	77.8	40-120	0			J
Dimethyl phthalate	14.35	20	20	0	71.8	25-125	0			J
Di-n-butyl phthalate	15.71	5.0	20	0	78.6	55-115	0			
Di-n-octyl phthalate	16.31	5.0	20	0	81.6	35-135	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 63956		Instrument ID SVMS4		Method: SW846 8270D					
Fluoranthene	14.98	5.0	20	0	74.9	55-115	0		
Fluorene	12.98	5.0	20	0	64.9	50-110	0		
Hexachlorobenzene	12.92	5.0	20	0	64.6	50-110	0		
Hexachlorobutadiene	11.18	5.0	20	0	55.9	25-105	0		
Hexachlorocyclopentadiene	7.01	20	20	0	35	25-105	0		J
Hexachloroethane	10.81	5.0	20	0	54	30-95	0		
Indeno(1,2,3-cd)pyrene	14.49	5.0	20	0	72.4	45-125	0		
Isophorone	14.35	5.0	20	0	71.8	50-110	0		
Naphthalene	11.09	5.0	20	0	55.4	40-100	0		
Nitrobenzene	11.91	5.0	20	0	59.6	45-110	0		
N-Nitrosodi-n-propylamine	13.99	5.0	20	0	70	35-130	0		
N-Nitrosodiphenylamine	14.11	5.0	20	0	70.6	50-110	0		
Pentachlorophenol	8.73	20	20	0	43.6	40-115	0		J
Phenanthrene	13.74	5.0	20	0	68.7	50-115	0		
Phenol	5.09	5.0	20	0	25.4	12-43	0		
Pyrene	15.77	5.0	20	0	78.8	50-130	0		
<i>Surr: 2,4,6-Tribromophenol</i>	<i>29.36</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>58.7</i>	<i>38-115</i>	<i>0</i>		
<i>Surr: 2-Fluorobiphenyl</i>	<i>29.61</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>59.2</i>	<i>32-100</i>	<i>0</i>		
<i>Surr: 2-Fluorophenol</i>	<i>17.02</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>34</i>	<i>22-59</i>	<i>0</i>		
<i>Surr: 4-Terphenyl-d14</i>	<i>46.01</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>92</i>	<i>23-112</i>	<i>0</i>		
<i>Surr: Nitrobenzene-d5</i>	<i>32</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>64</i>	<i>31-93</i>	<i>0</i>		
<i>Surr: Phenol-d6</i>	<i>10.26</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>20.5</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: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63956** Instrument ID **SVMS4** Method: **SW846 8270D**

MS				Sample ID: 1410673-01B MS			Units: µg/L		Analysis Date: 10/16/2014 08:26 PM	
Client ID:				Run ID: SVMS4_141016A			SeqNo: 2986238		Prep Date: 10/16/2014	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	125.6	50	200	0	62.8	50-110	0			
2,4,6-Trichlorophenol	119.6	50	200	0	59.8	50-115	0			
2,4-Dichlorophenol	118	100	200	0	59	50-105	0			
2,4-Dimethylphenol	127.6	50	200	0	63.8	30-110	0			
2,4-Dinitrophenol	127.7	50	200	0	63.8	15-140	0			
2,4-Dinitrotoluene	149.7	50	200	0	74.8	50-120	0			
2,6-Dinitrotoluene	149.5	50	200	0	74.8	50-115	0			
2-Chloronaphthalene	133.5	50	200	0	66.8	50-105	0			
2-Chlorophenol	120.9	50	200	0	60.4	35-105	0			
2-Methylnaphthalene	126.6	50	200	0	63.3	45-105	0			
2-Methylphenol	99.8	50	200	0	49.9	40-110	0			
2-Nitroaniline	147.4	200	200	0	73.7	50-115	0			J
2-Nitrophenol	120.7	50	200	0	60.4	40-115	0			
3-Nitroaniline	160.1	200	200	0	80	20-125	0			J
4,6-Dinitro-2-methylphenol	135.1	200	200	0	67.6	40-130	0			J
4-Bromophenyl phenyl ether	150	50	200	0	75	50-115	0			
4-Chloro-3-methylphenol	125.5	50	200	0	62.8	45-110	0			
4-Chloroaniline	156.7	200	200	0	78.4	15-110	0			J
4-Chlorophenyl phenyl ether	151.6	50	200	0	75.8	50-110	0			
4-Nitroaniline	144.3	200	200	0	72.2	35-150	0			J
4-Nitrophenol	88	200	200	0	44	1-58	0			J
Acenaphthene	128.6	50	200	0.83	63.9	45-110	0			
Acenaphthylene	142.8	50	200	0	71.4	50-105	0			
Anthracene	160.5	50	200	0	80.2	55-110	0			
Benzo(a)anthracene	156	50	200	0	78	55-110	0			
Benzo(a)pyrene	155.5	50	200	0	77.8	55-110	0			
Benzo(b)fluoranthene	161.8	50	200	0	80.9	45-120	0			
Benzo(g,h,i)perylene	142	50	200	0	71	40-125	0			
Benzo(k)fluoranthene	171.1	50	200	0	85.6	45-125	0			
Bis(2-chloroethoxy)methane	138.2	50	200	0	69.1	45-105	0			
Bis(2-chloroethyl)ether	171.9	50	200	0	86	35-110	0			
Bis(2-chloroisopropyl)ether	108.3	50	200	0	54.2	25-130	0			
Bis(2-ethylhexyl)phthalate	170.5	50	200	2.59	84	40-125	0			
Butyl benzyl phthalate	175.4	50	200	0	87.7	45-115	0			
Carbazole	155.1	100	200	0	77.6	50-150	0			
Chrysene	161.1	50	200	0	80.6	55-110	0			
Dibenzo(a,h)anthracene	148.9	50	200	0	74.4	40-125	0			
Dibenzofuran	134	50	200	0	67	55-105	0			
Diethyl phthalate	169.3	200	200	0	84.6	40-120	0			J
Dimethyl phthalate	161	200	200	0	80.5	25-125	0			J
Di-n-butyl phthalate	169.6	50	200	1.4	84.1	55-115	0			
Di-n-octyl phthalate	169.7	50	200	0	84.8	35-135	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 63956		Instrument ID SVMS4		Method: SW846 8270D			
Fluoranthene	154.3	50	200	0	77.2	55-115	0
Fluorene	143.7	50	200	0	71.8	50-110	0
Hexachlorobenzene	135.4	50	200	0	67.7	50-110	0
Hexachlorobutadiene	125.7	50	200	0	62.8	25-105	0
Hexachlorocyclopentadiene	72.9	200	200	0	36.4	25-105	0 J
Hexachloroethane	115.8	50	200	0	57.9	30-95	0
Indeno(1,2,3-cd)pyrene	148.7	50	200	0	74.4	45-125	0
Isophorone	161.4	50	200	0	80.7	50-110	0
Naphthalene	126.1	50	200	0	63	40-100	0
Nitrobenzene	132.2	50	200	0	66.1	45-110	0
N-Nitrosodi-n-propylamine	153.6	50	200	0	76.8	35-130	0
N-Nitrosodiphenylamine	156.6	50	200	0	78.3	50-110	0
Pentachlorophenol	115	200	200	0	57.5	40-115	0 J
Phenanthrene	147.6	50	200	0	73.8	50-115	0
Phenol	59.3	50	200	0	29.6	12-43	0
Pyrene	169.3	50	200	0	84.6	50-130	0
<i>Surr: 2,4,6-Tribromophenol</i>	321.9	0	500	0	64.4	38-115	0
<i>Surr: 2-Fluorobiphenyl</i>	328.6	0	500	0	65.7	32-100	0
<i>Surr: 2-Fluorophenol</i>	185.1	0	500	0	37	22-59	0
<i>Surr: 4-Terphenyl-d14</i>	488.3	0	500	0	97.7	23-112	0
<i>Surr: Nitrobenzene-d5</i>	349.3	0	500	0	69.9	31-93	0
<i>Surr: Phenol-d6</i>	112.2	0	500	0	22.4	13-36	0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **63956** Instrument ID **SVMS4** Method: **SW846 8270D**

MSD					Sample ID: 1410673-01B MSD			Units: µg/L		Analysis Date: 10/16/2014 08:53 PM	
Client ID:			Run ID: SVMS4_141016A			SeqNo: 2986247		Prep Date: 10/16/2014		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
2,4,5-Trichlorophenol	117.5	50	200	0	58.8	50-110	125.6	6.66	30		
2,4,6-Trichlorophenol	111.2	50	200	0	55.6	50-115	119.6	7.28	30		
2,4-Dichlorophenol	108.1	100	200	0	54	50-105	118	8.76	30		
2,4-Dimethylphenol	118	50	200	0	59	30-110	127.6	7.82	30		
2,4-Dinitrophenol	120.3	50	200	0	60.2	15-140	127.7	5.97	30		
2,4-Dinitrotoluene	142.8	50	200	0	71.4	50-120	149.7	4.72	30		
2,6-Dinitrotoluene	138.6	50	200	0	69.3	50-115	149.5	7.57	30		
2-Chloronaphthalene	123.5	50	200	0	61.8	50-105	133.5	7.78	30		
2-Chlorophenol	112.3	50	200	0	56.2	35-105	120.9	7.38	30		
2-Methylnaphthalene	118.4	50	200	0	59.2	45-105	126.6	6.69	30		
2-Methylphenol	92.5	50	200	0	46.2	40-110	99.8	7.59	30		
2-Nitroaniline	141.6	200	200	0	70.8	50-115	147.4	0	30	J	
2-Nitrophenol	110	50	200	0	55	40-115	120.7	9.28	30		
3-Nitroaniline	154	200	200	0	77	20-125	160.1	0	30	J	
4,6-Dinitro-2-methylphenol	131.8	200	200	0	65.9	40-130	135.1	0	30	J	
4-Bromophenyl phenyl ether	142.2	50	200	0	71.1	50-115	150	5.34	30		
4-Chloro-3-methylphenol	118.7	50	200	0	59.4	45-110	125.5	5.57	30		
4-Chloroaniline	144.5	200	200	0	72.2	15-110	156.7	0	30	J	
4-Chlorophenyl phenyl ether	138.1	50	200	0	69	50-110	151.6	9.32	30		
4-Nitroaniline	140.6	200	200	0	70.3	35-150	144.3	0	30	J	
4-Nitrophenol	81.9	200	200	0	41	1-58	88	0	0	J	
Acenaphthene	121.3	50	200	0.83	60.2	45-110	128.6	5.84	30		
Acenaphthylene	130.8	50	200	0	65.4	50-105	142.8	8.77	30		
Anthracene	149.8	50	200	0	74.9	55-110	160.5	6.9	30		
Benzo(a)anthracene	148.7	50	200	0	74.4	55-110	156	4.79	30		
Benzo(a)pyrene	148.9	50	200	0	74.4	55-110	155.5	4.34	30		
Benzo(b)fluoranthene	154	50	200	0	77	45-120	161.8	4.94	30		
Benzo(g,h,i)perylene	131.5	50	200	0	65.8	40-125	142	7.68	30		
Benzo(k)fluoranthene	163.7	50	200	0	81.8	45-125	171.1	4.42	30		
Bis(2-chloroethoxy)methane	126.6	50	200	0	63.3	45-105	138.2	8.76	30		
Bis(2-chloroethyl)ether	150.8	50	200	0	75.4	35-110	171.9	13.1	30		
Bis(2-chloroisopropyl)ether	98.4	50	200	0	49.2	25-130	108.3	9.58	30		
Bis(2-ethylhexyl)phthalate	163.8	50	200	2.59	80.6	40-125	170.5	4.01	30		
Butyl benzyl phthalate	166.5	50	200	0	83.2	45-115	175.4	5.21	30		
Carbazole	145.2	100	200	0	72.6	50-150	155.1	6.59	30		
Chrysene	155	50	200	0	77.5	55-110	161.1	3.86	30		
Dibenzo(a,h)anthracene	140.4	50	200	0	70.2	40-125	148.9	5.88	30		
Dibenzofuran	125.5	50	200	0	62.8	55-105	134	6.55	30		
Diethyl phthalate	158.9	200	200	0	79.4	40-120	169.3	0	30	J	
Dimethyl phthalate	148.3	200	200	0	74.2	25-125	161	0	30	J	
Di-n-butyl phthalate	158.9	50	200	1.4	78.8	55-115	169.6	6.51	30		
Di-n-octyl phthalate	163.2	50	200	0	81.6	35-135	169.7	3.91	30		

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: 63956		Instrument ID SVMS4		Method: SW846 8270D					
Fluoranthene	147.8	50	200	0	73.9	55-115	154.3	4.3	30
Fluorene	133.5	50	200	0	66.8	50-110	143.7	7.36	30
Hexachlorobenzene	129.2	50	200	0	64.6	50-110	135.4	4.69	30
Hexachlorobutadiene	115.6	50	200	0	57.8	25-105	125.7	8.37	30
Hexachlorocyclopentadiene	72.7	200	200	0	36.4	25-105	72.9	0	30 J
Hexachloroethane	113.6	50	200	0	56.8	30-95	115.8	1.92	30
Indeno(1,2,3-cd)pyrene	143.7	50	200	0	71.8	45-125	148.7	3.42	30
Isophorone	148.7	50	200	0	74.4	50-110	161.4	8.19	30
Naphthalene	116.6	50	200	0	58.3	40-100	126.1	7.83	30
Nitrobenzene	125.5	50	200	0	62.8	45-110	132.2	5.2	30
N-Nitrosodi-n-propylamine	142.2	50	200	0	71.1	35-130	153.6	7.71	30
N-Nitrosodiphenylamine	146.7	50	200	0	73.4	50-110	156.6	6.53	30
Pentachlorophenol	110.8	200	200	0	55.4	40-115	115	0	30 J
Phenanthrene	139.2	50	200	0	69.6	50-115	147.6	5.86	30
Phenol	50.4	50	200	0	25.2	12-43	59.3	16.2	30
Pyrene	160.7	50	200	0	80.4	50-130	169.3	5.21	30
<i>Surr: 2,4,6-Tribromophenol</i>	<i>302.5</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>60.5</i>	<i>38-115</i>	<i>321.9</i>	<i>6.21</i>	<i>40</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>309.3</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>61.9</i>	<i>32-100</i>	<i>328.6</i>	<i>6.05</i>	<i>40</i>
<i>Surr: 2-Fluorophenol</i>	<i>167.2</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>33.4</i>	<i>22-59</i>	<i>185.1</i>	<i>10.2</i>	<i>40</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>444</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>88.8</i>	<i>23-112</i>	<i>488.3</i>	<i>9.5</i>	<i>40</i>
<i>Surr: Nitrobenzene-d5</i>	<i>329.1</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>65.8</i>	<i>31-93</i>	<i>349.3</i>	<i>5.96</i>	<i>40</i>
<i>Surr: Phenol-d6</i>	<i>95.1</i>	<i>0</i>	<i>500</i>	<i>0</i>	<i>19</i>	<i>13-36</i>	<i>112.2</i>	<i>16.5</i>	<i>40</i>

The following samples were analyzed in this batch: | 1410663-22B |

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150473** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW2-141016-R150473				Units: µg/L		Analysis Date: 10/17/2014 01:38 A		
Client ID:		Run ID: VMS5_141016B				SeqNo: 2985906		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150473	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
Surr: 1,2-Dichloroethane-d4	17.56	0 20 0 87.8 75-120 0
Surr: 4-Bromofluorobenzene	19.88	0 20 0 99.4 80-110 0
Surr: Dibromofluoromethane	19.54	0 20 0 97.7 85-115 0
Surr: Toluene-d8	18.4	0 20 0 92 85-110 0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150473** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW3-141016-R150473				Units: µg/L		Analysis Date: 10/17/2014 12:46 PM		
Client ID:		Run ID: VMS5_141016B				SeqNo: 2985913		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	20.61	1.0	20	0	103	75-130	0			
1,1,2,2-Tetrachloroethane	17.52	1.0	20	0	87.6	75-130	0			
1,1,2-Trichloroethane	19.25	1.0	20	0	96.2	75-125	0			
1,1-Dichloroethane	21.07	1.0	20	0	105	75-133	0			
1,1-Dichloroethene	22.01	1.0	20	0	110	70-145	0			
1,2,4-Trichlorobenzene	19.65	1.0	20	0	98.2	70-135	0			
1,2-Dibromo-3-chloropropane	17.14	1.0	20	0	85.7	60-130	0			
1,2-Dibromoethane	23.65	1.0	20	0	118	80-150	0			
1,2-Dichlorobenzene	18.99	1.0	20	0	95	70-130	0			
1,2-Dichloroethane	18.87	1.0	20	0	94.4	78-125	0			
1,2-Dichloropropane	20.77	1.0	20	0	104	75-125	0			
1,3-Dichlorobenzene	19.63	1.0	20	0	98.2	75-130	0			
1,4-Dichlorobenzene	19.16	1.0	20	0	95.8	75-130	0			
2-Butanone	21.69	5.0	20	0	108	55-150	0			
2-Hexanone	18.85	5.0	20	0	94.2	60-135	0			
4-Methyl-2-pentanone	25.06	1.0	20	0	125	77-178	0			
Acetone	20.74	10	20	0	104	60-160	0			
Benzene	21.32	1.0	20	0	107	85-125	0			
Bromodichloromethane	19.68	1.0	20	0	98.4	75-125	0			
Bromoform	16.84	1.0	20	0	84.2	60-125	0			
Bromomethane	41.73	1.0	20	0	209	30-185	0			S
Carbon disulfide	23.39	1.0	20	0	117	60-165	0			
Carbon tetrachloride	21.32	1.0	20	0	107	65-140	0			
Chlorobenzene	19.52	1.0	20	0	97.6	80-120	0			
Chloroethane	20.67	1.0	20	0	103	50-140	0			
Chloroform	20.52	1.0	20	0	103	80-130	0			
Chloromethane	23.01	1.0	20	0	115	50-130	0			
cis-1,2-Dichloroethene	22.98	1.0	20	0	115	75-134	0			
cis-1,3-Dichloropropene	21.12	1.0	20	0	106	70-130	0			
Dibromochloromethane	17.75	1.0	20	0	88.8	60-115	0			
Dichlorodifluoromethane	16.44	1.0	20	0	82.2	20-120	0			
Ethylbenzene	19.98	1.0	20	0	99.9	85-125	0			
Isopropylbenzene	20.82	1.0	20	0	104	80-127	0			
Methyl tert-butyl ether	21.39	1.0	20	0	107	80-130	0			
Methylene chloride	24.63	5.0	20	0	123	75-140	0			
Styrene	20.57	1.0	20	0	103	85-125	0			
Tetrachloroethene	21	1.0	20	0	105	77-138	0			
Toluene	19.45	1.0	20	0	97.2	85-125	0			
trans-1,2-Dichloroethene	22.12	1.0	20	0	111	80-140	0			
trans-1,3-Dichloropropene	19.01	1.0	20	0	95	81-123	0			
Trichloroethene	22.61	1.0	20	0	113	84-130	0			
Trichlorofluoromethane	20.94	1.0	20	0	105	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150473	Instrument ID VMS5		Method: SW8260				
Vinyl chloride	21.66	1.0	20	0	108	50-136	0
Xylenes, Total	59.98	3.0	60	0	100	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	17.26	0	20	0	86.3	75-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.33	0	20	0	102	80-110	0
<i>Surr: Dibromofluoromethane</i>	19.26	0	20	0	96.3	85-115	0
<i>Surr: Toluene-d8</i>	18.84	0	20	0	94.2	85-110	0

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150473** Instrument ID **VMS5** Method: **SW8260**

MS				Sample ID: 1410663-21A MS			Units: µg/L		Analysis Date: 10/17/2014 10:40 A	
Client ID: WG-017360-100914-MR-021				Run ID: VMS5_141016B			SeqNo: 2985911		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	19.74	1.0	20	0	98.7	75-130	0			
1,1,2,2-Tetrachloroethane	16.9	1.0	20	0	84.5	75-130	0			
1,1,2-Trichloroethane	18.36	1.0	20	0	91.8	75-125	0			
1,1-Dichloroethane	20.08	1.0	20	0	100	75-133	0			
1,1-Dichloroethene	21.41	1.0	20	0	107	70-145	0			
1,2,4-Trichlorobenzene	18.44	1.0	20	0	92.2	70-135	0			
1,2-Dibromo-3-chloropropane	15.9	1.0	20	0	79.5	60-130	0			
1,2-Dibromoethane	22.54	1.0	20	0	113	80-150	0			
1,2-Dichlorobenzene	17.72	1.0	20	0	88.6	70-130	0			
1,2-Dichloroethane	18.03	1.0	20	0	90.2	78-125	0			
1,2-Dichloropropane	19.52	1.0	20	0	97.6	75-125	0			
1,3-Dichlorobenzene	18.22	1.0	20	0	91.1	75-130	0			
1,4-Dichlorobenzene	17.87	1.0	20	0	89.4	75-130	0			
2-Butanone	19.53	5.0	20	0	97.6	55-150	0			
2-Hexanone	17.15	5.0	20	0	85.8	60-135	0			
4-Methyl-2-pentanone	23.39	1.0	20	0	117	77-178	0			
Acetone	18.99	10	20	0	95	60-160	0			
Benzene	20.42	1.0	20	0	102	85-125	0			
Bromodichloromethane	17.29	1.0	20	0	86.4	75-125	0			
Bromoform	14.85	1.0	20	0	74.2	60-125	0			
Bromomethane	28.01	1.0	20	0	140	30-185	0			
Carbon disulfide	21.35	1.0	20	0	107	60-165	0			
Carbon tetrachloride	19.97	1.0	20	0	99.8	65-140	0			
Chlorobenzene	18.5	1.0	20	0	92.5	80-120	0			
Chloroethane	16.82	1.0	20	0	84.1	50-140	0			
Chloroform	23.91	1.0	20	4.79	95.6	80-130	0			
Chloromethane	19.42	1.0	20	0	97.1	50-130	0			
cis-1,2-Dichloroethene	21.06	1.0	20	0	105	75-134	0			
cis-1,3-Dichloropropene	18.73	1.0	20	0	93.6	70-130	0			
Dibromochloromethane	15.23	1.0	20	0	76.2	60-115	0			
Dichlorodifluoromethane	15.64	1.0	20	0	78.2	20-120	0			
Ethylbenzene	19.15	1.0	20	0	95.8	85-125	0			
Isopropylbenzene	20.1	1.0	20	0	100	80-127	0			
Methyl tert-butyl ether	19.3	1.0	20	0	96.5	80-130	0			
Methylene chloride	20.69	5.0	20	0	103	75-140	0			
Styrene	18.91	1.0	20	0	94.6	85-125	0			
Tetrachloroethene	20.77	1.0	20	0	104	77-138	0			
Toluene	18.65	1.0	20	0	93.2	85-125	0			
trans-1,2-Dichloroethene	21.27	1.0	20	0	106	80-140	0			
trans-1,3-Dichloropropene	16.91	1.0	20	0	84.6	81-123	0			
Trichloroethene	21.93	1.0	20	0	110	84-130	0			
Trichlorofluoromethane	19.59	1.0	20	0	98	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150473	Instrument ID VMS5		Method: SW8260				
Vinyl chloride	20.06	1.0	20	0	100	50-136	0
Xylenes, Total	56.59	3.0	60	0	94.3	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>17.3</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>86.5</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.32</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.01</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>18.58</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>92.9</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150473** Instrument ID **VMS5** Method: **SW8260**

MSD				Sample ID: 1410663-21A MSD			Units: µg/L		Analysis Date: 10/17/2014 11:06 A	
Client ID: WG-017360-100914-MR-021				Run ID: VMS5_141016B			SeqNo: 2985912		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	19.3	1.0	20	0	96.5	75-130	19.74	2.25	30	
1,1,2,2-Tetrachloroethane	15.36	1.0	20	0	76.8	75-130	16.9	9.55	30	
1,1,2-Trichloroethane	17.18	1.0	20	0	85.9	75-125	18.36	6.64	30	
1,1-Dichloroethane	19.46	1.0	20	0	97.3	75-133	20.08	3.14	30	
1,1-Dichloroethene	20.74	1.0	20	0	104	70-145	21.41	3.18	30	
1,2,4-Trichlorobenzene	17.77	1.0	20	0	88.8	70-135	18.44	3.7	30	
1,2-Dibromo-3-chloropropane	12.66	1.0	20	0	63.3	60-130	15.9	22.7	30	
1,2-Dibromoethane	20.87	1.0	20	0	104	80-150	22.54	7.69	30	
1,2-Dichlorobenzene	17.91	1.0	20	0	89.6	70-130	17.72	1.07	30	
1,2-Dichloroethane	17.42	1.0	20	0	87.1	78-125	18.03	3.44	30	
1,2-Dichloropropane	19.34	1.0	20	0	96.7	75-125	19.52	0.926	30	
1,3-Dichlorobenzene	18.51	1.0	20	0	92.6	75-130	18.22	1.58	30	
1,4-Dichlorobenzene	18.12	1.0	20	0	90.6	75-130	17.87	1.39	30	
2-Butanone	16.1	5.0	20	0	80.5	55-150	19.53	19.3	30	
2-Hexanone	14.8	5.0	20	0	74	60-135	17.15	14.7	30	
4-Methyl-2-pentanone	19.16	1.0	20	0	95.8	77-178	23.39	19.9	30	
Acetone	14.74	10	20	0	73.7	60-160	18.99	25.2	30	
Benzene	19.89	1.0	20	0	99.4	85-125	20.42	2.63	30	
Bromodichloromethane	17.1	1.0	20	0	85.5	75-125	17.29	1.1	30	
Bromoform	13.55	1.0	20	0	67.8	60-125	14.85	9.15	30	
Bromomethane	34.5	1.0	20	0	172	30-185	28.01	20.8	30	
Carbon disulfide	20.45	1.0	20	0	102	60-165	21.35	4.31	30	
Carbon tetrachloride	19.77	1.0	20	0	98.8	65-140	19.97	1.01	30	
Chlorobenzene	18.1	1.0	20	0	90.5	80-120	18.5	2.19	30	
Chloroethane	17.92	1.0	20	0	89.6	50-140	16.82	6.33	30	
Chloroform	23.32	1.0	20	4.79	92.6	80-130	23.91	2.5	30	
Chloromethane	18.92	1.0	20	0	94.6	50-130	19.42	2.61	30	
cis-1,2-Dichloroethene	20.46	1.0	20	0	102	75-134	21.06	2.89	30	
cis-1,3-Dichloropropene	18.31	1.0	20	0	91.6	70-130	18.73	2.27	30	
Dibromochloromethane	14.77	1.0	20	0	73.8	60-115	15.23	3.07	30	
Dichlorodifluoromethane	15.04	1.0	20	0	75.2	20-120	15.64	3.91	30	
Ethylbenzene	19.01	1.0	20	0	95	85-125	19.15	0.734	30	
Isopropylbenzene	20.32	1.0	20	0	102	80-127	20.1	1.09	30	
Methyl tert-butyl ether	18.41	1.0	20	0	92	80-130	19.3	4.72	30	
Methylene chloride	20.05	5.0	20	0	100	75-140	20.69	3.14	30	
Styrene	18.73	1.0	20	0	93.6	85-125	18.91	0.956	30	
Tetrachloroethene	20.77	1.0	20	0	104	77-138	20.77	0	30	
Toluene	17.97	1.0	20	0	89.8	85-125	18.65	3.71	30	
trans-1,2-Dichloroethene	20.26	1.0	20	0	101	80-140	21.27	4.86	30	
trans-1,3-Dichloropropene	16.19	1.0	20	0	81	81-123	16.91	4.35	30	S
Trichloroethene	21.15	1.0	20	0	106	84-130	21.93	3.62	30	
Trichlorofluoromethane	19.38	1.0	20	0	96.9	60-140	19.59	1.08	30	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150473	Instrument ID VMS5			Method: SW8260					
Vinyl chloride	19.13	1.0	20	0	95.6	50-136	20.06	4.75	30
Xylenes, Total	56.61	3.0	60	0	94.4	80-126	56.59	0.0353	30
Surr: 1,2-Dichloroethane-d4	17.3	0	20	0	86.5	75-120	17.3	0	30
Surr: 4-Bromofluorobenzene	20.2	0	20	0	101	80-110	20.32	0.592	30
Surr: Dibromofluoromethane	19.03	0	20	0	95.2	85-115	19.01	0.105	30
Surr: Toluene-d8	18.32	0	20	0	91.6	85-110	18.58	1.41	30

The following samples were analyzed in this batch:	1410663-21A	1410663-22A	1410663-23A	
	1410663-24A			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150474** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VLKW2-141016-R150474				Units: µg/L		Analysis Date: 10/16/2014 11:27 PM		
Client ID:		Run ID: VMS6_141016B				SeqNo: 2985719		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150474		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>19.15</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.74</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.7</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.39</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>18.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.5</i>	<i>85-110</i>	<i>0</i>	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150474** Instrument ID **VMS6** Method: **SW8260**

LCS		Sample ID: VLCSW2-141016-R150474				Units: µg/L		Analysis Date: 10/16/2014 10:34 PM		
Client ID:		Run ID: VMS6_141016B				SeqNo: 2985718		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	21.57	1.0	20	0	108	75-130	0			
1,1,2,2-Tetrachloroethane	20.23	1.0	20	0	101	75-130	0			
1,1,2-Trichloroethane	20.19	1.0	20	0	101	75-125	0			
1,1-Dichloroethane	20.85	1.0	20	0	104	75-133	0			
1,1-Dichloroethene	21.74	1.0	20	0	109	70-145	0			
1,2,4-Trichlorobenzene	21.93	1.0	20	0	110	70-135	0			
1,2-Dibromo-3-chloropropane	17.75	1.0	20	0	88.8	60-130	0			
1,2-Dibromoethane	23.2	1.0	20	0	116	80-150	0			
1,2-Dichlorobenzene	21.09	1.0	20	0	105	70-130	0			
1,2-Dichloroethane	21.43	1.0	20	0	107	78-125	0			
1,2-Dichloropropane	20.44	1.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	22.01	1.0	20	0	110	75-130	0			
1,4-Dichlorobenzene	21.33	1.0	20	0	107	75-130	0			
2-Butanone	20.39	5.0	20	0	102	55-150	0			
2-Hexanone	18.29	5.0	20	0	91.4	60-135	0			
4-Methyl-2-pentanone	23.96	1.0	20	0	120	77-178	0			
Acetone	21.01	10	20	0	105	60-160	0			
Benzene	21.67	1.0	20	0	108	85-125	0			
Bromodichloromethane	18.91	1.0	20	0	94.6	75-125	0			
Bromoform	17.64	1.0	20	0	88.2	60-125	0			
Bromomethane	29.45	1.0	20	0	147	30-185	0			
Carbon disulfide	19.81	1.0	20	0	99	60-165	0			
Carbon tetrachloride	21.03	1.0	20	0	105	65-140	0			
Chlorobenzene	21.44	1.0	20	0	107	80-120	0			
Chloroethane	18.44	1.0	20	0	92.2	50-140	0			
Chloroform	21	1.0	20	0	105	80-130	0			
Chloromethane	18.94	1.0	20	0	94.7	50-130	0			
cis-1,2-Dichloroethene	20.91	1.0	20	0	105	75-134	0			
cis-1,3-Dichloropropene	21.23	1.0	20	0	106	70-130	0			
Dibromochloromethane	18.35	1.0	20	0	91.8	60-115	0			
Dichlorodifluoromethane	14.58	1.0	20	0	72.9	20-120	0			
Ethylbenzene	21.74	1.0	20	0	109	85-125	0			
Isopropylbenzene	23.26	1.0	20	0	116	80-127	0			
Methyl tert-butyl ether	20.34	1.0	20	0	102	80-130	0			
Methylene chloride	21.6	5.0	20	0	108	75-140	0			
Styrene	22.16	1.0	20	0	111	85-125	0			
Tetrachloroethene	22.47	1.0	20	0	112	77-138	0			
Toluene	20.82	1.0	20	0	104	85-125	0			
trans-1,2-Dichloroethene	21.55	1.0	20	0	108	80-140	0			
trans-1,3-Dichloropropene	20.35	1.0	20	0	102	81-123	0			
Trichloroethene	24.3	1.0	20	0	122	84-130	0			
Trichlorofluoromethane	20.62	1.0	20	0	103	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150474	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	17.43	1.0	20	0	87.2	50-136	0
Xylenes, Total	65.49	3.0	60	0	109	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.37</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.09</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.74</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>18.59</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150474** Instrument ID **VMS6** Method: **SW8260**

MS				Sample ID: 1410663-06A MS			Units: µg/L		Analysis Date: 10/17/2014 08:34 A	
Client ID: WG-017360-100714-MR-006				Run ID: VMS6_141016B			SeqNo: 2985744		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	20.95	1.0	20	0	105	75-130	0			
1,1,2,2-Tetrachloroethane	18.3	1.0	20	0	91.5	75-130	0			
1,1,2-Trichloroethane	18.92	1.0	20	0	94.6	75-125	0			
1,1-Dichloroethane	19.73	1.0	20	0	98.6	75-133	0			
1,1-Dichloroethene	20.83	1.0	20	0	104	70-145	0			
1,2,4-Trichlorobenzene	19.46	1.0	20	0	97.3	70-135	0			
1,2-Dibromo-3-chloropropane	14.2	1.0	20	0	71	60-130	0			
1,2-Dibromoethane	21.15	1.0	20	0	106	80-150	0			
1,2-Dichlorobenzene	19.13	1.0	20	0	95.6	70-130	0			
1,2-Dichloroethane	19.67	1.0	20	0	98.4	78-125	0			
1,2-Dichloropropane	19.46	1.0	20	0	97.3	75-125	0			
1,3-Dichlorobenzene	20.25	1.0	20	0	101	75-130	0			
1,4-Dichlorobenzene	19.56	1.0	20	0	97.8	75-130	0			
2-Butanone	18.44	5.0	20	0	92.2	55-150	0			
2-Hexanone	16.91	5.0	20	0	84.6	60-135	0			
4-Methyl-2-pentanone	21.49	1.0	20	0	107	77-178	0			
Acetone	19.33	10	20	0	96.6	60-160	0			
Benzene	20.81	1.0	20	0	104	85-125	0			
Bromodichloromethane	16.29	1.0	20	0	81.4	75-125	0			
Bromoform	13.62	1.0	20	0	68.1	60-125	0			
Bromomethane	21.4	1.0	20	0	107	30-185	0			
Carbon disulfide	17.07	1.0	20	0	85.4	60-165	0			
Carbon tetrachloride	20.05	1.0	20	0	100	65-140	0			
Chlorobenzene	20.31	1.0	20	0	102	80-120	0			
Chloroethane	17.44	1.0	20	0	87.2	50-140	0			
Chloroform	20.13	1.0	20	0	101	80-130	0			
Chloromethane	15.42	1.0	20	0	77.1	50-130	0			
cis-1,2-Dichloroethene	19.22	1.0	20	0	96.1	75-134	0			
cis-1,3-Dichloropropene	18.49	1.0	20	0	92.4	70-130	0			
Dibromochloromethane	15.15	1.0	20	0	75.8	60-115	0			
Dichlorodifluoromethane	14.59	1.0	20	0	73	20-120	0			
Ethylbenzene	20.85	1.0	20	0	104	85-125	0			
Isopropylbenzene	22.67	1.0	20	0	113	80-127	0			
Methyl tert-butyl ether	18.56	1.0	20	0	92.8	80-130	0			
Methylene chloride	18.56	5.0	20	0	92.8	75-140	0			
Styrene	20.55	1.0	20	0	103	85-125	0			
Tetrachloroethene	23.05	1.0	20	0	115	77-138	0			
Toluene	20.42	1.0	20	0	102	85-125	0			
trans-1,2-Dichloroethene	20.65	1.0	20	0	103	80-140	0			
trans-1,3-Dichloropropene	16.77	1.0	20	0	83.8	81-123	0			
Trichloroethene	23.91	1.0	20	0	120	84-130	0			
Trichlorofluoromethane	20.22	1.0	20	0	101	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150474	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	16.42	1.0	20	0	82.1	50-136	0
Xylenes, Total	62.31	3.0	60	0	104	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.47</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>75-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.86</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.3</i>	<i>80-110</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.26</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>18.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.5</i>	<i>85-110</i>	<i>0</i>

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150474** Instrument ID **VMS6** Method: **SW8260**

MSD				Sample ID: 1410663-06A MSD			Units: µg/L		Analysis Date: 10/17/2014 09:02 A	
Client ID: WG-017360-100714-MR-006				Run ID: VMS6_141016B			SeqNo: 2985745		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	20.3	1.0	20	0	102	75-130	20.95	3.15	30	
1,1,2,2-Tetrachloroethane	17.58	1.0	20	0	87.9	75-130	18.3	4.01	30	
1,1,2-Trichloroethane	18.81	1.0	20	0	94	75-125	18.92	0.583	30	
1,1-Dichloroethane	19.12	1.0	20	0	95.6	75-133	19.73	3.14	30	
1,1-Dichloroethene	19.89	1.0	20	0	99.4	70-145	20.83	4.62	30	
1,2,4-Trichlorobenzene	20.35	1.0	20	0	102	70-135	19.46	4.47	30	
1,2-Dibromo-3-chloropropane	13.55	1.0	20	0	67.8	60-130	14.2	4.68	30	
1,2-Dibromoethane	21.21	1.0	20	0	106	80-150	21.15	0.283	30	
1,2-Dichlorobenzene	19.48	1.0	20	0	97.4	70-130	19.13	1.81	30	
1,2-Dichloroethane	20.1	1.0	20	0	100	78-125	19.67	2.16	30	
1,2-Dichloropropane	19.28	1.0	20	0	96.4	75-125	19.46	0.929	30	
1,3-Dichlorobenzene	20.25	1.0	20	0	101	75-130	20.25	0	30	
1,4-Dichlorobenzene	19.51	1.0	20	0	97.6	75-130	19.56	0.256	30	
2-Butanone	15.64	5.0	20	0	78.2	55-150	18.44	16.4	30	
2-Hexanone	15.27	5.0	20	0	76.4	60-135	16.91	10.2	30	
4-Methyl-2-pentanone	20.26	1.0	20	0	101	77-178	21.49	5.89	30	
Acetone	17.4	10	20	0	87	60-160	19.33	10.5	30	
Benzene	20.39	1.0	20	0	102	85-125	20.81	2.04	30	
Bromodichloromethane	16.44	1.0	20	0	82.2	75-125	16.29	0.917	30	
Bromoform	13.72	1.0	20	0	68.6	60-125	13.62	0.732	30	
Bromomethane	22.08	1.0	20	0	110	30-185	21.4	3.13	30	
Carbon disulfide	16	1.0	20	0	80	60-165	17.07	6.47	30	
Carbon tetrachloride	20.19	1.0	20	0	101	65-140	20.05	0.696	30	
Chlorobenzene	20.35	1.0	20	0	102	80-120	20.31	0.197	30	
Chloroethane	16.99	1.0	20	0	85	50-140	17.44	2.61	30	
Chloroform	19.72	1.0	20	0	98.6	80-130	20.13	2.06	30	
Chloromethane	14.8	1.0	20	0	74	50-130	15.42	4.1	30	
cis-1,2-Dichloroethene	18.39	1.0	20	0	92	75-134	19.22	4.41	30	
cis-1,3-Dichloropropene	18.51	1.0	20	0	92.6	70-130	18.49	0.108	30	
Dibromochloromethane	15.22	1.0	20	0	76.1	60-115	15.15	0.461	30	
Dichlorodifluoromethane	14	1.0	20	0	70	20-120	14.59	4.13	30	
Ethylbenzene	20.64	1.0	20	0	103	85-125	20.85	1.01	30	
Isopropylbenzene	22.63	1.0	20	0	113	80-127	22.67	0.177	30	
Methyl tert-butyl ether	18.08	1.0	20	0	90.4	80-130	18.56	2.62	30	
Methylene chloride	18.34	5.0	20	0	91.7	75-140	18.56	1.19	30	
Styrene	20.32	1.0	20	0	102	85-125	20.55	1.13	30	
Tetrachloroethene	22.29	1.0	20	0	111	77-138	23.05	3.35	30	
Toluene	19.92	1.0	20	0	99.6	85-125	20.42	2.48	30	
trans-1,2-Dichloroethene	19.76	1.0	20	0	98.8	80-140	20.65	4.4	30	
trans-1,3-Dichloropropene	16.98	1.0	20	0	84.9	81-123	16.77	1.24	30	
Trichloroethene	23.74	1.0	20	0	119	84-130	23.91	0.714	30	
Trichlorofluoromethane	19.52	1.0	20	0	97.6	60-140	20.22	3.52	30	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150474	Instrument ID VMS6			Method: SW8260					
Vinyl chloride	15.75	1.0	20	0	78.8	50-136	16.42	4.17	30
Xylenes, Total	61.88	3.0	60	0	103	80-126	62.31	0.692	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.53</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>75-120</i>	<i>19.47</i>	<i>0.308</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.02</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>80-110</i>	<i>19.86</i>	<i>0.802</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>20.26</i>	<i>0.394</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>18.81</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94</i>	<i>85-110</i>	<i>18.9</i>	<i>0.477</i>	<i>30</i>

The following samples were analyzed in this batch:	1410663-01A	1410663-02A	1410663-03A
	1410663-04A	1410663-05A	1410663-06A
	1410663-07A	1410663-08A	1410663-09A
	1410663-10A	1410663-11A	1410663-12A
	1410663-13A	1410663-14A	1410663-15A
	1410663-16A	1410663-17A	1410663-18A
	1410663-19A	1410663-20A	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150517A** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VLKW1-141017-R150517A				Units: µg/L		Analysis Date: 10/17/2014 03:27 PM		
Client ID:		Run ID: VMS5_141017A				SeqNo: 2988273		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	1.0								
1,3-Dichlorobenzene	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	1.0								
Acetone	U	10								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	1.0								
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	1.0								
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	1.0								
Methylcyclohexane	U	1.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	1.0								
Toluene	U	1.0								

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150517A	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						
Surr: 1,2-Dichloroethane-d4	16.83	0	20	0	84.2	75-120	0	
Surr: 4-Bromofluorobenzene	19.82	0	20	0	99.1	80-110	0	
Surr: Dibromofluoromethane	18.8	0	20	0	94	85-115	0	
Surr: Toluene-d8	18.17	0	20	0	90.8	85-110	0	

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150517A** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-141017-R150517A				Units: µg/L		Analysis Date: 10/17/2014 02:10 PM		
Client ID:		Run ID: VMS5_141017A				SeqNo: 2988272		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	19.55	1.0	20	0	97.8	75-130	0			
1,1,2,2-Tetrachloroethane	16.79	1.0	20	0	84	75-130	0			
1,1,2-Trichloroethane	17.75	1.0	20	0	88.8	75-125	0			
1,1-Dichloroethane	19.96	1.0	20	0	99.8	75-133	0			
1,1-Dichloroethene	20.89	1.0	20	0	104	70-145	0			
1,2,4-Trichlorobenzene	19.71	1.0	20	0	98.6	70-135	0			
1,2-Dibromo-3-chloropropane	17.11	1.0	20	0	85.6	60-130	0			
1,2-Dibromoethane	22.48	1.0	20	0	112	80-150	0			
1,2-Dichlorobenzene	16.86	1.0	20	0	84.3	70-130	0			
1,2-Dichloroethane	17.79	1.0	20	0	89	78-125	0			
1,2-Dichloropropane	19.76	1.0	20	0	98.8	75-125	0			
1,3-Dichlorobenzene	16.92	1.0	20	0	84.6	75-130	0			
1,4-Dichlorobenzene	16.56	1.0	20	0	82.8	75-130	0			
2-Butanone	23.37	5.0	20	0	117	55-150	0			
2-Hexanone	18.7	5.0	20	0	93.5	60-135	0			
4-Methyl-2-pentanone	24.92	1.0	20	0	125	77-178	0			
Acetone	22.09	10	20	0	110	60-160	0			
Benzene	20.43	1.0	20	0	102	85-125	0			
Bromodichloromethane	17.37	1.0	20	0	86.8	75-125	0			
Bromoform	13	1.0	20	0	65	60-125	0			
Bromomethane	33.4	1.0	20	0	167	30-185	0			
Carbon disulfide	21.04	1.0	20	0	105	60-165	0			
Carbon tetrachloride	19.59	1.0	20	0	98	65-140	0			
Chlorobenzene	17.82	1.0	20	0	89.1	80-120	0			
Chloroethane	17.28	1.0	20	0	86.4	50-140	0			
Chloroform	19.41	1.0	20	0	97	80-130	0			
Chloromethane	20.27	1.0	20	0	101	50-130	0			
cis-1,2-Dichloroethene	21.96	1.0	20	0	110	75-134	0			
cis-1,3-Dichloropropene	19.69	1.0	20	0	98.4	70-130	0			
Dibromochloromethane	14.41	1.0	20	0	72	60-115	0			
Dichlorodifluoromethane	14.82	1.0	20	0	74.1	20-120	0			
Ethylbenzene	18.17	1.0	20	0	90.8	85-125	0			
Isopropylbenzene	18.94	1.0	20	0	94.7	80-127	0			
Methyl tert-butyl ether	19.28	1.0	20	0	96.4	80-130	0			
Methylene chloride	20.79	5.0	20	0	104	75-140	0			
Styrene	17.96	1.0	20	0	89.8	85-125	0			
Tetrachloroethene	19.5	1.0	20	0	97.5	77-138	0			
Toluene	18.11	1.0	20	0	90.6	85-125	0			
trans-1,2-Dichloroethene	21.27	1.0	20	0	106	80-140	0			
trans-1,3-Dichloropropene	17.26	1.0	20	0	86.3	81-123	0			
Trichloroethene	21.79	1.0	20	0	109	84-130	0			
Trichlorofluoromethane	18.9	1.0	20	0	94.5	60-140	0			

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: R150517A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	19.22	1.0	20	0	96.1	50-136	0
Xylenes, Total	53.88	3.0	60	0	89.8	80-126	0
<i>Surr: 1,2-Dichloroethane-d4</i>	16.93	0	20	0	84.6	75-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.11	0	20	0	101	80-110	0
<i>Surr: Dibromofluoromethane</i>	18.94	0	20	0	94.7	85-115	0
<i>Surr: Toluene-d8</i>	18.34	0	20	0	91.7	85-110	0

The following samples were analyzed in this batch: | 1410663-25A |

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

Client: Conestoga-Rovers & Associates
Work Order: 1410663
Project: Former GRMP (17360-T05Y14-01Y14)

QC BATCH REPORT

Batch ID: **R150584** Instrument ID **VMS6** Method: **SW8260**

MBLK				Sample ID: VBLKW3-141017-R150584				Units: µg/L			Analysis Date: 10/18/2014 04:57 PM		
Client ID:			Run ID: VMS6_141017C				SeqNo: 2988248			Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual			
Tetrachloroethene	U	1.0											
Surr: 1,2-Dichloroethane-d4	20.48	0	20	0	102	75-120	0						
Surr: 4-Bromofluorobenzene	19.08	0	20	0	95.4	80-110	0						
Surr: Dibromofluoromethane	19.88	0	20	0	99.4	85-115	0						
Surr: Toluene-d8	19.89	0	20	0	99.4	85-110	0						

LCS				Sample ID: VLCSW3-141017-R150584				Units: µg/L		Analysis Date: 10/18/2014 04:05 PM	
Client ID:			Run ID: VMS6_141017C			SeqNo: 2988247		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Tetrachloroethene	22.64	1.0	20	0	113	77-138	0				
Surr: 1,2-Dichloroethane-d4	19.92	0	20	0	99.6	75-120	0				
Surr: 4-Bromofluorobenzene	19.63	0	20	0	98.2	80-110	0				
Surr: Dibromofluoromethane	20.9	0	20	0	104	85-115	0				
Surr: Toluene-d8	19.86	0	20	0	99.3	85-110	0				

MS					Sample ID: 1410454-02A MS			Units: µg/L		Analysis Date: 10/19/2014 02:04 A	
Client ID:			Run ID: VMS6_141017C			SeqNo: 2988267		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Tetrachloroethene	21.91	1.0	20	0	110	77-138	0				
Surr: 1,2-Dichloroethane-d4	20.35	0	20	0	102	75-120	0				
Surr: 4-Bromofluorobenzene	19.78	0	20	0	98.9	80-110	0				
Surr: Dibromofluoromethane	20.42	0	20	0	102	85-115	0				
Surr: Toluene-d8	20.19	0	20	0	101	85-110	0				

MSD					Sample ID: 1410454-02A MSD			Units: µg/L		Analysis Date: 10/19/2014 02:30 A	
Client ID:			Run ID: VMS6_141017C			SeqNo: 2988268		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Tetrachloroethene	20.73	1.0	20	0	104	77-138	21.91	5.53	30		
Surr: 1,2-Dichloroethane-d4	20.23	0	20	0	101	75-120	20.35	0.591	30		
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	80-110	19.78	0.605	30		
Surr: Dibromofluoromethane	20.58	0	20	0	103	85-115	20.42	0.78	30		
Surr: Toluene-d8	19.76	0	20	0	98.8	85-110	20.19	2.15	30		

The following samples were analyzed in this batch: 1410663-20A

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-12738**

PAGE 1 OF 2

(See Reverse Side for Instructions)

Project No./Phase/Task Code: 017360-10514-01414				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 7360-026-101414/1214					
Project Name: Former GRMP				Lab Contact: Chad Welton				Lab Quote No:				Cooler No:					
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)					
Chemistry Contact: Rawa Fleisler				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 (Sol VOC) EnCore 305-g (125-g) Other:				Total Containers/Sample VOCs Metals					
Sampler(s): Matt Ramsey																	
Carrier: CRA				Airbill No:				Date Shipped: 10/10/14				COMMENTS/ SPECIAL INSTRUCTIONS:					
Airbill No:				Date Shipped:													
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (See back of COC) Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Sol VOC)	EnCore 305-g (125-g)	Other:	Total Containers/Sample	VOCs	Metals	MS/MSD Request	
1	SW-017360-100714-MR-001	10/7/14	1020	SW G	3								3	X			
2	" -002		1030											X			
3	" -003		1050											X			
4	WL-017360-100714-MR-004		1256	WL G										X			
5	" -005		1315											X			
6	" -006		1331											X			
7	" -007		1508											X			
8	" -008		1555											X			
9	WL-017360-100814-MR-009	10/8/14	1126											X			
10	" -010		1040											X			
11	" -011		1237											X	X		
12	" -012		1314											X			
13	" -013		1515											X			
14	" -014		1603											X			
15	" -015		1653											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: 52				Notes/ Special Requirements:									
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:				All Samples in Cooler must be on COC													
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME										
Max D	CRA	10/10/14	1400	Chad Welton	ALS	10/10/14	1400										

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-12743**

PAGE **2** OF **2**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-TOX-14-01y14				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-026-TOX-14-01y14			
Project Name: Former GRMP				Lab Contact: Chad Welton				Lab Quote No:				Cooler No:			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: Rawa Fleisher				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 (80/20 VOC) EnCore 3rd-g, 1x25-g Other:				Carrier: CRA			
Sampler(s): Matt Rung												Airbill No:			
Date Shipped: 10/10/14				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 (80/20 VOC)	EnCore 3rd-g, 1x25-g	Other:	Total Containers/Samples	VOCs	SVOs	MS/MSD Request
1	WG-017360-1009M-MR-016	10/09/14	1015	WG-G	3								3	X		
2	" -017		1059											X		
3	" -018		1130											X		
4	" -019		1206											X		
5	" -020		1251											X		
6	" -021		1525											X		
7	" -022		1404		2								5	X	X	
8	" -023		1609										3	X		
9	" -024		1657										3	X		
10	TB- " -025			TB-G	1								1	X		
11																
12																
13																
14																
15																

TAT Required in business days (use separate COCs for different TATs)				Total Number of Containers: 30				Notes/ Special Requirements:			
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:				All Samples in Cooler must be on COC							

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
M. Rung	CRA	10/10/14	1400	Chad Welton	ALS	10/10/14	1400

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: 10-Oct-14 14:00

Work Order: 1410663

Received by: KRW

Checklist completed by Keith Wurenga
eSignature

10-Oct-14
Date

Reviewed by: Chad Whelton
eSignature

13-Oct-14
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 ☐	
Sample(s) received on ice?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.8 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>10/10/2014 2:28:28 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 B

Data Validation Memorandum



**CONESTOGA-ROVERS
& ASSOCIATES**

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

To: Jennifer Quigley REF. NO.: 017360-T05Y14

FROM: Nancy Bergstrom/tl/73/Det *DF For -* DATE: November 18, 2014

RE: Analytical Results and Reduced Validation
Additional Site-Wide Investigation
Racer Grand Rapids Stamping Site
Wyoming, Michigan
October 2014

1.0 Introduction

The following document details a reduced validation of analytical results for surface water and groundwater samples collected in support of the Additional Site-Wide Investigation at the Racer Grand Rapids Stamping Site during October 2014. Samples were submitted to ALS Environmental, located in Holland, Michigan (ALS-MI). A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard Conestoga-Rovers & Associates (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), matrix spikes (MS), and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

- i) "Former Grand Rapids Metal Plant Quality Assurance Project Plan (QAPP)", Revision 1, January 6, 2011
- 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.

2.0 Sample Holding Time and Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature ($4 \pm 2^{\circ}\text{C}$).

3.0 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 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect or the sample results non-detect, indicating that laboratory contamination was not a factor; with the exception of zinc as qualified in Table 4.

4.0 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 target compound list volatile organic compound (TCL VOC) and target compound list semivolatile organic compounds (TCL 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 TCL SVOC analyses. According to the "Guidelines" for TCL 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. Several TCL VOC surrogates were recovered above the acceptance criteria, but TCL VOCs were not detected in the associated samples and qualification of the investigative data was not required. All remaining surrogate recoveries met the above criteria.

5.0 Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

Organic Analyses

The LCS contained all compounds of interest. Table 5 presents the TCL VOC data qualified due to outlying LCS results. All remaining LCS were within the laboratory control limits or outlying percent recoveries did not result in qualification, 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.

6.0 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 RPD between the MS and MSD is used to assess analytical precision. If the original sample concentration is significantly greater than the spike concentration, the recovery is not assessed.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses

The MS/MSD samples were spiked with all compounds of interest. Table 6 presents the TCL VOC sample results qualified due to outlying MS/MSD results. All remaining 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.

7.0 Field QA/QC Samples

The field QA/QC consisted of two trip blank samples and four field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, two trip blanks were submitted to the laboratory for TCL VOC analysis. All results were non-detect for the compounds of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, four 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.

8.0 Analyte Reporting

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9.0 Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable with the specific qualifications noted herein.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
OCTOBER 2014

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters		Comments
					TCL VOC	TCL SVOC	
ALS-MI SDG No.: 1410663							
SW-017360-100714-MR-001	C-2	water	10/07/2014	10:20	X	-	
SW-017360-100714-MR-002	C-3	water	10/07/2014	10:30	X	-	
SW-017360-100714-MR-003	C-1	water	10/07/2014	10:50	X	-	
WG-017360-100714-MR-004	MW6-03	water	10/07/2014	12:56	X	-	
WG-017360-100714-MR-005	MW6-03	water	10/07/2014	13:15	X	-	
WG-017360-100714-MR-006	87-13	water	10/07/2014	13:31	X	-	Field duplicate of MW6-03 MS/MSD
WG-017360-100714-MR-007	MW11S-05	water	10/07/2014	15:08	X	-	
WG-017360-100714-MR-008	MW11D-04	water	10/07/2014	15:55	X	-	
WG-017360-100814-MR-009	MW10-04	water	10/08/2014	11:26	X	-	
WG-017360-100814-MR-010	MW4-03	water	10/08/2014	10:40	X	-	
WG-017360-100814-MR-011	MW59-14	water	10/08/2014	12:37	X	-	
WG-017360-100814-MR-012	87-10	water	10/08/2014	13:14	X	-	MS/MSD
WG-017360-100814-MR-013	MW7-03	water	10/08/2014	15:15	X	-	
WG-017360-100814-MR-014	86-3	water	10/08/2014	16:03	X	-	
WG-017360-100814-MR-015	87-8	water	10/08/2014	16:53	X	-	
WG-017360-100914-MR-016	MW9-04	water	10/09/2014	10:15	X	-	
WG-017360-100914-MR-017	MW8-04	water	10/09/2014	10:59	X	-	
WG-017360-100914-MR-018	MW8-04	water	10/09/2014	11:30	X	-	Field duplicate of MW8-04
WG-017360-100914-MR-019	MW2-03	water	10/09/2014	12:06	X	-	
WG-017360-100914-MR-020	MW49-13	water	10/09/2014	12:51	X	-	
WG-017360-100914-MR-021	MW28-12	water	10/09/2014	15:25	X	-	MS/MSD
WG-017360-100914-MR-022	85-6	water	10/09/2014	14:04	X	X	
WG-017360-100914-MR-023	MW30-12	water	10/09/2014	14:09	X	-	
WG-017360-100914-MR-024	MW32-12	water	10/09/2014	14:57	X	-	
TB-017360-100914-MR-025	--	water	10/09/2014	--	X	-	Trip Blank
ALS-MI SDG No.: 1410899							
WG-017360-101314-MR-026	MW48-13	water	10/13/2014	10:20	X	-	
WG-017360-101314-MR-027	MW17-06	water	10/13/2014	10:59	X	-	
WG-017360-101314-MR-028	MW17-06	water	10/13/2014	11:20	X	-	

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
OCTOBER 2014

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters			Comments
					TCL VOC	TCL SVOC	Site-Specific TAL Metals	
ALS-MI SDG No.: 1410899								
WG-017360-101314-MR-029	MW58-13	water	10/13/2014	12:31	X	--	X	
WG-017360-101314-MR-030	MW27-11	water	10/13/2014	13:27	X	--	X	
WG-017360-101314-MR-031	MW27-11	water	10/13/2014	13:50	X	--	X	Field duplicate of MW27-11
WG-017360-101314-MR-032	MW15-04	water	10/13/2014	14:17	X	--	--	
WG-017360-101314-MR-033	MW60-14	water	10/13/2014	14:55	X	--	X	
WG-017360-101314-MR-034	MW42-12	water	10/13/2014	15:44	X	--	--	
WG-017360-101314-MR-035	MW40-12	water	10/13/2014	16:35	X	--	--	
WG-017360-101314-MR-036	MW41-12	water	10/13/2014	17:13	X	--	--	
WG-017360-101414-MR-037	MW34-12	water	10/14/2014	9:56	X	--	--	
WG-017360-101414-MR-038	MW33-12	water	10/14/2014	10:55	X	--	--	
WG-017360-101414-MR-039	MW35-12	water	10/14/2014	12:21	X	--	--	MS/MSD
WG-017360-101414-MR-040	MW37-12	water	10/14/2014	13:35	X	--	--	
WG-017360-101414-MR-041	MW38-12	water	10/14/2014	14:46	X	--	--	
WG-017360-101414-MR-042	MW43-12	water	10/14/2014	15:43	X	--	--	
WG-017360-101514-MR-043	MW52-12	water	10/15/2014	10:39	X	X	--	MS/MSD
WG-017360-101514-MR-044	MW51-12	water	10/15/2014	11:43	X	X	--	
WG-017360-101514-MR-045	MW51-12	water	10/15/2014	12:05	X	X	--	Field duplicate of MW51-12
WG-017360-101514-MR-046	MW50-12	water	10/15/2014	12:57	X	X	--	
WG-017360-101514-MR-047	MW44-12	water	10/15/2014	13:39	X	X	--	
WG-017360-101514-MR-048	MW45-12	water	10/15/2014	14:14	X	X	--	
WG-017360-101514-MR-049	MW46-12	water	10/15/2014	14:58	X	X	--	
TB-017360-101514-MR-050	--	water	10/15/2014	--	X	--	--	Trip Blank

Notes:

TCL VOC - Target Compound List Volatile Organic Compounds
TCL SVOC - Target Compound List Semivolatile Organic Compounds
TAL - Target Analyte List
MS/MSD - Matrix Spike/Matrix Spike Duplicate
ALS- MI - ALS Environmental - Holland, Michigan
SDG - Sample Delivery Group

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	85-6	86-3	87-8
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015
Sample Date:	10/9/2014	10/8/2014	10/8/2014
Sample Type:			
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	1.0 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	85-6	86-3	87-8
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015
Sample Date:	10/9/2014	10/8/2014	10/8/2014
Sample Type:	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS
Segment Depth			
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--
2,4,5-Trichlorophenol	5.3 U	--	--
2,4,6-Trichlorophenol	5.3 U	--	--
2,4-Dichlorophenol	11 U	--	--
2,4-Dimethylphenol	5.3 U	--	--
2,4-Dinitrophenol	5.3 U	--	--
2,4-Dinitrotoluene	5.3 U	--	--
2,6-Dinitrotoluene	5.3 U	--	--
2-Chloronaphthalene	5.3 U	--	--
2-Chlorophenol	5.3 U	--	--
2-Methylnaphthalene	5.3 U	--	--
2-Methylphenol	5.3 U	--	--
2-Nitroaniline	21 U	--	--
2-Nitrophenol	5.3 U	--	--
3,3'-Dichlorobenzidine	5.3 U	--	--
3-Nitroaniline	21 U	--	--
4,6-Dinitro-2-methylphenol	21 U	--	--
4-Bromophenyl phenyl ether	5.3 U	--	--
4-Chloro-3-methylphenol	5.3 U	--	--
4-Chloroaniline	21 U	--	--
4-Chlorophenyl phenyl ether	5.3 U	--	--
4-Methylphenol	5.3 U	--	--
4-Nitroaniline	21 U	--	--
4-Nitrophenol	21 U	--	--
Acenaphthene	5.3 U	--	--
Acenaphthylene	5.3 U	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	85-6	86-3	87-8
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015
Sample Date:	10/9/2014	10/8/2014	10/8/2014
Sample Type:			
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS
Semi-Volatile Organic Compounds	Units		
Acetophenone	ug/L	1.1 U	--
Anthracene	ug/L	5.3 U	--
Atrazine	ug/L	1.1 U	--
Benzaldehyde	ug/L	1.1 U	--
Benzo(a)anthracene	ug/L	5.3 U	--
Benzo(a)pyrene	ug/L	5.3 U	--
Benzo(b)fluoranthene	ug/L	5.3 U	--
Benzo(g,h,i)perylene	ug/L	5.3 U	--
Benzo(k)fluoranthene	ug/L	5.3 U	--
Biphenyl (1,1-Biphenyl)	ug/L	5.3 U	--
bis(2-Chloroethoxy)methane	ug/L	5.3 U	--
bis(2-Chloroethyl)ether	ug/L	5.3 U	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	5.3 U	--
Butyl benzylphthalate (BBP)	ug/L	5.3 U	--
Caprolactam	ug/L	11 U	--
Carbazole	ug/L	11 U	--
Chrysene	ug/L	5.3 U	--
Dibenz(a,h)anthracene	ug/L	5.3 U	--
Dibenzofuran	ug/L	5.3 U	--
Diethyl phthalate	ug/L	21 U	--
Dimethyl phthalate	ug/L	21 U	--
Di-n-butylphthalate (DBP)	ug/L	5.3 U	--
Di-n-octyl phthalate (DnOP)	ug/L	5.3 U	--
Fluoranthene	ug/L	5.3 U	--
Fluorene	ug/L	5.3 U	--
Hexachlorobenzene	ug/L	5.3 U	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	85-6	86-3	87-8
Sample Identification:	WG-017360-100914-MR-022	WG-017360-100814-MR-014	WG-017360-100814-MR-015
Sample Date:	10/9/2014	10/8/2014	10/8/2014
Sample Type:			
Segment Depth	(19.5-24.5) ft BGS	(41.5-46.5) ft BGS	(19.7-22.7) ft BGS
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	5.3 U	--	--
Hexachlorocyclopentadiene	21 U	--	--
Hexachloroethane	5.3 U	--	--
Indeno(1,2,3-cd)pyrene	5.3 U	--	--
Isophorone	5.3 U	--	--
Naphthalene	5.3 U	--	--
Nitrobenzene	5.3 U	--	--
N-Nitrosodi-n-propylamine	5.3 U	--	--
N-Nitrosodiphenylamine	5.3 U	--	--
Pentachlorophenol	21 U	--	--
Phenanthrene	5.3 U	--	--
Phenol	5.3 U	--	--
Pyrene	5.3 U	--	--
Metals			
Antimony	--	--	--
Arsenic	--	--	--
Barium	--	--	--
Beryllium	--	--	--
Cadmium	--	--	--
Chromium	--	--	--
Cobalt	--	--	--
Copper	--	--	--
Lead	--	--	--
Manganese	--	--	--

Units

ug/L

ug/L

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: 85-6 86-3 87-8
 Sample Identification: WG-017360-100914-MR-022 WG-017360-100814-MR-014 WG-017360-100814-MR-015
 Sample Date: 10/9/2014 10/8/2014 10/8/2014
 Sample Type: (19.5-24.5) ft BGS (41.5-46.5) ft BGS (19.7-22.7) ft BGS
 Segment Depth

Units

Metals
 Mercury
 Molybdenum
 Nickel
 Selenium
 Silver
 Thallium
 Vanadium
 Zinc

ug/L
 ug/L
 ug/L
 ug/L
 ug/L
 ug/L
 ug/L
 ug/L

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	87-10	87-13	C-1
Sample Identification:	WG-017360-100814-MR-012	WG-017360-100714-MR-006	SW-017360-100714-MR-003
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			
Segment Depth	(29-32) ft BGS	(40-43) ft BGS	
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	87-10	87-13	C-1
Sample Identification:	WG-017360-100814-MR-012	WG-017360-100714-MR-006	SW-017360-100714-MR-003
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			
Segment Depth	(29-32) ft BGS	(40-43) ft BGS	
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	3.7
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	3.2	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	87-10	87-13	C-1
Sample Identification:	WG-017360-100814-MR-012	WG-017360-100714-MR-006	SW-017360-100714-MR-003
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			
Segment Depth	(29-32) ft BGS	(40-43) ft BGS	
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
OCTOBER 2014

Sample Location: 87-10 87-13 C-1
Sample Identification: WG-017360-100814-MR-012 WG-017360-100714-MR-006 SW-017360-100714-MR-003
Sample Date: 10/8/2014 10/7/2014 10/7/2014
Sample Type:
Segment Depth: (29-32) ft BGS (40-43) ft BGS

Units

Metals	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Mercury	--	--	--	--	--	--	--	--
Molybdenum	--	--	--	--	--	--	--	--
Nickel	--	--	--	--	--	--	--	--
Selenium	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--
Thallium	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--
Zinc	--	--	--	--	--	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	C-2	C-3	MW2-03
Sample Identification:	SW-017360-100714-MR-001	SW-017360-100714-MR-002	WG-017360-100914-MR-019
Sample Date:	10/7/2014	10/7/2014	10/9/2014
Sample Type:			
Segment Depth			(22-27) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW2-03
 Sample Identification: WG-017360-100914-MR-019
 Sample Date: 10/9/2014
 Sample Type: C-3
 Segment Depth: (22-27) ft BGS

	C-2	C-3	
	SW-017360-100714-MR-001	SW-017360-100714-MR-002	
	10/7/2014	10/7/2014	
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.1	1.5	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.5	4.4	5.8
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	C-2	C-3	MW2-03
Sample Identification:	SW-017360-100714-MR-001	SW-017360-100714-MR-002	WG-017360-100914-MR-019
Sample Date:	10/7/2014	10/7/2014	10/9/2014
Sample Type:			
Segment Depth			(22-27) ft BGS
Semi-Volatile Organic Compounds	Units		
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

Sample Location:
Sample Identification:
Sample Date:
Sample Type:
Segment Depth

CRA 017360Memo73-T2

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW2-03
 Sample Identification: WG-017360-100914-MR-019
 Sample Date: 10/9/2014
 Sample Type: (22-27) ft BGS
 Segment Depth:

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW4-03	MW6-03	MW6-03
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW4-03	MW6-03	MW6-03
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW4-03 WG-017360-100814-MR-010 10/8/2014 (52-57) ft BGS	MW6-03 WG-017360-100714-MR-004 10/7/2014 (13-18) ft BGS	MW6-03 WG-017360-100714-MR-005 10/7/2014 Duplicate (13-18) ft BGS
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW4-03	MW6-03	MW6-03
Sample Identification:	WG-017360-100814-MR-010	WG-017360-100714-MR-004	WG-017360-100714-MR-005
Sample Date:	10/8/2014	10/7/2014	10/7/2014
Sample Type:			Duplicate
Segment Depth	(52-57) ft BGS	(13-18) ft BGS	(13-18) ft BGS
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	ug/L	--	--
Hexachlorocyclopentadiene	ug/L	--	--
Hexachloroethane	ug/L	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--
Isophorone	ug/L	--	--
Naphthalene	ug/L	--	--
Nitrobenzene	ug/L	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--
N-Nitrosodiphenylamine	ug/L	--	--
Pentachlorophenol	ug/L	--	--
Phenanthrene	ug/L	--	--
Phenol	ug/L	--	--
Pyrene	ug/L	--	--
Metals			
Antimony	ug/L	--	--
Arsenic	ug/L	--	--
Barium	ug/L	--	--
Beryllium	ug/L	--	--
Cadmium	ug/L	--	--
Chromium	ug/L	--	--
Cobalt	ug/L	--	--
Copper	ug/L	--	--
Lead	ug/L	--	--
Manganese	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW4-03 MW6-03 MW6-03
 Sample Identification: WG-017360-100814-MR-010 WG-017360-100714-MR-004 WG-017360-100714-MR-005
 Sample Date: 10/8/2014 10/7/2014 10/7/2014
 Sample Type: Duplicate
 Segment Depth: (52-57) ft BGS (13-18) ft BGS (13-18) ft BGS

Units

Metals

Mercury	--	--	--
Molybdenum	--	--	--
Nickel	--	--	--
Selenium	--	--	--
Silver	--	--	--
Thallium	--	--	--
Vanadium	--	--	--
Zinc	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW7-03	MW8-04	MW8-04
Sample Identification:	WG-017360-100814-MR-013	WG-017360-100914-MR-017	WG-017360-100914-MR-018
Sample Date:	10/8/2014	10/9/2014	10/9/2014
Sample Type:			Duplicate
Segment Depth	(36-41) ft BGS	(30-35) ft BGS	(30-35) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	1.0 U	1.7	1.7

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW7-03		MW8-04		Duplicate (30-35) ft BGS
	WG-017360-100814-MR-013 10/8/2014 (36-41) ft BGS		WG-017360-100914-MR-017 10/9/2014 (30-35) ft BGS	WG-017360-100914-MR-018 10/9/2014 (30-35) ft BGS	
Volatile Organic Compounds					
Chloromethane (Methyl chloride)	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	ug/L	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	ug/L	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Trichloroethene	1.8	ug/L	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	ug/L	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	ug/L	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW7-03 WG-017360-100814-MR-013 10/8/2014 (36-41) ft BGS	MW8-04 WG-017360-100914-MR-017 10/9/2014 (30-35) ft BGS	MW8-04 WG-017360-100914-MR-018 10/9/2014 Duplicate (30-35) ft BGS
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--
2,4,5-Trichlorophenol	ug/L	--	--
2,4,6-Trichlorophenol	ug/L	--	--
2,4-Dichlorophenol	ug/L	--	--
2,4-Dimethylphenol	ug/L	--	--
2,4-Dinitrophenol	ug/L	--	--
2,4-Dinitrotoluene	ug/L	--	--
2,6-Dinitrotoluene	ug/L	--	--
2-Chloronaphthalene	ug/L	--	--
2-Chlorophenol	ug/L	--	--
2-Methylnaphthalene	ug/L	--	--
2-Methylphenol	ug/L	--	--
2-Nitroaniline	ug/L	--	--
2-Nitrophenol	ug/L	--	--
3,3'-Dichlorobenzidine	ug/L	--	--
3-Nitroaniline	ug/L	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--
4-Bromophenyl phenyl ether	ug/L	--	--
4-Chloro-3-methylphenol	ug/L	--	--
4-Chloroaniline	ug/L	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--
4-Methylphenol	ug/L	--	--
4-Nitroaniline	ug/L	--	--
4-Nitrophenol	ug/L	--	--
Acenaphthene	ug/L	--	--
Acenaphthylene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:		MW7-03	MW8-04	MW8-04
Sample Identification:		WG-017360-100814-MR-013	WG-017360-100914-MR-017	WG-017360-100914-MR-018
Sample Date:		10/8/2014	10/9/2014	10/9/2014
Sample Type:				Duplicate
Segment Depth		(36-41) ft BGS	(30-35) ft BGS	(30-35) ft BGS
Semi-Volatile Organic Compounds				
Acetophenone	ug/L	--	--	--
Anthracene	ug/L	--	--	--
Atrazine	ug/L	--	--	--
Benzaldehyde	ug/L	--	--	--
Benzo(a)anthracene	ug/L	--	--	--
Benzo(a)pyrene	ug/L	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--
Caprolactam	ug/L	--	--	--
Carbazole	ug/L	--	--	--
Chrysene	ug/L	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--
Dibenzofuran	ug/L	--	--	--
Diethyl phthalate	ug/L	--	--	--
Dimethyl phthalate	ug/L	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--
Fluoranthene	ug/L	--	--	--
Fluorene	ug/L	--	--	--
Hexachlorobenzene	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-100814-MR-013 MW7-03 WG-017360-100914-MR-017 MW8-04 WG-017360-100914-MR-018
 10/8/2014 10/9/2014 10/9/2014 10/9/2014 10/9/2014
 (36-41) ft BGS (30-35) ft BGS Duplicate
 (30-35) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW9-04	MW10-04	MW11D-04
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008
Sample Date:	10/9/2014	10/8/2014	10/7/2014
Sample Type:			
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	0.74 J	1.0 U	0.78 J

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW9-04	MW10-04	MW11D-04
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008
Sample Date:	10/9/2014	10/8/2014	10/7/2014
Sample Type:			
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	3.6	1.5
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW9-04	MW10-04	MW11D-04
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008
Sample Date:	10/9/2014	10/8/2014	10/7/2014
Sample Type:			
Segment Depth	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS
Units			
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	--
2,4,5-Trichlorophenol	ug/L	--	--
2,4,6-Trichlorophenol	ug/L	--	--
2,4-Dichlorophenol	ug/L	--	--
2,4-Dimethylphenol	ug/L	--	--
2,4-Dinitrophenol	ug/L	--	--
2,4-Dinitrotoluene	ug/L	--	--
2,6-Dinitrotoluene	ug/L	--	--
2-Chloronaphthalene	ug/L	--	--
2-Chlorophenol	ug/L	--	--
2-Methylnaphthalene	ug/L	--	--
2-Methylphenol	ug/L	--	--
2-Nitroaniline	ug/L	--	--
2-Nitrophenol	ug/L	--	--
3,3'-Dichlorobenzidine	ug/L	--	--
3-Nitroaniline	ug/L	--	--
4,6-Dinitro-2-methylphenol	ug/L	--	--
4-Bromophenyl phenyl ether	ug/L	--	--
4-Chloro-3-methylphenol	ug/L	--	--
4-Chloroaniline	ug/L	--	--
4-Chlorophenyl phenyl ether	ug/L	--	--
4-Methylphenol	ug/L	--	--
4-Nitroaniline	ug/L	--	--
4-Nitrophenol	ug/L	--	--
Acenaphthene	ug/L	--	--
Acenaphthylene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW9-04	MW10-04	MW11D-04
Sample Identification:	WG-017360-100914-MR-016	WG-017360-100814-MR-009	WG-017360-100714-MR-008
Sample Date:	10/9/2014	10/8/2014	10/7/2014
Sample Type:	(43-48) ft BGS	(33-38) ft BGS	(40-45) ft BGS
Segment Depth			
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-100914-MR-016
 MW9-04
 10/9/2014
 (43-48) ft BGS

WG-017360-100814-MR-009
 MW10-04
 10/8/2014
 (33-38) ft BGS

WG-017360-100714-MR-008
 MW11D-04
 10/7/2014
 (40-45) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/7/2014	10/13/2014	10/13/2014
Sample Type:			
Segment Depth	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	2.3	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	1.0 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW115-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/7/2014	10/13/2014	10/13/2014
Sample Type:			
Segment Depth	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	48
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	78
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	7.1
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/7/2014	10/13/2014	10/13/2014
Sample Type:	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS
Segment Depth			
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	---	---
2,4,5-Trichlorophenol	ug/L	---	---
2,4,6-Trichlorophenol	ug/L	---	---
2,4-Dichlorophenol	ug/L	---	---
2,4-Dimethylphenol	ug/L	---	---
2,4-Dinitrophenol	ug/L	---	---
2,4-Dinitrotoluene	ug/L	---	---
2,6-Dinitrotoluene	ug/L	---	---
2-Chloronaphthalene	ug/L	---	---
2-Chlorophenol	ug/L	---	---
2-Methylnaphthalene	ug/L	---	---
2-Methylphenol	ug/L	---	---
2-Nitroaniline	ug/L	---	---
2-Nitrophenol	ug/L	---	---
3,3'-Dichlorobenzidine	ug/L	---	---
3-Nitroaniline	ug/L	---	---
4,6-Dinitro-2-methylphenol	ug/L	---	---
4-Bromophenyl phenyl ether	ug/L	---	---
4-Chloro-3-methylphenol	ug/L	---	---
4-Chloroaniline	ug/L	---	---
4-Chlorophenyl phenyl ether	ug/L	---	---
4-Methylphenol	ug/L	---	---
4-Nitroaniline	ug/L	---	---
4-Nitrophenol	ug/L	---	---
Acenaphthene	ug/L	---	---
Acenaphthylene	ug/L	---	---

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW115-05 MW15-04 MW17-06
 Sample Identification: WG-017360-100714-MR-007 WG-017360-101314-MR-032 WG-017360-101314-MR-027
 Sample Date: 10/7/2014 10/13/2014 10/13/2014
 Sample Type: (5-10) ft BGS (25-30) ft BGS (51-56) ft BGS
 Segment Depth

Units

Semi-Volatile Organic Compounds

Acetophenone	ug/L	--	--	--
Anthracene	ug/L	--	--	--
Atrazine	ug/L	--	--	--
Benzaldehyde	ug/L	--	--	--
Benzo(a)anthracene	ug/L	--	--	--
Benzo(a)pyrene	ug/L	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--
Caprolactam	ug/L	--	--	--
Carbazole	ug/L	--	--	--
Chrysene	ug/L	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--
Dibenzofuran	ug/L	--	--	--
Diethyl phthalate	ug/L	--	--	--
Dimethyl phthalate	ug/L	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--
Fluoranthene	ug/L	--	--	--
Fluorene	ug/L	--	--	--
Hexachlorobenzene	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW11S-05	MW15-04	MW17-06
Sample Identification:	WG-017360-100714-MR-007	WG-017360-101314-MR-032	WG-017360-101314-MR-027
Sample Date:	10/7/2014	10/13/2014	10/13/2014
Sample Type:			
Segment Depth	(5-10) ft BGS	(25-30) ft BGS	(51-56) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW17-06	MW27-11	MW27-11
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031
Sample Date:	10/13/2014	10/13/2014	10/13/2014
Sample Type:	Duplicate	Duplicate	Duplicate
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW17-06	MW27-11	MW27-11
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031
Sample Date:	10/13/2014	10/13/2014	10/13/2014
Sample Type:	Duplicate	Duplicate	Duplicate
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	48	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	78	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.3	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	7.5	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	3.0 U	3.0 U	3.0 U
Xylenes (total)			

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW17-06	MW27-11	MW27-11
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031
Sample Date:	10/13/2014	10/13/2014	10/13/2014
Sample Type:	Duplicate	Duplicate	Duplicate
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS
Units			
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	--	--	--
2,4,5-Trichlorophenol	--	--	--
2,4,6-Trichlorophenol	--	--	--
2,4-Dichlorophenol	--	--	--
2,4-Dimethylphenol	--	--	--
2,4-Dinitrophenol	--	--	--
2,4-Dinitrotoluene	--	--	--
2,6-Dinitrotoluene	--	--	--
2-Chloronaphthalene	--	--	--
2-Chlorophenol	--	--	--
2-Methylnaphthalene	--	--	--
2-Methylphenol	--	--	--
2-Nitroaniline	--	--	--
2-Nitrophenol	--	--	--
3,3'-Dichlorobenzidine	--	--	--
3-Nitroaniline	--	--	--
4,6-Dinitro-2-methylphenol	--	--	--
4-Bromophenyl phenyl ether	--	--	--
4-Chloro-3-methylphenol	--	--	--
4-Chloroaniline	--	--	--
4-Chlorophenyl phenyl ether	--	--	--
4-Methylphenol	--	--	--
4-Nitroaniline	--	--	--
4-Nitrophenol	--	--	--
Acenaphthene	--	--	--
Acenaphthylene	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW17-06	MW27-11	MW27-11
Sample Identification:	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031
Sample Date:	10/13/2014	10/13/2014	10/13/2014
Sample Type:	Duplicate		Duplicate
Segment Depth	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

	MW17-06	MW27-11	MW27-11
	WG-017360-101314-MR-028	WG-017360-101314-MR-030	WG-017360-101314-MR-031
	10/13/2014	10/13/2014	10/13/2014
	Duplicate		Duplicate
	(51-56) ft BGS	(12.5-17.5) ft BGS	(12.5-17.5) ft BGS
Units			
Metals			
Mercury	--	0.2 U	0.2 U
Molybdenum	--	15	14
Nickel	--	8	7.4
Selenium	--	2.1 J	2 J
Silver	--	5 U	5 U
Thallium	--	5 U	5 U
Vanadium	--	3.3 J	3.3 J
Zinc	--	24	22

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW28-12	MW30-12	MW32-12
Sample Identification:	WG-017360-100914-MR-021	WG-017360-100914-MR-023	WG-017360-100914-MR-024
Sample Date:	10/9/2014	10/9/2014	10/9/2014
Sample Type:			
Segment Depth	(14-19) ft BGS	(25-30) ft BGS	(13.9-23.9) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	4.8	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW28-12		MW30-12		MW32-12	
	WG-017360-100914-MR-021	10/9/2014	WG-017360-100914-MR-023	10/9/2014	WG-017360-100914-MR-024	10/9/2014
	(14-19) ft BGS		(25-30) ft BGS		(13.9-23.9) ft BGS	
Units						
Volatile Organic Compounds						
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U	3.5	2.6	2.6
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth		MW28-12 WG-017360-100914-MR-021 10/9/2014 (14-19) ft BGS	MW30-12 WG-017360-100914-MR-023 10/9/2014 (25-30) ft BGS	MW32-12 WG-017360-100914-MR-024 10/9/2014 (13.9-23.9) ft BGS
Semi-Volatile Organic Compounds				
Acetophenone	ug/L	--	--	--
Anthracene	ug/L	--	--	--
Atrazine	ug/L	--	--	--
Benzaldehyde	ug/L	--	--	--
Benzo(a)anthracene	ug/L	--	--	--
Benzo(a)pyrene	ug/L	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--
Caprolactam	ug/L	--	--	--
Carbazole	ug/L	--	--	--
Chrysene	ug/L	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--
Dibenzofuran	ug/L	--	--	--
Diethyl phthalate	ug/L	--	--	--
Dimethyl phthalate	ug/L	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--
Fluoranthene	ug/L	--	--	--
Fluorene	ug/L	--	--	--
Hexachlorobenzene	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW28-12	MW30-12	MW32-12
Sample Identification:	WG-017360-100914-MR-021	WG-017360-100914-MR-023	WG-017360-100914-MR-024
Sample Date:	10/9/2014	10/9/2014	10/9/2014
Sample Type:			
Segment Depth	(14-19) ft BGS	(25-30) ft BGS	(13.9-23.9) ft BGS
Units			
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	--	--	--
Hexachlorocyclopentadiene	--	--	--
Hexachloroethane	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--
Isophorone	--	--	--
Naphthalene	--	--	--
Nitrobenzene	--	--	--
N-Nitrosodi-n-propylamine	--	--	--
N-Nitrosodiphenylamine	--	--	--
Pentachlorophenol	--	--	--
Phenanthrene	--	--	--
Phenol	--	--	--
Pyrene	--	--	--
Metals			
Antimony	--	--	--
Arsenic	--	--	--
Barium	--	--	--
Beryllium	--	--	--
Cadmium	--	--	--
Chromium	--	--	--
Cobalt	--	--	--
Copper	--	--	--
Lead	--	--	--
Manganese	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-100914-MR-021
 10/9/2014
 (14-19) ft BGS

WG-017360-100914-MR-023
 10/9/2014
 (25-30) ft BGS

WG-017360-100914-MR-024
 10/9/2014
 (13.9-23.9) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW33-12	MW34-12	MW35-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039
Sample Date:	10/14/2014	10/14/2014	10/14/2014
Sample Type:			
Segment Depth	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1.4 J	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	1.0 U	1.0 U	0.58 J

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW33-12	MW34-12	MW35-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039
Sample Date:	10/14/2014	10/14/2014	10/14/2014
Sample Type:			
Segment Depth	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	2.0	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	2.3	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	3.0	4.3	37
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

<i>Sample Location:</i>		MW33-12	MW34-12	MW35-12
<i>Sample Identification:</i>		WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039
<i>Sample Date:</i>		10/14/2014	10/14/2014	10/14/2014
<i>Sample Type:</i>		(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS
<i>Segment Depth</i>				
<i>Semi-Volatile Organic Compounds</i>				
Acetophenone	ug/L	--	--	--
Anthracene	ug/L	--	--	--
Atrazine	ug/L	--	--	--
Benzaldehyde	ug/L	--	--	--
Benzo(a)anthracene	ug/L	--	--	--
Benzo(a)pyrene	ug/L	--	--	--
Benzo(b)fluoranthene	ug/L	--	--	--
Benzo(g,h,i)perylene	ug/L	--	--	--
Benzo(k)fluoranthene	ug/L	--	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--	--
bis(2-Chloroethyl)ether	ug/L	--	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--	--
Caprolactam	ug/L	--	--	--
Carbazole	ug/L	--	--	--
Chrysene	ug/L	--	--	--
Dibenz(a,h)anthracene	ug/L	--	--	--
Dibenzofuran	ug/L	--	--	--
Diethyl phthalate	ug/L	--	--	--
Dimethyl phthalate	ug/L	--	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--	--
Fluoranthene	ug/L	--	--	--
Fluorene	ug/L	--	--	--
Hexachlorobenzene	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW33-12	MW34-12	MW35-12
Sample Identification:	WG-017360-101414-MR-038	WG-017360-101414-MR-037	WG-017360-101414-MR-039
Sample Date:	10/14/2014	10/14/2014	10/14/2014
Sample Type:			
Segment Depth	(31-36) ft BGS	(14.4-24.4) ft BGS	(24.6-29.6) ft BGS
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	ug/L	--	--
Hexachlorocyclopentadiene	ug/L	--	--
Hexachloroethane	ug/L	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--
Isophorone	ug/L	--	--
Naphthalene	ug/L	--	--
Nitrobenzene	ug/L	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--
N-Nitrosodiphenylamine	ug/L	--	--
Pentachlorophenol	ug/L	--	--
Phenanthrene	ug/L	--	--
Phenol	ug/L	--	--
Pyrene	ug/L	--	--
Metals			
Antimony	ug/L	--	--
Arsenic	ug/L	--	--
Barium	ug/L	--	--
Beryllium	ug/L	--	--
Cadmium	ug/L	--	--
Chromium	ug/L	--	--
Cobalt	ug/L	--	--
Copper	ug/L	--	--
Lead	ug/L	--	--
Manganese	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-101414-MR-038
 10/14/2014
 (31-36) ft BGS

WG-017360-101414-MR-037
 10/14/2014
 (14.4-24.4) ft BGS

WG-017360-101414-MR-039
 10/14/2014
 (24.6-29.6) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/13/2014
Sample Type:			
Segment Depth	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/13/2014
Sample Type:			
Segment Depth	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
Volatile Organic Compounds	Units		
Chloromethane (Methyl chloride)	ug/L	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	8.0
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	5.0 U	5.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U
Isopropyl benzene	ug/L	5.0 U	5.0 U
Methyl acetate	ug/L	10 U	10 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	5.0 U	5.0 U
Methylene chloride	ug/L	5.0 U	5.0 U
Styrene	ug/L	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	14	7.2
Trifluorotrichloroethane (Freon 113)	ug/L	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U
Xylenes (total)	ug/L	13 J	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW37-12 WG-017360-101414-MR-040 10/14/2014 (19.4-29.4) ft BGS	MW38-12 WG-017360-101414-MR-041 10/14/2014 (20-30) ft BGS	MW40-12 WG-017360-101314-MR-035 10/13/2014 (45-50) ft BGS
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW37-12	MW38-12	MW40-12
Sample Identification:	WG-017360-101414-MR-040	WG-017360-101414-MR-041	WG-017360-101314-MR-035
Sample Date:	10/14/2014	10/14/2014	10/13/2014
Sample Type:	(19.4-29.4) ft BGS	(20-30) ft BGS	(45-50) ft BGS
Segment Depth			
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	--	--	--
Hexachlorocyclopentadiene	--	--	--
Hexachloroethane	--	--	--
Indeno(1,2,3-cd)pyrene	--	--	--
Isophorone	--	--	--
Naphthalene	--	--	--
Nitrobenzene	--	--	--
N-Nitrosodi-n-propylamine	--	--	--
N-Nitrosodiphenylamine	--	--	--
Pentachlorophenol	--	--	--
Phenanthrene	--	--	--
Phenol	--	--	--
Pyrene	--	--	--
Metals			
Antimony	--	--	--
Arsenic	--	--	--
Barium	--	--	--
Beryllium	--	--	--
Cadmium	--	--	--
Chromium	--	--	--
Cobalt	--	--	--
Copper	--	--	--
Lead	--	--	--
Manganese	--	--	--
Units	ug/L	ug/L	ug/L

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW41-12	MW42-12	MW43-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042
Sample Date:	10/13/2014	10/13/2014	10/14/2014
Sample Type:			
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW41-12			MW42-12			MW43-12		
	WG-017360-101314-MR-036	10/13/2014	(18.3-28.3) ft BGS	WG-017360-101314-MR-034	10/13/2014	(21-31) ft BGS	WG-017360-101414-MR-042	10/14/2014	(15-25) ft BGS
Volatile Organic Compounds									
Chloromethane (Methyl chloride)	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Cyclohexane	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Dibromochloromethane	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
Ethylbenzene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Isopropyl benzene	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
Methyl acetate	ug/L	10 U		10 U			10 U		10 U
Methyl cyclohexane	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Methyl tert butyl ether (MTBE)	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
Methylene chloride	ug/L	5.0 U		5.0 U			5.0 U		5.0 U
Styrene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Tetrachloroethene	ug/L	1.0 U		1.0 U			1.0 U		2.8
Toluene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Trichloroethene	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Vinyl chloride	ug/L	1.0 U		1.0 U			1.0 U		1.0 U
Xylenes (total)	ug/L	3.0 U		3.0 U			3.0 U		3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW41-12	MW42-12	MW43-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042
Sample Date:	10/13/2014	10/13/2014	10/14/2014
Sample Type:			
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS
Units			
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW41-12	MW42-12	MW43-12
Sample Identification:	WG-017360-101314-MR-036	WG-017360-101314-MR-034	WG-017360-101414-MR-042
Sample Date:	10/13/2014	10/13/2014	10/14/2014
Sample Type:			
Segment Depth	(18.3-28.3) ft BGS	(21-31) ft BGS	(15-25) ft BGS
Metals	Units		
Mercury	ug/L	--	--
Molybdenum	ug/L	--	--
Nickel	ug/L	--	--
Selenium	ug/L	--	--
Silver	ug/L	--	--
Thallium	ug/L	--	--
Vanadium	ug/L	--	--
Zinc	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:			
Segment Depth	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	0.83 J	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	5.8 J	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:			
Segment Depth	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
Units			
Volatile Organic Compounds			
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.5	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.4	1.0 U	1.0 U
Isopropyl benzene	2.0 J	5.0 U	5.0 U
Methyl acetate	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U
Styrene	1.0 U	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U
Xylenes (total)	4.7	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW44-12	MW45-12	MW46-12
Sample Identification:	WG-017360-101514-MR-047	WG-017360-101514-MR-048	WG-017360-101514-MR-049
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:			
Segment Depth	(18.5-28.5) ft BGS	(19.1-29.1) ft BGS	(20.2-30.2) ft BGS
Units			
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	5.4 U	5.0 U
2,4,5-Trichlorophenol	ug/L	5.0 U	5.0 U
2,4,6-Trichlorophenol	ug/L	5.0 U	5.0 U
2,4-Dichlorophenol	ug/L	10 U	0.50 J
2,4-Dimethylphenol	ug/L	3.6 J	5.0 U
2,4-Dinitrophenol	ug/L	5.0 U	3.9 J
2,4-Dinitrotoluene	ug/L	5.0 U	5.0 U
2,6-Dinitrotoluene	ug/L	5.0 U	5.0 U
2-Chloronaphthalene	ug/L	5.0 U	5.0 U
2-Chlorophenol	ug/L	5.0 U	5.0 U
2-Methylnaphthalene	ug/L	5.0 U	5.0 U
2-Methylphenol	ug/L	1.5 J	5.0 U
2-Nitroaniline	ug/L	20 U	20 U
2-Nitrophenol	ug/L	5.0 U	5.0 U
3,3'-Dichlorobenzidine	ug/L	5.0 U	5.0 U
3-Nitroaniline	ug/L	20 U	20 U
4,6-Dinitro-2-methylphenol	ug/L	20 U	20 U
4-Bromophenyl phenyl ether	ug/L	5.0 U	5.0 U
4-Chloro-3-methylphenol	ug/L	5.0 U	5.0 U
4-Chloroaniline	ug/L	20 U	20 U
4-Chlorophenyl phenyl ether	ug/L	5.0 U	5.0 U
4-Methylphenol	ug/L	1.2 J	5.0 U
4-Nitroaniline	ug/L	20 U	20 U
4-Nitrophenol	ug/L	20 U	20 U
Acenaphthene	ug/L	5.0 U	5.0 U
Acenaphthylene	ug/L	5.0 U	5.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW44-12 MW45-12 MW46-12
 Sample Identification: WG-017360-101514-MR-047 WG-017360-101514-MR-048 WG-017360-101514-MR-049
 Sample Date: 10/15/2014 10/15/2014 10/15/2014
 Sample Type:
 Segment Depth (18.5-28.5) ft BGS (19.1-29.1) ft BGS (20.2-30.2) ft BGS

Units

Semi-Volatile Organic Compounds

Acetophenone	ug/L	1.0 U	1.1 U	1.0 U
Anthracene	ug/L	5.0 U	5.4 U	5.0 U
Atrazine	ug/L	1.0 U	1.1 U	1.0 U
Benzaldehyde	ug/L	1.0 U	1.1 U	1.0 U
Benzo(a)anthracene	ug/L	5.0 U	5.4 U	5.0 U
Benzo(a)pyrene	ug/L	5.0 U	5.4 U	5.0 U
Benzo(b)fluoranthene	ug/L	5.0 U	5.4 U	5.0 U
Benzo(g,h,i)perylene	ug/L	5.0 U	5.4 U	5.0 U
Benzo(k)fluoranthene	ug/L	5.0 U	5.4 U	5.0 U
Biphenyl (1,1-Biphenyl)	ug/L	0.15 J	5.4 U	5.0 U
bis(2-Chloroethoxy)methane	ug/L	5.0 U	5.4 U	5.0 U
bis(2-Chloroethyl)ether	ug/L	5.0 U	5.4 U	5.0 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	5.0 U	5.4 U	0.50 J
Butyl benzylphthalate (BBP)	ug/L	5.0 U	5.4 U	5.0 U
Caprolactam	ug/L	10 U	11 U	10 U
Carbazole	ug/L	10 U	11 U	10 U
Chrysene	ug/L	5.0 U	5.4 U	5.0 U
Dibenz(a,h)anthracene	ug/L	5.0 U	5.4 U	5.0 U
Dibenzofuran	ug/L	5.0 U	5.4 U	5.0 U
Diethyl phthalate	ug/L	20 U	22 U	20 U
Dimethyl phthalate	ug/L	20 U	22 U	20 U
Di-n-butylphthalate (DBP)	ug/L	5.0 U	5.4 U	5.0 U
Di-n-octyl phthalate (DnOP)	ug/L	5.0 U	5.4 U	5.0 U
Fluoranthene	ug/L	5.0 U	5.4 U	5.0 U
Fluorene	ug/L	5.0 U	5.4 U	5.0 U
Hexachlorobenzene	ug/L	5.0 U	5.4 U	5.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW44-12 MW45-12 MW46-12
 Sample Identification: WG-017360-101514-MR-047 WG-017360-101514-MR-048 WG-017360-101514-MR-049
 Sample Date: 10/15/2014 10/15/2014 10/15/2014
 Sample Type:
 Segment Depth (18.5-28.5) ft BGS (19.1-29.1) ft BGS (20.2-30.2) ft BGS

Units

Semi-Volatile Organic Compounds

Hexachlorobutadiene	ug/L	5.0 U	5.4 U	5.0 U
Hexachlorocyclopentadiene	ug/L	20 U	22 U	20 U
Hexachloroethane	ug/L	5.0 U	5.4 U	5.0 U
Indeno(1,2,3-cd)pyrene	ug/L	5.0 U	5.4 U	5.0 U
Isophorone	ug/L	5.0 U	5.4 U	5.0 U
Naphthalene	ug/L	2.3 J	5.4 U	5.0 U
Nitrobenzene	ug/L	5.0 U	5.4 U	5.0 U
N-Nitrosodi-n-propylamine	ug/L	5.0 U	5.4 U	5.0 U
N-Nitrosodiphenylamine	ug/L	5.0 U	5.4 U	5.0 U
Pentachlorophenol	ug/L	20 U	22 U	20 U
Phenanthrene	ug/L	1.7 J	5.4 U	5.0 U
Phenol	ug/L	5.0 U	5.4 U	5.0 U
Pyrene	ug/L	5.0 U	5.4 U	5.0 U

Metals

Antimony	ug/L	--	--	--
Arsenic	ug/L	--	--	--
Barium	ug/L	--	--	--
Beryllium	ug/L	--	--	--
Cadmium	ug/L	--	--	--
Chromium	ug/L	--	--	--
Cobalt	ug/L	--	--	--
Copper	ug/L	--	--	--
Lead	ug/L	--	--	--
Manganese	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

MW44-12 MW45-12 MW46-12
 WG-017360-101514-MR-047 WG-017360-101514-MR-048 WG-017360-101514-MR-049
 10/15/2014 10/15/2014 10/15/2014
 (18.5-28.5) ft BGS (19.1-29.1) ft BGS (20.2-30.2) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW48-13	MW49-13	MW50-12
Sample Identification:	WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046
Sample Date:	10/13/2014	10/9/2014	10/15/2014
Sample Type:			
Segment Depth	(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS
Units			
Volatile Organic Compounds			
1,1,1-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	25 U	25 U	25 U
2-Hexanone	50 U	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	50 U	50 U	50 U
Acetone	50 U	50 U	50 U
Benzene	1.0 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5.0 U	5.0 U	5.0 U
Carbon disulfide	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	1.0 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

		MW48-13	MW49-13	MW50-12
Sample Location:		WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046
Sample Identification:				
Sample Date:		10/13/2014	10/9/2014	10/15/2014
Sample Type:				
Segment Depth		(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS
		Units		
Volatile Organic Compounds				
Chloromethane (Methyl chloride)		5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene		1.0 U	1.4	0.97 J
cis-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U
Dibromochloromethane		5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)		5.0 U	5.0 U	5.0 U
Ethylbenzene		1.0 U	1.0 U	1.0 U
Isopropyl benzene		5.0 U	5.0 U	5.0 U
Methyl acetate		10 U	10 U	10 U
Methyl cyclohexane		1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)		1.1 J	5.0 U	5.0 U
Methylene chloride		5.0 U	5.0 U	5.0 U
Styrene		1.0 U	1.0 U	1.0 U
Tetrachloroethene		1.0 U	220	4.4
Toluene		1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene		1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U
Trichloroethene		1.0 U	1.8	1.3
Trichlorofluoromethane (CFC-11)		1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)		1.0 U	1.0 U	1.0 U
Vinyl chloride		1.0 U	1.0 U	1.0 U
Xylenes (total)		3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW48-13	MW49-13	MW50-12
Sample Identification:	WG-017360-101314-MR-026	WG-017360-100914-MR-020	WG-017360-101514-MR-046
Sample Date:	10/13/2014	10/9/2014	10/15/2014
Sample Type:			
Segment Depth	(46-51) ft BGS	(34-39) ft BGS	(17-27) ft BGS
Semi-Volatile Organic Compounds			
	Units		
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	--	5.4 U
2,4,5-Trichlorophenol	ug/L	--	5.4 U
2,4,6-Trichlorophenol	ug/L	--	5.4 U
2,4-Dichlorophenol	ug/L	--	11 U
2,4-Dimethylphenol	ug/L	--	5.4 U
2,4-Dinitrophenol	ug/L	--	5.4 U
2,4-Dinitrotoluene	ug/L	--	5.4 U
2,6-Dinitrotoluene	ug/L	--	5.4 U
2-Chloronaphthalene	ug/L	--	5.4 U
2-Chlorophenol	ug/L	--	5.4 U
2-Methylnaphthalene	ug/L	--	5.4 U
2-Methylphenol	ug/L	--	5.4 U
2-Nitroaniline	ug/L	--	22 U
2-Nitrophenol	ug/L	--	5.4 U
3,3'-Dichlorobenzidine	ug/L	--	5.4 U
3-Nitroaniline	ug/L	--	22 U
4,6-Dinitro-2-methylphenol	ug/L	--	22 U
4-Bromophenyl phenyl ether	ug/L	--	5.4 U
4-Chloro-3-methylphenol	ug/L	--	5.4 U
4-Chloroaniline	ug/L	--	22 U
4-Chlorophenyl phenyl ether	ug/L	--	5.4 U
4-Methylphenol	ug/L	--	5.4 U
4-Nitroaniline	ug/L	--	22 U
4-Nitrophenol	ug/L	--	22 U
Acenaphthene	ug/L	--	5.4 U
Acenaphthylene	ug/L	--	5.4 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW48-13 WG-017360-101314-MR-026 10/13/2014 (46-51) ft BGS	MW49-13 WG-017360-100914-MR-020 10/9/2014 (34-39) ft BGS	MW50-12 WG-017360-101514-MR-046 10/15/2014 (17-27) ft BGS
Semi-Volatile Organic Compounds			
Acetophenone	ug/L	---	1.1 U
Anthracene	ug/L	---	5.4 U
Atrazine	ug/L	---	1.1 U
Benzaldehyde	ug/L	---	1.1 U
Benzo(a)anthracene	ug/L	---	5.4 U
Benzo(a)pyrene	ug/L	---	5.4 U
Benzo(b)fluoranthene	ug/L	---	5.4 U
Benzo(g,h,i)perylene	ug/L	---	5.4 U
Benzo(k)fluoranthene	ug/L	---	5.4 U
Biphenyl (1,1-Biphenyl)	ug/L	---	5.4 U
bis(2-Chloroethoxy)methane	ug/L	---	5.4 U
bis(2-Chloroethyl)ether	ug/L	---	5.4 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	---	0.88 J
Butyl benzylphthalate (BBP)	ug/L	---	5.4 U
Caprolactam	ug/L	---	11 U
Carbazole	ug/L	---	11 U
Chrysene	ug/L	---	5.4 U
Dibenz(a,h)anthracene	ug/L	---	5.4 U
Dibenzofuran	ug/L	---	5.4 U
Diethyl phthalate	ug/L	---	22 U
Dimethyl phthalate	ug/L	---	22 U
Di-n-butylphthalate (DBP)	ug/L	---	5.4 U
Di-n-octyl phthalate (DnOP)	ug/L	---	5.4 U
Fluoranthene	ug/L	---	5.4 U
Fluorene	ug/L	---	5.4 U
Hexachlorobenzene	ug/L	---	5.4 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-101314-MR-026
 10/13/2014
 (46-51) ft BGS

MW48-13

WG-017360-100914-MR-020
 10/9/2014
 (34-39) ft BGS

MW49-13

WG-017360-101514-MR-046
 10/15/2014
 (17-27) ft BGS

MW50-12

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:		Duplicate	
Segment Depth	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	2.5 J	25 UJ
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	5.0 J
Acetone	ug/L	10 J	50 UJ
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW51-12		MW51-12		MW52-12	
	WG-017360-101514-MR-044	10/15/2014	WG-017360-101514-MR-045	10/15/2014	WG-017360-101514-MR-043	10/15/2014
	(17-27) ft BGS		Duplicate (17-27) ft BGS		(16.7-26.7) ft BGS	
Units						
Volatile Organic Compounds						
Chloromethane (Methyl chloride)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.3
Isopropyl benzene	5.0 U	5.0 U	5.0 U	5.0 U	1.5 J	1.5 J
Methyl acetate	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 UJ
Styrene	1.0 U	1.0 U	1.0 U	1.0 U	0.77 J	0.77 J
Tetrachloroethene	2.6	2.6	2.7	2.7	1.0 U	1.0 U
Toluene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U	3.0 U	3.0 U	1.9 J	1.9 J

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:		Duplicate	
Segment Depth	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
Semi-Volatile Organic Compounds			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	ug/L	5.3 U	5.3 U
2,4,5-Trichlorophenol	ug/L	5.3 U	5.3 U
2,4,6-Trichlorophenol	ug/L	5.3 U	5.3 U
2,4-Dichlorophenol	ug/L	11 U	11 U
2,4-Dimethylphenol	ug/L	5.3 U	2.3 J
2,4-Dinitrophenol	ug/L	5.3 U	5.3 U
2,4-Dinitrotoluene	ug/L	5.3 U	5.3 U
2,6-Dinitrotoluene	ug/L	5.3 U	5.3 U
2-Chloronaphthalene	ug/L	5.3 U	5.3 U
2-Chlorophenol	ug/L	5.3 U	5.3 U
2-Methylnaphthalene	ug/L	5.3 U	0.21 J
2-Methylphenol	ug/L	5.3 U	5.3 U
2-Nitroaniline	ug/L	21 U	21 U
2-Nitrophenol	ug/L	5.3 U	5.3 U
3,3'-Dichlorobenzidine	ug/L	5.3 U	5.3 U
3-Nitroaniline	ug/L	21 U	21 U
4,6-Dinitro-2-methylphenol	ug/L	21 U	21 U
4-Bromophenyl phenyl ether	ug/L	5.3 U	5.3 U
4-Chloro-3-methylphenol	ug/L	5.3 U	5.3 U
4-Chloroaniline	ug/L	21 U	21 U
4-Chlorophenyl phenyl ether	ug/L	5.3 U	5.3 U
4-Methylphenol	ug/L	0.71 J	5.3 U
4-Nitroaniline	ug/L	21 U	21 U
4-Nitrophenol	ug/L	21 U	21 U
Acenaphthene	ug/L	0.51 J	0.67 J
Acenaphthylene	ug/L	5.3 U	5.3 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW51-12 MW52-12
 Sample Identification: WG-017360-101514-MR-044 WG-017360-101514-MR-045 WG-017360-101514-MR-043
 Sample Date: 10/15/2014 10/15/2014 10/15/2014
 Sample Type: Duplicate
 Segment Depth: (17-27) ft BGS (17-27) ft BGS (16.7-26.7) ft BGS

Units

Semi-Volatile Organic Compounds

Acetophenone	ug/L	0.34 J	0.35 J	1.1 U
Anthracene	ug/L	5.3 U	5.3 U	0.96 J
Atrazine	ug/L	1.1 U	1.1 U	1.1 U
Benzaldehyde	ug/L	1.1 U	1.1 U	1.1 U
Benzo(a)anthracene	ug/L	5.3 U	5.3 U	5.3 U
Benzo(a)pyrene	ug/L	5.3 U	5.3 U	5.3 U
Benzo(b)fluoranthene	ug/L	5.3 U	5.3 U	5.3 U
Benzo(g,h,i)perylene	ug/L	5.3 U	5.3 U	5.3 U
Benzo(k)fluoranthene	ug/L	5.3 U	5.3 U	5.3 U
Biphenyl (1,1-Biphenyl)	ug/L	0.11 J	0.13 J	0.57 J
bis(2-Chloroethoxy)methane	ug/L	5.3 U	5.3 U	5.3 U
bis(2-Chloroethyl)ether	ug/L	5.3 U	5.3 U	5.3 U
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	5.3 U	0.77 J	5.3 U
Butyl benzylphthalate (BBP)	ug/L	5.3 U	5.3 U	5.3 U
Caprolactam	ug/L	11 U	11 U	11 U
Carbazole	ug/L	11 U	11 U	0.74 J
Chrysene	ug/L	5.3 U	5.3 U	5.3 U
Dibenz(a,h)anthracene	ug/L	5.3 U	5.3 U	5.3 U
Dibenzofuran	ug/L	5.3 U	5.3 U	0.76 J
Diethyl phthalate	ug/L	21 U	21 U	21 U
Dimethyl phthalate	ug/L	21 U	21 U	21 U
Di-n-butylphthalate (DBP)	ug/L	5.3 U	5.3 U	5.3 U
Di-n-octyl phthalate (DnOP)	ug/L	5.3 U	5.3 U	5.3 U
Fluoranthene	ug/L	5.3 U	5.3 U	5.3 U
Fluorene	ug/L	0.32 J	0.34 J	2.3 J
Hexachlorobenzene	ug/L	5.3 U	5.3 U	5.3 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW51-12	MW51-12	MW52-12
Sample Identification:	WG-017360-101514-MR-044	WG-017360-101514-MR-045	WG-017360-101514-MR-043
Sample Date:	10/15/2014	10/15/2014	10/15/2014
Sample Type:		Duplicate	
Segment Depth	(17-27) ft BGS	(17-27) ft BGS	(16.7-26.7) ft BGS
	Units		
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	5.3 U	5.3 U	5.3 U
Hexachlorocyclopentadiene	21 U	21 U	21 U
Hexachloroethane	5.3 U	5.3 U	5.3 U
Indeno(1,2,3-cd)pyrene	5.3 U	5.3 U	5.3 U
Isophorone	5.3 U	5.3 U	5.3 U
Naphthalene	0.49 J	0.58 J	6.5
Nitrobenzene	5.3 U	5.3 U	5.3 U
N-Nitrosodi-n-propylamine	5.3 U	5.3 U	5.3 U
N-Nitrosodiphenylamine	5.3 U	5.3 U	5.3 U
Pentachlorophenol	21 U	21 U	21 U
Phenanthrene	5.3 U	5.3 U	1.3 J
Phenol	1.7 J	1.6 J	0.72 J
Pyrene	5.3 U	5.3 U	5.3 U
Metals			
Antimony	--	--	--
Arsenic	--	--	--
Barium	--	--	--
Beryllium	--	--	--
Cadmium	--	--	--
Chromium	--	--	--
Cobalt	--	--	--
Copper	--	--	--
Lead	--	--	--
Manganese	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
 Sample Identification:
 Sample Date:
 Sample Type:
 Segment Depth

WG-017360-101514-MR-044
 MW51-12
 10/15/2014
 (17-27) ft BGS

WG-017360-101514-MR-045
 MW51-12
 10/15/2014
 Duplicate
 (17-27) ft BGS

WG-017360-101514-MR-043
 MW52-12
 10/15/2014
 (16.7-26.7) ft BGS

Units

Metals

Mercury	ug/L	--	--	--
Molybdenum	ug/L	--	--	--
Nickel	ug/L	--	--	--
Selenium	ug/L	--	--	--
Silver	ug/L	--	--	--
Thallium	ug/L	--	--	--
Vanadium	ug/L	--	--	--
Zinc	ug/L	--	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW58-13	MW59-14	MW60-14
Sample Identification:	WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Date:	10/13/2014	10/8/2014	10/13/2014
Sample Type:			
Segment Depth	(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
Volatile Organic Compounds	Units		
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

		MW58-13	MW59-14	MW60-14
Sample Location:		WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Identification:		10/13/2014	10/8/2014	10/13/2014
Sample Date:				
Sample Type:				
Segment Depth		(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
Units				
Volatile Organic Compounds				
Chloromethane (Methyl chloride)	ug/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	15	1.0 U
cis-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	5.0 U	5.0 U	5.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	5.0 U	5.0 U	5.0 U
Methyl acetate	ug/L	10 U	10 U	10 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	5.0 U	5.0 U	5.0 U
Methylene chloride	ug/L	5.0 U	5.0 U	5.0 U
Styrene	ug/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	3.5	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	3.0 U	3.0 U	3.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: Sample Identification: Sample Date: Sample Type: Segment Depth	MW58-13 WG-017360-101314-MR-029 10/13/2014 (13.5-18.5) ft BGS	MW59-14 WG-017360-100814-MR-011 10/8/2014 (30-35) ft BGS	MW60-14 WG-017360-101314-MR-033 10/13/2014 (21-26) ft BGS
Semi-Volatile Organic Compounds			
Acetophenone	ug/L		
Anthracene	ug/L		
Atrazine	ug/L		
Benzaldehyde	ug/L		
Benzo(a)anthracene	ug/L		
Benzo(a)pyrene	ug/L		
Benzo(b)fluoranthene	ug/L		
Benzo(g,h,i)perylene	ug/L		
Benzo(k)fluoranthene	ug/L		
Biphenyl (1,1-Biphenyl)	ug/L		
bis(2-Chloroethoxy)methane	ug/L		
bis(2-Chloroethyl)ether	ug/L		
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L		
Butyl benzylphthalate (BBP)	ug/L		
Caprolactam	ug/L		
Carbazole	ug/L		
Chrysene	ug/L		
Dibenz(a,h)anthracene	ug/L		
Dibenzofuran	ug/L		
Diethyl phthalate	ug/L		
Dimethyl phthalate	ug/L		
Di-n-butylphthalate (DBP)	ug/L		
Di-n-octyl phthalate (DnOP)	ug/L		
Fluoranthene	ug/L		
Fluorene	ug/L		
Hexachlorobenzene	ug/L		

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	MW58-13	MW59-14	MW60-14
Sample Identification:	WG-017360-101314-MR-029	WG-017360-100814-MR-011	WG-017360-101314-MR-033
Sample Date:	10/13/2014	10/8/2014	10/13/2014
Sample Type:	(13.5-18.5) ft BGS	(30-35) ft BGS	(21-26) ft BGS
Segment Depth			
	Units		
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	ug/L	--	--
Hexachlorocyclopentadiene	ug/L	--	--
Hexachloroethane	ug/L	--	--
Indeno(1,2,3-cd)pyrene	ug/L	--	--
Isophorone	ug/L	--	--
Naphthalene	ug/L	--	--
Nitrobenzene	ug/L	--	--
N-Nitrosodi-n-propylamine	ug/L	--	--
N-Nitrosodiphenylamine	ug/L	--	--
Pentachlorophenol	ug/L	--	--
Phenanthrene	ug/L	--	--
Phenol	ug/L	--	--
Pyrene	ug/L	--	--
Metals			
Antimony	ug/L	5 U	5 U
Arsenic	ug/L	5 U	0.65 J
Barium	ug/L	9.7	35
Beryllium	ug/L	2 U	2 U
Cadmium	ug/L	0.37 J	0.091 J
Chromium	ug/L	0.3 J	1.5 J
Cobalt	ug/L	0.17 J	3.2 J
Copper	ug/L	0.52 J	3 J
Lead	ug/L	5 U	1.1 J
Manganese	ug/L	0.5 J	32

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location: MW58-13 MW59-14 MW60-14
 Sample Identification: WG-017360-101314-MR-029 WG-017360-100814-MR-011 WG-017360-101314-MR-033
 Sample Date: 10/13/2014 10/8/2014 10/13/2014
 Sample Type: (13.5-18.5) ft BGS (30-35) ft BGS (21-26) ft BGS
 Segment Depth

Units

Metals

Mercury	ug/L	0.2 U	0.2 U	0.2 U
Molybdenum	ug/L	5 U	0.68 J	0.98 J
Nickel	ug/L	2.1 J	3.8 J	3.8 J
Selenium	ug/L	1.8 J	5 U	0.95 J
Silver	ug/L	5 U	5 U	5 U
Thallium	ug/L	5 U	5 U	5 U
Vanadium	ug/L	5 U	5 U	1.1 J
Zinc	ug/L	10 U	16	11 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

<i>Sample Location:</i>		<i>Trip Blank</i>	<i>Trip Blank</i>
<i>Sample Identification:</i>		TB-017360-100914-MR-025	TB-017360-101514-MR-050
<i>Sample Date:</i>		10/9/2014	10/15/2014
<i>Sample Type:</i>			
<i>Segment Depth</i>			
<i>Volatile Organic Compounds</i>			
1,1,1-Trichloroethane	ug/L	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	1.0 U	1.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	25 U	25 U
2-Hexanone	ug/L	50 U	50 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	50 U	50 U
Acetone	ug/L	50 U	50 U
Benzene	ug/L	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	5.0 U	5.0 U
Carbon disulfide	ug/L	5.0 U	5.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U
Chloroethane	ug/L	5.0 U	5.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:	<i>Trip Blank</i>	<i>Trip Blank</i>
Sample Identification:	TB-017360-100914-MR-025	TB-017360-101514-MR-050
Sample Date:	10/9/2014	10/15/2014
Sample Type:		
Segment Depth		
Volatile Organic Compounds		
Chloromethane (Methyl chloride)	5.0 U	5.0 U
cis-1,2-Dichloroethene	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U
Dibromochloromethane	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	5.0 U	5.0 U
Ethylbenzene	1.0 U	1.0 U
Isopropyl benzene	5.0 U	5.0 U
Methyl acetate	10 U	10 U
Methyl cyclohexane	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	5.0 U	5.0 U
Methylene chloride	5.0 U	5.0 U
Styrene	1.0 U	1.0 U
Tetrachloroethene	1.0 U	1.0 U
Toluene	1.0 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	1.0 U
Trichloroethene	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U
Vinyl chloride	1.0 U	1.0 U
Xylenes (total)	3.0 U	3.0 U

Units

Volatile Organic Compounds

Chloromethane (Methyl chloride)
 cis-1,2-Dichloroethene
 cis-1,3-Dichloropropene
 Cyclohexane
 Dibromochloromethane
 Dichlorodifluoromethane (CFC-12)
 Ethylbenzene
 Isopropyl benzene
 Methyl acetate
 Methyl cyclohexane
 Methyl tert butyl ether (MTBE)
 Methylene chloride
 Styrene
 Tetrachloroethene
 Toluene
 trans-1,2-Dichloroethene
 trans-1,3-Dichloropropene
 Trichloroethene
 Trichlorofluoromethane (CFC-11)
 Trifluorotrichloroethane (Freon 113)
 Vinyl chloride
 Xylenes (total)

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:
Sample Identification:
Sample Date:
Sample Type:
Segment Depth

Trip Blank
 TB-017360-100914-MR-025
 10/9/2014

Trip Blank
 TB-017360-101514-MR-050
 10/15/2014

Units

Semi-Volatile Organic Compounds

Acetophenone	ug/L	--	--
Anthracene	ug/L	--	--
Atrazine	ug/L	--	--
Benzaldehyde	ug/L	--	--
Benzo(a)anthracene	ug/L	--	--
Benzo(a)pyrene	ug/L	--	--
Benzo(b)fluoranthene	ug/L	--	--
Benzo(g,h,i)perylene	ug/L	--	--
Benzo(k)fluoranthene	ug/L	--	--
Biphenyl (1,1-Biphenyl)	ug/L	--	--
bis(2-Chloroethoxy)methane	ug/L	--	--
bis(2-Chloroethyl)ether	ug/L	--	--
bis(2-Ethylhexyl)phthalate (DEHP)	ug/L	--	--
Butyl benzylphthalate (BBP)	ug/L	--	--
Caprolactam	ug/L	--	--
Carbazole	ug/L	--	--
Chrysene	ug/L	--	--
Dibenz(a,h)anthracene	ug/L	--	--
Dibenzofuran	ug/L	--	--
Diethyl phthalate	ug/L	--	--
Dimethyl phthalate	ug/L	--	--
Di-n-butylphthalate (DBP)	ug/L	--	--
Di-n-octyl phthalate (DnOP)	ug/L	--	--
Fluoranthene	ug/L	--	--
Fluorene	ug/L	--	--
Hexachlorobenzene	ug/L	--	--

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

Sample Location:			
Sample Identification:			
Sample Date:			
Sample Type:			
Segment Depth			
	Trip Blank	Trip Blank	
	TB-017360-100914-MR-025	TB-017360-101514-MR-050	
	10/9/2014	10/15/2014	
Semi-Volatile Organic Compounds			
Hexachlorobutadiene	--	--	ug/L
Hexachlorocyclopentadiene	--	--	ug/L
Hexachloroethane	--	--	ug/L
Indeno(1,2,3-cd)pyrene	--	--	ug/L
Isophorone	--	--	ug/L
Naphthalene	--	--	ug/L
Nitrobenzene	--	--	ug/L
N-Nitrosodi-n-propylamine	--	--	ug/L
N-Nitrosodiphenylamine	--	--	ug/L
Pentachlorophenol	--	--	ug/L
Phenanthrene	--	--	ug/L
Phenol	--	--	ug/L
Pyrene	--	--	ug/L
Metals			
Antimony	--	--	ug/L
Arsenic	--	--	ug/L
Barium	--	--	ug/L
Beryllium	--	--	ug/L
Cadmium	--	--	ug/L
Chromium	--	--	ug/L
Cobalt	--	--	ug/L
Copper	--	--	ug/L
Lead	--	--	ug/L
Manganese	--	--	ug/L

TABLE 2

VALIDATED ANALYTICAL RESULT SUMMARY
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

		Trip Blank		Trip Blank	
		TB-017360-100914-MR-025		TB-017360-101514-MR-050	
		10/9/2014		10/15/2014	
Sample Location:	Sample Identification:				
Sample Date:	Sample Type:				
Segment Depth					
Metals	Units				
Mercury	ug/L	--		--	
Molybdenum	ug/L	--		--	
Nickel	ug/L	--		--	
Selenium	ug/L	--		--	
Silver	ug/L	--		--	
Thallium	ug/L	--		--	
Vanadium	ug/L	--		--	
Zinc	ug/L	--		--	

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 3

**ANALYTICAL METHODS AND HOLDING TIME CRITERIA
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
OCTOBER**

<i>Parameter</i>	<i>Method</i>	<i>Matrix</i>	<i>Preservation</i>	<i>Holding Time</i>	
				<i>Collection to Extraction (Days)</i>	<i>Collection or Extraction to Analysis (Days)</i>
TCL VOC	SW-846 8260B	Water	Iced, 4 ± 2° C	-	14
TCL SVOC	SW-846 8270C	Water	Iced, 4 ± 2° C	14	40
Site-Specific TAL Metals (except Mercury)	SW-846 6020A	Water	Iced, 4 ± 2° C	-	180
Mercury	SW-846 7470A	Water	Iced, 4 ± 2° C	-	28

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 - Semivolatile Organic Compounds
 TAL - Target Analyte List
 TCL - Target Compound List

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
 ADDITIONAL SITE-WIDE INVESTIGATION
 RACER GRAND RAPIDS STAMPING SITE
 WYOMING, MICHIGAN
 OCTOBER 2014

<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>
TAL Metals	Zinc	10/21/14	0.002897	WG-017360-101314-MR-029	0.006 J	0.010 U	mg/L
				WG-017360-101314-MR-033	0.0	0.011 U	mg/L

Notes:

- J - Estimated concentration.
- U - Not detected at the associated reporting limit.
- TAL - Target Analyte List

TABLE 5

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
APRIL 2014

<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 VOC	Vinyl chloride	10/22/14	142	50-136	WG-017360-101414-MR-041	13 J	µg/L

Notes:

- J - Estimated concentration
- LCS - Laboratory control sample
- TCL - Target Compound List
- VOC - Volatile Organic Compounds

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
ADDITIONAL SITE-WIDE INVESTIGATION
RACER GRAND RAPIDS STAMPING SITE
WYOMING, MICHIGAN
OCTOBER 2014

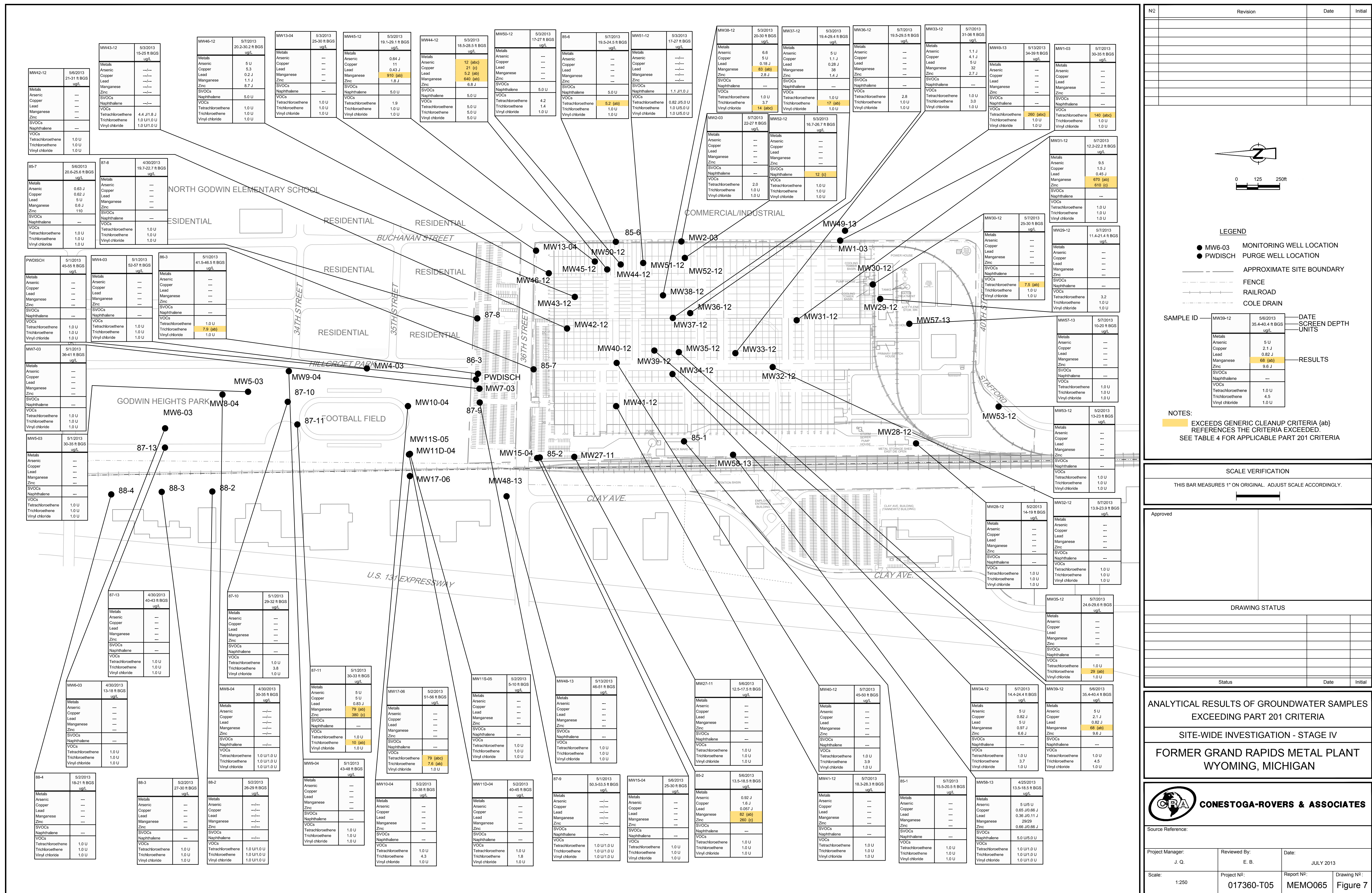
<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>		<i>MSD</i>		<i>RPD</i> <i>(percent)</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>		<i>% Recovery</i>			<i>% Recovery</i>	<i>RPD</i>		
TCL VOC	WG-017360-101514-MR-043	Acetone	57.6		40.5		35.0	60-160	30	50 UJ	µg/L
		2-Butanone	52.5		38.7		30.3	55-150	30	25 UJ	µg/L
		Methylene chloride	74.2		72.6		2.25	75-140	30	5.0 UJ	µg/L

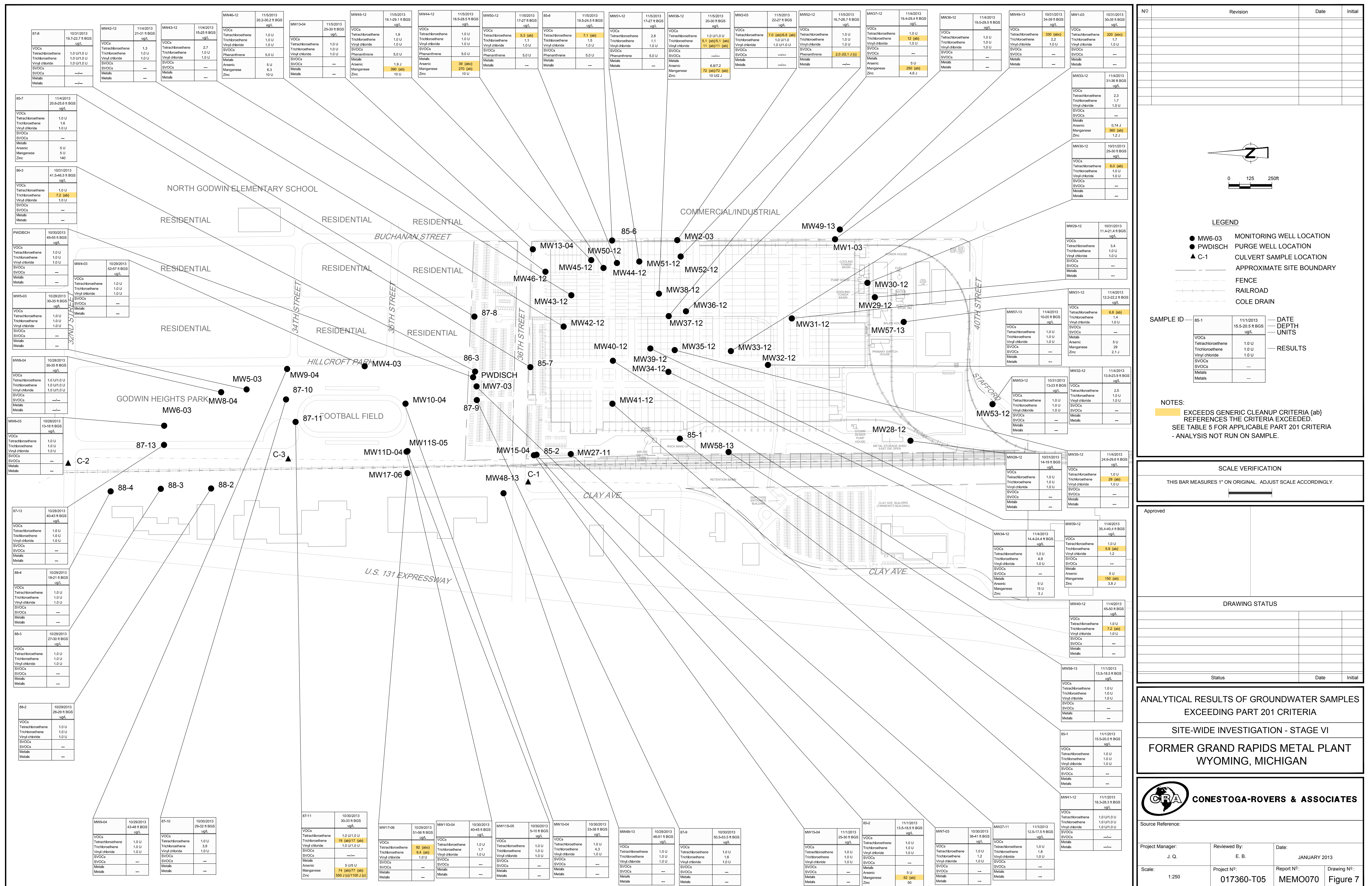
Notes:

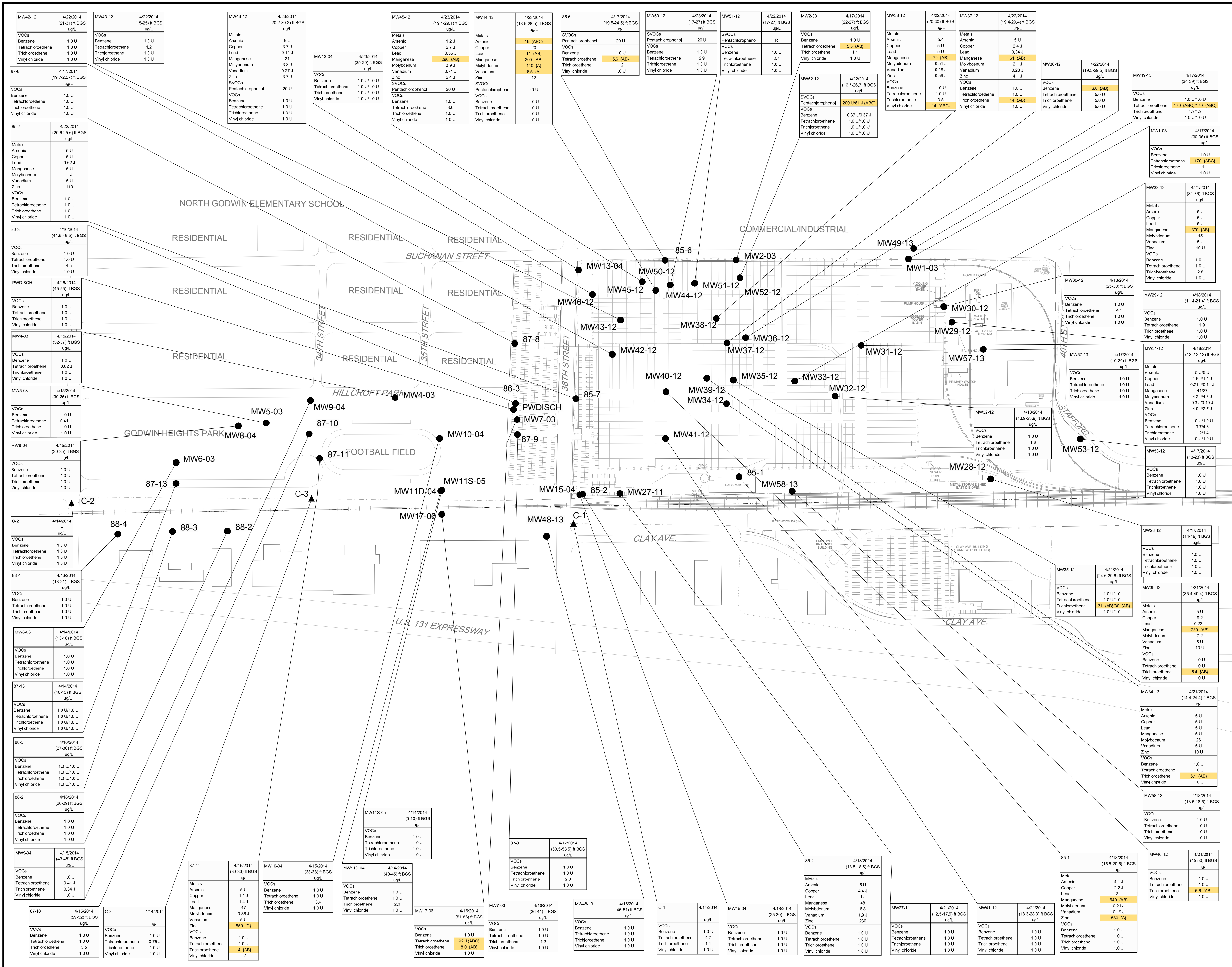
- UJ - Not detected; associated reporting limit is estimated
- MS - Matrix spike
- MSD - Matrix spike duplicate
- RPD - Relative percent difference
- TCL - Target Compound List
- TCL - Volatile Organic Compounds

Attachment C

Historical Analytical Data Figures







No

Revision

Date

Initial

0

125

250ft

LEGEND

● MW6-03

● PWDISCH

▲ C-1

MONITORING WELL LOCATION

PURGE WELL LOCATION

CULVERT SAMPLE LOCATION

APPROXIMATE SITE BOUNDARY

FENCE

RAILROAD

COLE DRAIN

SAMPLE ID

MW52-12

4/22/2014

(16.7-26.7) ft BGS

ug/L

VOCs

Pentachlorophenol

200 U/1 J (AB)

0.37 J/0.37 J

1.0 U/1.0 U

1.0 U/1.0 U

1.0 U/1.0 U

DATE

DEPTH

UNITS

RESULTS

NOTES:

EXCEEDS GENERIC CLEANUP CRITERIA (ab)

REFERENCES THE CRITERIA EXCEEDED.

SEE TABLE OF ANALYTICAL RESULTS FOR PART 201 CRITERIA

SCALE VERIFICATION

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

Approved

DRAWING STATUS

ANALYTICAL RESULTS COMPARED TO PART 201 CRITERIA

SPRING 2014 SEMI-ANNUAL MONITORING EVENT

FORMER GRAND RAPIDS METAL PLANT

WYOMING, MICHIGAN

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:

Reviewed By:

Date:

Scale:

Project N°:

Report N°:

Drawing N°:

J. Q.

E. B.

MAY 2014

1:250

017360-T05

MEMO072

Figure 6

017360-T05(MEMO072)GN-DE002 JUN 20/2014