



**CONESTOGA-ROVERS
& ASSOCIATES**

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January 15, 2014

Reference No. 012607

Mr. Greg Rudloff
U.S. Environmental Protection Agency, Region 5
Land and Chemicals Division
77 West Jackson Blvd., LU-9J
Chicago, Illinois 60604-3590

Dear Mr. Rudloff:

RE: 2nd Semi-Annual 2013 Progress Report
Performance-Based Administrative Order on Consent
Docket Number RCRA-05-2011-0025
13000 Eckles Road Site, Livonia, Michigan
USEPA ID No. MID 005 356 621

In accordance with the Performance-Based Administrative Order on Consent between the U.S. Environmental Protection Agency Region 5 (USEPA) and Revitalizing Auto Communities Environmental Response Trust (RACER), please find the attached progress report for the 2nd half of 2013 (July 1, 2013 through December 31, 2013).

Please contact Grant Trigger or Jeff Crum (regarding soil vapor related matters), or Dave Favero or myself (regarding system operation and groundwater matters) if you would like to discuss further. Thank you.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Christopher J. Meincke, P.E.

KTA/12/Det.

Attachment A: 2nd Semi-Annual 2013 Progress Report

cc: Christina Rose Bush, MDCH
Grant Trigger, RACER
Dave Favero, RACER
Richard Conforti, MDEQ
Jeff Crum, Hamp, Mathews & Associates
Livonia Civic Center Library

ATTACHMENT A

**2nd SEMI-ANNUAL 2013 PROGRESS REPORT
PERFORMANCE-BASED ADMINISTRATIVE ORDER ON CONSENT
13000 ECKLES ROAD SITE, LIVONIA, MICHIGAN
JULY 1, 2013 TO DECEMBER 31, 2013**

DESCRIPTION OF WORK COMPLETED

- Continued operation of the Area 1 French Drain Collection Trench and Groundwater Treatment system.
- Submitted a 1st Semi-Annual 2013 Progress Report dated July 15, 2013 to USEPA.
- Submitted a Semi-Annual Report for Special Discharge Permit SD6-94508 dated September 13, 2013 to the City of Detroit Water and Sewerage Department for the period of March 2013 through August 2013.
- Participated in a meeting with USEPA on July 26, 2013 to review and discuss the additional investigation activities at Area 1 (Former Plating Area).
- Continued evaluation of TCE short-term vapor intrusion risk to consider in finalizing the vapor intrusion investigation and/or need for long-term soil gas monitoring.
- Assisted Michigan Department of Community Health with Health Consultation report to the Agency for Toxic Substances and Disease Registry.
- Developed letter to residents, whose homes were investigated for vapor intrusion, updating them of status of U.S. EPA evaluation of vapor intrusion guidance, and possible next site activities.
- Conducted vapor intrusion mitigation performance test on the sub-slab depressurization system operating at Home 7 (Test results to be included in the final vapor intrusion investigation report to RACER).
- Installed monitoring well MW-35D-13 within Area 1 on August 22, 2013.
- Collected groundwater samples from Area 1 monitoring wells on August 26-29, 2013 as part of the approved Groundwater Monitoring Plan and additional Area 1 Characterization activities.
- Completed the Annual Groundwater Monitoring Event at AOI 31 monitoring wells on September 30 through October 4, 2013.
- Performed groundwater elevation and LNAPL thickness measurement activities at AOI 21 monitoring wells on September 30 and November 22, 2013.
- Collected groundwater samples from the Area 1 monitoring wells for the Zero Valent Iron Permeable Reactive Barrier Treatability Study on October 8, 2013.
- Installed monitoring wells MW-36D-13 and MW-37D-13 on October 10, 2013 in Area 1 as part of the pilot study for sodium dithionite injections.
- Completed a meeting/conference call with USEPA to discuss Corrective Action O&M activities, potential vapor intrusion evaluation updates, and the 2014 scope and budget request.

- Installed monitoring wells MW-38D-13, MW-39D-13, MW-40D-13 and MW-41D-13 on November 11-12, 2013 within Area 1 as part of the additional investigation/delineation activities for the Groundwater Monitoring Plan and additional Area 1 Characterization activities.
- Collected groundwater samples from Area 1 monitoring wells as part of the pre-injection groundwater monitoring for the Sodium Dithionite Pilot Study on November 7, 2013.
- Completed a Sodium Dithionite Pilot Study injection in Area 1 on November 13, 2013.
- Submitted a 2014 Annual Environmental Action Budget Request to USEPA on November 13, 2013. USEPA approved the 2014 Annual Budget Request on December 2, 2013.
- Collected groundwater samples from the Area 1 monitoring wells for the 1 and 3-week post-injection monitoring on November 20-21 and December 4, 2013.
- Collected groundwater samples from the additional Area 1 Characterization monitoring wells on November 21, 2013.
- Performed groundwater modeling activities to evaluate flow characteristics inside and outside of the Area 1 Barrier wall under pre-barrier wall conditions, current conditions, and various permeable reactive barrier alignments with the cessation of the groundwater collection and treatment system.
- Continued evaluation of potential cost savings and remedial alternatives to decrease the long-term OM&M costs associated with the Area 1 Groundwater Collection and Treatment System.

DATA COLLECTED

- The Groundwater Monitoring Plant Sample Results are presented in a memorandum included in Exhibit A to this Attachment. A sample key is presented in Table 1. Analytical results of groundwater samples collected from AOI 31 monitoring wells in September-October 2013 and Area 1 monitoring wells in August 2013 are included in attached Tables 2 and 3 and on Figures 1 and 2.
- Groundwater elevation contours from August 2013 and September 2013 measurement events are included on attached Figure 3.
- Groundwater elevation and LNAPL thickness measurements from AOI 21 monitoring wells are included on attached Figure 4.
- Laboratory Analytical Reports and Data Validation memorandum are included in the Exhibit A memorandum.
- Groundwater sample results associated with the Sodium Dithionite Pilot Study Injections (pre- and post-monitoring) have not been included in this Semi-Annual Report. They will be reported and submitted under a separate cover after results from the 3-month post-injection monitoring event (February 2014) are received.

PROBLEMS ENCOUNTERED

- Home 7 had not been able to be accessed to perform the scheduled 180-day post-installation performance monitoring of the vapor mitigation system due to foreclosure and the non-responsiveness of the foreclosing agency representatives. New homeowners were identified and system performance monitoring was completed in November 2013.

ESTIMATED PERCENT COMPLETE AND INFORMATION SUMMARY FOR SELECTED ACTIVITIES

- O&M of the Groundwater Pump & Treat System (GWTP, Barrier Wall, Cover) 11%
Continued operation of the Area 1 French Drain Collection Trench and Groundwater Treatment system. Submitted appropriate discharge reports as per the Special Discharge Permit. (Percent complete estimated as 3 years complete of 27 years estimated in the May 2010 RCES.)
- Long-Term Groundwater Monitoring 100%
Long-Term Groundwater Monitoring Plan scheduled to be complete after 5 years of continued stability/reduction in off-Site/boundary concentrations (2006 through 2010). Sampling activities are currently planned to continue pending USEPA approval to cease monitoring.
- Maintenance of the AOI 39 Dust Control Plan 100%
- Restrictive Covenants 100%
- Vapor Intrusion Investigation 75%
Undergoing RACER review and awaiting further indication from USEPA's vapor intrusion approach to address potential short-term effects from trichloroethylene (TCE) vapor intrusion.
- Installation of Vapor Mitigation System 100%
Installation completed and system updated September 2012. System performance monitoring is being implemented at pre-scheduled time periods, though some delay in the schedule occurred due to home foreclosure and achieving contact with new homeowners. Latest system performance monitoring completed November 2013.
- Operation, Maintenance and Performance Monitoring of Vapor Mitigation System on-going
- Pilot Tests - Alternative Chemicals & Target In-Situ Treatment Injection 75%
Objective was to design, implement and evaluate a pilot test to use alternative chemicals in the wastewater treatment process that could reduce treatment system operating time and/or operating costs. Also, design and implement an in-situ stabilization treatment in Area 1 that could also reduce treatment system operating time and long-term monitoring duration. The Area 1 field pilot test was conducted in November and December 2010. Based on an evaluation of the pilot test results, additional pilot study injection and monitoring activities were recommended to determine if full-scale on-site implementation would significantly reduce dissolved concentrations of chromium and nickel and allow for the groundwater treatment plant activities to be reduced or eliminated. The additional field pilot test injection was completed in November 2013 and monitoring activities are ongoing.

The groundwater treatment plant optimization activities have not been conducted due to health and safety concerns associated with handling, storing, and mixing the proposed replacement chemicals. Additional cost and remedial alternative evaluations were performed in 2013. Additional Area 1 Characterization activities have been implemented. A laboratory treatability study was performed using site groundwater to evaluate the effectiveness of utilizing a permeable reactive barrier wall (PRB) with zero valent iron (ZVI) to treat Area 1 groundwater if the existing groundwater collection and treatment system operations are ceased. Groundwater modeling activities were also performed to evaluate the optimal location and number of PRBs and the effects on groundwater flow inside and outside of the Area 1 Barrier Wall.

- Groundwater Treatment System Decommissioning & Removal 0%
Anticipated to be completed in 2037 per May 2010 RCES.
- Completion Report & Well Abandonment 0%
Anticipated to be completed in 2037 per May 201 RCES.

SUMMARY OF CONTACTS WITH INTERESTED PARTIES

- Discussions with City of Livonia and MDCH representatives regarding the results of the vapor intrusion investigation.

CHANGES IN PERSONNEL

- None

PROJECTED WORK FOR NEXT REPORTING PERIOD (JANUARY 2014 THROUGH JUNE 2014)

- Remove subslab and near-slab soil gas ports from residences
- Conduct a vapor mitigation performance evaluation and submit a summary of the vapor mitigation performance results and any system modifications, if needed, to USEPA
- Prepare and submit to USEPA a soil gas monitoring work plan to monitor potential spatial and temporal changes in the soil gas plume immediately above the water table to assure that VI pathway conditions remain not an indoor air risk
- Continued operation of the Area 1 French Drain Collection Trench and Groundwater Treatment system
- Collect 3 month post-injection groundwater samples for the Area 1 Field Pilot Study and prepare a summary document.
- Evaluate the ZVI PRB Laboratory Study and Groundwater Model Results.
- Complete quarterly groundwater elevation and LNAPL thickness measurements from AOI 21 monitoring wells

January 15, 2013

- Continue evaluation of potential cost savings and remedial alternatives to decrease the long-term OM&M costs associated with the Area 1 Groundwater Collection and Treatment System.
- Conduct meetings/information sessions with off-Site property owners related to AOI 31 groundwater and soil vapor as appropriate.
- Prepare summaries of meetings, data reviews, or conference calls with USEPA, as appropriate.
- Prepare the 1st 2014 Semi-Annual Progress Report.

Attachments:

Exhibit A - Groundwater Monitoring Plan Sample Results

EXHIBIT A

GROUNDWATER MONITORING PLAN SAMPLE RESULTS MEMORANDUM



**CONESTOGA-ROVERS
& ASSOCIATES**

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MEMORANDUM

To: Greg Rudloff, U.S. EPA REF. NO.: 012607-T01Y13

FROM: Chris Meincke/232/Det. DATE: January 14, 2014

CC: Grant Trigger, RACER
Dave Favero, RACER
Tom Kinney, CRA
Jeff Crum, HMA

RE: **Groundwater Monitoring Results, 13000 Eckles Road Site (13020)**
Livonia, Michigan

Conestoga-Rovers and Associates has prepared this memorandum to present the results of groundwater samples collected from on-site and off-site monitoring wells at the 13000 Eckles Road Site in Livonia, Michigan (Site). The groundwater sampling scope of work consisted of collecting groundwater samples from monitoring wells identified in the approved Groundwater Monitoring Plan and additional Area 1 monitoring wells proposed to the United States Environmental Protection Agency (U.S. EPA) in an email dated August 7, 2013 and approved by U.S. EPA via email on August 20, 2013 and in an email dated November 8, 2013 and approved by U.S. EPA via email on November 8, 2013. The scope of work included the installation of five new monitoring wells in the northern portion of Area 1 and the collection of groundwater samples from forty Area 1 monitoring wells and fifteen AOI 31 monitoring wells. The Area 1 groundwater samples were submitted for analysis of nickel; nickel and chromium; or nickel, chromium, and hexavalent chromium and the AOI 31 groundwater samples were submitted for the analysis of Target Compound List (TCL) volatile organic compounds (VOCs). The purpose of the groundwater sampling and analysis scope was to collect a comprehensive round of groundwater samples to confirm the extent and concentrations of groundwater impacts at Area 1 and AOI 31 and support the evaluation of in-situ treatment at Area 1 and potential vapor intrusion pathway evaluation at AOI 31. A sample key is presented in Table 1.

AOI 31 – Former Fire Training Area Results

Based on the analytical results, trichloroethene (TCE) remains the only parameter detected at concentrations greater than Michigan Department of Environmental Quality (MDEQ) Part 201 Drinking Water Criteria (DWC). TCE was identified in four monitoring wells at concentrations of 53 ug/L in MW-103S, 33 ug/L in MW-202S, 110 ug/L in MW-213S, and 50 ug/L in MW-215S. All four monitoring wells are in the center line of the plume and the results were slightly higher than the April 2012 results but similar to results over the last 4 years. 1,1,1-TCA was detected in various on-site and off-site monitoring wells but at concentrations below Part 201 criteria and at concentrations similar to previous results. Neither VC nor Cis-1,2-DCE were detected in any of the groundwater samples. Analytical results of groundwater samples are presented on figure 1 and in Table 2. Laboratory analytical reports are presented in Attachment 1. Data Validation memorandum are provided in Attachment 2.

Area 1 – Former Plating Area Results

Based on the analytical results, nickel and chromium remain at concentrations greater than MDEQ Part 201 DWC. Nickel was detected at concentrations ranging up to 400 mg/L at HA-16 and remains delineated downgradient by off-

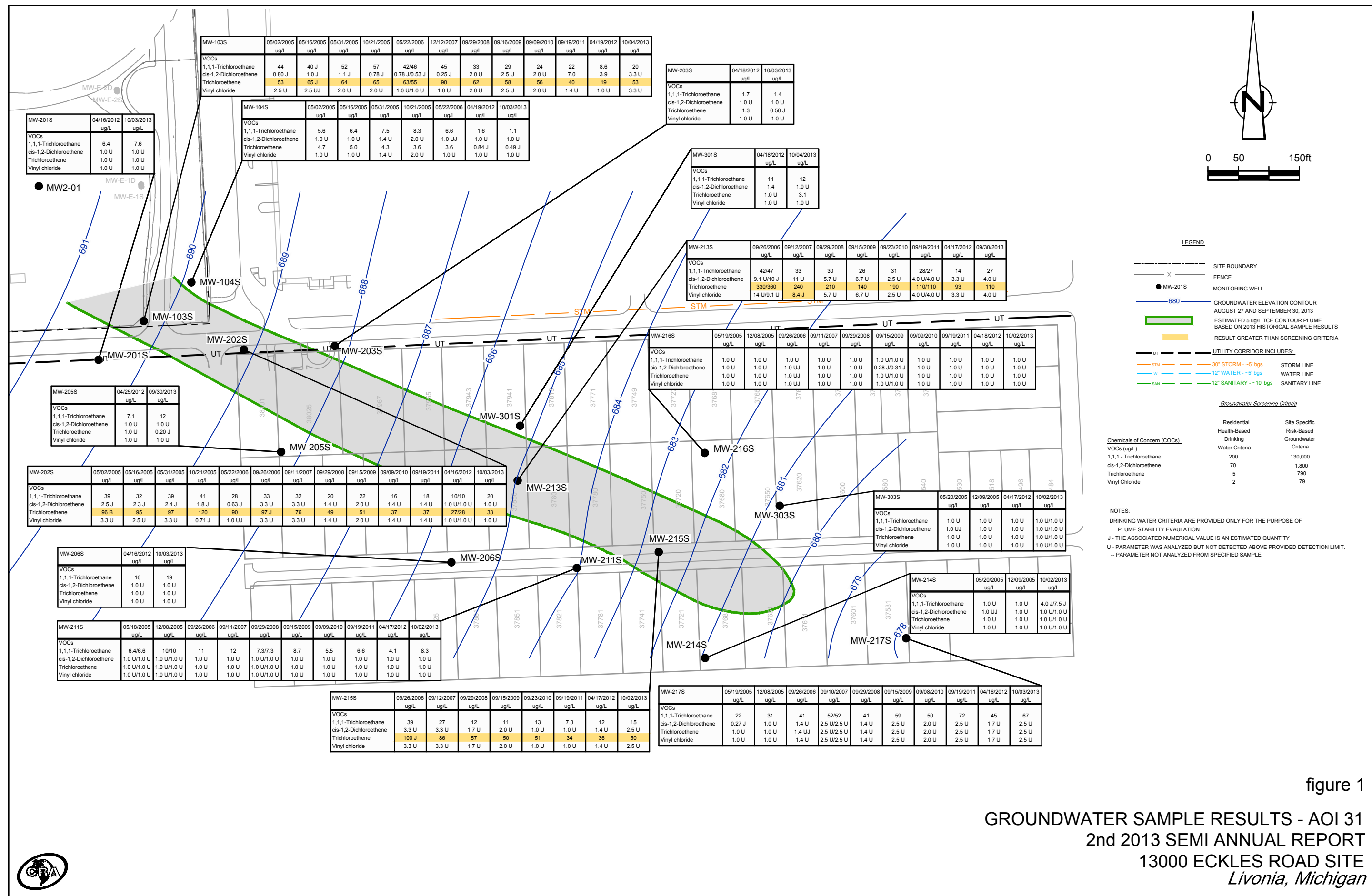
site monitoring wells south of the Area 1 Barrier Wall. Hexavalent chromium was detected at concentrations ranging up to 300 mg/L in monitoring well OW-24 and remains delineated downgradient by on-site monitoring wells located at the south property boundary. Five new monitoring wells were installed to characterize and delineate the extents of nickel and chromium-impacted groundwater in the northern portion of Area 1. MW-35D-13, MW-38D-13, MW-39D-13, MW-40D-13, and MW-41D-13 define the extents of elevated chromium and nickel concentrations in the north portion of Area 1, however, additional monitoring wells will be necessary to define the extents of exceedences of drinking water criteria. Analytical results of groundwater samples are presented on figure 2 and in Table 3. Laboratory analytical reports are presented in Attachment 1. Data Validation memorandum are provided in Attachment 2.

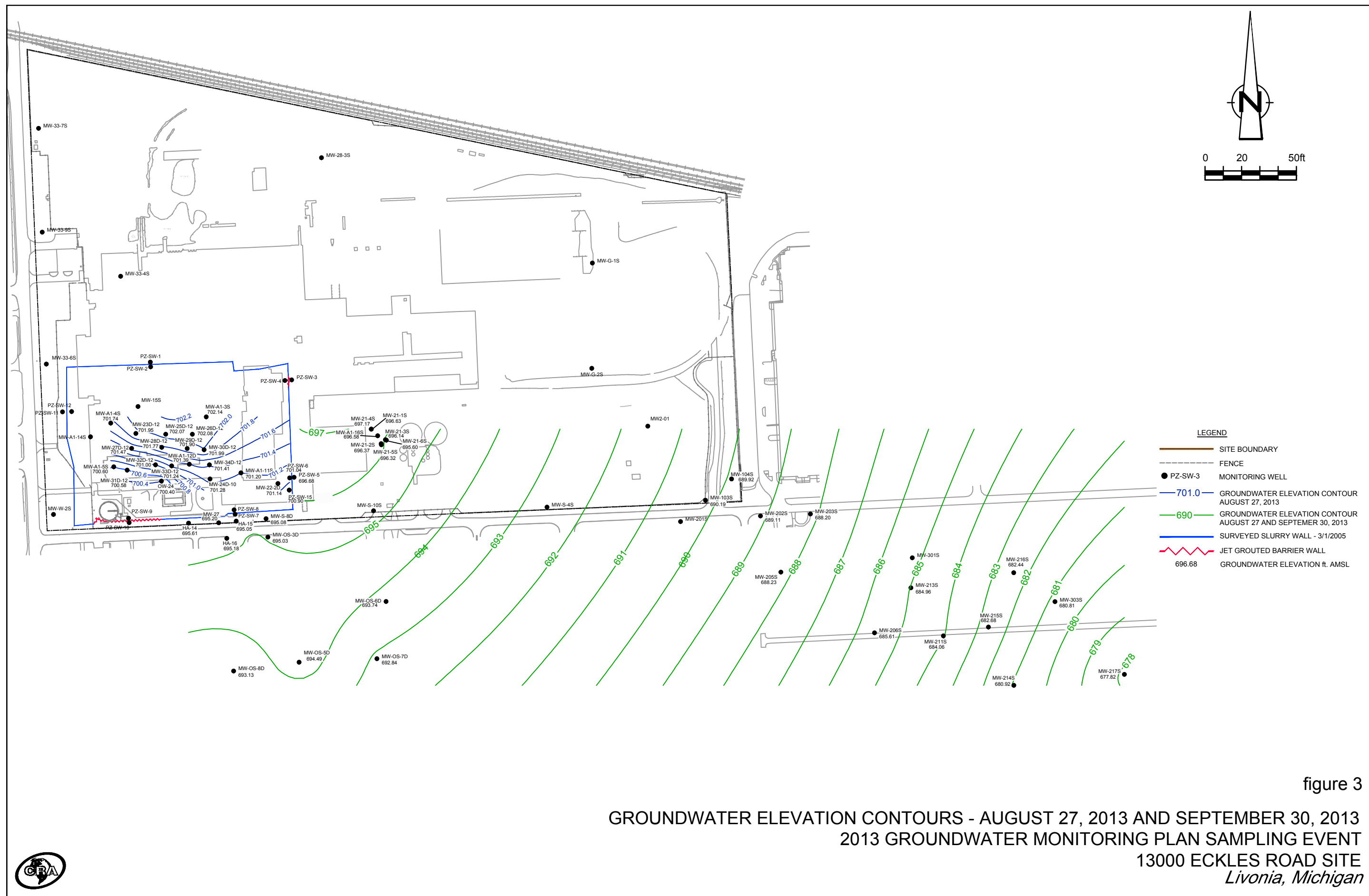
Groundwater Elevation and LNAPL Measurements

Groundwater elevation measurements were collected from on-site and off-site monitoring wells on August 12, 2013 and September 30, 2013. Groundwater elevation contours are presented on figure 3 and show groundwater flow south within the Area 1 Barrier Wall and to the southeast across the Site and to the southeast. The measured depth to groundwater within the Area 1 Barrier Wall is consistent with measurements collected during the September 2012 event. The measured depth to groundwater at AOI 31 and off-site to the southeast was approximately 2 feet deeper (farther from the ground surface) than the previous measurements conducted on April 19, 2012. Groundwater elevations appeared to have fluctuated up to 2 ft since 2006 in the vicinity of AOI 31.

Depth to product and depth to groundwater measurements were collected from AOI 21 Monitoring wells on September 30, 2013 and November 22, 2013. Product thicknesses are presented on figure 4.

Please contact Mr. Tom Kinney or myself at (734) 453-5123 with any questions or comments.





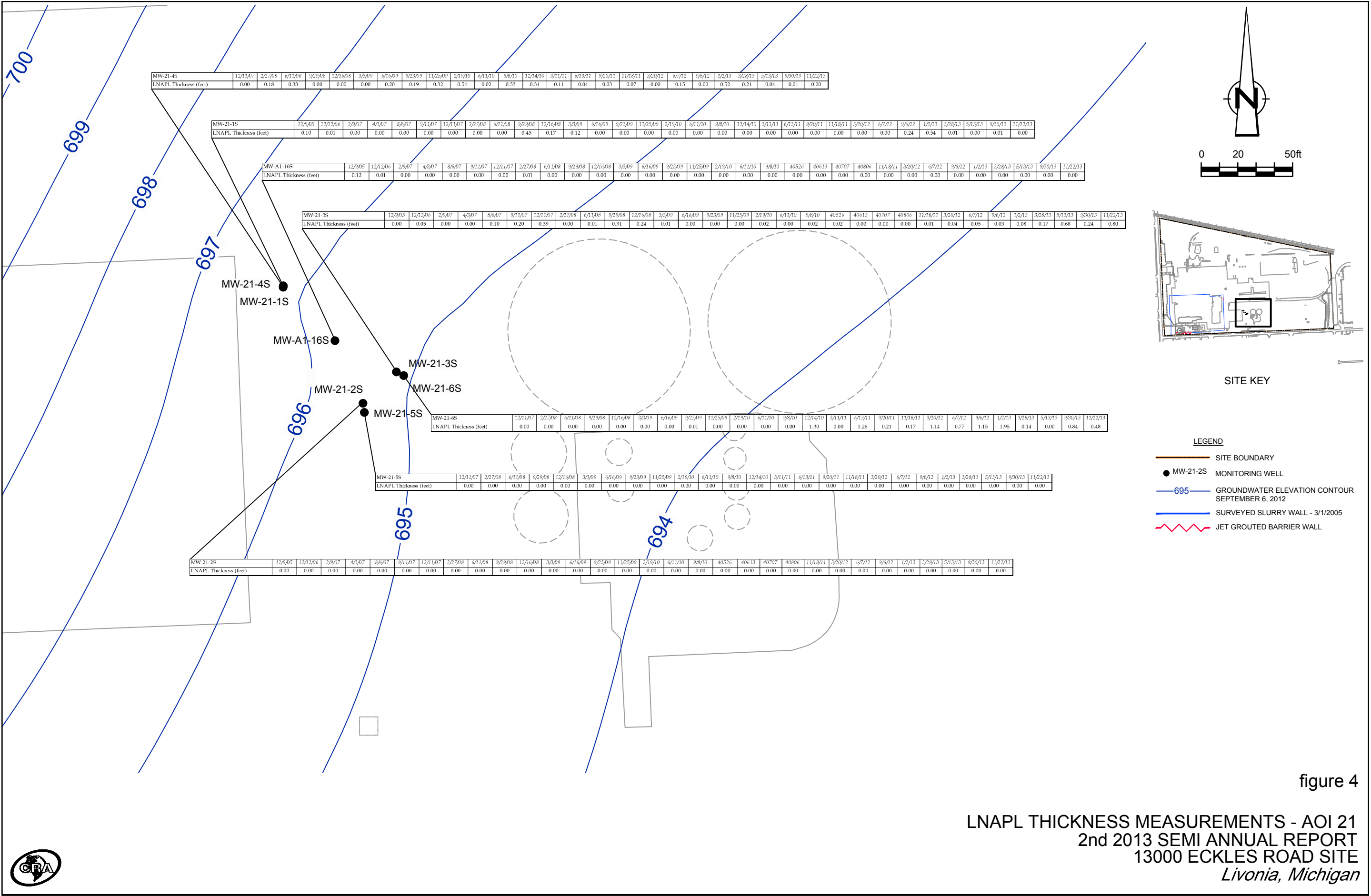


figure 4

LNAPL THICKNESS MEASUREMENTS - AOI 21
2nd 2013 SEMI ANNUAL REPORT
13000 ECKLES ROAD SITE
Livonia, Michigan



TABLE 1

January 15, 2014

Page 1 of 2

SAMPLE SUMMARY
2013 GROUNDWATER MONITORING PLAN SAMPLING EVENT
ECKLES ROAD SITE
LIVONIA, MICHIGAN

<i>Area of Interest</i>	<i>On-Site / Off-Site</i>	<i>Sample Matrix</i>	<i>Sample Location</i>	<i>Sample ID</i>	<i>Sample Date</i>	<i>Analysis</i>	<i>Notes</i>
Area 1	Off-Site	Groundwater	MW-OS-8D	GW-012607-082613-EM-001	8/26/2013	Nickel	
Area 1	Off-Site	Groundwater	MW-OS-5D	GW-012607-082613-EM-002	8/26/2013	Nickel	
Area 1	On-Site	Groundwater	OW-24	GW-012607-082613-EM-003	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-24D-10	GW-012607-082613-EM-004	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-A1-11S	GW-012607-082613-EM-005	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-A1-11D	GW-012607-082613-EM-006	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	HA-14	GW-012607-082613-EM-007	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-34D-12	GW-012607-082613-EM-008	8/26/2013	Chromium, Chromium VI, Nickel	
Area 1	Off-Site	Groundwater	MW-OS-3D	GW-012607-082713-EM-009	8/27/2013	Chromium, Nickel	
Area 1	Off-Site	Groundwater	HA-16	GW-012607-082713-EM-010	8/27/2013	Chromium, Nickel	
Area 1	Off-Site	Groundwater	MW-OS-6D	GW-012607-082713-EM-011	8/27/2013	Nickel	
Area 1	On-Site	Groundwater	MW-A1-12D	GW-012607-082713-EM-012	8/27/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-33D-12	GW-012607-082713-EM-013	8/27/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-32D-12	GW-012607-082713-EM-014	8/27/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-31D-12	GW-012607-082713-EM-015	8/27/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-31D-12	GW-012607-082713-EM-016	8/27/2013	Chromium, Chromium VI, Nickel	Duplicate (015)
Area 1	On-Site	Groundwater	MW-A1-5S	GW-012607-082713-EM-017	8/27/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-27D-12	GW-012607-082813-EM-018	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-27D-12	GW-012607-082813-EM-019	8/28/2013	Chromium, Chromium VI, Nickel	Duplicate (018)
Area 1	On-Site	Groundwater	MW-28D-12	GW-012607-082813-EM-020	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-23D-12	GW-012607-082813-EM-021	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-25D-12	GW-012607-082813-EM-022	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-35D-13	GW-012607-082813-EM-023	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-29D-12	GW-012607-082813-EM-024	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-30D-12	GW-012607-082813-EM-025	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-A1-3S	GW-012607-082813-EM-026	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-A1-4S	GW-012607-082813-EM-027	8/28/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-22-2D	GW-012607-082813-EM-028	8/28/2013	Chromium, Nickel	
Area 1	Off-Site	Groundwater	MW-OS-7D	GW-012607-082913-EM-029	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	MW-S-8S	GW-012607-082913-EM-030	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	MW-S-8D	GW-012607-082913-EM-031	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	MW-S-8D	GW-012607-082913-EM-032	8/29/2013	Chromium, Nickel	Duplicate (031)
Area 1	On-Site	Groundwater	MW-S-3S	GW-012607-082913-EM-033	8/29/2013	Chromium, Nickel	

TABLE 1

January 15, 2014

Page 2 of 2

SAMPLE SUMMARY
2013 GROUNDWATER MONITORING PLAN SAMPLING EVENT
ECKLES ROAD SITE
LIVONIA, MICHIGAN

<i>Area of Interest</i>	<i>On-Site / Off-Site</i>	<i>Sample Matrix</i>	<i>Sample Location</i>	<i>Sample ID</i>	<i>Sample Date</i>	<i>Analysis</i>	<i>Notes</i>
Area 1	On-Site	Groundwater	HA-15	GW-012607-082913-EM-034	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	MW-26D-12	GW-012607-082913-EM-035	8/29/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-27	GW-012607-082913-EM-036	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	MW-S-7S	GW-012607-082913-EM-037	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	PZ-SW-15	GW-012607-082913-EM-038	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	PZ-SW-6	GW-012607-082913-EM-039	8/29/2013	Chromium, Nickel	
Area 1	On-Site	Groundwater	PZ-SW-5	GW-012607-082913-EM-040	8/29/2013	Chromium, Nickel	
AOI 31	Off-Site	Groundwater	MW-205S	GW-12607-093013-JY-002	9/30/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-213S	GW-12607-093013-JY-003	9/30/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-303S	GW-12607-100213-JY-004	10/2/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-303S	GW-12607-100213-JY-005	10/2/2013	VOCs	Duplicate (004)
AOI 31	Off-Site	Groundwater	MW-216S	GW-12607-100213-JY-006	10/2/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-215S	GW-12607-100213-JY-007	10/2/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-214S	GW-12607-100213-JY-008	10/2/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-214S	GW-12607-100213-JY-009	10/2/2013	VOCs	Duplicate (008)
AOI 31	Off-Site	Groundwater	MW-211S	GW-12607-100213-JY-010	10/2/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-217S	GW-12607-100313-JY-011	10/3/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-206S	GW-12607-100313-JY-012	10/3/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-203S	GW-12607-100313-JY-013	10/3/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-202S	GW-12607-100313-JY-014	10/3/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-201S	GW-12607-100313-JY-015	10/3/2013	VOCs	
AOI 31	On-Site	Groundwater	MW-104S	GW-12607-100313-JY-016	10/3/2013	VOCs	
AOI 31	On-Site	Groundwater	MW-103S	GW-12607-100413-JY-017	10/4/2013	VOCs	
AOI 31	Off-Site	Groundwater	MW-301S	GW-12607-100413-JY-018	10/4/2013	VOCs	
Area 1	On-Site	Groundwater	MW-40D-13	GW-12607-112113-SK-008	11/21/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-39D-13	GW-12607-112113-SK-009	11/21/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-39D-13	GW-12607-112113-SK-010	11/21/2013	Chromium, Chromium VI, Nickel	Duplicate (009)
Area 1	On-Site	Groundwater	MW-38D-13	GW-12607-112113-SK-011	11/21/2013	Chromium, Chromium VI, Nickel	
Area 1	On-Site	Groundwater	MW-41D-13	GW-12607-112113-SK-012	11/21/2013	Chromium, Chromium VI, Nickel	

Notes:

VOCs - Target Compound List Volatile Organic Compounds

TABLE 2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES

AREA OF INTEREST 31 - FORMER FIRE TRAINING AREA

ECKLES ROAD SITE

LIVONIA, MICHIGAN

<i>On-Site:</i>		<i>On-Site</i>	<i>On-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>
<i>Sample Location:</i>		<i>MW-103S</i>	<i>MW-104S</i>	<i>MW-201S</i>	<i>MW-202S</i>	<i>MW-203S</i>	<i>MW-205S</i>	<i>MW-206S</i>	<i>MW-211S</i>
<i>Sample ID:</i>		<i>GW-12607-100413-JY-017</i>	<i>GW-12607-100313-JY-016</i>	<i>GW-12607-100313-JY-015</i>	<i>GW-12607-100313-JY-014</i>	<i>GW-12607-100313-JY-013</i>	<i>GW-12607-093013-JY-002</i>	<i>GW-12607-100313-JY-012</i>	<i>GW-12607-100213-JY-010</i>
<i>Sample Date:</i>		<i>10/4/2013</i>	<i>10/3/2013</i>	<i>10/3/2013</i>	<i>10/3/2013</i>	<i>10/3/2013</i>	<i>9/30/2013</i>	<i>10/3/2013</i>	<i>10/2/2013</i>
<i>Parameters</i>	<i>Units</i>								
VOCs									
1,1,1-Trichloroethane	ug/L	20	1.1	7.6	20	1.4	12	19	8.3
1,1,2,2-Tetrachloroethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	3.3 U	1.0 U	0.88 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	ug/L	3.3 U	1.0 U	1.0 U	0.33 J	1.0 U	0.38 J	0.38 J	0.22 J
1,2,4-Trichlorobenzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	3.3 U	1.0 U	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	33 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	33 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	33 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	ug/L	33 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	ug/L	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl acetate	ug/L	33 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L	3.3 U	1.0 U	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	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	53	0.49 J	1.0 U	33	0.50 J	0.20 J	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Field Parameters									
Conductivity, field	umhos/cm	0.617	0.575	0.68	1.69	1.49	1.97	2.63	0.825
Dissolved oxygen (DO), field	ug/L	430	700	420	2660	2720	3380	1260	2990
Oxidation reduction potential (ORP), field	millivolts	60	19	-3	72	75	-55	86	56
pH, field	S.U.	7.2	7.58	7.51	7.54	7.55	7.38	7.28	7.56
Temperature, field	Deg C	13.51	14.89	15.7	18.33	18.82	15.22	15.8	17.89
Turbidity, field	NTU	0.97	2.59	0.08	0.27	0.12	1.05	2.88	0.57

Notes:

U - Not detected at the associated reporting limit.

J - Estimated concentration.

TABLE 2

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA OF INTEREST 31 - FORMER FIRE TRAINING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

<i>On-Site:</i>		<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>Off-Site</i>	<i>NA</i>
<i>Sample Location:</i>		<i>MW-214S</i>	<i>MW-214S</i>	<i>MW-215S</i>	<i>MW-216S</i>	<i>MW-217S</i>	<i>MW-301S</i>	<i>MW-303S</i>	<i>MW-303S</i>	<i>Trip Blank</i>
<i>Sample ID:</i>		<i>GW-12607-100213-JY-008</i>	<i>GW-12607-100213-JY-009</i>	<i>GW-12607-100213-JY-007</i>	<i>GW-12607-100213-JY-006</i>	<i>GW-12607-100313-JY-011</i>	<i>GW-12607-100413-JY-018</i>	<i>GW-12607-100213-JY-004</i>	<i>GW-12607-100213-JY-005</i>	<i>TB-12607-093013-JY-001</i>
<i>Sample Date:</i>		<i>10/2/2013</i>	<i>10/2/2013</i>	<i>10/2/2013</i>	<i>10/2/2013</i>	<i>10/3/2013</i>	<i>10/4/2013</i>	<i>10/2/2013</i>	<i>10/2/2013</i>	<i>9/30/2013</i>
			<i>(Duplicate)</i>						<i>(Duplicate)</i>	
<i>Parameters</i>	<i>Units</i>									
VOCs										
1,1,1-Trichloroethane	ug/L	4.0 J	7.5 J	15	1.0 U	67	12	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 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	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	0.35 J	0.32 J	0.32 J	1.0 U
1,1-Dichloroethene	ug/L	1.0 U	1.0 U	0.57 J	1.0 U	2.6	0.29 J	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	10 U	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
2-Hexanone	ug/L	10 U	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	10 U	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
Acetone	ug/L	10 U	10 U	25 U	10 U	25 U	10 U	10 U	10 U	6.1 J
Benzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	ug/L	1.0 U	1.0 U	0.60 J	0.33 J	1.0 J	1.0 U	1.0 U	0.33 J	1.0 U
Chloromethane (Methyl chloride)	ug/L	0.48 J	0.39 J	2.5 U	1.9	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 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	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	ug/L	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl acetate	ug/L	10 U	10 U	25 U	10 U	25 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 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	2.5 U	1.0 U	2.5 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	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	ug/L	1.0 U	1.0 U	50	1.0 U	2.5 U	3.1	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	ug/L	1.0 U	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	ug/L	2.0 U	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Field Parameters										
Conductivity, field	umhos/cm	1.166	1.166	1.023	0.768	0.859	0.722	1.036	1.036	--
Dissolved oxygen (DO), field	ug/L	1160	1160	2510	1970	1980	490	660	660	--
Oxidation reduction potential (ORP), field	millivolts	-17	-17	64	69	109	-92	80	80	--
pH, field	S.U.	7.46	7.46	7.51	7.66	7.53	7.3	7.62	7.62	--
Temperature, field	Deg C	15.67	15.67	16.81	13.79	16.02	16.96	16.01	16.01	--
Turbidity, field	NTU	1	1	4.81	1.99	0.37	2.6	5.23	5.23	--

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:	HA-14	HA-15	HA-16	MW-23D-12	MW-24D-10	MW-25D-12	MW-26D-12
Sample ID:	GW-12607-082613-EM-007	GW-12607-082913-EM-034	GW-12607-082713-EM-010	GW-12607-082813-EM-021	GW-12607-082613-EM-004	GW-12607-082813-EM-022	GW-12607-082913-EM-035
Sample Date:	8/26/2013	8/29/2013	8/27/2013	8/28/2013	8/26/2013	8/28/2013	8/29/2013
Sample Type							

Parameters	Units							
Metals								
Chromium	mg/L	0.005 U	0.005 U	0.005 U	180	0.012 U	2.6	0.005 U
Chromium III (trivalent)	mg/L	0.010 U	--	--	8.2	0.0076 J	0.21	0.010 U
Chromium VI (hexavalent)	mg/L	0.010 U	--	--	170	0.010 U	2.4	0.010 U
Nickel	mg/L	0.23	16	400	0.16	14	2.1	28
Field Parameters								
Conductivity, field	umhos/cm	0.76	1.346	5.06	1.58	1.59	1.7	2.3
Dissolved oxygen (DO), field	ug/L	20	110	440	10	220	10	10
Oxidation reduction potential (ORP), fiel	millivolts	-35	-101	-47	186	-23	113	-68
pH, field	S.U.	7.49	6.97	6.49	7.14	7.07	7.35	6.98
Temperature, field	Deg C	20.19	16.29	15.99	20.67	19.13	19.13	20.15
Turbidity, field	NTU	6.42	0.79	0.29	4.89	4.9	1.49	1.23

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:	MW-27	MW-27D-12	MW-27D-12	MW-28D-12	MW-29D-12	MW-30D-12	MW-31D-12
Sample ID:	GW-12607-082913-EM-036	GW-12607-082813-EM-018	GW-12607-082813-EM-019	GW-12607-082813-EM-020	GW-12607-082813-EM-024	GW-12607-082813-EM-025	GW-12607-082713-EM-015
Sample Date:	8/29/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/27/2013
Sample Type			(Duplicate)				

Parameters	Units							
Metals								
Chromium	mg/L	0.005 U	180	180	30	0.025	0.0029 J	12
Chromium III (trivalent)	mg/L	--	14	8.1	0.010 U	0.014	0.010 U	0.42 J
Chromium VI (hexavalent)	mg/L	--	170	170	31	0.011	0.0054 J	12
Nickel	mg/L	9.9	0.94	0.92	0.43	6.4	200	0.049
Field Parameters								
Conductivity, field	umhos/cm	0.959	1.85	1.85	1.91	2.99	3.19	1.034
Dissolved oxygen (DO), field	ug/L	160	220	220	120	90	120	10
Oxidation reduction potential (ORP), fiel	millivolts	-97	127	127	66	-24	-59	109
pH, field	S.U.	7.08	6.87	6.87	7	6.62	6.37	7.71
Temperature, field	Deg C	15.81	19.45	19.45	20.38	19.3	19.63	17.68
Turbidity, field	NTU	0.82	0.81	0.81	0.58	0.65	0.28	1.13

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:		MW-31D-12	MW-32D-12	MW-33D-12	MW-34D-12	MW-35D-13	MW-OS-3D	MW-OS-5D
Sample ID:		GW-12607-082713-EM-016	GW-12607-082713-EM-014	GW-12607-082713-EM-013	GW-12607-082613-EM-008	GW-12607-082813-EM-023	GW-12607-082713-EM-009	GW-12607-082613-EM-002
Sample Date:		8/27/2013	8/27/2013	8/27/2013	8/26/2013	8/28/2013	8/27/2013	8/26/2013
Sample Type		(Duplicate)						
Parameters	Units							
Metals								
Chromium	mg/L	11	110	130	0.005 U	0.017	0.005 U	--
Chromium III (trivalent)	mg/L	0.010 U	0.92	0.010 U	0.010 U	0.014	--	--
Chromium VI (hexavalent)	mg/L	12	110	140	0.010 U	0.0028 J	--	--
Nickel	mg/L	0.05	1.2	6.4	82	8.9	8.4	0.011 J
Field Parameters								
Conductivity, field	umhos/cm	1.034	2.19	2.67	1.75	0.692	0.972	3.61
Dissolved oxygen (DO), field	ug/L	10	160	20	20	10	140	210
Oxidation reduction potential (ORP), fiel	millivolts	109	168	177	-34	77	-80	-85
pH, field	S.U.	7.71	7.1	6.91	6.91	7.57	7.26	6.81
Temperature, field	Deg C	17.68	18.53	18.34	20.01	18.33	17.37	17.8
Turbidity, field	NTU	1.13	0.71	0.38	6.01	--	2.91	5.13

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:		MW-OS-6D	MW-OS-7D	MW-OS-8D	MW-S-3S	MW-S-8D	MW-S-8D	MW-S-8S
Sample ID:		GW-12607-082713-EM-011	GW-12607-082913-EM-029	GW-12607-082613-EM-001	GW-12607-082913-EM-033	GW-12607-082913-EM-031	GW-12607-082913-EM-032	GW-12607-082913-EM-030
Sample Date:		8/27/2013	8/29/2013	8/26/2013	8/29/2013	8/29/2013	8/29/2013	8/29/2013
Sample Type							(Duplicate)	
Parameters	Units							
Metals								
Chromium	mg/L	--	0.005 U	--	0.005 U	0.005 U	0.005 U	0.005 U
Chromium III (trivalent)	mg/L	--	--	--	--	--	--	--
Chromium VI (hexavalent)	mg/L	--	--	--	--	--	--	--
Nickel	mg/L	0.014 J	0.015 J	0.0079 J	0.37	8.4	8.6	0.02 U
Field Parameters								
Conductivity, field	umhos/cm	2	2.62	2	0.767	0.987	0.987	0.686
Dissolved oxygen (DO), field	ug/L	160	210	140	810	130	130	1920
Oxidation reduction potential (ORP), fiel	millivolts	-140	-97	-32	-20	-111	-111	44
pH, field	S.U.	7.5	6.94	7.07	7.13	7.1	7.1	7.25
Temperature, field	Deg C	16.24	14.92	14.01	17.79	15.93	15.93	16.58
Turbidity, field	NTU	4.98	0.89	5.02	0.8	2.12	2.12	1.39

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:	OW-24	PZ-SW-5	PZ-SW-6	PZ-SW-15	MW-A1-3S	MW-A1-4S	MW-A1-5S
Sample ID:	GW-12607-082613-EM-003	GW-12607-082913-EM-040	GW-12607-082913-EM-039	GW-12607-082913-EM-038	GW-12607-082813-EM-026	GW-12607-082813-EM-027	GW-12607-082713-EM-017
Sample Date:	8/26/2013	8/29/2013	8/29/2013	8/29/2013	8/28/2013	8/28/2013	8/27/2013
Sample Type							

Parameters	Units							
Metals								
Chromium	mg/L	300	0.005 U	0.005 U	0.005 U	0.018	1.9	2.6
Chromium III (trivalent)	mg/L	0.010 U	--	--	--	0.018	0.64	0.010 U
Chromium VI (hexavalent)	mg/L	310	--	--	--	0.010 U	1.2	2.9
Nickel	mg/L	16	0.0061 J	0.02 U	0.47	0.074	0.017 J	0.024
Field Parameters								
Conductivity, field	umhos/cm	4.01	1.135	0.763	0.833	1.212	0.614	0.531
Dissolved oxygen (DO), field	ug/L	400	90	130	10	570	340	30
Oxidation reduction potential (ORP), fiel	millivolts	201	-134	-260	66	7	29	49
pH, field	S.U.	6.79	6.86	7.05	7.53	8.19	7.06	7.65
Temperature, field	Deg C	19.3	18.37	20.35	21.86	21.14	19.71	20.72
Turbidity, field	NTU	3.9	0.81	1.21	5.45	38.2	2.21	4.09

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location:	MW-A1-11D	MW-A1-11S	MW-A1-12D	MW-22-2D	MW-38D-13	MW-39D-13	MW-39D-13
Sample ID:	GW-12607-082613-EM-006	GW-12607-082613-EM-005	GW-12607-082713-EM-012	GW-12607-082813-EM-028	GW-12607-112113-SK-011	GW-12607-112113-SK-009	GW-12607-112113-SK-010
Sample Date:	8/26/2013	8/26/2013	8/27/2013	8/28/2013	11/21/2013	11/21/2013	11/21/2013
Sample Type							(Duplicate)

Parameters	Units							
Metals								
Chromium	mg/L	0.005 U	0.0057 U	10	0.005 U	0.0031 J	0.0025 J	0.005 U
Chromium III (trivalent)	mg/L	0.010 U	0.010 U	0.010 U	--	0.010 U	0.010 U	0.010 U
Chromium VI (hexavalent)	mg/L	0.014 U	0.010 U	12	--	0.010 U	0.010 U	0.010 U
Nickel	mg/L	63	0.3	2.6	14	0.017 J	0.12	0.12
Field Parameters								
Conductivity, field	umhos/cm	1.268	0.83	1.49	2.38	1.44	0.873	0.873
Dissolved oxygen (DO), field	ug/L	20	30	180	90	230	210	210
Oxidation reduction potential (ORP), fiel	millivolts	-85	-132	15	-121	-125.8	-136.5	-136.5
pH, field	S.U.	7.23	7.69	7.23	7.01	7.03	7.49	7.49
Temperature, field	Deg C	19.09	21	19.89	18.79	13.89	14.99	14.99
Turbidity, field	NTU	16.2	42.9	3.4	3.92	3	5.43	5.43

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

TABLE 3

ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
AREA 1 - FORMER PLATING AREA
ECKLES ROAD SITE
LIVONIA, MICHIGAN

Sample Location: MW-40D-13 MW-41D-13
Sample ID: GW-12607-112113-SK-008 GW-12607-112113-SK-012
Sample Date: 11/21/2013 11/21/2013
Sample Type:

Parameters	Units		
Metals			
Chromium	mg/L	0.005	0.006
Chromium III (trivalent)	mg/L	0.0050 J	0.010 U
Chromium VI (hexavalent)	mg/L	0.010 U	0.0066 J
Nickel	mg/L	3.8	0.033
Field Parameters			
Conductivity, field	umhos/cm	1.776	1.965
Dissolved oxygen (DO), field	ug/L	210	200
Oxidation reduction potential (ORP), fiel	millivolts	-67.6	-100.6
pH, field	S.U.	7.16	7.06
Temperature, field	Deg C	15.08	13.26
Turbidity, field	NTU	8.33	3.26

Notes:
U - Not detected at the associated reporting limit.
J - Estimated concentration.
UJ - Not detected; associated reporting limit is estimated.

ATTACHMENT 1

LABORATORY ANALYTICAL REPORTS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28353-1

Client Project/Site: 12607-T01-013, RACER Eckles Rd

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman



Authorized for release by:

9/4/2013 9:40:14 AM

Denise Heckler, Project Manager II

denise.heckler@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	9
Client Sample Results	10
QC Association Summary	24
QC Sample Results	26
Lab Chronicle	27
Certification Summary	29
Chain of Custody	30



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Job ID: 240-28353-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607-T01-013, RACER Eckles Rd

Report Number: 240-28353-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/27/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.5 C.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-12607-082613-EM-001 (240-28353-1), GW-12607-082613-EM-002 (240-28353-2), GW-12607-082613-EM-003 (240-28353-3), GW-12607-082613-EM-004 (240-28353-4), GW-12607-082613-EM-005 (240-28353-5), GW-12607-082613-EM-006 (240-28353-6), GW-12607-082613-EM-007 (240-28353-7) and GW-12607-082613-EM-008 (240-28353-8) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 08/28/2013 and analyzed on 08/29/2013 and 08/30/2013.

Chromium was detected in method blank MB 240-99332/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples GW-12607-082613-EM-003 (240-28353-3)[20X], GW-12607-082613-EM-006 (240-28353-6)[5X] and GW-12607-082613-EM-008 (240-28353-8)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Job ID: 240-28353-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples GW-12607-082613-EM-003 (240-28353-3), GW-12607-082613-EM-004 (240-28353-4), GW-12607-082613-EM-005 (240-28353-5), GW-12607-082613-EM-006 (240-28353-6), GW-12607-082613-EM-007 (240-28353-7) and GW-12607-082613-EM-008 (240-28353-8) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 08/27/2013.

Cr (VI) was detected in method blank MB 240-99164/3 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Sample GW-12607-082613-EM-003 (240-28353-3)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the hexavalent chromium analysis.

All other quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples GW-12607-082613-EM-003 (240-28353-3), GW-12607-082613-EM-004 (240-28353-4), GW-12607-082613-EM-005 (240-28353-5), GW-12607-082613-EM-006 (240-28353-6), GW-12607-082613-EM-007 (240-28353-7) and GW-12607-082613-EM-008 (240-28353-8) were analyzed for trivalent chromium in accordance with EPA SW-846 Method 7196A_CR3. The samples were analyzed on 08/28/2013.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-28353-1	GW-12607-082613-EM-001	Water	08/26/13 11:25	08/27/13 09:20
240-28353-2	GW-12607-082613-EM-002	Water	08/26/13 10:40	08/27/13 09:20
240-28353-3	GW-12607-082613-EM-003	Water	08/26/13 12:45	08/27/13 09:20
240-28353-4	GW-12607-082613-EM-004	Water	08/26/13 13:50	08/27/13 09:20
240-28353-5	GW-12607-082613-EM-005	Water	08/26/13 14:30	08/27/13 09:20
240-28353-6	GW-12607-082613-EM-006	Water	08/26/13 15:05	08/27/13 09:20
240-28353-7	GW-12607-082613-EM-007	Water	08/26/13 16:30	08/27/13 09:20
240-28353-8	GW-12607-082613-EM-008	Water	08/26/13 17:20	08/27/13 09:20

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Client Sample ID: GW-12607-082613-EM-001

Lab Sample ID: 240-28353-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	7.9	J	20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082613-EM-002

Lab Sample ID: 240-28353-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	11	J	20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082613-EM-003

Lab Sample ID: 240-28353-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	300000	B	100	44	ug/L	20		6010B	Total Recoverable
Nickel	16000		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	310	B	10	2.0	mg/L	1000		7196A	Total/NA

Client Sample ID: GW-12607-082613-EM-004

Lab Sample ID: 240-28353-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	12	B	5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	14000		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	0.0041	J B	0.010	0.0020	mg/L	1		7196A	Total/NA
Cr (III)	0.0076	J	0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082613-EM-005

Lab Sample ID: 240-28353-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	5.7	B	5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	300		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	0.0066	J B	0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082613-EM-006

Lab Sample ID: 240-28353-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	63000		100	16	ug/L	5		6010B	Total Recoverable
Cr (VI)	0.014	B	0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082613-EM-007

Lab Sample ID: 240-28353-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	230		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	0.0041	J B	0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082613-EM-008

Lab Sample ID: 240-28353-8

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Client Sample ID: GW-12607-082613-EM-008 (Continued)

Lab Sample ID: 240-28353-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	82000		100	16	ug/L	5		6010B	Total
Cr (VI)	0.0028	J B	0.010	0.0020	mg/L	1		7196A	Recoverable Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-001

Date Collected: 08/26/13 11:25

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	7.9	J	20	3.2	ug/L		08/28/13 10:22	08/29/13 20:23	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-002

Date Collected: 08/26/13 10:40

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	11	J	20	3.2	ug/L		08/28/13 10:22	08/29/13 20:27	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-003

Date Collected: 08/26/13 12:45

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	300000	B	100	44	ug/L		08/28/13 10:22	08/30/13 15:45	20
Nickel	16000		20	3.2	ug/L		08/28/13 10:22	08/29/13 20:31	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-004

Date Collected: 08/26/13 13:50

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	12	B	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 20:39	1
Nickel	14000		20	3.2	ug/L		08/28/13 10:22	08/29/13 20:39	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-005

Date Collected: 08/26/13 14:30

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.7	B	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 20:51	1
Nickel	300		20	3.2	ug/L		08/28/13 10:22	08/29/13 20:51	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-006

Date Collected: 08/26/13 15:05

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 20:55	1
Nickel	63000		100	16	ug/L		08/28/13 10:22	08/30/13 15:49	5

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-007

Date Collected: 08/26/13 16:30

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 20:59	1
Nickel	230		20	3.2	ug/L		08/28/13 10:22	08/29/13 20:59	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082613-EM-008

Date Collected: 08/26/13 17:20

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 21:03	1
Nickel	82000		100	16	ug/L		08/28/13 10:22	08/30/13 15:53	5

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-003

Date Collected: 08/26/13 12:45

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	310	B	10	2.0	mg/L			08/27/13 12:14	1000
Cr (III)	0.010	U	0.010	0.0050	mg/L			08/28/13 13:44	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-004

Date Collected: 08/26/13 13:50

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0041	J B	0.010	0.0020	mg/L			08/27/13 12:15	1
Cr (III)	0.0076	J	0.010	0.0050	mg/L			08/28/13 13:44	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-005

Date Collected: 08/26/13 14:30

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0066	J B	0.010	0.0020	mg/L			08/27/13 12:18	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			08/28/13 13:44	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-006

Date Collected: 08/26/13 15:05

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.014	B	0.010	0.0020	mg/L			08/27/13 12:21	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			08/28/13 13:44	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-007

Date Collected: 08/26/13 16:30

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0041	J B	0.010	0.0020	mg/L			08/27/13 12:22	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			08/28/13 13:44	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry

Client Sample ID: GW-12607-082613-EM-008

Date Collected: 08/26/13 17:20

Date Received: 08/27/13 09:20

Lab Sample ID: 240-28353-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0028	J B	0.010	0.0020	mg/L			08/27/13 12:23	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			08/28/13 13:44	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Metals

Prep Batch: 99332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-1	GW-12607-082613-EM-001	Total Recoverable	Water	3005A	
240-28353-2	GW-12607-082613-EM-002	Total Recoverable	Water	3005A	
240-28353-3	GW-12607-082613-EM-003	Total Recoverable	Water	3005A	
240-28353-4	GW-12607-082613-EM-004	Total Recoverable	Water	3005A	
240-28353-5	GW-12607-082613-EM-005	Total Recoverable	Water	3005A	
240-28353-6	GW-12607-082613-EM-006	Total Recoverable	Water	3005A	
240-28353-7	GW-12607-082613-EM-007	Total Recoverable	Water	3005A	
240-28353-8	GW-12607-082613-EM-008	Total Recoverable	Water	3005A	
LCS 240-99332/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-99332/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 99547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-1	GW-12607-082613-EM-001	Total Recoverable	Water	6010B	99332
240-28353-2	GW-12607-082613-EM-002	Total Recoverable	Water	6010B	99332
240-28353-3	GW-12607-082613-EM-003	Total Recoverable	Water	6010B	99332
240-28353-4	GW-12607-082613-EM-004	Total Recoverable	Water	6010B	99332
240-28353-5	GW-12607-082613-EM-005	Total Recoverable	Water	6010B	99332
240-28353-6	GW-12607-082613-EM-006	Total Recoverable	Water	6010B	99332
240-28353-7	GW-12607-082613-EM-007	Total Recoverable	Water	6010B	99332
240-28353-8	GW-12607-082613-EM-008	Total Recoverable	Water	6010B	99332
LCS 240-99332/2-A	Lab Control Sample	Total Recoverable	Water	6010B	99332
MB 240-99332/1-A	Method Blank	Total Recoverable	Water	6010B	99332

Analysis Batch: 99875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-3	GW-12607-082613-EM-003	Total Recoverable	Water	6010B	99332
240-28353-6	GW-12607-082613-EM-006	Total Recoverable	Water	6010B	99332
240-28353-8	GW-12607-082613-EM-008	Total Recoverable	Water	6010B	99332

General Chemistry

Analysis Batch: 99164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-3	GW-12607-082613-EM-003	Total/NA	Water	7196A	
240-28353-4	GW-12607-082613-EM-004	Total/NA	Water	7196A	
240-28353-4 MS	GW-12607-082613-EM-004	Total/NA	Water	7196A	
240-28353-4 MSD	GW-12607-082613-EM-004	Total/NA	Water	7196A	
240-28353-5	GW-12607-082613-EM-005	Total/NA	Water	7196A	
240-28353-6	GW-12607-082613-EM-006	Total/NA	Water	7196A	
240-28353-7	GW-12607-082613-EM-007	Total/NA	Water	7196A	
240-28353-8	GW-12607-082613-EM-008	Total/NA	Water	7196A	
LCS 240-99164/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-99164/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 99393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-3	GW-12607-082613-EM-003	Total/NA	Water	7196A	
240-28353-4	GW-12607-082613-EM-004	Total/NA	Water	7196A	
240-28353-5	GW-12607-082613-EM-005	Total/NA	Water	7196A	

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QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

General Chemistry (Continued)

Analysis Batch: 99393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28353-6	GW-12607-082613-EM-006	Total/NA	Water	7196A	
240-28353-7	GW-12607-082613-EM-007	Total/NA	Water	7196A	
240-28353-8	GW-12607-082613-EM-008	Total/NA	Water	7196A	

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-99332/1-A

Matrix: Water

Analysis Batch: 99547

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 99332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	3.59	J	5.0	2.2	ug/L		08/28/13 10:22	08/29/13 19:32	1
Nickel	20	U	20	3.2	ug/L		08/28/13 10:22	08/29/13 19:32	1

Lab Sample ID: LCS 240-99332/2-A

Matrix: Water

Analysis Batch: 99547

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 99332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	194		ug/L		97	80 - 120
Nickel	500	477		ug/L		95	80 - 120

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-99164/3

Matrix: Water

Analysis Batch: 99164

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.00276	J	0.010	0.0020	mg/L			08/27/13 12:11	1

Lab Sample ID: LCS 240-99164/4

Matrix: Water

Analysis Batch: 99164

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.256		mg/L		103	80 - 118

Lab Sample ID: 240-28353-4 MS

Matrix: Water

Analysis Batch: 99164

Client Sample ID: GW-12607-082613-EM-004

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0041	J B	0.250	0.215		mg/L		85	41 - 136

Lab Sample ID: 240-28353-4 MSD

Matrix: Water

Analysis Batch: 99164

Client Sample ID: GW-12607-082613-EM-004

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Cr (VI)	0.0041	J B	0.250	0.212		mg/L		83	41 - 136	1	20

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Client Sample ID: GW-12607-082613-EM-001

Lab Sample ID: 240-28353-1

Date Collected: 08/26/13 11:25

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:23	RKT	TAL CAN

Client Sample ID: GW-12607-082613-EM-002

Lab Sample ID: 240-28353-2

Date Collected: 08/26/13 10:40

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:27	RKT	TAL CAN

Client Sample ID: GW-12607-082613-EM-003

Lab Sample ID: 240-28353-3

Date Collected: 08/26/13 12:45

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:31	RKT	TAL CAN
Total Recoverable	Analysis	6010B		20	99875	08/30/13 15:45	RKT	TAL CAN
Total/NA	Analysis	7196A		1000	99164	08/27/13 12:14	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

Client Sample ID: GW-12607-082613-EM-004

Lab Sample ID: 240-28353-4

Date Collected: 08/26/13 13:50

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:39	RKT	TAL CAN
Total/NA	Analysis	7196A		1	99164	08/27/13 12:15	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

Client Sample ID: GW-12607-082613-EM-005

Lab Sample ID: 240-28353-5

Date Collected: 08/26/13 14:30

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:51	RKT	TAL CAN
Total/NA	Analysis	7196A		1	99164	08/27/13 12:18	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Client Sample ID: GW-12607-082613-EM-006

Lab Sample ID: 240-28353-6

Date Collected: 08/26/13 15:05

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:55	RKT	TAL CAN
Total Recoverable	Analysis	6010B		5	99875	08/30/13 15:49	RKT	TAL CAN
Total/NA	Analysis	7196A		1	99164	08/27/13 12:21	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

Client Sample ID: GW-12607-082613-EM-007

Lab Sample ID: 240-28353-7

Date Collected: 08/26/13 16:30

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 20:59	RKT	TAL CAN
Total/NA	Analysis	7196A		1	99164	08/27/13 12:22	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

Client Sample ID: GW-12607-082613-EM-008

Lab Sample ID: 240-28353-8

Date Collected: 08/26/13 17:20

Matrix: Water

Date Received: 08/27/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99332	08/28/13 10:22	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99547	08/29/13 21:03	RKT	TAL CAN
Total Recoverable	Analysis	6010B		5	99875	08/30/13 15:53	RKT	TAL CAN
Total/NA	Analysis	7196A		1	99164	08/27/13 12:23	AMM2	TAL CAN
Total/NA	Analysis	7196A		1	99393	08/28/13 13:44	KLC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28353-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13 *
Texas	NELAP	6		08-31-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

TestAmerica Canton Sample Receipt Form/Narrative

Login # : 28353

Canton Facility

Client <u>CRA</u>	Site Name _____	Cooler unpacked by: <u>[Signature]</u>
Cooler Received on <u>8-27-13</u>	Opened on <u>8-27-13</u>	
FedEx: 1 st Grd <u>Exp</u> UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____		
TestAmerica Cooler # _____	Foam Box <u>Client Cooler</u> Box _____ Other _____	
Packing material used: <u>Bubble Wrap</u> Foam Plastic Bag <u>None</u> Other _____		
COOLANT: <u>Wet Ice</u> Blue Ice Dry Ice Water <u>None</u>		

- Cooler temperature upon receipt

IR GUN# A (CF -1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 4 (CF 0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF -0 °C) Observed Cooler Temp. <u>0.5</u> °C	Corrected Cooler Temp. <u>0.5</u> °C	
- Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
 - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 - Were custody seals on the bottle(s)? Yes No
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels be reconciled with the COC? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes No NA
- Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [Signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
GW-12607-082613-EM-001	240-28353-A-1	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-002	240-28353-A-2	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-003	240-28353-A-3	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-004	240-28353-A-4	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-005	240-28353-A-5	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-006	240-28353-A-6	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-007	240-28353-A-7	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082613-EM-008	240-28353-A-8	Plastic 250ml - with Nitric Acid	<2	_____	_____

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28403-1

Client Project/Site: 12607-T01-013, RACER Eckles Rd

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman



Authorized for release by:

9/9/2013 1:58:20 PM

Denise Heckler, Project Manager II

denise.heckler@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	9
Client Sample Results	10
QC Association Summary	25
QC Sample Results	27
Lab Chronicle	29
Certification Summary	31
Chain of Custody	32



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Job ID: 240-28403-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607-T01-013, RACER Eckles Rd

Report Number: 240-28403-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/28/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.4 C.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-12607-082713-EM-009 (240-28403-1), GW-12607-082713-EM-010 (240-28403-2), GW-12607-082713-EM-011 (240-28403-3), GW-12607-082713-EM-012 (240-28403-4), GW-12607-082713-EM-013 (240-28403-5), GW-12607-082713-EM-014 (240-28403-6), GW-12607-082713-EM-015 (240-28403-7), GW-12607-082713-EM-016 (240-28403-8) and GW-12607-082713-EM-017 (240-28403-9) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 08/29/2013 and analyzed on 08/30/2013 and 09/03/2013.

Samples GW-12607-082713-EM-010 (240-28403-2)[50X], GW-12607-082713-EM-013 (240-28403-5)[10X] and GW-12607-082713-EM-014 (240-28403-6)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Job ID: 240-28403-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

HEXAVALENT CHROMIUM

Samples GW-12607-082713-EM-012 (240-28403-4), GW-12607-082713-EM-013 (240-28403-5), GW-12607-082713-EM-014 (240-28403-6), GW-12607-082713-EM-015 (240-28403-7), GW-12607-082713-EM-016 (240-28403-8) and GW-12607-082713-EM-017 (240-28403-9) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 08/28/2013.

Samples GW-12607-082713-EM-012 (240-28403-4)[100X], GW-12607-082713-EM-013 (240-28403-5)[1000X], GW-12607-082713-EM-014 (240-28403-6)[1000X], GW-12607-082713-EM-015 (240-28403-7)[100X], GW-12607-082713-EM-016 (240-28403-8)[100X] and GW-12607-082713-EM-017 (240-28403-9)[100X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the hexavalent chromium analysis.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples GW-12607-082713-EM-012 (240-28403-4), GW-12607-082713-EM-013 (240-28403-5), GW-12607-082713-EM-014 (240-28403-6), GW-12607-082713-EM-015 (240-28403-7), GW-12607-082713-EM-016 (240-28403-8) and GW-12607-082713-EM-017 (240-28403-9) were analyzed for trivalent chromium in accordance with EPA SW-846 Method 7196A_CR3. The samples were analyzed on 09/09/2013.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-28403-1	GW-12607-082713-EM-009	Water	08/27/13 10:20	08/28/13 09:15
240-28403-2	GW-12607-082713-EM-010	Water	08/27/13 10:45	08/28/13 09:15
240-28403-3	GW-12607-082713-EM-011	Water	08/27/13 11:40	08/28/13 09:15
240-28403-4	GW-12607-082713-EM-012	Water	08/27/13 13:30	08/28/13 09:15
240-28403-5	GW-12607-082713-EM-013	Water	08/27/13 14:30	08/28/13 09:15
240-28403-6	GW-12607-082713-EM-014	Water	08/27/13 14:55	08/28/13 09:15
240-28403-7	GW-12607-082713-EM-015	Water	08/27/13 15:55	08/28/13 09:15
240-28403-8	GW-12607-082713-EM-016	Water	08/27/13 16:05	08/28/13 09:15
240-28403-9	GW-12607-082713-EM-017	Water	08/27/13 17:05	08/28/13 09:15

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Client Sample ID: GW-12607-082713-EM-009

Lab Sample ID: 240-28403-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	8400		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082713-EM-010

Lab Sample ID: 240-28403-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	400000		1000	160	ug/L	50		6010B	Total Recoverable

Client Sample ID: GW-12607-082713-EM-011

Lab Sample ID: 240-28403-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	14	J	20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082713-EM-012

Lab Sample ID: 240-28403-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	10000		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	2600		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	12		1.0	0.20	mg/L	100		7196A	Total/NA

Client Sample ID: GW-12607-082713-EM-013

Lab Sample ID: 240-28403-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	130000		50	22	ug/L	10		6010B	Total Recoverable
Nickel	6400		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	140		10	2.0	mg/L	1000		7196A	Total/NA

Client Sample ID: GW-12607-082713-EM-014

Lab Sample ID: 240-28403-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	110000		50	22	ug/L	10		6010B	Total Recoverable
Nickel	1200		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	110		10	2.0	mg/L	1000		7196A	Total/NA
Cr (III)	0.92		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082713-EM-015

Lab Sample ID: 240-28403-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	12000		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	49		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	12		1.0	0.20	mg/L	100		7196A	Total/NA
Cr (III)	0.42		0.010	0.0050	mg/L	1		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Client Sample ID: GW-12607-082713-EM-016

Lab Sample ID: 240-28403-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	11000		5.0	2.2	ug/L	1			6010B	Total
Nickel	50		20	3.2	ug/L	1			6010B	Recoverable
Cr (VI)	12		1.0	0.20	mg/L	100			7196A	Total

Client Sample ID: GW-12607-082713-EM-017

Lab Sample ID: 240-28403-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chromium	2600		5.0	2.2	ug/L	1			6010B	Total
Nickel	24		20	3.2	ug/L	1			6010B	Recoverable
Cr (VI)	2.9		1.0	0.20	mg/L	100			7196A	Total

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-009

Date Collected: 08/27/13 10:20

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/29/13 08:40	08/30/13 20:54	1
Nickel	8400		20	3.2	ug/L		08/29/13 08:40	08/30/13 20:54	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-010

Date Collected: 08/27/13 10:45

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/29/13 08:40	08/30/13 21:17	1
Nickel	400000		1000	160	ug/L		08/29/13 08:40	09/03/13 20:50	50

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-011

Lab Sample ID: 240-28403-3

Date Collected: 08/27/13 11:40

Matrix: Water

Date Received: 08/28/13 09:15

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	14	J	20	3.2	ug/L		08/29/13 08:40	09/03/13 20:54	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-012

Date Collected: 08/27/13 13:30

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	10000		5.0	2.2	ug/L		08/29/13 08:40	08/30/13 21:26	1
Nickel	2600		20	3.2	ug/L		08/29/13 08:40	08/30/13 21:26	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-013

Date Collected: 08/27/13 14:30

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	130000		50	22	ug/L		08/29/13 08:40	08/30/13 21:35	10
Nickel	6400		20	3.2	ug/L		08/29/13 08:40	08/30/13 21:30	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-014

Date Collected: 08/27/13 14:55

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	110000		50	22	ug/L		08/29/13 08:40	08/30/13 21:43	10
Nickel	1200		20	3.2	ug/L		08/29/13 08:40	08/30/13 21:39	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-015

Date Collected: 08/27/13 15:55

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	12000		5.0	2.2	ug/L		08/29/13 08:40	08/30/13 21:47	1
Nickel	49		20	3.2	ug/L		08/29/13 08:40	08/30/13 21:47	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-016

Date Collected: 08/27/13 16:05

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	11000		5.0	2.2	ug/L		08/29/13 08:40	08/30/13 21:51	1
Nickel	50		20	3.2	ug/L		08/29/13 08:40	08/30/13 21:51	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082713-EM-017

Date Collected: 08/27/13 17:05

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2600		5.0	2.2	ug/L		08/29/13 08:40	08/30/13 22:03	1
Nickel	24		20	3.2	ug/L		08/29/13 08:40	08/30/13 22:03	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-012

Date Collected: 08/27/13 13:30

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	12		1.0	0.20	mg/L			08/28/13 12:06	100
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-013

Date Collected: 08/27/13 14:30

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	140		10	2.0	mg/L			08/28/13 11:57	1000
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-014

Date Collected: 08/27/13 14:55

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	110		10	2.0	mg/L			08/28/13 11:58	1000
Cr (III)	0.92		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-015

Date Collected: 08/27/13 15:55

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	12		1.0	0.20	mg/L			08/28/13 12:07	100
Cr (III)	0.42		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-016

Date Collected: 08/27/13 16:05

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	12		1.0	0.20	mg/L			08/28/13 12:08	100
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry

Client Sample ID: GW-12607-082713-EM-017

Date Collected: 08/27/13 17:05

Date Received: 08/28/13 09:15

Lab Sample ID: 240-28403-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.9		1.0	0.20	mg/L			08/28/13 12:09	100
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Metals

Prep Batch: 99483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28403-1	GW-12607-082713-EM-009	Total Recoverable	Water	3005A	
240-28403-1 MS	GW-12607-082713-EM-009	Total Recoverable	Water	3005A	
240-28403-1 MSD	GW-12607-082713-EM-009	Total Recoverable	Water	3005A	
240-28403-2	GW-12607-082713-EM-010	Total Recoverable	Water	3005A	
240-28403-3	GW-12607-082713-EM-011	Total Recoverable	Water	3005A	
240-28403-4	GW-12607-082713-EM-012	Total Recoverable	Water	3005A	
240-28403-5	GW-12607-082713-EM-013	Total Recoverable	Water	3005A	
240-28403-6	GW-12607-082713-EM-014	Total Recoverable	Water	3005A	
240-28403-7	GW-12607-082713-EM-015	Total Recoverable	Water	3005A	
240-28403-8	GW-12607-082713-EM-016	Total Recoverable	Water	3005A	
240-28403-9	GW-12607-082713-EM-017	Total Recoverable	Water	3005A	
LCS 240-99483/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-99483/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 99875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28403-1	GW-12607-082713-EM-009	Total Recoverable	Water	6010B	99483
240-28403-1 MS	GW-12607-082713-EM-009	Total Recoverable	Water	6010B	99483
240-28403-1 MSD	GW-12607-082713-EM-009	Total Recoverable	Water	6010B	99483
240-28403-2	GW-12607-082713-EM-010	Total Recoverable	Water	6010B	99483
240-28403-4	GW-12607-082713-EM-012	Total Recoverable	Water	6010B	99483
240-28403-5	GW-12607-082713-EM-013	Total Recoverable	Water	6010B	99483
240-28403-5	GW-12607-082713-EM-013	Total Recoverable	Water	6010B	99483
240-28403-6	GW-12607-082713-EM-014	Total Recoverable	Water	6010B	99483
240-28403-6	GW-12607-082713-EM-014	Total Recoverable	Water	6010B	99483
240-28403-7	GW-12607-082713-EM-015	Total Recoverable	Water	6010B	99483
240-28403-8	GW-12607-082713-EM-016	Total Recoverable	Water	6010B	99483
240-28403-9	GW-12607-082713-EM-017	Total Recoverable	Water	6010B	99483
LCS 240-99483/2-A	Lab Control Sample	Total Recoverable	Water	6010B	99483
MB 240-99483/1-A	Method Blank	Total Recoverable	Water	6010B	99483

Analysis Batch: 100043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28403-2	GW-12607-082713-EM-010	Total Recoverable	Water	6010B	99483
240-28403-3	GW-12607-082713-EM-011	Total Recoverable	Water	6010B	99483

General Chemistry

Analysis Batch: 99359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28403-4	GW-12607-082713-EM-012	Total/NA	Water	7196A	
240-28403-5	GW-12607-082713-EM-013	Total/NA	Water	7196A	
240-28403-6	GW-12607-082713-EM-014	Total/NA	Water	7196A	
240-28403-7	GW-12607-082713-EM-015	Total/NA	Water	7196A	
240-28403-8	GW-12607-082713-EM-016	Total/NA	Water	7196A	
240-28403-9	GW-12607-082713-EM-017	Total/NA	Water	7196A	
240-28403-9 MS	GW-12607-082713-EM-017	Total/NA	Water	7196A	
240-28403-9 MSD	GW-12607-082713-EM-017	Total/NA	Water	7196A	
LCS 240-99359/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-99359/3	Method Blank	Total/NA	Water	7196A	

TestAmerica Canton

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

General Chemistry (Continued)

Analysis Batch: 100637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28403-4	GW-12607-082713-EM-012	Total/NA	Water	7196A	
240-28403-5	GW-12607-082713-EM-013	Total/NA	Water	7196A	
240-28403-6	GW-12607-082713-EM-014	Total/NA	Water	7196A	
240-28403-7	GW-12607-082713-EM-015	Total/NA	Water	7196A	
240-28403-8	GW-12607-082713-EM-016	Total/NA	Water	7196A	
240-28403-9	GW-12607-082713-EM-017	Total/NA	Water	7196A	

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-99483/1-A

Matrix: Water

Analysis Batch: 99875

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 99483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		08/29/13 08:40	08/30/13 20:46	1
Nickel	20	U	20	3.2	ug/L		08/29/13 08:40	08/30/13 20:46	1

Lab Sample ID: LCS 240-99483/2-A

Matrix: Water

Analysis Batch: 99875

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 99483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	199		ug/L		99	80 - 120
Nickel	500	504		ug/L		101	80 - 120

Lab Sample ID: 240-28403-1 MS

Matrix: Water

Analysis Batch: 99875

Client Sample ID: GW-12607-082713-EM-009

Prep Type: Total Recoverable

Prep Batch: 99483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	5.0	U	200	203		ug/L		102	75 - 125
Nickel	8400		500	8810	4	ug/L		76	75 - 125

Lab Sample ID: 240-28403-1 MSD

Matrix: Water

Analysis Batch: 99875

Client Sample ID: GW-12607-082713-EM-009

Prep Type: Total Recoverable

Prep Batch: 99483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	5.0	U	200	203		ug/L		102	75 - 125	0	20
Nickel	8400		500	9020	4	ug/L		116	75 - 125	2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-99359/3

Matrix: Water

Analysis Batch: 99359

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			08/28/13 11:54	1

Lab Sample ID: LCS 240-99359/4

Matrix: Water

Analysis Batch: 99359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.271		mg/L		108	80 - 118

Lab Sample ID: 240-28403-9 MS

Matrix: Water

Analysis Batch: 99359

Client Sample ID: GW-12607-082713-EM-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	2.9		25.0	28.0		mg/L		101	41 - 136

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 240-28403-9 MSD

Matrix: Water

Analysis Batch: 99359

Client Sample ID: GW-12607-082713-EM-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	2.9		25.0	28.4		mg/L		102	41 - 136	1	20

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Client Sample ID: GW-12607-082713-EM-009

Lab Sample ID: 240-28403-1

Date Collected: 08/27/13 10:20

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 20:54	RKT	TAL CAN

Client Sample ID: GW-12607-082713-EM-010

Lab Sample ID: 240-28403-2

Date Collected: 08/27/13 10:45

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		50	100043	09/03/13 20:50	RKT	TAL CAN
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:17	RKT	TAL CAN

Client Sample ID: GW-12607-082713-EM-011

Lab Sample ID: 240-28403-3

Date Collected: 08/27/13 11:40

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100043	09/03/13 20:54	RKT	TAL CAN

Client Sample ID: GW-12607-082713-EM-012

Lab Sample ID: 240-28403-4

Date Collected: 08/27/13 13:30

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:26	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		100	99359	08/28/13 12:06	AMM2	TAL CAN

Client Sample ID: GW-12607-082713-EM-013

Lab Sample ID: 240-28403-5

Date Collected: 08/27/13 14:30

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:30	RKT	TAL CAN
Total Recoverable	Analysis	6010B		10	99875	08/30/13 21:35	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99359	08/28/13 11:57	AMM2	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

Client Sample ID: GW-12607-082713-EM-014

Lab Sample ID: 240-28403-6

Date Collected: 08/27/13 14:55

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:39	RKT	TAL CAN
Total Recoverable	Analysis	6010B		10	99875	08/30/13 21:43	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99359	08/28/13 11:58	AMM2	TAL CAN

Client Sample ID: GW-12607-082713-EM-015

Lab Sample ID: 240-28403-7

Date Collected: 08/27/13 15:55

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:47	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		100	99359	08/28/13 12:07	AMM2	TAL CAN

Client Sample ID: GW-12607-082713-EM-016

Lab Sample ID: 240-28403-8

Date Collected: 08/27/13 16:05

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 21:51	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		100	99359	08/28/13 12:08	AMM2	TAL CAN

Client Sample ID: GW-12607-082713-EM-017

Lab Sample ID: 240-28403-9

Date Collected: 08/27/13 17:05

Matrix: Water

Date Received: 08/28/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			99483	08/29/13 08:40	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	99875	08/30/13 22:03	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		100	99359	08/28/13 12:09	AMM2	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Canton

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28403-1

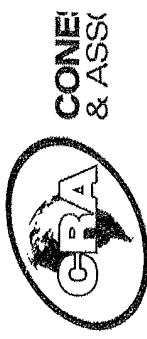
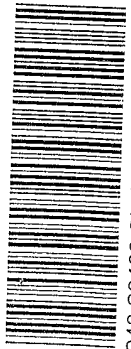
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton



IN OF CUSTODY RECORD
heldon Road, Suite #200, Plymouth, Michigan 48170
ne: (734) 453-5123 Fax: (734) 453-5201

COC NO.: **PL 12436**
PAGE **1** OF **1**
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 12607-TO1413-01		Laboratory Name: Test America		Lab Location: N. Canton, OH		SSOW ID: 12607-TO1-013	
Project Name: RACER, Eckles Rd.		Lab Contact: D. Heckler		Lab Quote No: -		Cooler No: -	
Project Location: Livonia, MI		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)		Carrier: Fed Ex	
Chemistry Contact: Paul Wiersma		SAMPLE TYPE		Total Containers/Sample		Airbill No: -	
Sampler(s): Eric Mickelson		Matrix Code		Other:		Date Shipped: 8-27-13	
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		DATE (mm/dd/yyyy)		TIME (hh:mm)		COMMENTS/ SPECIAL INSTRUCTIONS:	
1 GW-12607-082713-EM-009		8/27/13		1020		X	
2		1045		1140			
3		1330		1430			
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TestAmerica Canton Sample Receipt Form/Narrative

Login #: 28403

Canton Facility

Client <u>CRA</u>	Site Name <u>8/28/13</u>	Cooler unpacked by: <u>[Signature]</u>
Cooler Received on <u>8/28/13</u>	Opened on <u>8/28/13</u>	
FedEx: 1 st Grd <u>Exp</u>	UPS FAS Stetson	Client Drop Off TestAmerica Courier Other <u>[Signature]</u>
TestAmerica Cooler # _____	Foam Box <u>Client Cooler</u>	Box Other _____
Packing material used: <u>Bubble Wrap</u>	Foam Plastic Bag	None Other _____
COOLANT: <u>Wet Ice</u>	Blue Ice Dry Ice Water	None

1. Cooler temperature upon receipt

IR GUN# A (CF -1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 4 (CF 0 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 5 (CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 8 (CF -0 °C)	Observed Cooler Temp. <u>2.4</u> °C	Corrected Cooler Temp. <u>2.4</u> °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No

-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA

-Were custody seals on the bottle(s)? Yes No

3. Shippers' packing slip attached to the cooler(s)? Yes No

4. Did custody papers accompany the sample(s)? Yes No

5. Were the custody papers relinquished & signed in the appropriate place? Yes No

6. Did all bottles arrive in good condition (Unbroken)? Yes No

7. Could all bottle labels be reconciled with the COC? Yes No

8. Were correct bottle(s) used for the test(s) indicated? Yes No

9. Sufficient quantity received to perform indicated analyses? Yes No

10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062

11. Were VOAs on the COC? Yes No

12. Were air bubbles >6 mm in any VOA vials? Yes No NA

13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [Signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
GW-12607-082713-EM-009	240-28403-A-1	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-009	240-28403-B-1	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-010	240-28403-A-2	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-012	240-28403-A-4	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-013	240-28403-A-5	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-014	240-28403-A-6	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-015	240-28403-A-7	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-016	240-28403-A-8	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082713-EM-017	240-28403-A-9	Plastic 250ml - with Nitric Acid	<2	_____	_____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28488-1

Client Project/Site: 12607-T01-013, RACER Eckles Rd

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman



Authorized for release by:

9/12/2013 2:36:24 PM

Denise Heckler, Project Manager II

denise.heckler@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	9
Client Sample Results	10
QC Association Summary	31
QC Sample Results	33
Lab Chronicle	35
Certification Summary	38
Chain of Custody	39



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Job ID: 240-28488-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607-T01-013, RACER Eckles Rd

Report Number: 240-28488-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/29/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.2 C.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-12607-082813-EM-018 (240-28488-1), GW-12607-082813-EM-019 (240-28488-2), GW-12607-082813-EM-020 (240-28488-3), GW-12607-082813-EM-021 (240-28488-4), GW-12607-082813-EM-022 (240-28488-5), GW-12607-082813-EM-023 (240-28488-6), GW-12607-082813-EM-024 (240-28488-7), GW-12607-082813-EM-025 (240-28488-8), GW-12607-082813-EM-026 (240-28488-9), GW-12607-082813-EM-027 (240-28488-10) and GW-12607-082813-EM-028 (240-28488-11) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 09/04/2013 and analyzed on 09/05/2013 and 09/06/2013.

Chromium and Nickel failed the recovery criteria high for the MS of sample GW-12607-082813-EM-022MS (240-28488-5) in batch 240-100392.

Samples GW-12607-082813-EM-018 (240-28488-1)[10X], GW-12607-082813-EM-019 (240-28488-2)[50X], GW-12607-082813-EM-020 (240-28488-3)[2X], GW-12607-082813-EM-021 (240-28488-4)[50X], GW-12607-082813-EM-025 (240-28488-8)[10X] and GW-12607-082813-EM-028 (240-28488-11)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analysis.

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Job ID: 240-28488-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples GW-12607-082813-EM-018 (240-28488-1), GW-12607-082813-EM-019 (240-28488-2), GW-12607-082813-EM-020 (240-28488-3), GW-12607-082813-EM-021 (240-28488-4), GW-12607-082813-EM-022 (240-28488-5), GW-12607-082813-EM-023 (240-28488-6), GW-12607-082813-EM-024 (240-28488-7), GW-12607-082813-EM-025 (240-28488-8), GW-12607-082813-EM-026 (240-28488-9) and GW-12607-082813-EM-027 (240-28488-10) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 08/29/2013.

Samples GW-12607-082813-EM-018 (240-28488-1)[1000X], GW-12607-082813-EM-019 (240-28488-2)[1000X], GW-12607-082813-EM-020 (240-28488-3)[1000X] and GW-12607-082813-EM-021 (240-28488-4)[1000X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the hexavalent chromium analysis.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples GW-12607-082813-EM-018 (240-28488-1), GW-12607-082813-EM-019 (240-28488-2), GW-12607-082813-EM-020 (240-28488-3), GW-12607-082813-EM-021 (240-28488-4), GW-12607-082813-EM-022 (240-28488-5), GW-12607-082813-EM-023 (240-28488-6), GW-12607-082813-EM-024 (240-28488-7), GW-12607-082813-EM-025 (240-28488-8), GW-12607-082813-EM-026 (240-28488-9) and GW-12607-082813-EM-027 (240-28488-10) were analyzed for trivalent chromium in accordance with EPA SW-846 Method 7196A_CR3. The samples were analyzed on 09/09/2013.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-28488-1	GW-12607-082813-EM-018	Water	08/28/13 12:00	08/29/13 09:30
240-28488-2	GW-12607-082813-EM-019	Water	08/28/13 12:10	08/29/13 09:30
240-28488-3	GW-12607-082813-EM-020	Water	08/28/13 13:10	08/29/13 09:30
240-28488-4	GW-12607-082813-EM-021	Water	08/28/13 13:10	08/29/13 09:30
240-28488-5	GW-12607-082813-EM-022	Water	08/28/13 14:55	08/29/13 09:30
240-28488-6	GW-12607-082813-EM-023	Water	08/28/13 16:20	08/29/13 09:30
240-28488-7	GW-12607-082813-EM-024	Water	08/28/13 14:05	08/29/13 09:30
240-28488-8	GW-12607-082813-EM-025	Water	08/28/13 14:45	08/29/13 09:30
240-28488-9	GW-12607-082813-EM-026	Water	08/28/13 17:10	08/29/13 09:30
240-28488-10	GW-12607-082813-EM-027	Water	08/28/13 16:20	08/29/13 09:30
240-28488-11	GW-12607-082813-EM-028	Water	08/28/13 18:35	08/29/13 09:30

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Client Sample ID: GW-12607-082813-EM-018

Lab Sample ID: 240-28488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	180000		50	22	ug/L	10		6010B	Total
									Recoverable
Nickel	940		20	3.2	ug/L	1		6010B	Total
									Recoverable
Cr (VI)	170		10	2.0	mg/L	1000		7196A	Total/NA
Cr (III)	14		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-019

Lab Sample ID: 240-28488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	180000		250	110	ug/L	50		6010B	Total
									Recoverable
Nickel	920		20	3.2	ug/L	1		6010B	Total
									Recoverable
Cr (VI)	170		10	2.0	mg/L	1000		7196A	Total/NA
Cr (III)	8.1		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-020

Lab Sample ID: 240-28488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	30000		10	4.4	ug/L	2		6010B	Total
									Recoverable
Nickel	430		20	3.2	ug/L	1		6010B	Total
									Recoverable
Cr (VI)	31		10	2.0	mg/L	1000		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-021

Lab Sample ID: 240-28488-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	180000		250	110	ug/L	50		6010B	Total
									Recoverable
Nickel	160		20	3.2	ug/L	1		6010B	Total
									Recoverable
Cr (VI)	170		10	2.0	mg/L	1000		7196A	Total/NA
Cr (III)	8.2		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-022

Lab Sample ID: 240-28488-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2600		5.0	2.2	ug/L	1		6010B	Total
									Recoverable
Nickel	2100		20	3.2	ug/L	1		6010B	Total
									Recoverable
Cr (VI)	2.4		0.010	0.0020	mg/L	1		7196A	Total/NA
Cr (III)	0.21		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-023

Lab Sample ID: 240-28488-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	17		5.0	2.2	ug/L	1		6010B	Total
									Recoverable
Nickel	8900		20	3.2	ug/L	1		6010B	Total
									Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Client Sample ID: GW-12607-082813-EM-023 (Continued)

Lab Sample ID: 240-28488-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (VI)	0.0028	J	0.010	0.0020	mg/L	1		7196A	Total/NA
Cr (III)	0.014		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-024

Lab Sample ID: 240-28488-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	25		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	6400		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	0.011		0.010	0.0020	mg/L	1		7196A	Total/NA
Cr (III)	0.014		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-025

Lab Sample ID: 240-28488-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2.9	J	5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	200000		200	32	ug/L	10		6010B	Total Recoverable
Cr (VI)	0.0054	J	0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-026

Lab Sample ID: 240-28488-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	18		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	74		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (III)	0.018		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-027

Lab Sample ID: 240-28488-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1900		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	17	J	20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	1.2		0.010	0.0020	mg/L	1		7196A	Total/NA
Cr (III)	0.64		0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-082813-EM-028

Lab Sample ID: 240-28488-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	14000		40	6.4	ug/L	2		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-018

Date Collected: 08/28/13 12:00

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	180000		50	22	ug/L		09/04/13 08:24	09/06/13 00:24	10
Nickel	940		20	3.2	ug/L		09/04/13 08:24	09/06/13 00:20	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-019

Date Collected: 08/28/13 12:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	180000		250	110	ug/L		09/04/13 08:24	09/06/13 18:09	50
Nickel	920		20	3.2	ug/L		09/04/13 08:24	09/06/13 00:37	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-020

Date Collected: 08/28/13 13:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	30000		10	4.4	ug/L		09/04/13 08:24	09/06/13 18:13	2
Nickel	430		20	3.2	ug/L		09/04/13 08:24	09/06/13 00:45	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-021

Date Collected: 08/28/13 13:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	180000		250	110	ug/L		09/04/13 08:24	09/06/13 18:18	50
Nickel	160		20	3.2	ug/L		09/04/13 08:24	09/06/13 00:49	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-022

Date Collected: 08/28/13 14:55

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2600		5.0	2.2	ug/L		09/04/13 08:24	09/05/13 23:36	1
Nickel	2100		20	3.2	ug/L		09/04/13 08:24	09/05/13 23:36	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-023

Date Collected: 08/28/13 16:20

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	17		5.0	2.2	ug/L		09/04/13 08:24	09/06/13 00:57	1
Nickel	8900		20	3.2	ug/L		09/04/13 08:24	09/06/13 00:57	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-024

Date Collected: 08/28/13 14:05

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	25		5.0	2.2	ug/L		09/04/13 08:24	09/06/13 01:01	1
Nickel	6400		20	3.2	ug/L		09/04/13 08:24	09/06/13 01:01	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-025

Date Collected: 08/28/13 14:45

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.9	J	5.0	2.2	ug/L		09/04/13 08:24	09/06/13 01:05	1
Nickel	200000		200	32	ug/L		09/04/13 08:24	09/06/13 18:22	10

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-026

Date Collected: 08/28/13 17:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	18		5.0	2.2	ug/L		09/04/13 08:24	09/06/13 01:10	1
Nickel	74		20	3.2	ug/L		09/04/13 08:24	09/06/13 01:10	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-027

Date Collected: 08/28/13 16:20

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	1900		5.0	2.2	ug/L		09/04/13 08:24	09/06/13 01:14	1
Nickel	17	J	20	3.2	ug/L		09/04/13 08:24	09/06/13 01:14	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082813-EM-028

Date Collected: 08/28/13 18:35

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:24	09/06/13 01:26	1
Nickel	14000		40	6.4	ug/L		09/04/13 08:24	09/06/13 18:26	2

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-018

Date Collected: 08/28/13 12:00

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	170		10	2.0	mg/L			08/29/13 11:45	1000
Cr (III)	14		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-019

Date Collected: 08/28/13 12:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	170		10	2.0	mg/L			08/29/13 11:46	1000
Cr (III)	8.1		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-020

Date Collected: 08/28/13 13:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	31		10	2.0	mg/L			08/29/13 11:47	1000
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-021

Date Collected: 08/28/13 13:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	170		10	2.0	mg/L			08/29/13 11:48	1000
Cr (III)	8.2		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-022

Date Collected: 08/28/13 14:55

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.4		0.010	0.0020	mg/L			08/29/13 11:51	1
Cr (III)	0.21		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-023

Date Collected: 08/28/13 16:20

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0028	J	0.010	0.0020	mg/L			08/29/13 11:52	1
Cr (III)	0.014		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-024

Date Collected: 08/28/13 14:05

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.011		0.010	0.0020	mg/L			08/29/13 11:49	1
Cr (III)	0.014		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-025

Date Collected: 08/28/13 14:45

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0054	J	0.010	0.0020	mg/L			08/29/13 11:50	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-026

Date Collected: 08/28/13 17:10

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			08/29/13 11:58	1
Cr (III)	0.018		0.010	0.0050	mg/L			09/09/13 09:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry

Client Sample ID: GW-12607-082813-EM-027

Date Collected: 08/28/13 16:20

Date Received: 08/29/13 09:30

Lab Sample ID: 240-28488-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.2		0.010	0.0020	mg/L			08/29/13 11:57	1
Cr (III)	0.64		0.010	0.0050	mg/L			09/09/13 09:58	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Metals

Prep Batch: 100030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-1	GW-12607-082813-EM-018	Total Recoverable	Water	3005A	
240-28488-2	GW-12607-082813-EM-019	Total Recoverable	Water	3005A	
240-28488-3	GW-12607-082813-EM-020	Total Recoverable	Water	3005A	
240-28488-4	GW-12607-082813-EM-021	Total Recoverable	Water	3005A	
240-28488-5	GW-12607-082813-EM-022	Total Recoverable	Water	3005A	
240-28488-5 MS	GW-12607-082813-EM-022	Total Recoverable	Water	3005A	
240-28488-5 MSD	GW-12607-082813-EM-022	Total Recoverable	Water	3005A	
240-28488-6	GW-12607-082813-EM-023	Total Recoverable	Water	3005A	
240-28488-7	GW-12607-082813-EM-024	Total Recoverable	Water	3005A	
240-28488-8	GW-12607-082813-EM-025	Total Recoverable	Water	3005A	
240-28488-9	GW-12607-082813-EM-026	Total Recoverable	Water	3005A	
240-28488-10	GW-12607-082813-EM-027	Total Recoverable	Water	3005A	
240-28488-11	GW-12607-082813-EM-028	Total Recoverable	Water	3005A	
LCS 240-100030/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-100030/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 100392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-1	GW-12607-082813-EM-018	Total Recoverable	Water	6010B	100030
240-28488-1	GW-12607-082813-EM-018	Total Recoverable	Water	6010B	100030
240-28488-2	GW-12607-082813-EM-019	Total Recoverable	Water	6010B	100030
240-28488-3	GW-12607-082813-EM-020	Total Recoverable	Water	6010B	100030
240-28488-4	GW-12607-082813-EM-021	Total Recoverable	Water	6010B	100030
240-28488-5	GW-12607-082813-EM-022	Total Recoverable	Water	6010B	100030
240-28488-5 MS	GW-12607-082813-EM-022	Total Recoverable	Water	6010B	100030
240-28488-5 MSD	GW-12607-082813-EM-022	Total Recoverable	Water	6010B	100030
240-28488-6	GW-12607-082813-EM-023	Total Recoverable	Water	6010B	100030
240-28488-7	GW-12607-082813-EM-024	Total Recoverable	Water	6010B	100030
240-28488-8	GW-12607-082813-EM-025	Total Recoverable	Water	6010B	100030
240-28488-9	GW-12607-082813-EM-026	Total Recoverable	Water	6010B	100030
240-28488-10	GW-12607-082813-EM-027	Total Recoverable	Water	6010B	100030
240-28488-11	GW-12607-082813-EM-028	Total Recoverable	Water	6010B	100030
LCS 240-100030/2-A	Lab Control Sample	Total Recoverable	Water	6010B	100030
MB 240-100030/1-A	Method Blank	Total Recoverable	Water	6010B	100030

Analysis Batch: 100599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-2	GW-12607-082813-EM-019	Total Recoverable	Water	6010B	100030
240-28488-3	GW-12607-082813-EM-020	Total Recoverable	Water	6010B	100030
240-28488-4	GW-12607-082813-EM-021	Total Recoverable	Water	6010B	100030
240-28488-8	GW-12607-082813-EM-025	Total Recoverable	Water	6010B	100030
240-28488-11	GW-12607-082813-EM-028	Total Recoverable	Water	6010B	100030

General Chemistry

Analysis Batch: 99551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-1	GW-12607-082813-EM-018	Total/NA	Water	7196A	
240-28488-2	GW-12607-082813-EM-019	Total/NA	Water	7196A	
240-28488-3	GW-12607-082813-EM-020	Total/NA	Water	7196A	

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QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

General Chemistry (Continued)

Analysis Batch: 99551 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-4	GW-12607-082813-EM-021	Total/NA	Water	7196A	
240-28488-5	GW-12607-082813-EM-022	Total/NA	Water	7196A	
240-28488-6	GW-12607-082813-EM-023	Total/NA	Water	7196A	
240-28488-6 MS	GW-12607-082813-EM-023	Total/NA	Water	7196A	
240-28488-6 MSD	GW-12607-082813-EM-023	Total/NA	Water	7196A	
240-28488-7	GW-12607-082813-EM-024	Total/NA	Water	7196A	
240-28488-8	GW-12607-082813-EM-025	Total/NA	Water	7196A	
240-28488-9	GW-12607-082813-EM-026	Total/NA	Water	7196A	
240-28488-10	GW-12607-082813-EM-027	Total/NA	Water	7196A	
LCS 240-99551/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-99551/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 100637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28488-1	GW-12607-082813-EM-018	Total/NA	Water	7196A	
240-28488-2	GW-12607-082813-EM-019	Total/NA	Water	7196A	
240-28488-3	GW-12607-082813-EM-020	Total/NA	Water	7196A	
240-28488-4	GW-12607-082813-EM-021	Total/NA	Water	7196A	
240-28488-5	GW-12607-082813-EM-022	Total/NA	Water	7196A	
240-28488-6	GW-12607-082813-EM-023	Total/NA	Water	7196A	
240-28488-7	GW-12607-082813-EM-024	Total/NA	Water	7196A	
240-28488-8	GW-12607-082813-EM-025	Total/NA	Water	7196A	
240-28488-9	GW-12607-082813-EM-026	Total/NA	Water	7196A	
240-28488-10	GW-12607-082813-EM-027	Total/NA	Water	7196A	

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-100030/1-A

Matrix: Water

Analysis Batch: 100392

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 100030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:24	09/05/13 23:28	1
Nickel	20	U	20	3.2	ug/L		09/04/13 08:24	09/05/13 23:28	1

Lab Sample ID: LCS 240-100030/2-A

Matrix: Water

Analysis Batch: 100392

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 100030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	185		ug/L		92	80 - 120
Nickel	500	470		ug/L		94	80 - 120

Lab Sample ID: 240-28488-5 MS

Matrix: Water

Analysis Batch: 100392

Client Sample ID: GW-12607-082813-EM-022

Prep Type: Total Recoverable

Prep Batch: 100030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	2600		200	2920	4	ug/L		160	75 - 125
Nickel	2100		500	2790	4	ug/L		129	75 - 125

Lab Sample ID: 240-28488-5 MSD

Matrix: Water

Analysis Batch: 100392

Client Sample ID: GW-12607-082813-EM-022

Prep Type: Total Recoverable

Prep Batch: 100030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	2600		200	2830	4	ug/L		116	75 - 125	3	20
Nickel	2100		500	2720	4	ug/L		115	75 - 125	2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-99551/3

Matrix: Water

Analysis Batch: 99551

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			08/29/13 11:43	1

Lab Sample ID: LCS 240-99551/4

Matrix: Water

Analysis Batch: 99551

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.260		mg/L		104	80 - 118

Lab Sample ID: 240-28488-6 MS

Matrix: Water

Analysis Batch: 99551

Client Sample ID: GW-12607-082813-EM-023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0028	J	0.250	0.246		mg/L		97	41 - 136

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QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 240-28488-6 MSD

Matrix: Water

Analysis Batch: 99551

Client Sample ID: GW-12607-082813-EM-023

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.0028	J	0.250	0.255		mg/L	—	101	41 - 136	4	20

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Client Sample ID: GW-12607-082813-EM-018

Lab Sample ID: 240-28488-1

Date Collected: 08/28/13 12:00

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 00:20	RKT	TAL CAN
Total Recoverable	Analysis	6010B		10	100392	09/06/13 00:24	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99551	08/29/13 11:45	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-019

Lab Sample ID: 240-28488-2

Date Collected: 08/28/13 12:10

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		1	100392	09/06/13 00:37	RKT	TAL CAN
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		50	100599	09/06/13 18:09	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99551	08/29/13 11:46	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-020

Lab Sample ID: 240-28488-3

Date Collected: 08/28/13 13:10

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		1	100392	09/06/13 00:45	RKT	TAL CAN
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		2	100599	09/06/13 18:13	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99551	08/29/13 11:47	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-021

Lab Sample ID: 240-28488-4

Date Collected: 08/28/13 13:10

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		1	100392	09/06/13 00:49	RKT	TAL CAN
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		50	100599	09/06/13 18:18	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1000	99551	08/29/13 11:48	AMM2	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Client Sample ID: GW-12607-082813-EM-022

Lab Sample ID: 240-28488-5

Date Collected: 08/28/13 14:55

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/05/13 23:36	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:51	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-023

Lab Sample ID: 240-28488-6

Date Collected: 08/28/13 16:20

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 00:57	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:52	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-024

Lab Sample ID: 240-28488-7

Date Collected: 08/28/13 14:05

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 01:01	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:49	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-025

Lab Sample ID: 240-28488-8

Date Collected: 08/28/13 14:45

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 01:05	RKT	TAL CAN
Total Recoverable	Analysis	6010B		10	100599	09/06/13 18:22	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:50	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-026

Lab Sample ID: 240-28488-9

Date Collected: 08/28/13 17:10

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

Client Sample ID: GW-12607-082813-EM-026

Lab Sample ID: 240-28488-9

Date Collected: 08/28/13 17:10

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6010B		1	100392	09/06/13 01:10	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:58	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-027

Lab Sample ID: 240-28488-10

Date Collected: 08/28/13 16:20

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 01:14	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99551	08/29/13 11:57	AMM2	TAL CAN

Client Sample ID: GW-12607-082813-EM-028

Lab Sample ID: 240-28488-11

Date Collected: 08/28/13 18:35

Matrix: Water

Date Received: 08/29/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100030	09/04/13 08:24	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100392	09/06/13 01:26	RKT	TAL CAN
Total Recoverable	Analysis	6010B		2	100599	09/06/13 18:26	RKT	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28488-1

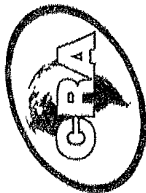
Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton



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-12434

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 12607-T01-013		Laboratory Name: Test America		Lab Location: N. Canton, OH		SSOW ID: 12607-T01-013	
Project Name: RACER-Eckles Rd.		Lab Contact: D. Heckler		Lab Quote No: -		Cooler No: -	
Project Location: Livonia, MI		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)		Carrier: Fed-Ex	
Chemistry Contact: Paul Wiseman		SAMPLE TYPE				Airbill No: -	
Sampler(s): Eric Mickelson		(see back of COC)				Date Shipped: 8-28-13	
		Grab (g) or Comp. (g)		Unpreserved		SPECIAL INSTRUCTIONS:	
SAMPLE IDENTIFICATION		DATE (mm/dd/yyyy)		TIME (hh:mm)			
(Containers for each sample may be combined on one line)							
1	GW-12607-082813-EM-018	8-28-13	1200	WG	G	X	
2	-019		1210			X	
3	-020		1310			X	
4	-021		1310			X	
5	-022		1455			X	
6	-023		1620			X	
7	-024		1405			X	
8	-025		1445			X	
9	-026		1710			X	
10	-027		1620			X	
11	-028		1835			X	
EM							
TAT Required in business days (use separate COCs for different TATs):		Total Number of Containers: 22		Notes/Special Requirements: Short Hold Times			
☐ 1 Day ☐ 2 Days ☐ 3 Days ☒ 1 Week ☐ Other:		All Samples in Cooler must be on COC					
RELINQUISHED BY: Eric Mickelson		DATE: 8-28-13		TIME: 2000		COMPANY: CRA	
RECEIVED BY: 1. Paul W. Heen		DATE: 8-28-13		TIME: 930		COMPANY: TA	
2.							
3.							

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

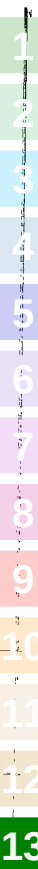
Distribution: WHITE - Fully Executed Copy (CRA)

YELLOW - Receiving Laboratory Copy

PINK - Shipper

GOLDENROD - Sampling Crew

CRA Form COC-10A (20110804)



Login # : 28488

Client <u>CRA</u>	Site Name _____	Cooler unpacked by: _____
Cooler Received on <u>8-29-13</u>	Opened on <u>8-29-13</u>	<u>Paul H. Leon</u>

Cooler Received on 8-29-13 Opened on 8-29-13 W. B. Odom

FedEx: 1st Grd ☒ Exp ☐ UPS ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other ☐

TestAmerica Cooler #	Foam Box	Client Cooler	Box	Other
1				
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100				

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
 IR GUN# A (CF -1°C) Observed Cooler Temp. _____ $^{\circ}\text{C}$ Corrected Cooler Temp. _____ $^{\circ}\text{C}$
 IR GUN# 4 (CF 0°C) Observed Cooler Temp. _____ $^{\circ}\text{C}$ Corrected Cooler Temp. _____ $^{\circ}\text{C}$
 IR GUN# 5 (CF $+1^{\circ}\text{C}$) Observed Cooler Temp. _____ $^{\circ}\text{C}$ Corrected Cooler Temp. _____ $^{\circ}\text{C}$
 IR GUN# 8 (CF -0°C) Observed Cooler Temp. 22 $^{\circ}\text{C}$ Corrected Cooler Temp. 22 $^{\circ}\text{C}$
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? _____ Yes No NA
 -Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No
- ☐ See Multiple Cooler Form

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
GW-12607-082813-EM-018	240-28488-B-1	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-019	240-28488-B-2	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-020	240-28488-B-3	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-021	240-28488-B-4	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-022	240-28488-B-5	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-023	240-28488-B-6	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-024	240-28488-B-7	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-025	240-28488-B-8	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-026	240-28488-B-9	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-027	240-28488-C-10	Plastic 250ml - with Nitric Acid	<2	_____	_____
GW-12607-082813-EM-028	240-28488-B-11	Plastic 250ml - with Nitric Acid	<2	_____	_____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-28526-1

Client Project/Site: 12607-T01-013, RACER Eckles Rd

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman



Authorized for release by:

9/11/2013 5:00:58 PM

Denise Heckler, Project Manager II

denise.heckler@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	9
Client Sample Results	10
QC Association Summary	23
QC Sample Results	24
Lab Chronicle	26
Certification Summary	29
Chain of Custody	30



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Job ID: 240-28526-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607-T01-013, RACER Eckles Rd

Report Number: 240-28526-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/30/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.8 C.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-12607-082913-EM-029 (240-28526-1), GW-12607-082913-EM-030 (240-28526-2), GW-12607-082913-EM-031 (240-28526-3), GW-12607-082913-EM-032 (240-28526-4), GW-12607-082913-EM-033 (240-28526-5), GW-12607-082913-EM-034 (240-28526-6), GW-12607-082913-EM-035 (240-28526-7), GW-12607-082913-EM-036 (240-28526-8), GW-12607-082913-EM-037 (240-28526-9), GW-12607-082913-EM-038 (240-28526-10), GW-12607-082913-EM-039 (240-28526-11) and GW-12607-082913-EM-040 (240-28526-12) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 09/04/2013 and analyzed on 09/06/2013.

Nickel failed the recovery criteria low for the MS/MSD of sample GW-12607-082913-EM-035 (240-28526-7) in batch 240-100599.

No other difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Job ID: 240-28526-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

HEXAVALENT CHROMIUM

Sample GW-12607-082913-EM-035 (240-28526-7) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 08/30/2013.

No difficulties were encountered during the hexavalent chromium analysis.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Sample GW-12607-082913-EM-035 (240-28526-7) was analyzed for trivalent chromium in accordance with EPA SW-846 Method 7196A_CR3. The samples were analyzed on 09/09/2013.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-28526-1	GW-12607-082913-EM-029	Water	08/29/13 10:20	08/30/13 09:30
240-28526-2	GW-12607-082913-EM-030	Water	08/29/13 11:30	08/30/13 09:30
240-28526-3	GW-12607-082913-EM-031	Water	08/29/13 12:05	08/30/13 09:30
240-28526-4	GW-12607-082913-EM-032	Water	08/29/13 12:20	08/30/13 09:30
240-28526-5	GW-12607-082913-EM-033	Water	08/29/13 12:50	08/30/13 09:30
240-28526-6	GW-12607-082913-EM-034	Water	08/29/13 13:30	08/30/13 09:30
240-28526-7	GW-12607-082913-EM-035	Water	08/29/13 14:35	08/30/13 09:30
240-28526-8	GW-12607-082913-EM-036	Water	08/29/13 14:30	08/30/13 09:30
240-28526-9	GW-12607-082913-EM-037	Water	08/29/13 15:10	08/30/13 09:30
240-28526-10	GW-12607-082913-EM-038	Water	08/29/13 15:05	08/30/13 09:30
240-28526-11	GW-12607-082913-EM-039	Water	08/29/13 16:15	08/30/13 09:30
240-28526-12	GW-12607-082913-EM-040	Water	08/29/13 17:00	08/30/13 09:30

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Client Sample ID: GW-12607-082913-EM-029

Lab Sample ID: 240-28526-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	15	J	20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-030

Lab Sample ID: 240-28526-2

No Detections.

Client Sample ID: GW-12607-082913-EM-031

Lab Sample ID: 240-28526-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	8400		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-032

Lab Sample ID: 240-28526-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	8600		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-033

Lab Sample ID: 240-28526-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	370		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-034

Lab Sample ID: 240-28526-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	16000		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-035

Lab Sample ID: 240-28526-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	28000		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-036

Lab Sample ID: 240-28526-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	9900		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-037

Lab Sample ID: 240-28526-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	570		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-038

Lab Sample ID: 240-28526-10

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Client Sample ID: GW-12607-082913-EM-038 (Continued)

Lab Sample ID: 240-28526-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	470		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-082913-EM-039

Lab Sample ID: 240-28526-11

No Detections.

Client Sample ID: GW-12607-082913-EM-040

Lab Sample ID: 240-28526-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	6.1	J	20	3.2	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-029

Date Collected: 08/29/13 10:20

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:30	1
Nickel	15	J	20	3.2	ug/L		09/04/13 08:06	09/06/13 20:30	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-030

Date Collected: 08/29/13 11:30

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:35	1
Nickel	20	U	20	3.2	ug/L		09/04/13 08:06	09/06/13 20:35	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-031

Date Collected: 08/29/13 12:05

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:39	1
Nickel	8400		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:39	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-032

Date Collected: 08/29/13 12:20

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:43	1
Nickel	8600		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:43	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-033

Date Collected: 08/29/13 12:50

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:47	1
Nickel	370		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:47	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-034

Date Collected: 08/29/13 13:30

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:51	1
Nickel	16000		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:51	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-035

Date Collected: 08/29/13 14:35

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 19:46	1
Nickel	28000		20	3.2	ug/L		09/04/13 08:06	09/06/13 19:46	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-036

Date Collected: 08/29/13 14:30

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:55	1
Nickel	9900		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:55	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-037

Date Collected: 08/29/13 15:10

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 20:59	1
Nickel	570		20	3.2	ug/L		09/04/13 08:06	09/06/13 20:59	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-038

Date Collected: 08/29/13 15:05

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 21:03	1
Nickel	470		20	3.2	ug/L		09/04/13 08:06	09/06/13 21:03	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-039

Date Collected: 08/29/13 16:15

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 21:15	1
Nickel	20	U	20	3.2	ug/L		09/04/13 08:06	09/06/13 21:15	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-082913-EM-040

Date Collected: 08/29/13 17:00

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 21:19	1
Nickel	6.1	J	20	3.2	ug/L		09/04/13 08:06	09/06/13 21:19	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

General Chemistry

Client Sample ID: GW-12607-082913-EM-035

Date Collected: 08/29/13 14:35

Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			08/30/13 11:25	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			09/09/13 09:58	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Metals

Prep Batch: 100028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28526-1	GW-12607-082913-EM-029	Total Recoverable	Water	3005A	
240-28526-2	GW-12607-082913-EM-030	Total Recoverable	Water	3005A	
240-28526-3	GW-12607-082913-EM-031	Total Recoverable	Water	3005A	
240-28526-4	GW-12607-082913-EM-032	Total Recoverable	Water	3005A	
240-28526-5	GW-12607-082913-EM-033	Total Recoverable	Water	3005A	
240-28526-6	GW-12607-082913-EM-034	Total Recoverable	Water	3005A	
240-28526-7	GW-12607-082913-EM-035	Total Recoverable	Water	3005A	
240-28526-7 MS	GW-12607-082913-EM-035	Total Recoverable	Water	3005A	
240-28526-7 MSD	GW-12607-082913-EM-035	Total Recoverable	Water	3005A	
240-28526-8	GW-12607-082913-EM-036	Total Recoverable	Water	3005A	
240-28526-9	GW-12607-082913-EM-037	Total Recoverable	Water	3005A	
240-28526-10	GW-12607-082913-EM-038	Total Recoverable	Water	3005A	
240-28526-11	GW-12607-082913-EM-039	Total Recoverable	Water	3005A	
240-28526-12	GW-12607-082913-EM-040	Total Recoverable	Water	3005A	
LCS 240-100028/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-100028/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 100599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28526-1	GW-12607-082913-EM-029	Total Recoverable	Water	6010B	100028
240-28526-2	GW-12607-082913-EM-030	Total Recoverable	Water	6010B	100028
240-28526-3	GW-12607-082913-EM-031	Total Recoverable	Water	6010B	100028
240-28526-4	GW-12607-082913-EM-032	Total Recoverable	Water	6010B	100028
240-28526-5	GW-12607-082913-EM-033	Total Recoverable	Water	6010B	100028
240-28526-6	GW-12607-082913-EM-034	Total Recoverable	Water	6010B	100028
240-28526-7	GW-12607-082913-EM-035	Total Recoverable	Water	6010B	100028
240-28526-7 MS	GW-12607-082913-EM-035	Total Recoverable	Water	6010B	100028
240-28526-7 MSD	GW-12607-082913-EM-035	Total Recoverable	Water	6010B	100028
240-28526-8	GW-12607-082913-EM-036	Total Recoverable	Water	6010B	100028
240-28526-9	GW-12607-082913-EM-037	Total Recoverable	Water	6010B	100028
240-28526-10	GW-12607-082913-EM-038	Total Recoverable	Water	6010B	100028
240-28526-11	GW-12607-082913-EM-039	Total Recoverable	Water	6010B	100028
240-28526-12	GW-12607-082913-EM-040	Total Recoverable	Water	6010B	100028
LCS 240-100028/2-A	Lab Control Sample	Total Recoverable	Water	6010B	100028
MB 240-100028/1-A	Method Blank	Total Recoverable	Water	6010B	100028

General Chemistry

Analysis Batch: 99679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28526-7	GW-12607-082913-EM-035	Total/NA	Water	7196A	
240-28526-7 MS	GW-12607-082913-EM-035	Total/NA	Water	7196A	
240-28526-7 MSD	GW-12607-082913-EM-035	Total/NA	Water	7196A	
LCS 240-99679/9	Lab Control Sample	Total/NA	Water	7196A	
MB 240-99679/8	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 100637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-28526-7	GW-12607-082913-EM-035	Total/NA	Water	7196A	

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-100028/1-A

Matrix: Water

Analysis Batch: 100599

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 100028

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		09/04/13 08:06	09/06/13 19:38	1
Nickel	20	U	20	3.2	ug/L		09/04/13 08:06	09/06/13 19:38	1

Lab Sample ID: LCS 240-100028/2-A

Matrix: Water

Analysis Batch: 100599

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 100028

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	198		ug/L		99	80 - 120
Nickel	500	492		ug/L		98	80 - 120

Lab Sample ID: 240-28526-7 MS

Matrix: Water

Analysis Batch: 100599

Client Sample ID: GW-12607-082913-EM-035

Prep Type: Total Recoverable

Prep Batch: 100028

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	5.0	U	200	198		ug/L		99	75 - 125
Nickel	28000		500	26700	4	ug/L		-171	75 - 125

Lab Sample ID: 240-28526-7 MSD

Matrix: Water

Analysis Batch: 100599

Client Sample ID: GW-12607-082913-EM-035

Prep Type: Total Recoverable

Prep Batch: 100028

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	5.0	U	200	196		ug/L		98	75 - 125	1	20
Nickel	28000		500	26400	4	ug/L		-215	75 - 125	1	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-99679/8

Matrix: Water

Analysis Batch: 99679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			08/30/13 11:23	1

Lab Sample ID: LCS 240-99679/9

Matrix: Water

Analysis Batch: 99679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.251		mg/L		100	80 - 118

Lab Sample ID: 240-28526-7 MS

Matrix: Water

Analysis Batch: 99679

Client Sample ID: GW-12607-082913-EM-035

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.010	U	0.250	0.120		mg/L		48	41 - 136

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 240-28526-7 MSD

Matrix: Water

Analysis Batch: 99679

Client Sample ID: GW-12607-082913-EM-035

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.010	U	0.250	0.128		mg/L		51	41 - 136	6	20

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Client Sample ID: GW-12607-082913-EM-029

Lab Sample ID: 240-28526-1

Date Collected: 08/29/13 10:20

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:30	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-030

Lab Sample ID: 240-28526-2

Date Collected: 08/29/13 11:30

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:35	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-031

Lab Sample ID: 240-28526-3

Date Collected: 08/29/13 12:05

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:39	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-032

Lab Sample ID: 240-28526-4

Date Collected: 08/29/13 12:20

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:43	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-033

Lab Sample ID: 240-28526-5

Date Collected: 08/29/13 12:50

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:47	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-034

Lab Sample ID: 240-28526-6

Date Collected: 08/29/13 13:30

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:51	RKT	TAL CAN

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Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Client Sample ID: GW-12607-082913-EM-035

Lab Sample ID: 240-28526-7

Date Collected: 08/29/13 14:35

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 19:46	RKT	TAL CAN
Total/NA	Analysis	7196A		1	100637	09/09/13 09:58	KLC	TAL CAN
Total/NA	Analysis	7196A		1	99679	08/30/13 11:25	AMM2	TAL CAN

Client Sample ID: GW-12607-082913-EM-036

Lab Sample ID: 240-28526-8

Date Collected: 08/29/13 14:30

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:55	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-037

Lab Sample ID: 240-28526-9

Date Collected: 08/29/13 15:10

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 20:59	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-038

Lab Sample ID: 240-28526-10

Date Collected: 08/29/13 15:05

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 21:03	RKT	TAL CAN

Client Sample ID: GW-12607-082913-EM-039

Lab Sample ID: 240-28526-11

Date Collected: 08/29/13 16:15

Matrix: Water

Date Received: 08/30/13 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 21:15	RKT	TAL CAN

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Client Sample ID: GW-12607-082913-EM-040
Date Collected: 08/29/13 17:00
Date Received: 08/30/13 09:30

Lab Sample ID: 240-28526-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			100028	09/04/13 08:06	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	100599	09/06/13 21:19	RKT	TAL CAN

Laboratory References:
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T01-013, RACER Eckles Rd

TestAmerica Job ID: 240-28526-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-13 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton



CONESTOGA-ROVERS
& ASSOCIATES

CHAIN OF CUSTODY RECORD

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

Phone: (734) 453-5123

Fax: (734) 453-5201

3.8

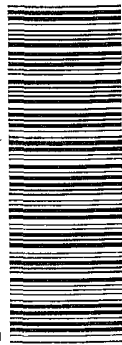
COC NO: PL-12433

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code:	12607-T01Y13-01
Project Name:	RACER - Eckles Rd.
Project Location:	Livonia, MI
Chemistry Contact:	Paul Wiseman
Sampler(s):	Eric Mickelson

Laboratory Name:	Test America
Lab Contact:	D. Hecker



240-28526 Chain of Custody

SOW ID:		12607-T01Y13-013
Cooler No:		
Carrier:		Fed-Ex
Airbill No:		
Date Shipped:		8-29-13
COMMENTS/SPECIAL INSTRUCTIONS:		

MS/MSD Request		
Total Containers/Sample		
Other:		
EnCores 3x5-g, 1x25-g		
Methanol/Water (Soil)		
Sodium Hydroxide (NaOH)		
Sulfuric Acid (H ₂ SO ₄)		
Nitric Acid (HNO ₃)		
Hydrochloric Acid (HCl)		
Unpreserved		
Grab (g) or Comp (c)		
Matrix Code (see back of COC)		

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yyyy)	TIME (hh:mm)
1	GW-12607-082913-EM-029	8/29/13	1020
2	-030		1130
3	-031		1205
4	-032		1220
5	-033		1250
6	-034		1330
7	-035		1435
8	-036		1430
9	-037		1510
10	-038		1505
11	-039		1615
12	-040		1700

Notes/Special Requirements:		Short Hold Time	
Total Number of Containers:		16	
All Samples in Cooler must be on COC			
RECEIVED BY		TIME	
DATE		COMPANY	
TIME		DATE	
TIME		DATE	

TAT Required in business days (use separate COCs for different TATs):		RECEIVED BY	
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:		TIME	
DATE		COMPANY	
TIME		DATE	
TIME		DATE	

Relinquished By:		CRA	
Eric Mickelson		8-29-13	
1800		1. Paul Wiseman	
2.		2.	
3.		3.	

Distribution:		WHITE - Fully Executed Copy (CRA)	
YELLOW - Receiving Laboratory Copy		PINK - Shipper	
GOLDENROD - Sampling Crew		CRA Form: COC-10A (20110804)	

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY	
Page 30 of 31	

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 28626

Client <u>CRA</u>		Site Name _____		Cooler unpacked by: <u>Deborah Green</u>	
Cooler Received on <u>8-30-13</u>		Opened on <u>8-30-13</u>			
FedEx: 1 st Grd <u>Exp</u>		UPS FAS Stetson		Client Drop Off TestAmerica Courier Other _____	
TestAmerica Cooler # _____		Foam Box <u>Client Cooler</u>		Box _____ Other _____	
Packing material used: Bubble Wrap		Foam Plastic Bag <u>None</u>		Other _____	
COOLANT: <u>Wet Ice</u>		Blue Ice Dry Ice Water		None	
1. Cooler temperature upon receipt					
IR GUN# A (CF -1 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
IR GUN# 4 (CF 0 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
IR GUN# 5 (CF +1 °C)		Observed Cooler Temp. _____ °C		Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF -0 °C)		Observed Cooler Temp. <u>3.8</u> °C		Corrected Cooler Temp. <u>3.8</u> °C	
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes <u>No</u>					
-Were custody seals on the outside of the cooler(s) signed & dated? Yes <u>No</u> NA					
-Were custody seals on the bottle(s)? Yes <u>No</u>					
3. Shippers' packing slip attached to the cooler(s)? <u>Yes</u> No					
4. Did custody papers accompany the sample(s)? <u>Yes</u> No					
5. Were the custody papers relinquished & signed in the appropriate place? <u>Yes</u> No					
6. Did all bottles arrive in good condition (Unbroken)? <u>Yes</u> No					
7. Could all bottle labels be reconciled with the COC? <u>Yes</u> No					
8. Were correct bottle(s) used for the test(s) indicated? <u>Yes</u> No					
9. Sufficient quantity received to perform indicated analyses? <u>Yes</u> No					
10. Were sample(s) at the correct pH upon receipt? <u>Yes</u> No NA pH Strip Lot# <u>HC376062</u>					
11. Were VOAs on the COC? <u>Yes</u> No					
12. Were air bubbles >6 mm in any VOA vials? <u>Yes</u> No <u>NA</u>					
13. Was a trip blank present in the cooler(s)? <u>Yes</u> No					
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____					
Concerning _____					

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: Deborah Green

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-29886-1

Client Project/Site: 12607, RACER Eckles Rd

Revision: 1

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman



Authorized for release by:

12/18/2013 8:55:44 AM

Denise Heckler, Project Manager II

(330)966-9477

denise.heckler@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	10
Client Sample Results	11
QC Association Summary	47
QC Sample Results	48
Surrogate Summary	62
Lab Chronicle	63
Certification Summary	66
Chain of Custody	67



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Job ID: 240-29886-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607, RACER Eckles Rd

Report Number: 240-29886-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

A revised report was provided on December 18, 2013. TCL VOCs were reported.

RECEIPT

The samples were received on 10/05/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6 C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TB-12607-093013-JY-001 (240-29886-1), GW-12607-093013-JY-002 (240-29886-2), GW-12607-093013-JY-003 (240-29886-3), GW-12607-100213-JY-004 (240-29886-4), GW-12607-100213-JY-005 (240-29886-5), GW-12607-100213-JY-006 (240-29886-6), GW-12607-100213-JY-007 (240-29886-7), GW-12607-100213-JY-008 (240-29886-8), GW-12607-100213-JY-009 (240-29886-9), GW-12607-100213-JY-010 (240-29886-10), GW-12607-100313-JY-011 (240-29886-11), GW-12607-100313-JY-012 (240-29886-12), GW-12607-100313-JY-013 (240-29886-13), GW-12607-100313-JY-014 (240-29886-14), GW-12607-100313-JY-015 (240-29886-15), GW-12607-100313-JY-016 (240-29886-16), GW-12607-100413-JY-017 (240-29886-17) and GW-12607-100413-JY-018 (240-29886-18) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/11/2013, 10/12/2013 and 10/14/2013.

Samples GW-12607-093013-JY-003 (240-29886-3)[4X], GW-12607-100213-JY-007 (240-29886-7)[2.5X], GW-12607-100313-JY-011 (240-29886-11)[2.5X] and GW-12607-100413-JY-017 (240-29886-17)[3.33X] required dilution prior to analysis. The reporting limits have

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Job ID: 240-29886-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

been adjusted accordingly.

No difficulties were encountered during the VOCs analysis.

All quality control parameters were within the acceptance limits.

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Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-29886-1	TB-12607-093013-JY-001	Water	09/30/13 00:00	10/05/13 09:45
240-29886-2	GW-12607-093013-JY-002	Water	09/30/13 10:25	10/05/13 09:45
240-29886-3	GW-12607-093013-JY-003	Water	09/30/13 12:10	10/05/13 09:45
240-29886-4	GW-12607-100213-JY-004	Water	10/02/13 10:55	10/05/13 09:45
240-29886-5	GW-12607-100213-JY-005	Water	10/02/13 11:00	10/05/13 09:45
240-29886-6	GW-12607-100213-JY-006	Water	10/02/13 12:00	10/05/13 09:45
240-29886-7	GW-12607-100213-JY-007	Water	10/02/13 13:15	10/05/13 09:45
240-29886-8	GW-12607-100213-JY-008	Water	10/02/13 14:15	10/05/13 09:45
240-29886-9	GW-12607-100213-JY-009	Water	10/02/13 14:20	10/05/13 09:45
240-29886-10	GW-12607-100213-JY-010	Water	10/02/13 15:20	10/05/13 09:45
240-29886-11	GW-12607-100313-JY-011	Water	10/03/13 09:10	10/05/13 09:45
240-29886-12	GW-12607-100313-JY-012	Water	10/03/13 10:15	10/05/13 09:45
240-29886-13	GW-12607-100313-JY-013	Water	10/03/13 11:40	10/05/13 09:45
240-29886-14	GW-12607-100313-JY-014	Water	10/03/13 13:00	10/05/13 09:45
240-29886-15	GW-12607-100313-JY-015	Water	10/03/13 13:50	10/05/13 09:45
240-29886-16	GW-12607-100313-JY-016	Water	10/03/13 14:50	10/05/13 09:45
240-29886-17	GW-12607-100413-JY-017	Water	10/04/13 11:55	10/05/13 09:45
240-29886-18	GW-12607-100413-JY-018	Water	10/04/13 13:20	10/05/13 09:45

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: TB-12607-093013-JY-001

Lab Sample ID: 240-29886-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.1	J	10	1.1	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-093013-JY-002

Lab Sample ID: 240-29886-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	12		1.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	0.20	J	1.0	0.17	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.38	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-093013-JY-003

Lab Sample ID: 240-29886-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	27		4.0	0.88	ug/L	4		8260B	Total/NA
Trichloroethene	110		4.0	0.68	ug/L	4		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-004

Lab Sample ID: 240-29886-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.32	J	1.0	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-005

Lab Sample ID: 240-29886-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.32	J	1.0	0.15	ug/L	1		8260B	Total/NA
Chloroform	0.33	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-006

Lab Sample ID: 240-29886-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	1.9		1.0	0.30	ug/L	1		8260B	Total/NA
Chloroform	0.33	J	1.0	0.16	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-007

Lab Sample ID: 240-29886-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	15		2.5	0.55	ug/L	2.5		8260B	Total/NA
Trichloroethene	50		2.5	0.43	ug/L	2.5		8260B	Total/NA
1,1-Dichloroethene	0.57	J	2.5	0.48	ug/L	2.5		8260B	Total/NA
Chloroform	0.60	J	2.5	0.40	ug/L	2.5		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-008

Lab Sample ID: 240-29886-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.0		1.0	0.22	ug/L	1		8260B	Total/NA
Chloromethane	0.48	J	1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-009

Lab Sample ID: 240-29886-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.5		1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: GW-12607-100213-JY-009 (Continued)

Lab Sample ID: 240-29886-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.39	J	1.0	0.30	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100213-JY-010

Lab Sample ID: 240-29886-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	8.3		1.0	0.22	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.22	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-011

Lab Sample ID: 240-29886-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	67		2.5	0.55	ug/L	2.5		8260B	Total/NA
1,1-Dichloroethene	2.6		2.5	0.48	ug/L	2.5		8260B	Total/NA
Chloroform	1.0	J	2.5	0.40	ug/L	2.5		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-012

Lab Sample ID: 240-29886-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	19		1.0	0.22	ug/L	1		8260B	Total/NA
Acetone	2.0	J	10	1.1	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.38	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-013

Lab Sample ID: 240-29886-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.4		1.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	0.50	J	1.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-014

Lab Sample ID: 240-29886-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20		1.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	33		1.0	0.17	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.33	J	1.0	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-015

Lab Sample ID: 240-29886-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.6		1.0	0.22	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.88	J	1.0	0.15	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100313-JY-016

Lab Sample ID: 240-29886-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.1		1.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	0.49	J	1.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: GW-12607-100413-JY-017

Lab Sample ID: 240-29886-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
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This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: GW-12607-100413-JY-017 (Continued)

Lab Sample ID: 240-29886-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20		3.3	0.73	ug/L	3.33		8260B	Total/NA
Trichloroethene	53		3.3	0.57	ug/L	3.33		8260B	Total/NA

Client Sample ID: GW-12607-100413-JY-018

Lab Sample ID: 240-29886-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	12		1.0	0.22	ug/L	1		8260B	Total/NA
Trichloroethene	3.1		1.0	0.17	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	0.35	J	1.0	0.15	ug/L	1		8260B	Total/NA
Acetone	1.3	J	10	1.1	ug/L	1		8260B	Total/NA
1,1-Dichloroethene	0.29	J	1.0	0.19	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-12607-093013-JY-001

Date Collected: 09/30/13 00:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 17:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 17:48	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 17:48	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 17:48	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 17:48	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 17:48	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 17:48	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 17:48	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 17:48	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 17:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 17:48	1
Acetone	6.1	J	10	1.1	ug/L			10/11/13 17:48	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 17:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 17:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 17:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 17:48	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 17:48	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 17:48	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 17:48	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 17:48	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 17:48	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 17:48	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 17:48	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 17:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 17:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 17:48	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 17:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 17:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 17:48	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 17:48	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 17:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 17:48	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 17:48	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 17:48	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 17:48	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 17:48	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 17:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 17:48	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 17:48	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 17:48	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 17:48	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 17:48	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TB-12607-093013-JY-001

Lab Sample ID: 240-29886-1

Date Collected: 09/30/13 00:00

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 17:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129					10/11/13 17:48	1
4-Bromofluorobenzene (Surr)	91		66 - 117					10/11/13 17:48	1
Toluene-d8 (Surr)	88		74 - 115					10/11/13 17:48	1
Dibromofluoromethane (Surr)	85		75 - 121					10/11/13 17:48	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-093013-JY-002

Date Collected: 09/30/13 10:25

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	12		1.0	0.22	ug/L			10/11/13 18:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 18:12	1
Trichloroethene	0.20	J	1.0	0.17	ug/L			10/11/13 18:12	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 18:12	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 18:12	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 18:12	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 18:12	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 18:12	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 18:12	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 18:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 18:12	1
Acetone	10	U	10	1.1	ug/L			10/11/13 18:12	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 18:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 18:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 18:12	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 18:12	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 18:12	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 18:12	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 18:12	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 18:12	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 18:12	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 18:12	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 18:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 18:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 18:12	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 18:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 18:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 18:12	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 18:12	1
1,1-Dichloroethene	0.38	J	1.0	0.19	ug/L			10/11/13 18:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 18:12	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 18:12	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 18:12	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 18:12	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 18:12	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 18:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 18:12	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 18:12	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 18:12	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 18:12	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:12	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-093013-JY-002

Lab Sample ID: 240-29886-2

Date Collected: 09/30/13 10:25

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 18:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129					10/11/13 18:12	1
4-Bromofluorobenzene (Surr)	88		66 - 117					10/11/13 18:12	1
Toluene-d8 (Surr)	85		74 - 115					10/11/13 18:12	1
Dibromofluoromethane (Surr)	92		75 - 121					10/11/13 18:12	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-093013-JY-003

Date Collected: 09/30/13 12:10

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	27		4.0	0.88	ug/L			10/11/13 18:35	4
cis-1,2-Dichloroethene	4.0	U	4.0	0.68	ug/L			10/11/13 18:35	4
Trichloroethene	110		4.0	0.68	ug/L			10/11/13 18:35	4
Vinyl chloride	4.0	U	4.0	0.88	ug/L			10/11/13 18:35	4
Benzene	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
cis-1,3-Dichloropropene	4.0	U	4.0	0.56	ug/L			10/11/13 18:35	4
Carbon disulfide	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
Bromoform	4.0	U	4.0	2.6	ug/L			10/11/13 18:35	4
Tetrachloroethene	4.0	U	4.0	1.2	ug/L			10/11/13 18:35	4
1,1-Dichloroethane	4.0	U	4.0	0.60	ug/L			10/11/13 18:35	4
1,2-Dichloroethane	4.0	U	4.0	0.88	ug/L			10/11/13 18:35	4
1,2-Dichloropropane	4.0	U	4.0	0.72	ug/L			10/11/13 18:35	4
1,1,2-Trichloroethane	4.0	U	4.0	1.1	ug/L			10/11/13 18:35	4
Acetone	40	U	40	4.4	ug/L			10/11/13 18:35	4
Methyl acetate	40	U	40	1.5	ug/L			10/11/13 18:35	4
Dichlorodifluoromethane	4.0	U	4.0	1.2	ug/L			10/11/13 18:35	4
4-Methyl-2-pentanone (MIBK)	40	U	40	1.3	ug/L			10/11/13 18:35	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.1	ug/L			10/11/13 18:35	4
Methylene Chloride	4.0	U	4.0	1.3	ug/L			10/11/13 18:35	4
Chloromethane	4.0	U	4.0	1.2	ug/L			10/11/13 18:35	4
Bromomethane	4.0	U	4.0	1.6	ug/L			10/11/13 18:35	4
Chlorodibromomethane	4.0	U	4.0	0.72	ug/L			10/11/13 18:35	4
Toluene	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
1,2,4-Trichlorobenzene	4.0	U	4.0	0.60	ug/L			10/11/13 18:35	4
o-Xylene	4.0	U	4.0	0.56	ug/L			10/11/13 18:35	4
Chlorobenzene	4.0	U	4.0	0.60	ug/L			10/11/13 18:35	4
1,2-Dibromo-3-Chloropropane	8.0	U	8.0	2.7	ug/L			10/11/13 18:35	4
1,3-Dichlorobenzene	4.0	U	4.0	0.56	ug/L			10/11/13 18:35	4
Methyl tert-butyl ether	4.0	U	4.0	0.68	ug/L			10/11/13 18:35	4
Styrene	4.0	U	4.0	0.44	ug/L			10/11/13 18:35	4
trans-1,2-Dichloroethene	4.0	U	4.0	0.76	ug/L			10/11/13 18:35	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.72	ug/L			10/11/13 18:35	4
Chloroethane	4.0	U	4.0	1.2	ug/L			10/11/13 18:35	4
1,1-Dichloroethene	4.0	U	4.0	0.76	ug/L			10/11/13 18:35	4
1,2-Dichlorobenzene	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
2-Hexanone	40	U	40	1.6	ug/L			10/11/13 18:35	4
2-Butanone (MEK)	40	U	40	2.3	ug/L			10/11/13 18:35	4
Ethylbenzene	4.0	U	4.0	0.68	ug/L			10/11/13 18:35	4
Isopropylbenzene	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
Methylcyclohexane	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
Trichlorofluoromethane	4.0	U	4.0	0.84	ug/L			10/11/13 18:35	4
Xylenes, Total	8.0	U	8.0	0.56	ug/L			10/11/13 18:35	4
Cyclohexane	4.0	U	4.0	0.48	ug/L			10/11/13 18:35	4
trans-1,3-Dichloropropene	4.0	U	4.0	0.76	ug/L			10/11/13 18:35	4
Chloroform	4.0	U	4.0	0.64	ug/L			10/11/13 18:35	4
m-Xylene & p-Xylene	8.0	U	8.0	0.96	ug/L			10/11/13 18:35	4
Ethylene Dibromide	4.0	U	4.0	0.96	ug/L			10/11/13 18:35	4
Carbon tetrachloride	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4
1,4-Dichlorobenzene	4.0	U	4.0	0.52	ug/L			10/11/13 18:35	4

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-093013-JY-003

Lab Sample ID: 240-29886-3

Date Collected: 09/30/13 12:10

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	4.0	U	4.0	0.60	ug/L			10/11/13 18:35	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 129					10/11/13 18:35	4
4-Bromofluorobenzene (Surr)	87		66 - 117					10/11/13 18:35	4
Toluene-d8 (Surr)	83		74 - 115					10/11/13 18:35	4
Dibromofluoromethane (Surr)	88		75 - 121					10/11/13 18:35	4

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-004

Date Collected: 10/02/13 10:55

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 18:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 18:58	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 18:58	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 18:58	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 18:58	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 18:58	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 18:58	1
1,1-Dichloroethane	0.32	J	1.0	0.15	ug/L			10/11/13 18:58	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 18:58	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 18:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 18:58	1
Acetone	10	U	10	1.1	ug/L			10/11/13 18:58	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 18:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 18:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 18:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 18:58	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 18:58	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 18:58	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 18:58	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 18:58	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 18:58	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 18:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 18:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 18:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 18:58	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 18:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 18:58	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 18:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 18:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 18:58	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 18:58	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 18:58	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 18:58	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 18:58	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 18:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 18:58	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 18:58	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 18:58	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 18:58	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 18:58	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-004

Lab Sample ID: 240-29886-4

Date Collected: 10/02/13 10:55

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L	—		10/11/13 18:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 129					10/11/13 18:58	1
4-Bromofluorobenzene (Surr)	84		66 - 117					10/11/13 18:58	1
Toluene-d8 (Surr)	80		74 - 115					10/11/13 18:58	1
Dibromofluoromethane (Surr)	93		75 - 121					10/11/13 18:58	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-005

Date Collected: 10/02/13 11:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 19:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:22	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:22	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 19:22	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 19:22	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 19:22	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 19:22	1
1,1-Dichloroethane	0.32	J	1.0	0.15	ug/L			10/11/13 19:22	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 19:22	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 19:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 19:22	1
Acetone	10	U	10	1.1	ug/L			10/11/13 19:22	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 19:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 19:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 19:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 19:22	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 19:22	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 19:22	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 19:22	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:22	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:22	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 19:22	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:22	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 19:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 19:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 19:22	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 19:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:22	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 19:22	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 19:22	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 19:22	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 19:22	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 19:22	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 19:22	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 19:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 19:22	1
Chloroform	0.33	J	1.0	0.16	ug/L			10/11/13 19:22	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 19:22	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 19:22	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:22	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-005

Lab Sample ID: 240-29886-5

Date Collected: 10/02/13 11:00

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L	—		10/11/13 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129					10/11/13 19:22	1
4-Bromofluorobenzene (Surr)	88		66 - 117					10/11/13 19:22	1
Toluene-d8 (Surr)	85		74 - 115					10/11/13 19:22	1
Dibromofluoromethane (Surr)	93		75 - 121					10/11/13 19:22	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-006

Date Collected: 10/02/13 12:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-6

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 19:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:07	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:07	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 19:07	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 19:07	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 19:07	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 19:07	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 19:07	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 19:07	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 19:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 19:07	1
Acetone	10	U	10	1.1	ug/L			10/11/13 19:07	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 19:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 19:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 19:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 19:07	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 19:07	1
Chloromethane	1.9		1.0	0.30	ug/L			10/11/13 19:07	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 19:07	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:07	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:07	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 19:07	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:07	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 19:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 19:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 19:07	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 19:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:07	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 19:07	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 19:07	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 19:07	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 19:07	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 19:07	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 19:07	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 19:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 19:07	1
Chloroform	0.33	J	1.0	0.16	ug/L			10/11/13 19:07	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 19:07	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 19:07	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:07	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-006

Lab Sample ID: 240-29886-6

Date Collected: 10/02/13 12:00

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 19:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 129					10/11/13 19:07	1
4-Bromofluorobenzene (Surr)	82		66 - 117					10/11/13 19:07	1
Toluene-d8 (Surr)	82		74 - 115					10/11/13 19:07	1
Dibromofluoromethane (Surr)	105		75 - 121					10/11/13 19:07	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-007

Date Collected: 10/02/13 13:15

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-7

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	15		2.5	0.55	ug/L			10/14/13 14:10	2.5
cis-1,2-Dichloroethene	2.5	U	2.5	0.43	ug/L			10/14/13 14:10	2.5
Trichloroethene	50		2.5	0.43	ug/L			10/14/13 14:10	2.5
Vinyl chloride	2.5	U	2.5	0.55	ug/L			10/14/13 14:10	2.5
Benzene	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.35	ug/L			10/14/13 14:10	2.5
Carbon disulfide	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
Bromoform	2.5	U	2.5	1.6	ug/L			10/14/13 14:10	2.5
Tetrachloroethene	2.5	U	2.5	0.73	ug/L			10/14/13 14:10	2.5
1,1-Dichloroethane	2.5	U	2.5	0.38	ug/L			10/14/13 14:10	2.5
1,2-Dichloroethane	2.5	U	2.5	0.55	ug/L			10/14/13 14:10	2.5
1,2-Dichloropropane	2.5	U	2.5	0.45	ug/L			10/14/13 14:10	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.68	ug/L			10/14/13 14:10	2.5
Acetone	25	U	25	2.8	ug/L			10/14/13 14:10	2.5
Methyl acetate	25	U	25	0.95	ug/L			10/14/13 14:10	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.78	ug/L			10/14/13 14:10	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	0.80	ug/L			10/14/13 14:10	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.70	ug/L			10/14/13 14:10	2.5
Methylene Chloride	2.5	U	2.5	0.83	ug/L			10/14/13 14:10	2.5
Chloromethane	2.5	U	2.5	0.75	ug/L			10/14/13 14:10	2.5
Bromomethane	2.5	U	2.5	1.0	ug/L			10/14/13 14:10	2.5
Chlorodibromomethane	2.5	U	2.5	0.45	ug/L			10/14/13 14:10	2.5
Toluene	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.38	ug/L			10/14/13 14:10	2.5
o-Xylene	2.5	U	2.5	0.35	ug/L			10/14/13 14:10	2.5
Chlorobenzene	2.5	U	2.5	0.38	ug/L			10/14/13 14:10	2.5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.7	ug/L			10/14/13 14:10	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.35	ug/L			10/14/13 14:10	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.43	ug/L			10/14/13 14:10	2.5
Styrene	2.5	U	2.5	0.28	ug/L			10/14/13 14:10	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.48	ug/L			10/14/13 14:10	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45	ug/L			10/14/13 14:10	2.5
Chloroethane	2.5	U	2.5	0.73	ug/L			10/14/13 14:10	2.5
1,1-Dichloroethene	0.57	J	2.5	0.48	ug/L			10/14/13 14:10	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
2-Hexanone	25	U	25	1.0	ug/L			10/14/13 14:10	2.5
2-Butanone (MEK)	25	U	25	1.4	ug/L			10/14/13 14:10	2.5
Ethylbenzene	2.5	U	2.5	0.43	ug/L			10/14/13 14:10	2.5
Isopropylbenzene	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
Methylcyclohexane	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
Trichlorofluoromethane	2.5	U	2.5	0.53	ug/L			10/14/13 14:10	2.5
Xylenes, Total	5.0	U	5.0	0.35	ug/L			10/14/13 14:10	2.5
Cyclohexane	2.5	U	2.5	0.30	ug/L			10/14/13 14:10	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.48	ug/L			10/14/13 14:10	2.5
Chloroform	0.60	J	2.5	0.40	ug/L			10/14/13 14:10	2.5
m-Xylene & p-Xylene	5.0	U	5.0	0.60	ug/L			10/14/13 14:10	2.5
Ethylene Dibromide	2.5	U	2.5	0.60	ug/L			10/14/13 14:10	2.5
Carbon tetrachloride	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			10/14/13 14:10	2.5

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-007

Lab Sample ID: 240-29886-7

Date Collected: 10/02/13 13:15

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	2.5	U	2.5	0.38	ug/L			10/14/13 14:10	2.5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		63 - 129					10/14/13 14:10	2.5
4-Bromofluorobenzene (Surr)	88		66 - 117					10/14/13 14:10	2.5
Toluene-d8 (Surr)	88		74 - 115					10/14/13 14:10	2.5
Dibromofluoromethane (Surr)	115		75 - 121					10/14/13 14:10	2.5

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-008

Date Collected: 10/02/13 14:15

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-8

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0		1.0	0.22	ug/L			10/11/13 19:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:52	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 19:52	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 19:52	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 19:52	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 19:52	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 19:52	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 19:52	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 19:52	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 19:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 19:52	1
Acetone	10	U	10	1.1	ug/L			10/11/13 19:52	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 19:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 19:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 19:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 19:52	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 19:52	1
Chloromethane	0.48	J	1.0	0.30	ug/L			10/11/13 19:52	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 19:52	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:52	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:52	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 19:52	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 19:52	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 19:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 19:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 19:52	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 19:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 19:52	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 19:52	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 19:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 19:52	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 19:52	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 19:52	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 19:52	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 19:52	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 19:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 19:52	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 19:52	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 19:52	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 19:52	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 19:52	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-008

Lab Sample ID: 240-29886-8

Date Collected: 10/02/13 14:15

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 19:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129					10/11/13 19:52	1
4-Bromofluorobenzene (Surr)	75		66 - 117					10/11/13 19:52	1
Toluene-d8 (Surr)	78		74 - 115					10/11/13 19:52	1
Dibromofluoromethane (Surr)	101		75 - 121					10/11/13 19:52	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-009

Date Collected: 10/02/13 14:20

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-9

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	7.5		1.0	0.22	ug/L			10/11/13 20:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 20:15	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 20:15	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 20:15	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 20:15	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 20:15	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 20:15	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 20:15	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 20:15	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 20:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 20:15	1
Acetone	10	U	10	1.1	ug/L			10/11/13 20:15	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 20:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 20:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 20:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 20:15	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 20:15	1
Chloromethane	0.39	J	1.0	0.30	ug/L			10/11/13 20:15	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 20:15	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 20:15	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 20:15	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 20:15	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 20:15	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 20:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 20:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 20:15	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 20:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 20:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 20:15	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 20:15	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 20:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 20:15	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 20:15	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 20:15	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 20:15	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 20:15	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 20:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 20:15	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 20:15	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 20:15	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 20:15	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:15	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-009

Lab Sample ID: 240-29886-9

Date Collected: 10/02/13 14:20

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 129					10/11/13 20:15	1
4-Bromofluorobenzene (Surr)	82		66 - 117					10/11/13 20:15	1
Toluene-d8 (Surr)	80		74 - 115					10/11/13 20:15	1
Dibromofluoromethane (Surr)	109		75 - 121					10/11/13 20:15	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100213-JY-010

Date Collected: 10/02/13 15:20

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-10

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	8.3		1.0	0.22	ug/L			10/11/13 20:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 20:38	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 20:38	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 20:38	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 20:38	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 20:38	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 20:38	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 20:38	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 20:38	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 20:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 20:38	1
Acetone	10	U	10	1.1	ug/L			10/11/13 20:38	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 20:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 20:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 20:38	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 20:38	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 20:38	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 20:38	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 20:38	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 20:38	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 20:38	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 20:38	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 20:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 20:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 20:38	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 20:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 20:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 20:38	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 20:38	1
1,1-Dichloroethene	0.22	J	1.0	0.19	ug/L			10/11/13 20:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 20:38	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 20:38	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 20:38	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 20:38	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 20:38	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 20:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 20:38	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 20:38	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 20:38	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 20:38	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 20:38	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100213-JY-010

Lab Sample ID: 240-29886-10

Date Collected: 10/02/13 15:20

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 20:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 129					10/11/13 20:38	1
4-Bromofluorobenzene (Surr)	71		66 - 117					10/11/13 20:38	1
Toluene-d8 (Surr)	80		74 - 115					10/11/13 20:38	1
Dibromofluoromethane (Surr)	104		75 - 121					10/11/13 20:38	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-011

Date Collected: 10/03/13 09:10

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-11

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	67		2.5	0.55	ug/L			10/11/13 21:00	2.5
cis-1,2-Dichloroethene	2.5	U	2.5	0.43	ug/L			10/11/13 21:00	2.5
Trichloroethene	2.5	U	2.5	0.43	ug/L			10/11/13 21:00	2.5
Vinyl chloride	2.5	U	2.5	0.55	ug/L			10/11/13 21:00	2.5
Benzene	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.35	ug/L			10/11/13 21:00	2.5
Carbon disulfide	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
Bromoform	2.5	U	2.5	1.6	ug/L			10/11/13 21:00	2.5
Tetrachloroethene	2.5	U	2.5	0.73	ug/L			10/11/13 21:00	2.5
1,1-Dichloroethane	2.5	U	2.5	0.38	ug/L			10/11/13 21:00	2.5
1,2-Dichloroethane	2.5	U	2.5	0.55	ug/L			10/11/13 21:00	2.5
1,2-Dichloropropane	2.5	U	2.5	0.45	ug/L			10/11/13 21:00	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.68	ug/L			10/11/13 21:00	2.5
Acetone	25	U	25	2.8	ug/L			10/11/13 21:00	2.5
Methyl acetate	25	U	25	0.95	ug/L			10/11/13 21:00	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.78	ug/L			10/11/13 21:00	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	0.80	ug/L			10/11/13 21:00	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.70	ug/L			10/11/13 21:00	2.5
Methylene Chloride	2.5	U	2.5	0.83	ug/L			10/11/13 21:00	2.5
Chloromethane	2.5	U	2.5	0.75	ug/L			10/11/13 21:00	2.5
Bromomethane	2.5	U	2.5	1.0	ug/L			10/11/13 21:00	2.5
Chlorodibromomethane	2.5	U	2.5	0.45	ug/L			10/11/13 21:00	2.5
Toluene	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.38	ug/L			10/11/13 21:00	2.5
o-Xylene	2.5	U	2.5	0.35	ug/L			10/11/13 21:00	2.5
Chlorobenzene	2.5	U	2.5	0.38	ug/L			10/11/13 21:00	2.5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	1.7	ug/L			10/11/13 21:00	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.35	ug/L			10/11/13 21:00	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.43	ug/L			10/11/13 21:00	2.5
Styrene	2.5	U	2.5	0.28	ug/L			10/11/13 21:00	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.48	ug/L			10/11/13 21:00	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45	ug/L			10/11/13 21:00	2.5
Chloroethane	2.5	U	2.5	0.73	ug/L			10/11/13 21:00	2.5
1,1-Dichloroethene	2.6		2.5	0.48	ug/L			10/11/13 21:00	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
2-Hexanone	25	U	25	1.0	ug/L			10/11/13 21:00	2.5
2-Butanone (MEK)	25	U	25	1.4	ug/L			10/11/13 21:00	2.5
Ethylbenzene	2.5	U	2.5	0.43	ug/L			10/11/13 21:00	2.5
Isopropylbenzene	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
Methylcyclohexane	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
Trichlorofluoromethane	2.5	U	2.5	0.53	ug/L			10/11/13 21:00	2.5
Xylenes, Total	5.0	U	5.0	0.35	ug/L			10/11/13 21:00	2.5
Cyclohexane	2.5	U	2.5	0.30	ug/L			10/11/13 21:00	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.48	ug/L			10/11/13 21:00	2.5
Chloroform	1.0	J	2.5	0.40	ug/L			10/11/13 21:00	2.5
m-Xylene & p-Xylene	5.0	U	5.0	0.60	ug/L			10/11/13 21:00	2.5
Ethylene Dibromide	2.5	U	2.5	0.60	ug/L			10/11/13 21:00	2.5
Carbon tetrachloride	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			10/11/13 21:00	2.5

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-011

Lab Sample ID: 240-29886-11

Date Collected: 10/03/13 09:10

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	2.5	U	2.5	0.38	ug/L			10/11/13 21:00	2.5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129					10/11/13 21:00	2.5
4-Bromofluorobenzene (Surr)	75		66 - 117					10/11/13 21:00	2.5
Toluene-d8 (Surr)	77		74 - 115					10/11/13 21:00	2.5
Dibromofluoromethane (Surr)	102		75 - 121					10/11/13 21:00	2.5

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-012

Date Collected: 10/03/13 10:15

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	19		1.0	0.22	ug/L			10/12/13 01:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 01:07	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 01:07	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/12/13 01:07	1
Benzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/12/13 01:07	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/12/13 01:07	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/12/13 01:07	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/12/13 01:07	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 01:07	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/12/13 01:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/12/13 01:07	1
Acetone	2.0	J	10	1.1	ug/L			10/12/13 01:07	1
Methyl acetate	10	U	10	0.38	ug/L			10/12/13 01:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/12/13 01:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/12/13 01:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/12/13 01:07	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/13 01:07	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/12/13 01:07	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/12/13 01:07	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:07	1
Toluene	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:07	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/12/13 01:07	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:07	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/12/13 01:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/12/13 01:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/12/13 01:07	1
Styrene	1.0	U	1.0	0.11	ug/L			10/12/13 01:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 01:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:07	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/12/13 01:07	1
1,1-Dichloroethene	0.38	J	1.0	0.19	ug/L			10/12/13 01:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
2-Hexanone	10	U	10	0.41	ug/L			10/12/13 01:07	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/12/13 01:07	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/12/13 01:07	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/12/13 01:07	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/12/13 01:07	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/12/13 01:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/12/13 01:07	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/12/13 01:07	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/12/13 01:07	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/12/13 01:07	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:07	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-012

Lab Sample ID: 240-29886-12

Date Collected: 10/03/13 10:15

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/12/13 01:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 129					10/12/13 01:07	1
4-Bromofluorobenzene (Surr)	87		66 - 117					10/12/13 01:07	1
Toluene-d8 (Surr)	87		74 - 115					10/12/13 01:07	1
Dibromofluoromethane (Surr)	106		75 - 121					10/12/13 01:07	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-013

Date Collected: 10/03/13 11:40

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-13

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.4		1.0	0.22	ug/L			10/11/13 21:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 21:23	1
Trichloroethene	0.50	J	1.0	0.17	ug/L			10/11/13 21:23	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 21:23	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 21:23	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 21:23	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 21:23	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 21:23	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 21:23	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 21:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 21:23	1
Acetone	10	U	10	1.1	ug/L			10/11/13 21:23	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 21:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 21:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 21:23	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 21:23	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 21:23	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 21:23	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 21:23	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 21:23	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 21:23	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 21:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 21:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 21:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 21:23	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 21:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 21:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 21:23	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 21:23	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 21:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 21:23	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 21:23	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 21:23	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 21:23	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 21:23	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 21:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 21:23	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 21:23	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 21:23	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 21:23	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 21:23	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-013

Lab Sample ID: 240-29886-13

Date Collected: 10/03/13 11:40

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129					10/11/13 21:23	1
4-Bromofluorobenzene (Surr)	76		66 - 117					10/11/13 21:23	1
Toluene-d8 (Surr)	77		74 - 115					10/11/13 21:23	1
Dibromofluoromethane (Surr)	101		75 - 121					10/11/13 21:23	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-014

Date Collected: 10/03/13 13:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-14

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20		1.0	0.22	ug/L			10/12/13 01:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 01:29	1
Trichloroethene	33		1.0	0.17	ug/L			10/12/13 01:29	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/12/13 01:29	1
Benzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/12/13 01:29	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/12/13 01:29	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/12/13 01:29	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/12/13 01:29	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 01:29	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/12/13 01:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/12/13 01:29	1
Acetone	10	U	10	1.1	ug/L			10/12/13 01:29	1
Methyl acetate	10	U	10	0.38	ug/L			10/12/13 01:29	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/12/13 01:29	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/12/13 01:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/12/13 01:29	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/13 01:29	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/12/13 01:29	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/12/13 01:29	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:29	1
Toluene	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:29	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/12/13 01:29	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:29	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/12/13 01:29	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/12/13 01:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/12/13 01:29	1
Styrene	1.0	U	1.0	0.11	ug/L			10/12/13 01:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 01:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:29	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/12/13 01:29	1
1,1-Dichloroethene	0.33	J	1.0	0.19	ug/L			10/12/13 01:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
2-Hexanone	10	U	10	0.41	ug/L			10/12/13 01:29	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/12/13 01:29	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/12/13 01:29	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/12/13 01:29	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/12/13 01:29	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/12/13 01:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/12/13 01:29	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/12/13 01:29	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/12/13 01:29	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/12/13 01:29	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:29	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-014

Lab Sample ID: 240-29886-14

Date Collected: 10/03/13 13:00

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/12/13 01:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129					10/12/13 01:29	1
4-Bromofluorobenzene (Surr)	80		66 - 117					10/12/13 01:29	1
Toluene-d8 (Surr)	83		74 - 115					10/12/13 01:29	1
Dibromofluoromethane (Surr)	100		75 - 121					10/12/13 01:29	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-015

Lab Sample ID: 240-29886-15

Date Collected: 10/03/13 13:50

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	7.6		1.0	0.22	ug/L			10/12/13 01:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 01:51	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 01:51	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/12/13 01:51	1
Benzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/12/13 01:51	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/12/13 01:51	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/12/13 01:51	1
1,1-Dichloroethane	0.88	J	1.0	0.15	ug/L			10/12/13 01:51	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 01:51	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/12/13 01:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/12/13 01:51	1
Acetone	10	U	10	1.1	ug/L			10/12/13 01:51	1
Methyl acetate	10	U	10	0.38	ug/L			10/12/13 01:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/12/13 01:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/12/13 01:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/12/13 01:51	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/13 01:51	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/12/13 01:51	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/12/13 01:51	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:51	1
Toluene	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:51	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/12/13 01:51	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 01:51	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/12/13 01:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/12/13 01:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/12/13 01:51	1
Styrene	1.0	U	1.0	0.11	ug/L			10/12/13 01:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 01:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/12/13 01:51	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/12/13 01:51	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 01:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
2-Hexanone	10	U	10	0.41	ug/L			10/12/13 01:51	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/12/13 01:51	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/12/13 01:51	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/12/13 01:51	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/12/13 01:51	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/12/13 01:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/12/13 01:51	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/12/13 01:51	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/12/13 01:51	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/12/13 01:51	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 01:51	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-015

Lab Sample ID: 240-29886-15

Date Collected: 10/03/13 13:50

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/12/13 01:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		63 - 129					10/12/13 01:51	1
4-Bromofluorobenzene (Surr)	79		66 - 117					10/12/13 01:51	1
Toluene-d8 (Surr)	81		74 - 115					10/12/13 01:51	1
Dibromofluoromethane (Surr)	102		75 - 121					10/12/13 01:51	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100313-JY-016

Lab Sample ID: 240-29886-16

Date Collected: 10/03/13 14:50

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.1		1.0	0.22	ug/L			10/12/13 02:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 02:13	1
Trichloroethene	0.49	J	1.0	0.17	ug/L			10/12/13 02:13	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/12/13 02:13	1
Benzene	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/12/13 02:13	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/12/13 02:13	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/12/13 02:13	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/12/13 02:13	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 02:13	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/12/13 02:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/12/13 02:13	1
Acetone	10	U	10	1.1	ug/L			10/12/13 02:13	1
Methyl acetate	10	U	10	0.38	ug/L			10/12/13 02:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/12/13 02:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/12/13 02:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/12/13 02:13	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/13 02:13	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/12/13 02:13	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/12/13 02:13	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/12/13 02:13	1
Toluene	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 02:13	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/12/13 02:13	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 02:13	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/12/13 02:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/12/13 02:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/12/13 02:13	1
Styrene	1.0	U	1.0	0.11	ug/L			10/12/13 02:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 02:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/12/13 02:13	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/12/13 02:13	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 02:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
2-Hexanone	10	U	10	0.41	ug/L			10/12/13 02:13	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/12/13 02:13	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/12/13 02:13	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/12/13 02:13	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/12/13 02:13	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/12/13 02:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/12/13 02:13	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/12/13 02:13	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/12/13 02:13	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/12/13 02:13	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 02:13	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100313-JY-016

Lab Sample ID: 240-29886-16

Date Collected: 10/03/13 14:50

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/12/13 02:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129					10/12/13 02:13	1
4-Bromofluorobenzene (Surr)	80		66 - 117					10/12/13 02:13	1
Toluene-d8 (Surr)	79		74 - 115					10/12/13 02:13	1
Dibromofluoromethane (Surr)	99		75 - 121					10/12/13 02:13	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100413-JY-017

Date Collected: 10/04/13 11:55

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-17

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	20		3.3	0.73	ug/L			10/12/13 08:14	3.33
cis-1,2-Dichloroethene	3.3	U	3.3	0.57	ug/L			10/12/13 08:14	3.33
Trichloroethene	53		3.3	0.57	ug/L			10/12/13 08:14	3.33
Vinyl chloride	3.3	U	3.3	0.73	ug/L			10/12/13 08:14	3.33
Benzene	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
cis-1,3-Dichloropropene	3.3	U	3.3	0.47	ug/L			10/12/13 08:14	3.33
Carbon disulfide	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
Bromoform	3.3	U	3.3	2.1	ug/L			10/12/13 08:14	3.33
Tetrachloroethene	3.3	U	3.3	0.97	ug/L			10/12/13 08:14	3.33
1,1-Dichloroethane	3.3	U	3.3	0.50	ug/L			10/12/13 08:14	3.33
1,2-Dichloroethane	3.3	U	3.3	0.73	ug/L			10/12/13 08:14	3.33
1,2-Dichloropropane	3.3	U	3.3	0.60	ug/L			10/12/13 08:14	3.33
1,1,2-Trichloroethane	3.3	U	3.3	0.90	ug/L			10/12/13 08:14	3.33
Acetone	33	U	33	3.7	ug/L			10/12/13 08:14	3.33
Methyl acetate	33	U	33	1.3	ug/L			10/12/13 08:14	3.33
Dichlorodifluoromethane	3.3	U	3.3	1.0	ug/L			10/12/13 08:14	3.33
4-Methyl-2-pentanone (MIBK)	33	U	33	1.1	ug/L			10/12/13 08:14	3.33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	3.3	0.93	ug/L			10/12/13 08:14	3.33
Methylene Chloride	3.3	U	3.3	1.1	ug/L			10/12/13 08:14	3.33
Chloromethane	3.3	U	3.3	1.0	ug/L			10/12/13 08:14	3.33
Bromomethane	3.3	U	3.3	1.4	ug/L			10/12/13 08:14	3.33
Chlorodibromomethane	3.3	U	3.3	0.60	ug/L			10/12/13 08:14	3.33
Toluene	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
1,2,4-Trichlorobenzene	3.3	U	3.3	0.50	ug/L			10/12/13 08:14	3.33
o-Xylene	3.3	U	3.3	0.47	ug/L			10/12/13 08:14	3.33
Chlorobenzene	3.3	U	3.3	0.50	ug/L			10/12/13 08:14	3.33
1,2-Dibromo-3-Chloropropane	6.7	U	6.7	2.2	ug/L			10/12/13 08:14	3.33
1,3-Dichlorobenzene	3.3	U	3.3	0.47	ug/L			10/12/13 08:14	3.33
Methyl tert-butyl ether	3.3	U	3.3	0.57	ug/L			10/12/13 08:14	3.33
Styrene	3.3	U	3.3	0.37	ug/L			10/12/13 08:14	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/12/13 08:14	3.33
1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.60	ug/L			10/12/13 08:14	3.33
Chloroethane	3.3	U	3.3	0.97	ug/L			10/12/13 08:14	3.33
1,1-Dichloroethene	3.3	U	3.3	0.63	ug/L			10/12/13 08:14	3.33
1,2-Dichlorobenzene	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
2-Hexanone	33	U	33	1.4	ug/L			10/12/13 08:14	3.33
2-Butanone (MEK)	33	U	33	1.9	ug/L			10/12/13 08:14	3.33
Ethylbenzene	3.3	U	3.3	0.57	ug/L			10/12/13 08:14	3.33
Isopropylbenzene	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
Methylcyclohexane	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
Trichlorofluoromethane	3.3	U	3.3	0.70	ug/L			10/12/13 08:14	3.33
Xylenes, Total	6.7	U	6.7	0.47	ug/L			10/12/13 08:14	3.33
Cyclohexane	3.3	U	3.3	0.40	ug/L			10/12/13 08:14	3.33
trans-1,3-Dichloropropene	3.3	U	3.3	0.63	ug/L			10/12/13 08:14	3.33
Chloroform	3.3	U	3.3	0.53	ug/L			10/12/13 08:14	3.33
m-Xylene & p-Xylene	6.7	U	6.7	0.80	ug/L			10/12/13 08:14	3.33
Ethylene Dibromide	3.3	U	3.3	0.80	ug/L			10/12/13 08:14	3.33
Carbon tetrachloride	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33
1,4-Dichlorobenzene	3.3	U	3.3	0.43	ug/L			10/12/13 08:14	3.33

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100413-JY-017

Lab Sample ID: 240-29886-17

Date Collected: 10/04/13 11:55

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	3.3	U	3.3	0.50	ug/L			10/12/13 08:14	3.33
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 129					10/12/13 08:14	3.33
4-Bromofluorobenzene (Surr)	79		66 - 117					10/12/13 08:14	3.33
Toluene-d8 (Surr)	81		74 - 115					10/12/13 08:14	3.33
Dibromofluoromethane (Surr)	105		75 - 121					10/12/13 08:14	3.33

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-12607-100413-JY-018

Date Collected: 10/04/13 13:20

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-18

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	12		1.0	0.22	ug/L			10/14/13 13:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/14/13 13:47	1
Trichloroethene	3.1		1.0	0.17	ug/L			10/14/13 13:47	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/14/13 13:47	1
Benzene	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/14/13 13:47	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/14/13 13:47	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/14/13 13:47	1
1,1-Dichloroethane	0.35	J	1.0	0.15	ug/L			10/14/13 13:47	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/14/13 13:47	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/14/13 13:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/14/13 13:47	1
Acetone	1.3	J	10	1.1	ug/L			10/14/13 13:47	1
Methyl acetate	10	U	10	0.38	ug/L			10/14/13 13:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/14/13 13:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/14/13 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/14/13 13:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/13 13:47	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/14/13 13:47	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/14/13 13:47	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/14/13 13:47	1
Toluene	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/14/13 13:47	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/14/13 13:47	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/14/13 13:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/14/13 13:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/14/13 13:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/14/13 13:47	1
Styrene	1.0	U	1.0	0.11	ug/L			10/14/13 13:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/14/13 13:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/14/13 13:47	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/14/13 13:47	1
1,1-Dichloroethene	0.29	J	1.0	0.19	ug/L			10/14/13 13:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
2-Hexanone	10	U	10	0.41	ug/L			10/14/13 13:47	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/14/13 13:47	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/14/13 13:47	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/14/13 13:47	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/14/13 13:47	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/14/13 13:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/14/13 13:47	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/14/13 13:47	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/14/13 13:47	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/14/13 13:47	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/14/13 13:47	1

TestAmerica Canton

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-12607-100413-JY-018

Lab Sample ID: 240-29886-18

Date Collected: 10/04/13 13:20

Matrix: Water

Date Received: 10/05/13 09:45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/14/13 13:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		63 - 129					10/14/13 13:47	1
4-Bromofluorobenzene (Surr)	82		66 - 117					10/14/13 13:47	1
Toluene-d8 (Surr)	82		74 - 115					10/14/13 13:47	1
Dibromofluoromethane (Surr)	104		75 - 121					10/14/13 13:47	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

GC/MS VOA

Analysis Batch: 105169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-29886-1	TB-12607-093013-JY-001	Total/NA	Water	8260B	
240-29886-2	GW-12607-093013-JY-002	Total/NA	Water	8260B	
240-29886-3	GW-12607-093013-JY-003	Total/NA	Water	8260B	
240-29886-4	GW-12607-100213-JY-004	Total/NA	Water	8260B	
240-29886-5	GW-12607-100213-JY-005	Total/NA	Water	8260B	
LCS 240-105169/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-105169/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 105209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-29886-6	GW-12607-100213-JY-006	Total/NA	Water	8260B	
240-29886-8	GW-12607-100213-JY-008	Total/NA	Water	8260B	
240-29886-9	GW-12607-100213-JY-009	Total/NA	Water	8260B	
240-29886-10	GW-12607-100213-JY-010	Total/NA	Water	8260B	
240-29886-11	GW-12607-100313-JY-011	Total/NA	Water	8260B	
240-29886-13	GW-12607-100313-JY-013	Total/NA	Water	8260B	
240-29886-13 MS	GW-12607-100313-JY-013	Total/NA	Water	8260B	
240-29886-13 MSD	GW-12607-100313-JY-013	Total/NA	Water	8260B	
LCS 240-105209/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-105209/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 105288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-29886-12	GW-12607-100313-JY-012	Total/NA	Water	8260B	
240-29886-14	GW-12607-100313-JY-014	Total/NA	Water	8260B	
240-29886-15	GW-12607-100313-JY-015	Total/NA	Water	8260B	
240-29886-16	GW-12607-100313-JY-016	Total/NA	Water	8260B	
240-29886-17	GW-12607-100413-JY-017	Total/NA	Water	8260B	
240-29886-17 MS	GW-12607-100413-JY-017	Total/NA	Water	8260B	
240-29886-17 MSD	GW-12607-100413-JY-017	Total/NA	Water	8260B	
LCS 240-105288/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-105288/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 105408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-29886-7	GW-12607-100213-JY-007	Total/NA	Water	8260B	
240-29886-18	GW-12607-100413-JY-018	Total/NA	Water	8260B	
LCS 240-105408/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-105408/6	Method Blank	Total/NA	Water	8260B	

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-105169/5

Matrix: Water

Analysis Batch: 105169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 09:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 09:55	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 09:55	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 09:55	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 09:55	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 09:55	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 09:55	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 09:55	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 09:55	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 09:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 09:55	1
Acetone	10	U	10	1.1	ug/L			10/11/13 09:55	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 09:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 09:55	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 09:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 09:55	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 09:55	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 09:55	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 09:55	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 09:55	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 09:55	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 09:55	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 09:55	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 09:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 09:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 09:55	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 09:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 09:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 09:55	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 09:55	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 09:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 09:55	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 09:55	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 09:55	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 09:55	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 09:55	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 09:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 09:55	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 09:55	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 09:55	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 09:55	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-105169/5

Matrix: Water

Analysis Batch: 105169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 09:55	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 09:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		63 - 129					10/11/13 09:55	1
4-Bromofluorobenzene (Surr)	86		66 - 117					10/11/13 09:55	1
Toluene-d8 (Surr)	83		74 - 115					10/11/13 09:55	1
Dibromofluoromethane (Surr)	88		75 - 121					10/11/13 09:55	1

Lab Sample ID: LCS 240-105169/4

Matrix: Water

Analysis Batch: 105169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	74 - 118
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	80 - 113
Trichloroethene	10.0	10.5		ug/L		105	76 - 117
Vinyl chloride	10.0	7.55		ug/L		76	53 - 127
Benzene	10.0	9.49		ug/L		95	83 - 112
cis-1,3-Dichloropropene	10.0	9.49		ug/L		95	61 - 115
Carbon disulfide	10.0	9.38		ug/L		94	62 - 142
Bromoform	10.0	8.85		ug/L		89	40 - 131
Tetrachloroethene	10.0	9.43		ug/L		94	79 - 114
1,1-Dichloroethane	10.0	9.89		ug/L		99	82 - 115
1,2-Dichloroethane	10.0	9.98		ug/L		100	71 - 127
1,2-Dichloropropane	10.0	9.23		ug/L		92	81 - 115
1,1,2-Trichloroethane	10.0	9.71		ug/L		97	80 - 112
Acetone	20.0	19.1		ug/L		96	43 - 136
Methyl acetate	50.0	47.2		ug/L		94	58 - 131
Dichlorodifluoromethane	10.0	4.60		ug/L		46	19 - 129
4-Methyl-2-pentanone (MIBK)	20.0	16.2		ug/L		81	63 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.25		ug/L		93	74 - 151
Methylene Chloride	10.0	10.4		ug/L		104	66 - 131
Chloromethane	10.0	7.24		ug/L		72	44 - 126
Bromomethane	10.0	7.91		ug/L		79	11 - 185
Chlorodibromomethane	10.0	10.0		ug/L		100	64 - 119
Toluene	10.0	9.44		ug/L		94	84 - 111
1,2,4-Trichlorobenzene	10.0	9.82		ug/L		98	48 - 135
o-Xylene	10.0	10.1		ug/L		101	83 - 113
Chlorobenzene	10.0	9.39		ug/L		94	85 - 110
1,2-Dibromo-3-Chloropropane	10.0	9.25		ug/L		92	42 - 136
1,3-Dichlorobenzene	10.0	9.82		ug/L		98	80 - 110
Methyl tert-butyl ether	10.0	9.60		ug/L		96	52 - 144
Styrene	10.0	9.81		ug/L		98	79 - 114
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	83 - 117
1,1,2,2-Tetrachloroethane	10.0	9.53		ug/L		95	68 - 118
Chloroethane	10.0	8.53		ug/L		85	25 - 153

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-105169/4

Matrix: Water

Analysis Batch: 105169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	9.76		ug/L		98	78 - 131
1,2-Dichlorobenzene	10.0	9.74		ug/L		97	81 - 110
2-Hexanone	20.0	16.9		ug/L		84	55 - 133
2-Butanone (MEK)	20.0	18.0		ug/L		90	60 - 126
Ethylbenzene	10.0	9.69		ug/L		97	83 - 112
Isopropylbenzene	10.0	9.80		ug/L		98	75 - 114
Methylcyclohexane	10.0	8.58		ug/L		86	56 - 127
Trichlorofluoromethane	10.0	9.21		ug/L		92	49 - 157
Xylenes, Total	20.0	20.2		ug/L		101	83 - 112
Cyclohexane	10.0	8.16		ug/L		82	54 - 121
trans-1,3-Dichloropropene	10.0	10.4		ug/L		104	58 - 117
Chloroform	10.0	9.62		ug/L		96	79 - 117
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	83 - 113
Ethylene Dibromide	10.0	9.54		ug/L		95	79 - 113
Carbon tetrachloride	10.0	10.4		ug/L		104	66 - 128
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	82 - 110
Dichlorobromomethane	10.0	9.69		ug/L		97	72 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	78		63 - 129
4-Bromofluorobenzene (Surr)	90		66 - 117
Toluene-d8 (Surr)	85		74 - 115
Dibromofluoromethane (Surr)	89		75 - 121

Lab Sample ID: MB 240-105209/6

Matrix: Water

Analysis Batch: 105209

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 13:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 13:04	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/11/13 13:04	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/11/13 13:04	1
Benzene	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/11/13 13:04	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/11/13 13:04	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/11/13 13:04	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/11/13 13:04	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/11/13 13:04	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/11/13 13:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/11/13 13:04	1
Acetone	10	U	10	1.1	ug/L			10/11/13 13:04	1
Methyl acetate	10	U	10	0.38	ug/L			10/11/13 13:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/11/13 13:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/11/13 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/11/13 13:04	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/11/13 13:04	1

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-105209/6

Matrix: Water

Analysis Batch: 105209

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.30	ug/L			10/11/13 13:04	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/11/13 13:04	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/11/13 13:04	1
Toluene	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 13:04	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/11/13 13:04	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/11/13 13:04	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/11/13 13:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/11/13 13:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/11/13 13:04	1
Styrene	1.0	U	1.0	0.11	ug/L			10/11/13 13:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 13:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/11/13 13:04	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/11/13 13:04	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/11/13 13:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
2-Hexanone	10	U	10	0.41	ug/L			10/11/13 13:04	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/11/13 13:04	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/11/13 13:04	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/11/13 13:04	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/11/13 13:04	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/11/13 13:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/11/13 13:04	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/11/13 13:04	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/11/13 13:04	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/11/13 13:04	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/11/13 13:04	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/11/13 13:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129		10/11/13 13:04	1
4-Bromofluorobenzene (Surr)	80		66 - 117		10/11/13 13:04	1
Toluene-d8 (Surr)	80		74 - 115		10/11/13 13:04	1
Dibromofluoromethane (Surr)	97		75 - 121		10/11/13 13:04	1

Lab Sample ID: LCS 240-105209/4

Matrix: Water

Analysis Batch: 105209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	74 - 118
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	80 - 113
Trichloroethene	10.0	10.3		ug/L		103	76 - 117
Vinyl chloride	10.0	11.0		ug/L		110	53 - 127
Benzene	10.0	10.1		ug/L		101	83 - 112

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-105209/4

Matrix: Water

Analysis Batch: 105209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	10.0	10.4		ug/L		104	61 - 115
Carbon disulfide	10.0	10.1		ug/L		101	62 - 142
Bromoform	10.0	9.29		ug/L		93	40 - 131
Tetrachloroethene	10.0	10.9		ug/L		109	79 - 114
1,1-Dichloroethane	10.0	10.2		ug/L		102	82 - 115
1,2-Dichloroethane	10.0	9.63		ug/L		96	71 - 127
1,2-Dichloropropane	10.0	9.71		ug/L		97	81 - 115
1,1,2-Trichloroethane	10.0	9.69		ug/L		97	80 - 112
Acetone	20.0	22.3		ug/L		112	43 - 136
Methyl acetate	50.0	48.0		ug/L		96	58 - 131
Dichlorodifluoromethane	10.0	12.5		ug/L		125	19 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.8		ug/L		99	63 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.2		ug/L		112	74 - 151
Methylene Chloride	10.0	10.1		ug/L		101	66 - 131
Chloromethane	10.0	10.1		ug/L		101	44 - 126
Bromomethane	10.0	11.5		ug/L		115	11 - 185
Chlorodibromomethane	10.0	10.4		ug/L		104	64 - 119
Toluene	10.0	10.4		ug/L		104	84 - 111
1,2,4-Trichlorobenzene	10.0	7.45		ug/L		75	48 - 135
o-Xylene	10.0	10.1		ug/L		101	83 - 113
Chlorobenzene	10.0	9.71		ug/L		97	85 - 110
1,2-Dibromo-3-Chloropropane	10.0	8.02		ug/L		80	42 - 136
1,3-Dichlorobenzene	10.0	9.74		ug/L		97	80 - 110
Methyl tert-butyl ether	10.0	9.61		ug/L		96	52 - 144
Styrene	10.0	9.84		ug/L		98	79 - 114
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 117
1,1,2,2-Tetrachloroethane	10.0	9.44		ug/L		94	68 - 118
Chloroethane	10.0	10.8		ug/L		108	25 - 153
1,1-Dichloroethene	10.0	9.86		ug/L		99	78 - 131
1,2-Dichlorobenzene	10.0	9.19		ug/L		92	81 - 110
2-Hexanone	20.0	19.6		ug/L		98	55 - 133
2-Butanone (MEK)	20.0	18.8		ug/L		94	60 - 126
Ethylbenzene	10.0	10.1		ug/L		101	83 - 112
Isopropylbenzene	10.0	9.72		ug/L		97	75 - 114
Methylcyclohexane	10.0	10.3		ug/L		103	56 - 127
Trichlorofluoromethane	10.0	12.5		ug/L		125	49 - 157
Xylenes, Total	20.0	20.4		ug/L		102	83 - 112
Cyclohexane	10.0	10.4		ug/L		104	54 - 121
trans-1,3-Dichloropropene	10.0	10.8		ug/L		108	58 - 117
Chloroform	10.0	10.2		ug/L		102	79 - 117
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	83 - 113
Ethylene Dibromide	10.0	9.86		ug/L		99	79 - 113
Carbon tetrachloride	10.0	11.5		ug/L		115	66 - 128
1,4-Dichlorobenzene	10.0	9.53		ug/L		95	82 - 110
Dichlorobromomethane	10.0	9.48		ug/L		95	72 - 121

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-105209/4

Matrix: Water

Analysis Batch: 105209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	87		63 - 129
4-Bromofluorobenzene (Surr)	88		66 - 117
Toluene-d8 (Surr)	92		74 - 115
Dibromofluoromethane (Surr)	93		75 - 121

Lab Sample ID: 240-29886-13 MS

Matrix: Water

Analysis Batch: 105209

Client Sample ID: GW-12607-100313-JY-013

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.4		10.0	11.7		ug/L		103	68 - 121
cis-1,2-Dichloroethene	1.0	U	10.0	9.58		ug/L		96	70 - 120
Trichloroethene	0.50	J	10.0	9.76		ug/L		93	66 - 120
Vinyl chloride	1.0	U	10.0	7.75		ug/L		78	49 - 130
Benzene	1.0	U	10.0	1.0	U F	ug/L		0	72 - 121
cis-1,3-Dichloropropene	1.0	U	10.0	1.0	U F	ug/L		0	51 - 110
Carbon disulfide	1.0	U	10.0	1.0	U F	ug/L		0	57 - 147
Bromoform	1.0	U	10.0	1.0	U F	ug/L		0	32 - 128
Tetrachloroethene	1.0	U	10.0	1.0	U F	ug/L		0	70 - 117
1,1-Dichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	79 - 116
1,2-Dichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	68 - 129
1,2-Dichloropropane	1.0	U	10.0	1.0	U F	ug/L		0	78 - 115
1,1,2-Trichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	75 - 115
Acetone	10	U	20.0	10	U F	ug/L		0	33 - 145
Methyl acetate	10	U	50.0	10	U F	ug/L		0	47 - 130
Dichlorodifluoromethane	1.0	U	10.0	1.0	U F	ug/L		0	17 - 128
4-Methyl-2-pentanone (MIBK)	10	U	20.0	10	U F	ug/L		0	56 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	1.0	U F	ug/L		0	70 - 152
Methylene Chloride	1.0	U	10.0	1.0	U F	ug/L		0	63 - 128
Chloromethane	1.0	U	10.0	1.0	U F	ug/L		0	33 - 132
Bromomethane	1.0	U	10.0	1.0	U F	ug/L		0	10 - 186
Chlorodibromomethane	1.0	U	10.0	1.0	U F	ug/L		0	56 - 118
Toluene	1.0	U	10.0	1.0	U F	ug/L		0	78 - 114
1,2,4-Trichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	38 - 138
o-Xylene	1.0	U	10.0	1.0	U F	ug/L		0	76 - 116
Chlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	80 - 110
1,2-Dibromo-3-Chloropropane	2.0	U	10.0	2.0	U F	ug/L		0	32 - 139
1,3-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	73 - 110
Methyl tert-butyl ether	1.0	U	10.0	1.0	U F	ug/L		0	46 - 144
Styrene	1.0	U	10.0	1.0	U F	ug/L		0	71 - 117
trans-1,2-Dichloroethene	1.0	U	10.0	1.0	U F	ug/L		0	80 - 119
1,1,2,2-Tetrachloroethane	1.0	U	10.0	1.0	U F	ug/L		0	63 - 122
Chloroethane	1.0	U	10.0	1.0	U F	ug/L		0	21 - 165
1,1-Dichloroethene	1.0	U	10.0	1.0	U F	ug/L		0	74 - 135
1,2-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 111
2-Hexanone	10	U	20.0	10	U F	ug/L		0	47 - 139
2-Butanone (MEK)	10	U	20.0	10	U F	ug/L		0	54 - 129

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29886-13 MS

Matrix: Water

Analysis Batch: 105209

Client Sample ID: GW-12607-100313-JY-013

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 116
Isopropylbenzene	1.0	U	10.0	1.0	U F	ug/L		0	68 - 116
Methylcyclohexane	1.0	U	10.0	1.0	U F	ug/L		0	49 - 127
Trichlorofluoromethane	1.0	U	10.0	1.0	U F	ug/L		0	46 - 157
Xylenes, Total	2.0	U	20.0	2.0	U F	ug/L		0	76 - 116
Cyclohexane	1.0	U	10.0	1.0	U F	ug/L		0	49 - 123
trans-1,3-Dichloropropene	1.0	U	10.0	1.0	U F	ug/L		0	46 - 116
Chloroform	1.0	U	10.0	1.0	U F	ug/L		0	76 - 118
m-Xylene & p-Xylene	2.0	U	10.0	2.0	U F	ug/L		0	75 - 117
Ethylene Dibromide	1.0	U	10.0	1.0	U F	ug/L		0	74 - 113
Carbon tetrachloride	1.0	U	10.0	1.0	U F	ug/L		0	59 - 129
1,4-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 110
Dichlorobromomethane	1.0	U	10.0	1.0	U F	ug/L		0	67 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		63 - 129
4-Bromofluorobenzene (Surr)	96		66 - 117
Toluene-d8 (Surr)	85		74 - 115
Dibromofluoromethane (Surr)	92		75 - 121

Lab Sample ID: 240-29886-13 MSD

Matrix: Water

Analysis Batch: 105209

Client Sample ID: GW-12607-100313-JY-013

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.4		10.0	11.7		ug/L		103	68 - 121	0	30
cis-1,2-Dichloroethene	1.0	U	10.0	9.70		ug/L		97	70 - 120	1	30
Trichloroethene	0.50	J	10.0	9.57		ug/L		91	66 - 120	2	30
Vinyl chloride	1.0	U	10.0	7.79		ug/L		78	49 - 130	0	30
Benzene	1.0	U	10.0	1.0	U F	ug/L		0	72 - 121	NC	30
cis-1,3-Dichloropropene	1.0	U	10.0	1.0	U F	ug/L		0	51 - 110	NC	30
Carbon disulfide	1.0	U	10.0	1.0	U F	ug/L		0	57 - 147	NC	30
Bromoform	1.0	U	10.0	1.0	U F	ug/L		0	32 - 128	NC	30
Tetrachloroethene	1.0	U	10.0	1.0	U F	ug/L		0	70 - 117	NC	30
1,1-Dichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	79 - 116	NC	30
1,2-Dichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	68 - 129	NC	30
1,2-Dichloropropane	1.0	U	10.0	1.0	U F	ug/L		0	78 - 115	NC	30
1,1,2-Trichloroethane	1.0	U	10.0	1.0	U F	ug/L		0	75 - 115	NC	30
Acetone	10	U	20.0	10	U F	ug/L		0	33 - 145	NC	30
Methyl acetate	10	U	50.0	10	U F	ug/L		0	47 - 130	NC	30
Dichlorodifluoromethane	1.0	U	10.0	1.0	U F	ug/L		0	17 - 128	NC	30
4-Methyl-2-pentanone (MIBK)	10	U	20.0	10	U F	ug/L		0	56 - 131	NC	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	1.0	U F	ug/L		0	70 - 152	NC	30
Methylene Chloride	1.0	U	10.0	1.0	U F	ug/L		0	63 - 128	NC	30
Chloromethane	1.0	U	10.0	1.0	U F	ug/L		0	33 - 132	NC	30
Bromomethane	1.0	U	10.0	1.0	U F	ug/L		0	10 - 186	NC	30
Chlorodibromomethane	1.0	U	10.0	1.0	U F	ug/L		0	56 - 118	NC	30

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29886-13 MSD

Matrix: Water

Analysis Batch: 105209

Client Sample ID: GW-12607-100313-JY-013

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	1.0	U	10.0	1.0	U F	ug/L		0	78 - 114	NC	30
1,2,4-Trichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	38 - 138	NC	30
o-Xylene	1.0	U	10.0	1.0	U F	ug/L		0	76 - 116	NC	30
Chlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	80 - 110	NC	30
1,2-Dibromo-3-Chloropropane	2.0	U	10.0	2.0	U F	ug/L		0	32 - 139	NC	30
1,3-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	73 - 110	NC	30
Methyl tert-butyl ether	1.0	U	10.0	1.0	U F	ug/L		0	46 - 144	NC	30
Styrene	1.0	U	10.0	1.0	U F	ug/L		0	71 - 117	NC	30
trans-1,2-Dichloroethene	1.0	U	10.0	1.0	U F	ug/L		0	80 - 119	NC	30
1,1,2,2-Tetrachloroethane	1.0	U	10.0	1.0	U F	ug/L		0	63 - 122	NC	30
Chloroethane	1.0	U	10.0	1.0	U F	ug/L		0	21 - 165	NC	30
1,1-Dichloroethene	1.0	U	10.0	1.0	U F	ug/L		0	74 - 135	NC	30
1,2-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 111	NC	30
2-Hexanone	10	U	20.0	10	U F	ug/L		0	47 - 139	NC	30
2-Butanone (MEK)	10	U	20.0	10	U F	ug/L		0	54 - 129	NC	30
Ethylbenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 116	NC	30
Isopropylbenzene	1.0	U	10.0	1.0	U F	ug/L		0	68 - 116	NC	30
Methylcyclohexane	1.0	U	10.0	1.0	U F	ug/L		0	49 - 127	NC	30
Trichlorofluoromethane	1.0	U	10.0	1.0	U F	ug/L		0	46 - 157	NC	30
Xylenes, Total	2.0	U	20.0	2.0	U F	ug/L		0	76 - 116	NC	30
Cyclohexane	1.0	U	10.0	1.0	U F	ug/L		0	49 - 123	NC	30
trans-1,3-Dichloropropene	1.0	U	10.0	1.0	U F	ug/L		0	46 - 116	NC	30
Chloroform	1.0	U	10.0	1.0	U F	ug/L		0	76 - 118	NC	30
m-Xylene & p-Xylene	2.0	U	10.0	2.0	U F	ug/L		0	75 - 117	NC	30
Ethylene Dibromide	1.0	U	10.0	1.0	U F	ug/L		0	74 - 113	NC	30
Carbon tetrachloride	1.0	U	10.0	1.0	U F	ug/L		0	59 - 129	NC	30
1,4-Dichlorobenzene	1.0	U	10.0	1.0	U F	ug/L		0	75 - 110	NC	30
Dichlorobromomethane	1.0	U	10.0	1.0	U F	ug/L		0	67 - 120	NC	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	85		63 - 129
4-Bromofluorobenzene (Surr)	97		66 - 117
Toluene-d8 (Surr)	83		74 - 115
Dibromofluoromethane (Surr)	93		75 - 121

Lab Sample ID: MB 240-105288/6

Matrix: Water

Analysis Batch: 105288

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 00:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 00:44	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/12/13 00:44	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/12/13 00:44	1
Benzene	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			10/12/13 00:44	1
Carbon disulfide	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
Bromoform	1.0	U	1.0	0.64	ug/L			10/12/13 00:44	1

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-105288/6

Matrix: Water

Analysis Batch: 105288

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			10/12/13 00:44	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			10/12/13 00:44	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			10/12/13 00:44	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			10/12/13 00:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			10/12/13 00:44	1
Acetone	10	U	10	1.1	ug/L			10/12/13 00:44	1
Methyl acetate	10	U	10	0.38	ug/L			10/12/13 00:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			10/12/13 00:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			10/12/13 00:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			10/12/13 00:44	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/13 00:44	1
Chloromethane	1.0	U	1.0	0.30	ug/L			10/12/13 00:44	1
Bromomethane	1.0	U	1.0	0.41	ug/L			10/12/13 00:44	1
Chlorodibromomethane	1.0	U	1.0	0.18	ug/L			10/12/13 00:44	1
Toluene	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 00:44	1
o-Xylene	1.0	U	1.0	0.14	ug/L			10/12/13 00:44	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			10/12/13 00:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.67	ug/L			10/12/13 00:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			10/12/13 00:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			10/12/13 00:44	1
Styrene	1.0	U	1.0	0.11	ug/L			10/12/13 00:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 00:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			10/12/13 00:44	1
Chloroethane	1.0	U	1.0	0.29	ug/L			10/12/13 00:44	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			10/12/13 00:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
2-Hexanone	10	U	10	0.41	ug/L			10/12/13 00:44	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			10/12/13 00:44	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			10/12/13 00:44	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			10/12/13 00:44	1
Xylenes, Total	2.0	U	2.0	0.14	ug/L			10/12/13 00:44	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			10/12/13 00:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			10/12/13 00:44	1
Chloroform	1.0	U	1.0	0.16	ug/L			10/12/13 00:44	1
m-Xylene & p-Xylene	2.0	U	2.0	0.24	ug/L			10/12/13 00:44	1
Ethylene Dibromide	1.0	U	1.0	0.24	ug/L			10/12/13 00:44	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			10/12/13 00:44	1
Dichlorobromomethane	1.0	U	1.0	0.15	ug/L			10/12/13 00:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129		10/12/13 00:44	1
4-Bromofluorobenzene (Surr)	82		66 - 117		10/12/13 00:44	1
Toluene-d8 (Surr)	80		74 - 115		10/12/13 00:44	1
Dibromofluoromethane (Surr)	99		75 - 121		10/12/13 00:44	1

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-105288/4

Matrix: Water

Analysis Batch: 105288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.0		ug/L		110	74 - 118
cis-1,2-Dichloroethene	10.0	9.64		ug/L		96	80 - 113
Trichloroethene	10.0	10.4		ug/L		104	76 - 117
Vinyl chloride	10.0	7.02		ug/L		70	53 - 127
Benzene	10.0	9.77		ug/L		98	83 - 112
cis-1,3-Dichloropropene	10.0	9.97		ug/L		100	61 - 115
Carbon disulfide	10.0	9.85		ug/L		98	62 - 142
Bromoform	10.0	8.72		ug/L		87	40 - 131
Tetrachloroethene	10.0	10.5		ug/L		105	79 - 114
1,1-Dichloroethane	10.0	9.72		ug/L		97	82 - 115
1,2-Dichloroethane	10.0	9.61		ug/L		96	71 - 127
1,2-Dichloropropane	10.0	9.51		ug/L		95	81 - 115
1,1,2-Trichloroethane	10.0	8.80		ug/L		88	80 - 112
Acetone	20.0	20.2		ug/L		101	43 - 136
Methyl acetate	50.0	44.9		ug/L		90	58 - 131
Dichlorodifluoromethane	10.0	4.26		ug/L		43	19 - 129
4-Methyl-2-pentanone (MIBK)	20.0	17.8		ug/L		89	63 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	74 - 151
Methylene Chloride	10.0	10.2		ug/L		102	66 - 131
Chloromethane	10.0	6.24		ug/L		62	44 - 126
Bromomethane	10.0	9.87		ug/L		99	11 - 185
Chlorodibromomethane	10.0	9.36		ug/L		94	64 - 119
Toluene	10.0	9.60		ug/L		96	84 - 111
1,2,4-Trichlorobenzene	10.0	8.03		ug/L		80	48 - 135
o-Xylene	10.0	10.4		ug/L		104	83 - 113
Chlorobenzene	10.0	9.43		ug/L		94	85 - 110
1,2-Dibromo-3-Chloropropane	10.0	7.71		ug/L		77	42 - 136
1,3-Dichlorobenzene	10.0	9.47		ug/L		95	80 - 110
Methyl tert-butyl ether	10.0	9.35		ug/L		94	52 - 144
Styrene	10.0	10.1		ug/L		101	79 - 114
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	83 - 117
1,1,2,2-Tetrachloroethane	10.0	8.05		ug/L		80	68 - 118
Chloroethane	10.0	9.95		ug/L		100	25 - 153
1,1-Dichloroethene	10.0	9.33		ug/L		93	78 - 131
1,2-Dichlorobenzene	10.0	9.44		ug/L		94	81 - 110
2-Hexanone	20.0	16.1		ug/L		80	55 - 133
2-Butanone (MEK)	20.0	17.9		ug/L		90	60 - 126
Ethylbenzene	10.0	10.1		ug/L		101	83 - 112
Isopropylbenzene	10.0	10.8		ug/L		108	75 - 114
Methylcyclohexane	10.0	10.1		ug/L		101	56 - 127
Trichlorofluoromethane	10.0	10.2		ug/L		102	49 - 157
Xylenes, Total	20.0	20.6		ug/L		103	83 - 112
Cyclohexane	10.0	10.1		ug/L		101	54 - 121
trans-1,3-Dichloropropene	10.0	9.57		ug/L		96	58 - 117
Chloroform	10.0	10.2		ug/L		102	79 - 117
m-Xylene & p-Xylene	10.0	10.2		ug/L		102	83 - 113
Ethylene Dibromide	10.0	8.99		ug/L		90	79 - 113

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-105288/4

Matrix: Water

Analysis Batch: 105288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	10.0	11.2		ug/L		112	66 - 128
1,4-Dichlorobenzene	10.0	9.51		ug/L		95	82 - 110
Dichlorobromomethane	10.0	9.61		ug/L		96	72 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	84		63 - 129
4-Bromofluorobenzene (Surr)	101		66 - 117
Toluene-d8 (Surr)	86		74 - 115
Dibromofluoromethane (Surr)	92		75 - 121

Lab Sample ID: 240-29886-17 MS

Matrix: Water

Analysis Batch: 105288

Client Sample ID: GW-12607-100413-JY-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20		33.3	58.5		ug/L		115	68 - 121
cis-1,2-Dichloroethene	3.3	U	33.3	34.8		ug/L		104	70 - 120
Trichloroethene	53		33.3	84.0		ug/L		93	66 - 120
Vinyl chloride	3.3	U	33.3	24.3		ug/L		73	49 - 130
Benzene	3.3	U	33.3	3.3	U F	ug/L		0	72 - 121
cis-1,3-Dichloropropene	3.3	U	33.3	3.3	U F	ug/L		0	51 - 110
Carbon disulfide	3.3	U	33.3	3.3	U F	ug/L		0	57 - 147
Bromoform	3.3	U	33.3	3.3	U F	ug/L		0	32 - 128
Tetrachloroethene	3.3	U	33.3	3.3	U F	ug/L		0	70 - 117
1,1-Dichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	79 - 116
1,2-Dichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	68 - 129
1,2-Dichloropropane	3.3	U	33.3	3.3	U F	ug/L		0	78 - 115
1,1,2-Trichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	75 - 115
Acetone	33	U	66.6	33	U F	ug/L		0	33 - 145
Methyl acetate	33	U	167	33	U F	ug/L		0	47 - 130
Dichlorodifluoromethane	3.3	U	33.3	3.3	U F	ug/L		0	17 - 128
4-Methyl-2-pentanone (MIBK)	33	U	66.6	33	U F	ug/L		0	56 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	33.3	3.3	U F	ug/L		0	70 - 152
Methylene Chloride	3.3	U	33.3	3.3	U F	ug/L		0	63 - 128
Chloromethane	3.3	U	33.3	3.3	U F	ug/L		0	33 - 132
Bromomethane	3.3	U	33.3	3.3	U F	ug/L		0	10 - 186
Chlorodibromomethane	3.3	U	33.3	3.3	U F	ug/L		0	56 - 118
Toluene	3.3	U	33.3	3.3	U F	ug/L		0	78 - 114
1,2,4-Trichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	38 - 138
o-Xylene	3.3	U	33.3	3.3	U F	ug/L		0	76 - 116
Chlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	80 - 110
1,2-Dibromo-3-Chloropropane	6.7	U	33.3	6.7	U F	ug/L		0	32 - 139
1,3-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	73 - 110
Methyl tert-butyl ether	3.3	U	33.3	3.3	U F	ug/L		0	46 - 144
Styrene	3.3	U	33.3	3.3	U F	ug/L		0	71 - 117
trans-1,2-Dichloroethene	3.3	U	33.3	3.3	U F	ug/L		0	80 - 119
1,1,2,2-Tetrachloroethane	3.3	U	33.3	3.3	U F	ug/L		0	63 - 122

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29886-17 MS

Matrix: Water

Analysis Batch: 105288

Client Sample ID: GW-12607-100413-JY-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	3.3	U	33.3	3.3	U F	ug/L		0	21 - 165
1,1-Dichloroethene	3.3	U	33.3	3.3	U F	ug/L		0	74 - 135
1,2-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 111
2-Hexanone	33	U	66.6	33	U F	ug/L		0	47 - 139
2-Butanone (MEK)	33	U	66.6	33	U F	ug/L		0	54 - 129
Ethylbenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 116
Isopropylbenzene	3.3	U	33.3	3.3	U F	ug/L		0	68 - 116
Methylcyclohexane	3.3	U	33.3	3.3	U F	ug/L		0	49 - 127
Trichlorofluoromethane	3.3	U	33.3	3.3	U F	ug/L		0	46 - 157
Xylenes, Total	6.7	U	66.6	6.7	U F	ug/L		0	76 - 116
Cyclohexane	3.3	U	33.3	3.3	U F	ug/L		0	49 - 123
trans-1,3-Dichloropropene	3.3	U	33.3	3.3	U F	ug/L		0	46 - 116
Chloroform	3.3	U	33.3	3.3	U F	ug/L		0	76 - 118
m-Xylene & p-Xylene	6.7	U	33.3	6.7	U F	ug/L		0	75 - 117
Ethylene Dibromide	3.3	U	33.3	3.3	U F	ug/L		0	74 - 113
Carbon tetrachloride	3.3	U	33.3	3.3	U F	ug/L		0	59 - 129
1,4-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 110
Dichlorobromomethane	3.3	U	33.3	3.3	U F	ug/L		0	67 - 120

Surrogate	%Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	92		63 - 129
4-Bromofluorobenzene (Surr)	105		66 - 117
Toluene-d8 (Surr)	94		74 - 115
Dibromofluoromethane (Surr)	102		75 - 121

Lab Sample ID: 240-29886-17 MSD

Matrix: Water

Analysis Batch: 105288

Client Sample ID: GW-12607-100413-JY-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1-Trichloroethane	20		33.3	54.6		ug/L		103	68 - 121	7	30
cis-1,2-Dichloroethene	3.3	U	33.3	33.2		ug/L		100	70 - 120	5	30
Trichloroethene	53		33.3	79.4		ug/L		79	66 - 120	6	30
Vinyl chloride	3.3	U	33.3	23.4		ug/L		70	49 - 130	4	30
Benzene	3.3	U	33.3	3.3	U F	ug/L		0	72 - 121	NC	30
cis-1,3-Dichloropropene	3.3	U	33.3	3.3	U F	ug/L		0	51 - 110	NC	30
Carbon disulfide	3.3	U	33.3	3.3	U F	ug/L		0	57 - 147	NC	30
Bromoform	3.3	U	33.3	3.3	U F	ug/L		0	32 - 128	NC	30
Tetrachloroethene	3.3	U	33.3	3.3	U F	ug/L		0	70 - 117	NC	30
1,1-Dichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	79 - 116	NC	30
1,2-Dichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	68 - 129	NC	30
1,2-Dichloropropane	3.3	U	33.3	3.3	U F	ug/L		0	78 - 115	NC	30
1,1,2-Trichloroethane	3.3	U	33.3	3.3	U F	ug/L		0	75 - 115	NC	30
Acetone	33	U	66.6	33	U F	ug/L		0	33 - 145	NC	30
Methyl acetate	33	U	167	33	U F	ug/L		0	47 - 130	NC	30
Dichlorodifluoromethane	3.3	U	33.3	3.3	U F	ug/L		0	17 - 128	NC	30
4-Methyl-2-pentanone (MIBK)	33	U	66.6	33	U F	ug/L		0	56 - 131	NC	30

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-29886-17 MSD

Matrix: Water

Analysis Batch: 105288

Client Sample ID: GW-12607-100413-JY-017

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	33.3	3.3	U F	ug/L		0	70 - 152	NC	30
Methylene Chloride	3.3	U	33.3	3.3	U F	ug/L		0	63 - 128	NC	30
Chloromethane	3.3	U	33.3	3.3	U F	ug/L		0	33 - 132	NC	30
Bromomethane	3.3	U	33.3	3.3	U F	ug/L		0	10 - 186	NC	30
Chlorodibromomethane	3.3	U	33.3	3.3	U F	ug/L		0	56 - 118	NC	30
Toluene	3.3	U	33.3	3.3	U F	ug/L		0	78 - 114	NC	30
1,2,4-Trichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	38 - 138	NC	30
o-Xylene	3.3	U	33.3	3.3	U F	ug/L		0	76 - 116	NC	30
Chlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	80 - 110	NC	30
1,2-Dibromo-3-Chloropropane	6.7	U	33.3	6.7	U F	ug/L		0	32 - 139	NC	30
1,3-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	73 - 110	NC	30
Methyl tert-butyl ether	3.3	U	33.3	3.3	U F	ug/L		0	46 - 144	NC	30
Styrene	3.3	U	33.3	3.3	U F	ug/L		0	71 - 117	NC	30
trans-1,2-Dichloroethene	3.3	U	33.3	3.3	U F	ug/L		0	80 - 119	NC	30
1,1,2,2-Tetrachloroethane	3.3	U	33.3	3.3	U F	ug/L		0	63 - 122	NC	30
Chloroethane	3.3	U	33.3	3.3	U F	ug/L		0	21 - 165	NC	30
1,1-Dichloroethene	3.3	U	33.3	3.3	U F	ug/L		0	74 - 135	NC	30
1,2-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 111	NC	30
2-Hexanone	33	U	66.6	33	U F	ug/L		0	47 - 139	NC	30
2-Butanone (MEK)	33	U	66.6	33	U F	ug/L		0	54 - 129	NC	30
Ethylbenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 116	NC	30
Isopropylbenzene	3.3	U	33.3	3.3	U F	ug/L		0	68 - 116	NC	30
Methylcyclohexane	3.3	U	33.3	3.3	U F	ug/L		0	49 - 127	NC	30
Trichlorofluoromethane	3.3	U	33.3	3.3	U F	ug/L		0	46 - 157	NC	30
Xylenes, Total	6.7	U	66.6	6.7	U F	ug/L		0	76 - 116	NC	30
Cyclohexane	3.3	U	33.3	3.3	U F	ug/L		0	49 - 123	NC	30
trans-1,3-Dichloropropene	3.3	U	33.3	3.3	U F	ug/L		0	46 - 116	NC	30
Chloroform	3.3	U	33.3	3.3	U F	ug/L		0	76 - 118	NC	30
m-Xylene & p-Xylene	6.7	U	33.3	6.7	U F	ug/L		0	75 - 117	NC	30
Ethylene Dibromide	3.3	U	33.3	3.3	U F	ug/L		0	74 - 113	NC	30
Carbon tetrachloride	3.3	U	33.3	3.3	U F	ug/L		0	59 - 129	NC	30
1,4-Dichlorobenzene	3.3	U	33.3	3.3	U F	ug/L		0	75 - 110	NC	30
Dichlorobromomethane	3.3	U	33.3	3.3	U F	ug/L		0	67 - 120	NC	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	89		63 - 129
4-Bromofluorobenzene (Surr)	103		66 - 117
Toluene-d8 (Surr)	90		74 - 115
Dibromofluoromethane (Surr)	96		75 - 121

Lab Sample ID: MB 240-105408/6

Matrix: Water

Analysis Batch: 105408

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			10/14/13 13:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			10/14/13 13:10	1

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-105408/6

Matrix: Water

Analysis Batch: 105408

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.17	ug/L			10/14/13 13:10	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			10/14/13 13:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 129		10/14/13 13:10	1
4-Bromofluorobenzene (Surr)	82		66 - 117		10/14/13 13:10	1
Toluene-d8 (Surr)	79		74 - 115		10/14/13 13:10	1
Dibromofluoromethane (Surr)	102		75 - 121		10/14/13 13:10	1

Lab Sample ID: LCS 240-105408/4

Matrix: Water

Analysis Batch: 105408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	11.1		ug/L		111	74 - 118
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	80 - 113
Trichloroethene	10.0	10.2		ug/L		102	76 - 117
Vinyl chloride	10.0	10.8		ug/L		108	53 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		63 - 129
4-Bromofluorobenzene (Surr)	93		66 - 117
Toluene-d8 (Surr)	89		74 - 115
Dibromofluoromethane (Surr)	94		75 - 121

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (63-129)	BFB (66-117)	TOL (74-115)	DBFM (75-121)
240-29886-1	TB-12607-093013-JY-001	87	91	88	85
240-29886-2	GW-12607-093013-JY-002	87	88	85	92
240-29886-3	GW-12607-093013-JY-003	84	87	83	88
240-29886-4	GW-12607-100213-JY-004	91	84	80	93
240-29886-5	GW-12607-100213-JY-005	86	88	85	93
240-29886-6	GW-12607-100213-JY-006	106	82	82	105
240-29886-7	GW-12607-100213-JY-007	110	88	88	115
240-29886-8	GW-12607-100213-JY-008	94	75	78	101
240-29886-9	GW-12607-100213-JY-009	106	82	80	109
240-29886-10	GW-12607-100213-JY-010	100	71	80	104
240-29886-11	GW-12607-100313-JY-011	96	75	77	102
240-29886-12	GW-12607-100313-JY-012	102	87	87	106
240-29886-13	GW-12607-100313-JY-013	96	76	77	101
240-29886-13 MS	GW-12607-100313-JY-013	85	96	85	92
240-29886-13 MSD	GW-12607-100313-JY-013	85	97	83	93
240-29886-14	GW-12607-100313-JY-014	97	80	83	100
240-29886-15	GW-12607-100313-JY-015	98	79	81	102
240-29886-16	GW-12607-100313-JY-016	94	80	79	99
240-29886-17	GW-12607-100413-JY-017	103	79	81	105
240-29886-17 MS	GW-12607-100413-JY-017	92	105	94	102
240-29886-17 MSD	GW-12607-100413-JY-017	89	103	90	96
240-29886-18	GW-12607-100413-JY-018	98	82	82	104
LCS 240-105169/4	Lab Control Sample	78	90	85	89
LCS 240-105209/4	Lab Control Sample	87	88	92	93
LCS 240-105288/4	Lab Control Sample	84	101	86	92
LCS 240-105408/4	Lab Control Sample	86	93	89	94
MB 240-105169/5	Method Blank	80	86	83	88
MB 240-105209/6	Method Blank	96	80	80	97
MB 240-105288/6	Method Blank	94	82	80	99
MB 240-105408/6	Method Blank	95	82	79	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: TB-12607-093013-JY-001

Date Collected: 09/30/13 00:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105169	10/11/13 17:48	LRW	TAL CAN

Client Sample ID: GW-12607-093013-JY-002

Date Collected: 09/30/13 10:25

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105169	10/11/13 18:12	LRW	TAL CAN

Client Sample ID: GW-12607-093013-JY-003

Date Collected: 09/30/13 12:10

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	105169	10/11/13 18:35	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-004

Date Collected: 10/02/13 10:55

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105169	10/11/13 18:58	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-005

Date Collected: 10/02/13 11:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105169	10/11/13 19:22	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-006

Date Collected: 10/02/13 12:00

Date Received: 10/05/13 09:45

Lab Sample ID: 240-29886-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105209	10/11/13 19:07	LRW	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: GW-12607-100213-JY-007

Lab Sample ID: 240-29886-7

Date Collected: 10/02/13 13:15

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	105408	10/14/13 14:10	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-008

Lab Sample ID: 240-29886-8

Date Collected: 10/02/13 14:15

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105209	10/11/13 19:52	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-009

Lab Sample ID: 240-29886-9

Date Collected: 10/02/13 14:20

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105209	10/11/13 20:15	LRW	TAL CAN

Client Sample ID: GW-12607-100213-JY-010

Lab Sample ID: 240-29886-10

Date Collected: 10/02/13 15:20

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105209	10/11/13 20:38	LRW	TAL CAN

Client Sample ID: GW-12607-100313-JY-011

Lab Sample ID: 240-29886-11

Date Collected: 10/03/13 09:10

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	105209	10/11/13 21:00	LRW	TAL CAN

Client Sample ID: GW-12607-100313-JY-012

Lab Sample ID: 240-29886-12

Date Collected: 10/03/13 10:15

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105288	10/12/13 01:07	LRW	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Client Sample ID: GW-12607-100313-JY-013

Lab Sample ID: 240-29886-13

Date Collected: 10/03/13 11:40

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105209	10/11/13 21:23	LRW	TAL CAN

Client Sample ID: GW-12607-100313-JY-014

Lab Sample ID: 240-29886-14

Date Collected: 10/03/13 13:00

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105288	10/12/13 01:29	LRW	TAL CAN

Client Sample ID: GW-12607-100313-JY-015

Lab Sample ID: 240-29886-15

Date Collected: 10/03/13 13:50

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105288	10/12/13 01:51	LRW	TAL CAN

Client Sample ID: GW-12607-100313-JY-016

Lab Sample ID: 240-29886-16

Date Collected: 10/03/13 14:50

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105288	10/12/13 02:13	LRW	TAL CAN

Client Sample ID: GW-12607-100413-JY-017

Lab Sample ID: 240-29886-17

Date Collected: 10/04/13 11:55

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	105288	10/12/13 08:14	LRW	TAL CAN

Client Sample ID: GW-12607-100413-JY-018

Lab Sample ID: 240-29886-18

Date Collected: 10/04/13 13:20

Matrix: Water

Date Received: 10/05/13 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	105408	10/14/13 13:47	LRW	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Canton

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607, RACER Eckles Rd

TestAmerica Job ID: 240-29886-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

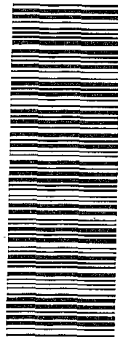


CONESTOGA-ROVERS
& ASSOCIATES

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1 240-29886 Chain of Custody

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COC NO.: PL-12107

PAGE 1 OF 2

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 12607		Laboratory Name: Test America		Lab Location: North Lark, OH		SSOW ID: 12607	
Project Name: Racer Eckles Rd		Lab Contact: Denise Hecker		Lab Quote No:		Cooler No:	
Project Location: Livonia, Michigan		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)		Carrier: FedEx	
Chemistry Contact: Paul Wiseman		SAMPLE TYPE		Total Containers/Sample		Airbill No: 9044 0672 0342	
Sampler(s): St York		Matrix Code (see back of COC)		Other:		Date Shipped: 10-4-13	
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		DATE (mm/dd/yyyy)		TIME (hh:mm)		COMMENTS/ SPECIAL INSTRUCTIONS:	
Item							
1	TR-12607-093013-JY-001	9-30-13	1025	1210	1055		
2	GW-12607-093013-JY-002						
3							
4	GW-12607-100213-JY-004	10-2-13	1100	1200	1315		
5							
6							
7							
8							
9							
10							
11	GW-12607-100313-JY-011	10-3-13	0910	1015	1140		
12							
13							
14							
15							
TAT Required in business days (use separate COCs for different TATs):		DATE		TIME		DATE	
1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other: CRA STD		CRA		9-30-13		1700	
RELINQUISHED BY		COMPANY		RECEIVED BY		COMPANY	
Johnsford		CRA		Denny Buma		TH	
1.				1.		10/5/13 0945	
2.				2.			
3.				3.			

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

CRA Form: COC-10A (20110804)

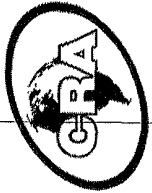
GOLDENROD - Sampling Crew

PINK - Shipper

YELLOW - Receiving Laboratory Copy

WHITE - Fully Executed Copy (CRA)

Distribution:



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-12108

PAGE 2 OF 2

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 12607		Laboratory Name: Test America		Lab Location: North Canton, OH		SSOW ID: 12607	
Project Name: Racer Eckles Rd		Lab Contact: Denise Hecker		Lab Quote No:		Cooler No:	
Project Location: Livonia, Mich.		SAMPLE TYPE		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)	
Chemistry Contact: Paul Wiseman		Matrix Code (see back of COC)		Grab (g) or Comp (c)		Unpreserved	
Sampler(s): S. York		DATE (mm/dd/yyyy)		TIME (hh:mm)		Total Containers/Sample	
Item		SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)		DATE		TIME	
1		GW-12607-100313-SY-016		10-3-13		1450	
2		GW-12607-100413-SY-017		10-4-13		1155	
3		GW-12607-100413-SY-018		1		1320	
4							
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TestAmerica Canton Sample Receipt Form/Narrative Login # : 29886

Canton Facility

Client CRA Site Name Racer Eckler Cooler unpacked by: Denny Burns

Cooler Received on 10/5/13 Opened on 10/7/13

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

- Cooler temperature upon receipt

IR GUN# A	(CF +2 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 4	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 5	(CF +2 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C
IR GUN# 8	(CF -0 °C)	Observed Cooler Temp. <u>2.6</u> °C	Corrected Cooler Temp. <u>2.6</u> °C
- Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
 - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 - Were custody seals on the bottle(s)? Yes No
- Shippers' packing slip attached to the cooler(s)? Yes No
- Did custody papers accompany the sample(s)? Yes No
- Were the custody papers relinquished & signed in the appropriate place? Yes No
- Did all bottles arrive in good condition (Unbroken)? Yes No
- Could all bottle labels be reconciled with the COC? Yes No
- Were correct bottle(s) used for the test(s) indicated? Yes No
- Sufficient quantity received to perform indicated analyses? Yes No
- Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC376062
- Were VOAs on the COC? Yes No
- Were air bubbles >6 mm in any VOA vials? Yes No NA
- Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [Signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-31751-1

Client Project/Site: 12607-T013, RACER Eckles Rd

For:

Conestoga-Rovers & Associates, Inc.

14496 Sheldon Road, Suite 200

Plymouth, Michigan 48170

Attn: Rawa Fleisher



Authorized for release by:

12/5/2013 10:34:14 AM

Denise Heckler, Project Manager II

(330)966-9477

denise.heckler@testamericainc.com

LINKS

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results through

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions/Glossary	5
Sample Summary	6
Detection Summary	7
Method Summary	8
Client Sample Results	9
QC Association Summary	19
QC Sample Results	21
Lab Chronicle	23
Certification Summary	25
Chain of Custody	26



Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Job ID: 240-31751-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 12607-T013, RACER Eckles Rd

Report Number: 240-31751-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/22/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.4° C and 2.8° C.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-12607-112113-SK-008 (240-31751-1), GW-12607-112113-SK-009 (240-31751-2), GW-12607-112113-SK-010 (240-31751-3), GW-12607-112113-SK-011 (240-31751-4) and GW-12607-112113-SK-012 (240-31751-5) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 11/27/2013 and 12/02/2013 and analyzed on 12/02/2013 and 12/03/2013.

No difficulties were encountered during the metals analysis.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples GW-12607-112113-SK-008 (240-31751-1), GW-12607-112113-SK-009 (240-31751-2), GW-12607-112113-SK-010 (240-31751-3), GW-12607-112113-SK-011 (240-31751-4) and GW-12607-112113-SK-012 (240-31751-5) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 11/22/2013.

The matrix spike (MS) recoveries associated with batch 111004 were outside control limits: GW-12607-112113-SK-012 (240-31751-5)

Case Narrative

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Job ID: 240-31751-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

MS), GW-12607-112113-SK-012 (240-31751-5 MSD). Matrix interference is suspected. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No difficulties were encountered during the hexavalent chromium analysis.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples GW-12607-112113-SK-008 (240-31751-1), GW-12607-112113-SK-009 (240-31751-2), GW-12607-112113-SK-010 (240-31751-3), GW-12607-112113-SK-011 (240-31751-4) and GW-12607-112113-SK-012 (240-31751-5) were analyzed for trivalent chromium in accordance with EPA SW-846 Method 7196A_CR3. The samples were analyzed on 12/03/2013.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-31751-1	GW-12607-112113-SK-008	Water	11/21/13 15:00	11/22/13 07:55
240-31751-2	GW-12607-112113-SK-009	Water	11/21/13 15:55	11/22/13 07:55
240-31751-3	GW-12607-112113-SK-010	Water	11/21/13 16:25	11/22/13 07:55
240-31751-4	GW-12607-112113-SK-011	Water	11/21/13 16:55	11/22/13 07:55
240-31751-5	GW-12607-112113-SK-012	Water	11/21/13 17:55	11/22/13 07:55

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Client Sample ID: GW-12607-112113-SK-008

Lab Sample ID: 240-31751-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	5.0		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	3800		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (III)	0.0050	J	0.010	0.0050	mg/L	1		7196A	Total/NA

Client Sample ID: GW-12607-112113-SK-009

Lab Sample ID: 240-31751-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	2.5	J	5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	120		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-112113-SK-010

Lab Sample ID: 240-31751-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	120		20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-112113-SK-011

Lab Sample ID: 240-31751-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	3.1	J	5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	17	J	20	3.2	ug/L	1		6010B	Total Recoverable

Client Sample ID: GW-12607-112113-SK-012

Lab Sample ID: 240-31751-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	6.0		5.0	2.2	ug/L	1		6010B	Total Recoverable
Nickel	33		20	3.2	ug/L	1		6010B	Total Recoverable
Cr (VI)	0.0066	J	0.010	0.0020	mg/L	1		7196A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-112113-SK-008

Date Collected: 11/21/13 15:00

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0		5.0	2.2	ug/L		11/27/13 08:29	12/02/13 11:12	1
Nickel	3800		20	3.2	ug/L		11/27/13 08:29	12/02/13 11:12	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-112113-SK-009

Date Collected: 11/21/13 15:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	2.5	J	5.0	2.2	ug/L		11/27/13 08:29	12/02/13 11:20	1
Nickel	120		20	3.2	ug/L		11/27/13 08:29	12/02/13 11:20	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-112113-SK-010

Date Collected: 11/21/13 16:25

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		11/27/13 08:29	12/02/13 11:24	1
Nickel	120		20	3.2	ug/L		11/27/13 08:29	12/02/13 11:24	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-112113-SK-011

Date Collected: 11/21/13 16:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	3.1	J	5.0	2.2	ug/L		11/27/13 08:29	12/02/13 11:28	1
Nickel	17	J	20	3.2	ug/L		11/27/13 08:29	12/02/13 11:28	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-12607-112113-SK-012

Date Collected: 11/21/13 17:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	6.0		5.0	2.2	ug/L		12/02/13 08:05	12/03/13 11:00	1
Nickel	33		20	3.2	ug/L		12/02/13 08:05	12/03/13 11:00	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry

Client Sample ID: GW-12607-112113-SK-008

Date Collected: 11/21/13 15:00

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			11/22/13 10:54	1
Cr (III)	0.0050	J	0.010	0.0050	mg/L			12/03/13 11:57	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry

Client Sample ID: GW-12607-112113-SK-009

Date Collected: 11/21/13 15:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			11/22/13 10:54	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			12/03/13 11:57	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry

Client Sample ID: GW-12607-112113-SK-010

Date Collected: 11/21/13 16:25

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			11/22/13 10:54	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			12/03/13 11:57	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry

Client Sample ID: GW-12607-112113-SK-011

Date Collected: 11/21/13 16:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			11/22/13 10:54	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			12/03/13 11:57	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry

Client Sample ID: GW-12607-112113-SK-012

Date Collected: 11/21/13 17:55

Date Received: 11/22/13 07:55

Lab Sample ID: 240-31751-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.0066	J	0.010	0.0020	mg/L			11/22/13 10:54	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			12/03/13 11:57	1

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Metals

Prep Batch: 111563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-1	GW-12607-112113-SK-008	Total Recoverable	Water	3005A	
240-31751-2	GW-12607-112113-SK-009	Total Recoverable	Water	3005A	
240-31751-3	GW-12607-112113-SK-010	Total Recoverable	Water	3005A	
240-31751-4	GW-12607-112113-SK-011	Total Recoverable	Water	3005A	
LCS 240-111563/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-111563/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 111860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-5	GW-12607-112113-SK-012	Total Recoverable	Water	3005A	
240-31751-5 MS	GW-12607-112113-SK-012	Total Recoverable	Water	3005A	
240-31751-5 MSD	GW-12607-112113-SK-012	Total Recoverable	Water	3005A	
LCS 240-111860/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-111860/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 111970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-1	GW-12607-112113-SK-008	Total Recoverable	Water	6010B	111563
240-31751-2	GW-12607-112113-SK-009	Total Recoverable	Water	6010B	111563
240-31751-3	GW-12607-112113-SK-010	Total Recoverable	Water	6010B	111563
240-31751-4	GW-12607-112113-SK-011	Total Recoverable	Water	6010B	111563
LCS 240-111563/2-A	Lab Control Sample	Total Recoverable	Water	6010B	111563
MB 240-111563/1-A	Method Blank	Total Recoverable	Water	6010B	111563

Analysis Batch: 112054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-5	GW-12607-112113-SK-012	Total Recoverable	Water	6010B	111860
240-31751-5 MS	GW-12607-112113-SK-012	Total Recoverable	Water	6010B	111860
240-31751-5 MSD	GW-12607-112113-SK-012	Total Recoverable	Water	6010B	111860
LCS 240-111860/2-A	Lab Control Sample	Total Recoverable	Water	6010B	111860
MB 240-111860/1-A	Method Blank	Total Recoverable	Water	6010B	111860

General Chemistry

Analysis Batch: 111004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-1	GW-12607-112113-SK-008	Total/NA	Water	7196A	
240-31751-2	GW-12607-112113-SK-009	Total/NA	Water	7196A	
240-31751-3	GW-12607-112113-SK-010	Total/NA	Water	7196A	
240-31751-4	GW-12607-112113-SK-011	Total/NA	Water	7196A	
240-31751-5	GW-12607-112113-SK-012	Total/NA	Water	7196A	
240-31751-5 MS	GW-12607-112113-SK-012	Total/NA	Water	7196A	
240-31751-5 MSD	GW-12607-112113-SK-012	Total/NA	Water	7196A	
LCS 240-111004/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-111004/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 112086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-1	GW-12607-112113-SK-008	Total/NA	Water	7196A	
240-31751-2	GW-12607-112113-SK-009	Total/NA	Water	7196A	

TestAmerica Canton

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

General Chemistry (Continued)

Analysis Batch: 112086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-31751-3	GW-12607-112113-SK-010	Total/NA	Water	7196A	
240-31751-4	GW-12607-112113-SK-011	Total/NA	Water	7196A	
240-31751-5	GW-12607-112113-SK-012	Total/NA	Water	7196A	

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-111563/1-A

Matrix: Water

Analysis Batch: 111970

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 111563

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		11/27/13 08:29	12/02/13 10:23	1
Nickel	20	U	20	3.2	ug/L		11/27/13 08:29	12/02/13 10:23	1

Lab Sample ID: LCS 240-111563/2-A

Matrix: Water

Analysis Batch: 111970

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 111563

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	193		ug/L		96	80 - 120
Nickel	500	489		ug/L		98	80 - 120

Lab Sample ID: MB 240-111860/1-A

Matrix: Water

Analysis Batch: 112054

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 111860

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	5.0	U	5.0	2.2	ug/L		12/02/13 08:05	12/03/13 09:06	1
Nickel	20	U	20	3.2	ug/L		12/02/13 08:05	12/03/13 09:06	1

Lab Sample ID: LCS 240-111860/2-A

Matrix: Water

Analysis Batch: 112054

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 111860

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	189		ug/L		94	80 - 120
Nickel	500	505		ug/L		101	80 - 120

Lab Sample ID: 240-31751-5 MS

Matrix: Water

Analysis Batch: 112054

Client Sample ID: GW-12607-112113-SK-012

Prep Type: Total Recoverable

Prep Batch: 111860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	6.0		200	205		ug/L		100	75 - 125
Nickel	33		500	529		ug/L		99	75 - 125

Lab Sample ID: 240-31751-5 MSD

Matrix: Water

Analysis Batch: 112054

Client Sample ID: GW-12607-112113-SK-012

Prep Type: Total Recoverable

Prep Batch: 111860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chromium	6.0		200	197		ug/L		96	75 - 125	4	20
Nickel	33		500	512		ug/L		96	75 - 125	3	20

TestAmerica Canton

QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-111004/3

Matrix: Water

Analysis Batch: 111004

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			11/22/13 07:37	1

Lab Sample ID: LCS 240-111004/4

Matrix: Water

Analysis Batch: 111004

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.228		mg/L		91	80 - 118

Lab Sample ID: 240-31751-5 MS

Matrix: Water

Analysis Batch: 111004

Client Sample ID: GW-12607-112113-SK-012

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.0066	J	0.250	0.134		mg/L		51	41 - 136

Lab Sample ID: 240-31751-5 MSD

Matrix: Water

Analysis Batch: 111004

Client Sample ID: GW-12607-112113-SK-012

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.0066	J	0.250	0.137		mg/L		52	41 - 136	2	20

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Client Sample ID: GW-12607-112113-SK-008

Lab Sample ID: 240-31751-1

Date Collected: 11/21/13 15:00

Matrix: Water

Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111563	11/27/13 08:29	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	111970	12/02/13 11:12	NJT	TAL CAN
Total/NA	Analysis	7196A		1	111004	11/22/13 10:54	JAK	TAL CAN
Total/NA	Analysis	7196A		1	112086	12/03/13 11:57	KLC	TAL CAN

Client Sample ID: GW-12607-112113-SK-009

Lab Sample ID: 240-31751-2

Date Collected: 11/21/13 15:55

Matrix: Water

Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111563	11/27/13 08:29	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	111970	12/02/13 11:20	NJT	TAL CAN
Total/NA	Analysis	7196A		1	111004	11/22/13 10:54	JAK	TAL CAN
Total/NA	Analysis	7196A		1	112086	12/03/13 11:57	KLC	TAL CAN

Client Sample ID: GW-12607-112113-SK-010

Lab Sample ID: 240-31751-3

Date Collected: 11/21/13 16:25

Matrix: Water

Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111563	11/27/13 08:29	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	111970	12/02/13 11:24	NJT	TAL CAN
Total/NA	Analysis	7196A		1	111004	11/22/13 10:54	JAK	TAL CAN
Total/NA	Analysis	7196A		1	112086	12/03/13 11:57	KLC	TAL CAN

Client Sample ID: GW-12607-112113-SK-011

Lab Sample ID: 240-31751-4

Date Collected: 11/21/13 16:55

Matrix: Water

Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111563	11/27/13 08:29	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	111970	12/02/13 11:28	NJT	TAL CAN
Total/NA	Analysis	7196A		1	111004	11/22/13 10:54	JAK	TAL CAN
Total/NA	Analysis	7196A		1	112086	12/03/13 11:57	KLC	TAL CAN

Client Sample ID: GW-12607-112113-SK-012

Lab Sample ID: 240-31751-5

Date Collected: 11/21/13 17:55

Matrix: Water

Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			111860	12/02/13 08:05	LPM	TAL CAN
Total Recoverable	Analysis	6010B		1	112054	12/03/13 11:00	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Client Sample ID: GW-12607-112113-SK-012 Lab Sample ID: 240-31751-5
Date Collected: 11/21/13 17:55 Matrix: Water
Date Received: 11/22/13 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7196A		1	111004	11/22/13 10:54	JAK	TAL CAN
Total/NA	Analysis	7196A		1	112086	12/03/13 11:57	KLC	TAL CAN

Laboratory References:
TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 12607-T013, RACER Eckles Rd

TestAmerica Job ID: 240-31751-1

Laboratory: TestAmerica Canton

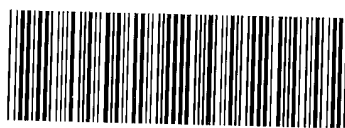
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

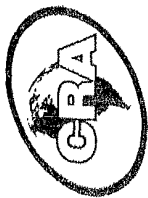
* Expired certification is currently pending renewal and is considered valid.

TestAmerica Canton

CHAIN OF CUSTODY AND RECEIVING DOCUMENTS



240-31751 Chain of Custody



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-13922

2.8

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 12607		Laboratory Name: Test America		Lab Location: N. Canton, O.H		SSOW ID: 12607-T01-013	
Project Name: Racer - Eckles Rd		Lab Contact: D. Heckler		Lab Quote No.: -		Cooler No.: -	
Project Location: Livonia, M.I.		SAMPLE TYPE		CONTAINER QUANTITY & PRESERVATION		ANALYSIS REQUESTED (See Back of COC for Definitions)	
Chemistry Contact: R. Fleisher		Matrix Code (see back of COC)		Grab (g) or Comp (c)		Carrier: Fed Ex	
Sampler(s): S. Kippen		DATE (mm/dd/yy)		TIME (hh:mm)		Airbill No: 8010-4751-8561	
Item		DATE		TIME		Date Shipped: 11-21-13	
1		GW-12607-112113-SK-008		11-21-13 15:00		COMMENTS/ SPECIAL INSTRUCTIONS:	
2		11-21-13 15:55		11-21-13 15:55			
3		11-21-13 16:25		11-21-13 16:25			
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TestAmerica Canton Sample Receipt Form/Narrative

Login # : 31751

Canton Facility

Client <u>CRA</u>	Site Name _____	Cooler unpacked by: <u>Ch [Signature]</u>
Cooler Received on <u>11-22-13</u>	Opened on <u>11-22-13</u>	
FedEx ☒ Grd Exp ☐ UPS ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other _____		
TestAmerica Cooler # _____	Foam Box ☐ Client Cooler ☐ Box ☐ Other _____	
Packing material used: <u>Bubble Wrap</u>	Foam ☐ Plastic Bag ☐ None ☐ Other _____	
COOLANT: <u>Wet Ice</u>	Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐	
1. Cooler temperature upon receipt		
IR GUN# A (CF +0 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☒ See Multiple Cooler Form
IR GUN# 4 (CF -1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8 (CF +1 °C) Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes ☒ No ☒		
-Were custody seals on the outside of the cooler(s) signed & dated? Yes ☐ No ☒		
-Were custody seals on the bottle(s)? Yes ☒ No ☐		
3. Shippers' packing slip attached to the cooler(s)? ☒ Yes ☐ No		
4. Did custody papers accompany the sample(s)? ☒ Yes ☐ No		
5. Were the custody papers relinquished & signed in the appropriate place? ☒ Yes ☐ No		
6. Did all bottles arrive in good condition (Unbroken)? ☒ Yes ☐ No		
7. Could all bottle labels be reconciled with the COC? ☒ Yes ☐ No		
8. Were correct bottle(s) used for the test(s) indicated? ☒ Yes ☐ No		
9. Sufficient quantity received to perform indicated analyses? ☒ Yes ☐ No		
10. Were sample(s) at the correct pH upon receipt? ☒ Yes ☐ No NA pH Strip Lot# <u>HC391902</u>		
11. Were VOAs on the COC? ☒ Yes ☐ No		
12. Were air bubbles >6 mm in any VOA vials? ☐ Yes ☒ No		
13. Was a trip blank present in the cooler(s)? ☐ Yes ☒ No		
Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____		
Concerning _____		

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: [Signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container</u> <u>pH</u>	<u>Preservative</u> <u>Added (mls)</u>	<u>Lot #</u>
GW-12607-112113-SK-008	240-31751-B-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-009	240-31751-B-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-010	240-31751-B-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-011	240-31751-B-4	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-012	240-31751-D-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-012	240-31751-E-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
GW-12607-112113-SK-012	240-31751-F-5	Plastic 500ml - with Nitric Acid	<2	_____	_____

ATTACHMENT 2

DATA VALIDATION MEMORANDUM

ATTACHMENT 2.1

August 2013 Area 1 GMP Sampling Event



**CONESTOGA-ROVERS
& ASSOCIATES**

14496 Sheldon Road, Suite #200
Plymouth, Michigan 41870
Telephone: 734-453-5123 Fax: 734-453-5201
www.CRAworld.com

MEMORANDUM

TO: Chris Meincke

FROM: Michael Richardson/tl/231/Det *for*

RE: Analytical Results and Reduced Validation
Annual Groundwater Sampling
13000 Eckles Road Site
Livonia, Michigan
August 2013

REF. NO.: 012607-T01Y13

DATE: October 22, 2013

E-Mail and Hard Copy if Requested

1.0 Introduction

The following document details a reduced validation of analytical results for groundwater samples collected in support of the Annual Groundwater Sampling at the 13000 Eckles Road Site during August 2013. Samples were submitted to TestAmerica Laboratories, Inc. located in North Canton, Ohio (TA-NC). A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard CRA report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, laboratory control samples (LCS), matrix spikes, and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the documents entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Item i) 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 2. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved and delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

CRA MEMORANDUM

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 one per analytical batch.

All method blank results were non-detect with the exception of some low concentrations of total chromium and hexavalent chromium. Associated samples with total chromium and hexavalent chromium concentrations similar to the blank concentrations were qualified as non-detect. The qualified sample results are presented in Table 4.

4.0 Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per analytical batch.

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.

5.0 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 relative percent difference (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. The laboratory performed additional site-specific MS/MSD analyses internally.

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.

CRA MEMORANDUM

6.0 Field QA/QC Samples

The field QA/QC consisted of three (3) field duplicate sample sets.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, three (3) 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 criterion is one time the RL value for water samples.

Most field duplicates results showed adequate reproducibility, indicating satisfactory sampling and laboratory precision. The chromium III results for sample GW-12607-082713-EM-015 and its field duplicate did show some variability. The original and duplicate sample results were qualified as estimated.

7.0 Analyte Reporting

The laboratory reported concentrations of hexavalent chromium in excess of the total chromium values. The hexavalent chromium analyses were completed by colorimetric methods (SW-846 7196) which is prone to matrix interference from sample turbidity and/or sample color. The total chromium was completed by inductively coupled plasma (ICP) SW-846 method 6010 and is less prone to matrix interference. The hexavalent chromium results presented in Table 6 are qualified non-detect at the reported values since they exceed the total chromium concentrations reported.

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL.

8.0 Conclusion

Based on this assessment of the information provided, the data produced by TA-NC were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

Analysis/Parameters									
Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Total Chromium				Comments
					Nickel	Hexavalent Chromium	Trivalent Chromium		
TA-NC Job ID: 240-28353-1									
GW-12607-082613-EM-001	MW-OS-8D	groundwater	8/26/2013	11:25:00 AM	X				
GW-12607-082613-EM-002	MW-OS-5D	groundwater	8/26/2013	10:40:00 AM	X				
GW-12607-082613-EM-003	OW-24	groundwater	8/26/2013	12:45:00 PM	X	X	X	X	
GW-12607-082613-EM-004	MW-24D-10	groundwater	8/26/2013	1:50:00 PM	X	X	X	X	
GW-12607-082613-EM-005	MW-A1-11S	groundwater	8/26/2013	2:30:00 PM	X	X	X	X	
GW-12607-082613-EM-006	MW-A1-11D	groundwater	8/26/2013	3:05:00 PM	X	X	X	X	
GW-12607-082613-EM-007	HA-14	groundwater	8/26/2013	4:30:00 PM	X	X	X	X	
GW-12607-082613-EM-008	MW-34D-12	groundwater	8/26/2013	5:20:00 PM	X	X	X	X	
TA-NC Job ID: 240-28403-1									
GW-12607-082713-EM-009	MW-OS-3D	groundwater	8/27/2013	10:20:00 AM	X	X			MS/MSD
GW-12607-082713-EM-010	HA-16	groundwater	8/27/2013	10:45:00 AM	X	X			
GW-12607-082713-EM-011	MW-OS-6D	groundwater	8/27/2013	11:40:00 AM	X				
GW-12607-082713-EM-012	MW-A1-12D	groundwater	8/27/2013	1:30:00 PM	X	X	X	X	
GW-12607-082713-EM-013	MW-33D-12	groundwater	8/27/2013	2:30:00 PM	X	X	X	X	
GW-12607-082713-EM-014	MW-32D-12	groundwater	8/27/2013	2:55:00 PM	X	X	X	X	
GW-12607-082713-EM-015	MW-31D-12	groundwater	8/27/2013	3:55:00 PM	X	X	X	X	
GW-12607-082713-EM-016	MW-31D-12	groundwater	8/27/2013	4:05:00 PM	X	X	X	X	
GW-12607-082713-EM-017	MW-A1-5S	groundwater	8/27/2013	5:05:00 PM	X	X	X	X	
TA-NC Job ID: 240-28488-1									
GW-12607-082813-EM-018	MW-27D-12	groundwater	8/28/2013	12:00:00 PM	X	X	X	X	
GW-12607-082813-EM-019	MW-27D-12	groundwater	8/28/2013	12:10:00 PM	X	X	X	X	
GW-12607-082813-EM-020	MW-28D-12	groundwater	8/28/2013	1:10:00 PM	X	X	X	X	
GW-12607-082813-EM-021	MW-23D-12	groundwater	8/28/2013	1:10:00 PM	X	X	X	X	
GW-12607-082813-EM-022	MW-25D-12	groundwater	8/28/2013	2:55:00 PM	X	X	X	X	

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013**

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters			
					Nickel	Total Chromium	Hexavalent Chromium	Trivalent Chromium
TA-NC Job ID: 240-28488-1								
GW-12607-082813-EM-023	MW-35D-13	groundwater	8/28/2013	4:20:00 PM	X	X	X	X
GW-12607-082813-EM-024	MW-29D-12	groundwater	8/28/2013	2:05:00 PM	X	X	X	X
GW-12607-082813-EM-025	MW-30D-12	groundwater	8/28/2013	2:45:00 PM	X	X	X	X
GW-12607-082813-EM-026	MW-A1-3S	groundwater	8/28/2013	5:10:00 PM	X	X	X	X
GW-12607-082813-EM-027	MW-A1-4S	groundwater	8/28/2013	4:20:00 PM	X	X	X	X
GW-12607-082813-EM-028	MW-22-2D	groundwater	8/28/2013	6:35:00 PM	X	X		
TA-NC Job ID: 240-28526-1								
GW-12607-082913-EM-029	MW-OS-7D	groundwater	8/29/2013	10:20:00 AM	X	X		
GW-12607-082913-EM-030	MW-S-8S	groundwater	8/29/2013	11:30:00 AM	X	X		
GW-12607-082913-EM-031	MW-S-8D	groundwater	8/29/2013	12:05:00 PM	X	X		
GW-12607-082913-EM-032	MW-S-8D	groundwater	8/29/2013	12:20:00 PM	X	X		
GW-12607-082913-EM-033	MW-S-3S	groundwater	8/29/2013	12:50:00 PM	X	X		
GW-12607-082913-EM-034	HA-15	groundwater	8/29/2013	1:30:00 PM	X	X		
GW-12607-082913-EM-035	MW-26D-12	groundwater	8/29/2013	2:35:00 PM	X	X	X	MS/MSD
GW-12607-082913-EM-036	MW-27	groundwater	8/29/2013	2:30:00 PM	X	X		
GW-12607-082913-EM-037	MW-S-7S	groundwater	8/29/2013	3:10:00 PM	X	X		
GW-12607-082913-EM-038	PZ-SW-15	groundwater	8/29/2013	3:05:00 PM	X	X		
GW-12607-082913-EM-039	PZ-SW-6	groundwater	8/29/2013	4:15:00 PM	X	X		
GW-12607-082913-EM-040	PZ-SW-5	groundwater	8/29/2013	5:00:00 PM	X	X		

Notes:

NC - North Canton

TA - TestAmerica

MS/MSD - Matrix Spike/Matrix Spike Duplicate

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area:	Area 01	Area 01	Area 01	Area 01	Area 01/Area 03
Sample Location:	MW-QS-8D	MW-QS-5D	OW-24	MW-24D-10	MW-A1-115
Sample ID:	GW-12607-082613-EM-001	GW-12607-082613-EM-002	GW-12607-082613-EM-003	GW-12607-082613-EM-004	GW-12607-082613-EM-005
Sample Date:	8/26/2013	8/26/2013	8/26/2013	8/26/2013	8/26/2013
Sample Type:					
Parameters					
Metals					
Chromium	—	—	300000	12 U	5.7 U
Chromium III (trivalent)	—	—	0.010 U	0.0076 J	0.010 U
Chromium VI (hexavalent)	—	—	310	0.010 U	0.010 U
Nickel	7.9 J	11 J	16000	14000	300

Notes:

U - Not detected at the associated reporting limit.

J - Estimated concentration.

UU - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area:	Area 01/Area 03	Area 01	Area 01	Area 01	Area 01	Area 01
Sample Location:	MW-A1-11D	HA-14	MW-34D-12	MW-OS-3D	HA-16	
Sample ID:	GW-12607-082613-EM-006	GW-12607-082613-EM-007	GW-12607-082613-EM-008	GW-12607-082713-EM-009	GW-12607-082713-EM-010	
Sample Date:	8/26/2013	8/26/2013	8/26/2013	8/27/2013	8/27/2013	
Sample Type:						
Parameters						
Metals						
Chromium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chromium III (trivalent)	0.010 U	0.010 U	0.010 U	--	--	
Chromium VI (hexavalent)	0.014 U	0.010 U	0.010 U	--	--	
Nickel	63000	230	82000	8400	400000	

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area: Sample Location: Sample ID: Sample Date: Sample Type:	Area 01 MW-OS-6D GW-12607-082713-EM-011 8/27/2013	Area 01/Area 03 MW-A1-12D GW-12607-082713-EM-012 8/27/2013	Area 01 MW-33D-12 GW-12607-082713-EM-013 8/27/2013	Area 01 MW-32D-12 GW-12607-082713-EM-014 8/27/2013	Area 01 MW-31D-12 GW-12607-082713-EM-015 8/27/2013
Parameters					
Metals					
Chromium	--	10000	130000	110000	12000
Chromium III (trivalent)	--	0.010 U	0.010 U	0.92	0.42 J
Chromium VI (hexavalent)	--	12	140	110	12
Nickel	14 J	2600	6400	1200	49

Notes:

U - Not detected at the associated reporting limit.
J - Estimated concentration.

UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area: Sample Location: Sample ID: Sample Date: Sample Type:								
	Area 01 MW-31D-12 GW-12607-082713-EM-016 8/27/2013 (Duplicate)	Area 01/Area 03 MW-A1-5S GW-12607-082713-EM-017 8/27/2013	Area 01 MW-27D-12 GW-12607-082813-EM-018 8/28/2013	Area 01 MW-27D-12 GW-12607-082813-EM-019 8/28/2013 (Duplicate)	Area 01 MW-28D-12 GW-12607-082813-EM-020 8/28/2013			
Parameters						Units		
Metals								
Chromium	11000	2600	180000	180000	30000	ug/L		
Chromium III (trivalent)	0.010 U	0.010 U	14	8.1	0.010 U	mg/L		
Chromium VI (hexavalent)	12	2.9	170	170	31	mg/L		
Nickel	50	24	940	920	430	ug/L		

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS

13000 ECKLES ROAD SITE

LIVONIA, MICHIGAN

AUGUST 2013

AOI/Area: Sample Location: Sample ID: Sample Date: Sample Type:	Area 01	Area 01	Area 01	Area 01	Area 01
	MW-23D-12	MW-25D-12	MW-35D-13	MW-29D-12	MW-30D-12
	GW-12607-082813-EM-021	GW-12607-082813-EM-022	GW-12607-082813-EM-023	GW-12607-082813-EM-024	GW-12607-082813-EM-025
	8/28/2013	8/28/2013	8/28/2013	8/28/2013	8/28/2013
Parameters	Units				
Metals					
Chromium	180000	2600	17	25	2.9 J
Chromium III (trivalent)	8.2	0.21	0.014	0.014	0.010 U
Chromium VI (hexavalent)	170	2.4	0.0028 J	0.011	0.0054 J
Nickel	160	2100	8900	6400	200000

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area: Sample Location: Sample ID: Sample Date: Sample Type:	Area 01/Area 03 MW-A1-35 GW-12607-082813-EM-026 8/28/2013	Area 01/Area 03 MW-A1-45 GW-12607-082813-EM-027 8/28/2013	Area 01/Area 03/AOI 22 MW-22-2D GW-12607-082813-EM-028 8/28/2013	Area 01 MW-QS-7D GW-12607-082913-EM-029 8/29/2013	Area 01 MW-S-8S GW-12607-082913-EM-030 8/29/2013
Parameters					
Metals					
Chromium	18	1900	5.0 U	5.0 U	5.0 U
Chromium III (trivalent)	0.018	0.64	--	--	--
Chromium VI (hexavalent)	0.010 U	1.2	--	--	--
Nickel	74	17 J	14000	15 J	20 U

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area: Sample Location: Sample ID: Sample Date: Sample Type:	Area 01 MW-S-8D GW-12607-082913-EM-031 8/29/2013	Area 01 MW-S-8D GW-12607-082913-EM-032 8/29/2013 (Duplicate)	Area 01 MW-S-3S GW-12607-082913-EM-033 8/29/2013	Area 01 HA-15 GW-12607-082913-EM-034 8/29/2013	Area 01 MW-26D-12 GW-12607-082913-EM-035 8/29/2013
Parameters					
Metals					
Chromium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium III (trivalent)	--	--	--	--	0.010 U
Chromium VI (hexavalent)	--	--	--	--	0.010 U
Nickel	8400	8600	370	16000	28000

Notes:

- U - Not detected at the associated reporting limit.
- J - Estimated concentration.
- UJ - Not detected; associated reporting limit is estimated.

TABLE 2

SUMMARY OF VALIDATED ANALYTICAL RESULTS
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

AOI/Area:		Area 01	General		
Sample Location:		MW-27	MW-S-75		PZ-SW-5
Sample ID:		GW-12607-082913-EM-036	GW-12607-082913-EM-037	GW-12607-082913-EM-039	GW-12607-082913-EM-040
Sample Date:		8/29/2013	8/29/2013	8/29/2013	8/29/2013
Sample Type:					
Parameters					
Metals					
Chromium	ug/L	5.0 U	5.0 U	5.0 U	5.0 U
Chromium III (trivalent)	mg/L	--	--	--	--
Chromium VI (hexavalent)	mg/L	--	--	--	--
Nickel	ug/L	9900	570	20 U	6.1 J

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
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013**

<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>
Nickel, Chromium	SW-846 60108	Water	pH > 12 and Iced, 4 ± 2° C	-	180
Hexavalent Chromium	SW-846 7196	Water	Iced, 4 ± 2° C	-	24 hours
Trivalent Chromium	SW-846 7196	Water	Iced, 4 ± 2° C	-	24 hours

Notes:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD
LIVONIA, MICHIGAN
AUGUST 2013

Parameter	Analyte	Analysis Date (mm/dd/yyyy)	Blank Result *	Sample ID	Original Result	Qualified Result	Units
Total Chromium	Total Chromium	8/29/2013	3.59 J	GW-12607-082613-EM-004 GW-12607-082613-EM-005	12 5.7	12 U 5.7 U	ug/L ug/L
Hexavalent Chromium	Hexavalent Chromium	8/27/2013	0.00276 J	GW-12607-082613-EM-004 GW-12607-082613-EM-005 GW-12607-082613-EM-006 GW-12607-082613-EM-007 GW-12607-082613-EM-008	0.0041 JB 0.0066 JB 0.014 B 0.0041 JB 0.0028 JB	0.010 U 0.010 U 0.014 U 0.010 U 0.010 U	mg/L mg/L mg/L mg/L mg/L

Notes:

- * Blank result adjusted for sample factors where applicable.
- U Not detected at the associated reporting limit.
- J Estimated concentration.
- B Laboratory qualifier - result detected in associated method blank.

TABLE 5
QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

<i>Parameter</i>	<i>Analyte</i>	<i>RPD/Diff</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Field Duplicate Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
Trivalent Chromium	Trivalent Chromium	191 RPD	GW-12607-082713-EM-015	0.4 J	GW-12607-082713-EM-016	0.010 U	mg/L

Notes:

- U - Not detected at the associated reporting limit
- J - Estimated concentration
- Diff - Difference (i.e. >1X RL for waters or >2XRL for soils.)
- RPD - Relative percent difference.

TABLE 6

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO A DISCREPANCY BETWEEN TOTAL/HEXAVALENT CHROMIUM RESULTS
ANNUAL GROUNDWATER SAMPLING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
AUGUST 2013

<i>Sample ID</i>	<i>Analyte</i>	<i>Date Analyzed</i>	<i>Sample Result</i>	<i>Total Chromium Result</i>	<i>Qualified Result</i>	<i>Units</i>
GW-12607-082613-EM-006	Hexavalent Chromium	8/27/2013	0.014	0.005 U	0.014 U	mg/L

Notes:

U - Not detected at the associated reporting limit.

ATTACHMENT 2.2

September/October 2013 AOI 31 GMP Sampling Event



**CONESTOGA-ROVERS
& ASSOCIATES**

14496 Sheldon Road, Suite #200

Plymouth, Michigan 48170

Telephone: (734) 453-5723

www.CRAworld.com

Fax: (734) 453-5201

MEMORANDUM

TO: Chris Meincke
FROM: Nancy Bergstrom/tl/233/Det *EP For*
RE: Analytical Results and Reduced Validation
GMP Monitoring
13000 Eckles Road
Livonia, Michigan
September/October 2013

REF. NO.: 012607
DATE: January 3, 2014

1.0 Introduction

The following document details a reduced validation of analytical results for groundwater samples collected in support of GMP Monitoring at the 13000 Eckles Road Site during September and October 2013. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard CRA report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS), matrix spike/matrix spike duplicate (MS/MSD) samples, and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999.

Item i) will subsequently be referred to as the "Guidelines" in this Memorandum.

2.0 Sample Holding Time and Preservation

The sample holding time criteria 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 properly preserved and delivered on ice, stored by the laboratory at the required temperature (0-6°C), and analyzed within the specified holding time periods.

CRA MEMORANDUM

3.0 Laboratory Method Blank Analyses

Method blank samples 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 blank samples were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The method blank samples were reported to be free from detectable levels of target analytes, indicating no laboratory-attributable contamination occurred.

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 analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for target compound list (TCL) volatile organic compounds (VOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Each individual surrogate compound is expected to meet the laboratory control limits.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

5.0 Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The LCS contained all compounds of interest. All LCS recoveries and relative percent differences were within the laboratory control limits or did not warrant qualification, 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 analytes of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

CRA MEMORANDUM

The MS/MSD samples were spiked with compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7.0 Field QA/QC Samples

The field QA/QC consisted of one (1) trip blank sample and two (2) field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one (1) trip blank sample was collected and submitted to the laboratory for VOC analysis.

Acetone was detected in the trip blank sample. Table 4 presents the data qualified for trip blank contamination. No remaining target analytes were reported as detected in the trip blank sample.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, two (2) field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the report limit (RL), the evaluation criteria is one time the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision, with the exception of the 1,1,1-trichloroethane results qualified in Table 5.

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 this assessment of the information provided, the data produced by TestAmerica Laboratories, Inc. were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

<i>Sample Identification</i>	<i>Location</i>	<i>Matrix</i>	<i>Collection Date (mm/dd/yyyy)</i>	<i>Collection Time (hr:min)</i>	<i>Analysis/Parameters</i>	<i>Comments</i>
TestAmerica Job No: 240-29886-1						
TB-12607-093013-JY-001	---	Water	9/30/2013	---	TCL VOC	Trip Blank
GW-12607-093013-JY-002	MW-205S	Water	9/30/2013	10:25	TCL VOC	
GW-12607-093013-JY-003	MW-213S	Water	9/30/2013	12:10	TCL VOC	
GW-12607-100213-JY-004	MW-303S	Water	10/2/2013	10:55	TCL VOC	
GW-12607-100213-JY-005	MW-303S	Water	10/2/2013	11:00	TCL VOC	Field Duplicate of 303S
GW-12607-100213-JY-006	MW-216S	Water	10/2/2013	12:00	TCL VOC	
GW-12607-100213-JY-007	MW-215S	Water	10/2/2013	13:15	TCL VOC	
GW-12607-100213-JY-008	MW-214S	Water	10/2/2013	14:15	TCL VOC	
GW-12607-100213-JY-009	MW-214S	Water	10/2/2013	14:20	TCL VOC	Field Duplicate of 214S
GW-12607-100213-JY-010	MW-211S	Water	10/2/2013	15:20	TCL VOC	
GW-12607-100313-JY-011	MW-217S	Water	10/3/2013	09:10	TCL VOC	
GW-12607-100313-JY-012	MW-206S	Water	10/3/2013	10:15	TCL VOC	
GW-12607-100313-JY-013	MW-203S	Water	10/3/2013	11:40	TCL VOC	MS/MSD
GW-12607-100313-JY-014	MW-202S	Water	10/3/2013	13:00	TCL VOC	
GW-12607-100313-JY-015	MW-201S	Water	10/3/2013	13:50	TCL VOC	
GW-12607-100313-JY-016	MW-104S	Water	10/3/2013	14:50	TCL VOC	
GW-12607-100413-JY-017	MW-103S	Water	10/4/2013	11:55	TCL VOC	MS/MSD
GW-12607-100413-JY-018	MW-301S	Water	10/4/2013	13:20	TCL VOC	

Notes:

MS/MSD - Matrix Spike/Matrix Spike Duplicate
VOC - Volatile Organic Compounds

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31 MW-103S GW-12607-100413-JY-017 10/04/2013	AOI 31 MW-104S GW-12607-100313-JY-016 10/03/2013	AOI 31 MW-201S GW-12607-100313-JY-015 10/03/2013	AOI 31 MW-202S GW-12607-100313-JY-014 10/03/2013	AOI 31 MW-203S GW-12607-100313-JY-013 10/03/2013
Sample Location:					
Sample ID:					
Sample Date:					
Sample Type:					
Parameters					
TCL VOCs					
1,1,1-Trichloroethane	20	1.1	7.6	20	1.4
1,1,2,2-Tetrachloroethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	3.3 U	1.0 U	0.88 J	1.0 U	1.0 U
1,1-Dichloroethene	3.3 U	1.0 U	1.0 U	0.33 J	1.0 U
1,2,4-Trichlorobenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone)	33 U	10 U	10 U	10 U	10 U
2-Hexanone	33 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	33 U	10 U	10 U	10 U	10 U
Acetone	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U
m&p-Xylenes	33 U	10 U	10 U	10 U	10 U
Methyl acetate	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl cyclohexane	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY
 GMP MONITORING
 13000 ECKLES ROAD SITE
 LIVONIA, MICHIGAN
 SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31
Sample Location:	MW-103S	MW-104S	MW-201S	MW-202S	MW-203S	MW-203S
Sample ID:	GW-12607-100413-JY-017	GW-12607-100313-JY-016	GW-12607-100313-JY-015	GW-12607-100313-JY-014	GW-12607-100313-JY-013	GW-12607-100313-JY-013
Sample Date:	10/04/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013	10/03/2013
Sample Type:						
Parameters	Units					
TCL VOCs						
Tetrachloroethene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	53	0.49 J	1.0 U	33	0.50 J	0.50 J
Trichlorofluoromethane (CFC-11)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	6.7 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

Notes:

U Not detected at the associated reporting limit.

J Estimated concentration.

TCL - Target Compound List

VOC - Volatile Organic Compound

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31
Sample Location:	MW-205S	MW-206S	MW-211S	MW-213S	MW-214S
Sample ID:	GW-12607-093013-JY-002	GW-12607-100313-JY-012	GW-12607-100213-JY-010	GW-12607-093013-JY-003	GW-12607-100213-JY-008
Sample Date:	09/30/2013	10/03/2013	10/02/2013	09/30/2013	10/02/2013
Sample Type:					
Parameters	Units				
TCL VOCs					
1,1,1-Trichloroethane	12	19	8.3	27	4.0 J
1,1,2,2-Tetrachloroethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,1-Dichloroethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,1-Dichloroethene	0.38 J	0.38 J	0.22 J	4.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U
1,2-Dibromoethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichloroethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,2-Dichloropropane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
2-Butanone (Methyl ethyl ketone)	10 U	10 U	10 U	40 U	10 U
2-Hexanone	10 U	10 U	10 U	40 U	10 U
4-Methyl-2-pentanone (MIBK)	10 U	10 U	10 U	40 U	10 U
Acetone	10 U	10 U	10 U	40 U	10 U
Benzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromodichloromethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromoform	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Bromomethane (Methyl bromide)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Carbon disulfide	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chloroform (Trichloromethane)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Chloromethane (Methyl chloride)	1.0 U	1.0 U	1.0 U	4.0 U	0.48 J
cis-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Cyclohexane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Dibromochloromethane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
m&p-Xylenes	2.0 U	2.0 U	2.0 U	8.0 U	2.0 U
Methyl acetate	10 U	10 U	10 U	40 U	10 U
Methyl cyclohexane	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Methyl tert butyl ether (MTBE)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Methylene chloride	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY

GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31
Sample Location:	MW-2055	MW-2065	MW-2115	MW-2135	MW-2145	
Sample ID:	GW-12607-093013-JY-002	GW-12607-100313-JY-012	GW-12607-100213-JY-010	GW-12607-093013-JY-003	GW-12607-100213-JY-008	
Sample Date:	09/30/2013	10/03/2013	10/02/2013	09/30/2013	10/02/2013	
Sample Type:						
Parameters	Units					
TCL VOCs						
Tetrachloroethene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
Toluene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
trans-1,2-Dichloroethene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
trans-1,3-Dichloropropene	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
Trichloroethene	0.20 J	1.0 U	1.0 U	110	1.0 U	
Trichlorofluoromethane (CFC-11)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
Trifluorotrichloroethane (Freon 113)	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
Vinyl chloride	1.0 U	1.0 U	1.0 U	4.0 U	1.0 U	
Xylenes (total)	2.0 U	2.0 U	2.0 U	8.0 U	2.0 U	

Notes:

- U Not detected at the associated reporting limit.
- J Estimated concentration.
- TCL - Target Compound List
- VOC - Volatile Organic Compound

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY
GNP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31
Sample Location:	MW-214S	MW-215S	MW-216S	MW-217S	MW-301S	
Sample ID:	GW-12607-100213-JY-009	GW-12607-100213-JY-007	GW-12607-100213-JY-006	GW-12607-100313-JY-011	GW-12607-100413-JY-018	
Sample Date:	10/02/2013	10/02/2013	10/02/2013	10/03/2013	10/04/2013	
Sample Type:	Duplicate					
Parameters	Units					
TCL VOCs						
1,1,1-Trichloroethane	7.5 J	15	1.0 U	67	12	1.0 U
1,1,2,2-Tetrachloroethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1.0 U	2.5 U	1.0 U	2.5 U	0.35 J	1.0 U
1,1-Dichloroethane	1.0 U	0.57 J	1.0 U	2.6	0.29 J	1.0 U
1,1-Dichloroethene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U
1,2-Dibromo-3-chloropropane (DBCP)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dibromoethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dichlorobenzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dichloroethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dichloropropane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,3-Dichlorobenzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
1,4-Dichlorobenzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone)	10 U	25 U	10 U	25 U	10 U	10 U
2-Hexanone	10 U	25 U	10 U	25 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	10 U	25 U	10 U	25 U	10 U	10 U
Acetone	10 U	25 U	10 U	25 U	10 U	10 U
Benzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromodichloromethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromoform	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Carbon disulfide	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Chloroethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	1.0 U	0.60	0.33 J	1.0 J	1.0 U	1.0 U
Chloromethane (Methyl chloride)	0.39 J	2.5 U	1.9	2.5 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Cyclohexane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Dibromochloromethane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Isopropyl benzene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
m,p-Xylenes	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U	2.0 U
Methyl acetate	10 U	25 U	10 U	25 U	10 U	10 U
Methyl cyclohexane	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Methylene chloride	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
o-Xylene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U
Styrene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY

GMP MONITORING

13000 ECKLES ROAD SITE

LIVONIA, MICHIGAN

SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	AOI 31	AOI 31	AOI 31
Sample Location:	MW-214S	MW-215S	MW-216S	MW-217S	MW-301S
Sample ID:	GW-12607-100213-JY-009	GW-12607-100213-JY-007	GW-12607-100213-JY-006	GW-12607-100313-JY-011	GW-12607-100413-JY-018
Sample Date:	10/02/2013	10/02/2013	10/02/2013	10/03/2013	10/04/2013
Sample Type:	Duplicate				
Parameters	Units				
TCL VOCs					
Tetrachloroethene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
Toluene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
trans-1,2-Dichloroethene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
trans-1,3-Dichloropropene	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
Trichloroethene	1.0 U	50	1.0 U	2.5 U	3.1
Trichlorofluoromethane (CFC-11)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
Trifluorotrichloroethane (Freon 113)	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
Vinyl chloride	1.0 U	2.5 U	1.0 U	2.5 U	1.0 U
Xylenes (total)	2.0 U	5.0 U	2.0 U	5.0 U	2.0 U

Notes:

U Not detected at the associated reporting limit.

J Estimated concentration.

TCL - Target Compound List

VOC - Volatile Organic Compound

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY

GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	None
Sample Location:	MMW-303S	MMW-303S	Trip Blank
Sample ID:	GW-12607-100213-JY-004	GW-12607-100213-JY-005	TB-12607-093013-JY-001
Sample Date:	10/02/2013	10/02/2013	9/30/2013
Sample Type:		Duplicate	
Parameters	Units		
TCL VOCs			
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	0.32 J	0.32 J	1.0 U
1,1-Dichloroethene	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane	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)	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	10 U	10 U	10 U
Acetone	10 U	10 U	6.1 J
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)	1.0 U	1.0 U	1.0 U
Carbon disulfide	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	1.0 U	1.0 U	1.0 U
Chlorobenzene	1.0 U	1.0 U	1.0 U
Chloroethane	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	1.0 U	0.33 J	1.0 U
Chloromethane (Methyl chloride)	1.0 U	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	1.0 U	1.0 U	1.0 U
Ethylbenzene	1.0 U	1.0 U	1.0 U
Isopropyl benzene	1.0 U	1.0 U	1.0 U
m&p-Xylenes	2.0 U	2.0 U	2.0 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)	1.0 U	1.0 U	1.0 U
Methylene chloride	1.0 U	1.0 U	1.0 U
o-Xylene	1.0 U	1.0 U	1.0 U
Styrene	1.0 U	1.0 U	1.0 U

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY

GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

AOI:	AOI 31	AOI 31	None
Sample Location:	MW-303S	MW-303S	Trip Blank
Sample ID:	GW-12607-100213-JY-004	GW-12607-100213-JY-005	TB-12607-093013-JY-001
Sample Date:	10/02/2013	10/02/2013	9/30/2013
Sample Type:		Duplicate	
Parameters	Units		
TCL VOCs			
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)	2.0 U	2.0 U	2.0 U

Notes:

U Not detected at the associated reporting limit.

J Estimated concentration.

TCL - Target Compound List

VOC - Volatile Organic Compound

TABLE 3

ANALYTICAL METHODS AND HOLDING TIME CRITERIA

GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

<i>Parameter</i>	<i>Method¹</i>	<i>Matrix</i>	<i>Holding Time</i>	
			<i>Collection to Extraction (Days)</i>	<i>Collection or Extraction to Analysis (Days)</i>
TCL VOC	SW-846 8260	Water	-	14

Notes

¹ Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.

TCL - Target Compound List

VOC - Volatile Organic Compounds

TABLE 4
QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANKS
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

<i>Parameter</i>	<i>Blank Date</i>	<i>Analyte</i>	<i>Blank Result</i>	<i>Associated Sample ID</i>	<i>Original Result</i>	<i>Qualified Result</i>	<i>Units</i>
TCL VOC	9/30/2013	Acetone	6.1 J	GW-12607-100313-JY-012	2.0 J	10 U	µg/L
				GW-12607-100413-JY-018	1.3 J	10 U	µg/L

Notes:

U - Not detected at the associated reporting limit

J - Estimated concentration

TCL - Target Compound List

VOC - Volatile Organic Compounds

TABLE 5
QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
SEPTEMBER/OCTOBER 2013

Parameter	Analyte	RPD	Sample ID	Qualified Result	Field Duplicate Sample ID	Qualified Result	Units
TCL VOC	1,1,1-Trichloroethane	61	GW-12607-100213-JY-008	4.0 J	GW-12607-100213-JY-009	7.5 J	µg/L

Notes:
RPD - Relative percent difference.
TCL - Target Compound List
VOC - Volatile Organic Compounds

ATTACHMENT 2.3

November 2013 Additional Area 1 Characterization Sampling Event



**CONESTOGA-ROVERS
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MEMORANDUM

TO: Chris Meincke
FROM: ^{BOF For -} Nancy Bergstrom/tl/234/Det
RE: **Analytical Results and Reduced Validation
GMP Monitoring
13000 Eckles Road
Livonia, Michigan
November 2013**

REF. NO.: 012607
DATE: January 10, 2014

1.0 Introduction

The following document details a reduced validation of analytical results for groundwater samples collected in support of GMP Monitoring at the 13000 Eckles Road Site during November 2013. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard CRA report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, laboratory control samples (LCS), matrix spike/matrix spike duplicate (MS/MSD) samples, and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the document entitled:

- i) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994.

Item i) will subsequently be referred to as the "Guidelines" in this Memorandum.

2.0 Sample Holding Time and Preservation

The sample holding time criteria 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 properly preserved and delivered on ice, stored by the laboratory at the required temperature (0-6°C), and analyzed within the specified holding time periods.

CRA MEMORANDUM

3.0 Laboratory Method Blank Analyses

Method blank samples 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 blank samples were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The method blank samples were reported to be free from detectable levels of target analytes, indicating no laboratory-attributable contamination occurred.

4.0 Laboratory Control Sample (LCS) Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The LCS contained all compounds of interest. All LCS recoveries and relative percent differences were within the laboratory control limits or did not warrant qualification, demonstrating acceptable analytical accuracy.

5.0 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 analytes of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

6.0 Field QA/QC Samples

The field QA/QC consisted of one(1) field duplicate sample set.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one (1) field duplicate sample was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with this duplicate sample must be less than 50 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the report limit (RL), the evaluation criteria is one time the RL value.

CRA MEMORANDUM

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

7.0 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.

8.0 Conclusion

Based on this assessment of the information provided, the data produced by TestAmerica Laboratories, Inc. were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
NOVEMBER 2013

<i>Sample Identification</i>	<i>Location</i>	<i>Matrix</i>	<i>Collection Date (mm/dd/yyyy)</i>	<i>Collection Time (hr:min)</i>	<i>Analysis/Parameters</i>	<i>Comments</i>
TestAmerica Job No: 240-31751-1						
GW-12607-112113-SK-008	MW-40D-13	Water	11/21/2013	15:00	Metals	
GW-12607-112113-SK-009	MW-39D-13	Water	11/21/2013	15:55	Metals	
GW-12607-112113-SK-010	MW-39D-13	Water	11/21/2013	16:25	Metals	Field Duplicate of MW-39D-13
GW-12607-112113-SK-011	MW-38D-13	Water	11/21/2013	16:55	Metals	
GW-12607-112113-SK-012	MW-41D-13	Water	11/21/2013	17:55	Metals	MS/MSD

Notes:

MS/MSD - Matrix Spike/Matrix Spike Duplicate
 Metals - Chromium, Nickel, Hexavalent Chromium, Trivalent Chromium

TABLE 2

VALIDATED ANALYTICAL RESULTS SUMMARY
 GMP MONITORING
 13000 ECKLES ROAD SITE
 LIVONIA, MICHIGAN
 NOVEMBER 2013

Sample Location:	MW-38D-13	MW-39D-13	MW-39D-13	MW-40D-13	MW-41D-13
Sample ID:	GW-12607-112113-SK-011	GW-12607-112113-SK-009	GW-12607-112113-SK-010	GW-12607-112113-SK-008	GW-12607-112113-SK-012
Sample Date:	11/21/2013	11/21/2013	11/21/2013	11/21/2013	11/21/2013
Sample Type:			Duplicate		
Parameters					
Metals					
Chromium	3.1 J	2.5 J	ND(5.0)	5.0	6.0
Chromium III (trivalent)	ND(0.010)	ND(0.010)	ND(0.010)	0.0050 J	ND(0.010)
Chromium VI (hexavalent)	ND(0.010)	ND(0.010)	ND(0.010)	ND(0.010)	0.0066 J
Nickel	17 J	120	120	3800	33

Notes:

ND Not detected at the associated reporting limit.
 J Estimated concentration.

TABLE 3
ANALYTICAL METHODS AND HOLDING TIME CRITERIA
GMP MONITORING
13000 ECKLES ROAD SITE
LIVONIA, MICHIGAN
NOVEMBER 2013

<i>Parameter</i>	<i>Method ¹</i>	<i>Matrix</i>	<i>Holding Time</i>	
			<i>Collection to Extraction (Days)</i>	<i>to Analysis (Days)</i>
Chromium and Nickel	SW-846 6010B	Water	-	180
Hexavalent/Trivalent Chromium	SW-846 7196A	Water	-	24 hours

Notes

- ¹ Method References:
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.