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April 23, 2013

Reference No. 003978

Ms. Sheri Bianchin  
United States Environmental  
Protection Agency  
77 West Jackson Blvd. (SR-6J)  
Chicago, Illinois 60604

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MAY 20 2013

DNR - SUPERIOR

Ms. Erin Endsley  
Wisconsin Department of  
Natural Resources  
DNR Service Center  
1701 North 4th St.  
Superior, WI 54880

Dear Ms. Bianchin and Ms. Endsley:

Re: 2012 Annual Monitoring Report  
Wausau Water Supply NPL Site

On behalf of the Wausau Water Supply PRP Group, Conestoga-Rovers and Associates (CRA) is pleased to submit this 2012 Annual Monitoring Report for the Wausau Water Supply NPL Site. This Report has been prepared as required by the Groundwater Monitoring Plan.

Please contact me if you have any questions or comments.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Charles Ahrens

CEA/sb/24  
Encl.

cc: Dave Erickson, City of Wausau  
Lee Bergmann, Regal Beloit (via email)  
Rob Flashinski, Wausau Chemical (via email)

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## 2012 ANNUAL MONITORING REPORT

WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN

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## 2012 ANNUAL MONITORING REPORT

WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN

APRIL 2013

REF. NO. 003978 (31)

This report is printed on recycled paper.

Prepared by:  
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## 1.0 INTRODUCTION

Conestoga-Rovers and Associates (CRA) has prepared this 2012 Annual Monitoring Report (Report) for the Wausau Water Supply NPL Site (Site) in Wausau, Wisconsin, on behalf of the Wausau Potential Responsible Party (PRP) Group. This Report presents the results of groundwater and extraction well monitoring at the Site during 2012. This Report also presents operational data for the groundwater remediation systems.

### 1.1 HISTORY

The Wausau PRP Group initiated remedial action at the Site in the early 1990s in accordance with the September 29, 1990, Record of Decision (ROD) and the Consent Decree (CD) entered with the court on January 24, 1991. The final remedial action at the Site consisted of two soil vapor extraction (SVE) systems to address the source areas and groundwater extraction and treatment, utilizing existing municipal production wells and an extraction well. The Site location is shown on Figure 1.1 and a Site plan is presented on Figure 1.2.

Source area remediation was accomplished by the installation of SVE systems at Marathon Electric (West Bank) and Wausau Chemical (East Bank) in January 1994. The SVE system at Marathon Electric operated until April 1996, when the West Bank source remediation was approved as complete. The East Bank SVE system was modified in 1996 and continued to operate. In January 2001 the East Bank SVE system was shut down while evaluation for final closure occurred. The East Bank source remediation was approved as complete in 2007.

Groundwater remediation is provided through two existing municipal production wells (CW3 and CW6) and one extraction well installed at Marathon Electric (EW1). Air strippers, located at the Wausau water treatment plant, treat water from the municipal supply wells. Water from EW1 is also treated by air stripping (over riprap on the riverbank) before being discharged to the Wisconsin River.

The pumping rates for the three extraction wells were originally defined in the CD. In the Groundwater Flow Model report (CRA, May 1993), CRA established a range of pumping rates that would maintain capture of the groundwater plume. Subsequently, in an August 4, 1995 letter, the United States Environmental Protection Agency (USEPA) approved a pumping configuration range for the three extraction wells. Those pumping rates were:

- CW3: 65 hours per week at 1,200 gallons per minute (gpm) to 100 hours per week at 1,100 gpm
- CW6: 85 hours to 100 hours per week at 1,400 gpm
- EW1: 800 to 900 gpm continuously

Additional groundwater remediation was provided by a groundwater extraction system operated by Wausau Chemical between 1985 and 1996 as an interim remediation measure. The extraction system at Wausau Chemical consisted of a series of shallow wells at the south end of the Wausau Chemical property. Groundwater was treated by air stripping. This system was in addition to the requirements of the ROD or the CD and operation ceased in 1996.

From 1993 through 2000 groundwater monitoring was conducted according to the Monitoring Program Plan (CRA, 1994). The Monitoring Program Plan consisted of a complex system of monthly, quarterly, semiannual, and annual monitoring. In June 2000, the Groundwater Monitoring Plan replaced the Monitoring Program Plan as the approved groundwater monitoring program. The Groundwater Monitoring Plan consists of annual monitoring well sampling and quarterly sampling of EW1.

The Groundwater Monitoring Plan requires an annual report on the activities occurring the previous calendar year. This Report fulfills the requirement for 2012.

## 1.2 MONITORING BACKGROUND

Groundwater monitoring at this Site is a combination of hydraulic and water quality monitoring designed to verify that the groundwater extraction wells are containing the contaminant plume and that groundwater quality is improving as a result of past source remedial actions and ongoing volatile organic compound (VOC) removal from the aquifer.

Groundwater remediation at the Wausau Site is a long-term process that cannot be readily measured on a short-term basis using water quality data alone. Accordingly, water quality data is measured annually on a long-term basis to show the downward trend of VOC concentrations in groundwater. Because of the time necessary to achieve groundwater remediation, containment of contaminated groundwater is the primary measurable and achievable short-term objective.



For the purpose of evaluation, groundwater monitoring at Wausau has been divided into two areas, the East Bank and the West Bank of the Wisconsin River, corresponding to the two original source areas. The river forms a natural hydraulic division of the Site. There are three active groundwater extraction wells that contain and remove VOC contaminated groundwater. Two of the extraction wells are on the West Bank, (CW6 and EW1) and one is on the East Bank (CW3) (see Figure 1.2).

### 1.3 SITE GEOLOGY

The Site is underlain by glacial outwash and alluvial sediments that have filled in the preglacial stream valley in which the Wisconsin River now flows. This alluvial aquifer ranges from 0 to 160 feet thick and has an irregular base and lateral boundaries. The relatively impermeable bedrock that underlies the aquifer, and forms its lateral boundaries within the preglacial valley, defines the boundaries of the aquifer. Six production wells in the Site area provide drinking water for the City of Wausau. These wells are screened in the glacial outwash and alluvial sand and gravel deposits that underlie and are adjacent to the Wisconsin River.

### 1.4 GROUNDWATER CLEANUP STANDARDS

The Groundwater Monitoring Plan was developed to monitor compliance with cleanup standards for the groundwater at the Site. The groundwater cleanup standards for the Site are the United States Environmental Protection Agency (USEPA) maximum drinking water contaminant levels (MCLs). The MCLs for the primary VOC contaminants of concern at the Site are:

- Trichloroethylene (TCE) 5 µg/L
- Tetrachloroethylene (PCE) 5 µg/L
- cis-1,2-Dichloroethylene (DCE) 70 µg/L
- Vinyl chloride 2 µg/L



## 2.0 2012 MONITORING

Groundwater monitoring during 2012, which included water level measurements and water sampling, was conducted in late November in accordance with the Groundwater Monitoring Plan, with the following exceptions:

- As reported in the 2000 Annual Monitoring Report, two monitoring wells (WC2 and W51A) are no longer monitored and they were abandoned in 2000.
- Also, as approved by the USEPA and Wisconsin Department of Natural Resources (WDNR) through the 2002 Annual Monitoring Report, the analysis of bis(2-ethylhexyl)phthalate at C4S and W53A was discontinued in 2003.
- With USEPA and WDNR approval, monitoring wells E24 and E24A were abandoned. Monitoring well E24AR was installed as a replacement. The well log for E24AR is provided in Appendix A.
- Due to health and safety issues and lack of proper transportation to the island in the Wisconsin River, as approved by USEPA and WDNR, monitoring well IWD was not sampled in 2012.

Monitoring of the EW1 influent and effluent was conducted in February and June, 2012. Due to additional pump issues and eventual failure, EW1 was not operating for most of the third and fourth quarters and monitoring was not performed during that period.

### 2.1 WATER LEVEL MONITORING

Table 2.1 presents the groundwater elevation data measured on November 12 and 13, 2012. Water table contours based on these measurements are presented on Figure 2.1. Field staff measured water levels on the East Bank on November 12 while CW-3, the East Bank remediation well, was pumping. West Bank water levels were measured on November 13 while CW-6, the West Bank remediation well was operating. As explained above, EW1 was not operating during the November monitoring event. Water levels in the City production wells were measured with the assistance of City staff.

The West Bank contours are consistent with flow patterns observed in previous years. The West Bank flow patterns are controlled by the operation of City production well CW3. The East Bank contours depict a large cone of influence created by CW6. Under normal pumping conditions, CW10 and CW11 would also show significant drawdown and would augment the cone of influence created by the West Wellfield. However,

based on the elevations recorded for those wells, they were not pumping when their water levels were measured. Under natural conditions, groundwater would flow toward and discharge to the Wisconsin River. Under existing conditions however, groundwater flows toward production wells and EW1 when it is operating.

## 2.2 GROUNDWATER SAMPLING

Annual groundwater sampling was conducted from on November 13 and 14, 2012. Monitoring well samples were analyzed for the Site specific VOC list (see Table 2.2) by EPA Method 8260. A summary of the groundwater sampling event, including field parameter measurements, is presented in Table 2.3.

Groundwater sampling was conducted according to the Quality Assurance Project Plan, (CRA, February 1994) as amended by a June 11, 1999, letter to the USEPA. TestAmerica Laboratories, Inc. in North Canton, Ohio, analyzed all samples. Laboratory results are being submitted electronically in the Region V Electronic Data Deliverable (EDD) format for inclusion in the Region V EPA database. Copies of the Data Quality Validation memoranda for the 2012 data are included in Appendix B.

## 2.3 EXTRACTION WELL EW1 SAMPLING

The monitoring program for EW1 was designed to measure long-term water quality improvement in the groundwater and to measure the effectiveness of the EW1 groundwater treatment system. These data are also used to monitor the contaminant levels discharged to the Wisconsin River from the treatment system. The discharge concentrations must meet the substantive requirements of the Wisconsin Pollutant Discharge Elimination System (WPDES).

Influent and effluent samples were collected from the EW1 treatment system in February and June, 2012. Due to additional pump problems and eventual failure, the second quarter sample could not be collected until June 13, 2012, and the third and fourth quarter samples were not collected because EW1 was not operating. The influent and effluent samples were analyzed by EPA Method 8260 for the Site specific VOCs (Table 2.2).

The quarterly samples were analyzed by TestAmerica. Laboratory results are being submitted electronically in the Region V EDD format for inclusion in the Region V EPA

database. Copies of the Data Quality Validation memoranda for the 2012 data are included in Appendix B.

### 3.0 OPERATION AND MAINTENANCE

Operation and maintenance activities reported in this section cover EW1, the City production wells, the groundwater monitoring wells, and the annual inspection of the paved surfaces in the East Bank source area.

#### 3.1 MONITORING WELL INSPECTION

All Site monitoring wells were inspected during the November monitoring round. An inspection form was used to document the following well conditions:

- Total depth
- Well ID
- Casing and grout condition
- Well cap condition
- Lock condition
- Concrete seal condition
- Ground condition (subsidence)

Table 3.1 presents the results of the inspection. The inspection indicated that all wells were in satisfactory condition. Minor maintenance issues will be addressed during the 2013 monitoring event.

#### 3.2 EW1 OPERATION

In 2012, approximately 75,000,000 gallons of water were extracted and treated by the West Bank extraction well (EW1) at RBC Manufacturing (formerly Marathon Electric). The extraction well pumped at an average flow rate of 271 gallons per minute during while it was operating. The pump in EW1 was removed for repairs on July 16, 2012, and did not operate for the remainder of 2012. Table 3.2 summarizes EW1 operational data for 2012, including the number of gallons pumped per month and average flow rates.

### 3.3 CITY PRODUCTION WELLS

CW3 and CW6 operated as required in 2012 with minimal shutdowns or repairs. Table 3.3 presents 2012 pumping data for the six City wells. While only CW3 and CW6 are part of the remediation system, data for all City wells are presented, consistent with previous reports. The table shows, by month, the number of hours each well was operated, the number of gallons pumped from each well, and the average pumping rate while the pump was operating.

CW3 and CW6 operated on alternate schedules at rates that exceeded the operating requirements established by the USEPA approval letter dated August 4, 1995. CW3 operated for an average of 77.7 hours per week with an average pumping rate of 1,595 gpm, exceeding the requirements of 65 hours per week at 1,200 gpm.

CW6 operated for an average of 89.3 hours per week with an average pumping rate of 1,579 gpm, exceeding the requirement of 85 hours per week at 1,400 gpm.

### 3.4 EAST BANK SOURCE AREA PAVEMENT INSPECTION

The USEPA and WDNR approved final closure of the East Bank source remediation SVE system in September 2007. A requirement of the closure was an annual inspection of the paved areas surrounding the Wausau Chemical property, as described in the Pavement Cover and Building Maintenance Plan. The purpose of the inspection is to monitor the integrity of the paved areas of the property and make recommendations to minimize rainwater infiltration and prevent direct human contact with soils. In August 2009 the entire pavement area was repaved with new asphalt and the street adjacent to the west side of the property, North River Drive, was repaved by the City of Wausau. Also, an approximately 2,800 square foot addition, with concrete floor and roof, was added to the south end of the building in 2009-2010. Inspections conducted during 2012 found the pavement to be in very good condition. Utility work by the natural gas company was thoroughly patched and all minor cracks were filled. A copy of the pavement inspection report is contained in Appendix C.

## 4.0 EVALUATION OF GROUNDWATER DATA

The objectives of groundwater monitoring at the Site are to monitor the containment of the contaminant plume and the long-term improvement in groundwater quality.

Table 4.1 presents the laboratory results for monitoring well samples collected in November 2012. The data indicate that, in general, the VOC concentrations are stable or decreasing. Figure 4.1 presents the total chlorinated VOC (CVOC) data and total CVOC concentration contours that illustrate the plume configuration based on the November 2012 data.

### 4.1 WEST BANK

The primary CVOC found in the West Bank groundwater is trichloroethene (TCE), which was detected at 7 of the 12 West Bank monitoring wells and City well CW6. The degradation product, cis-1,2-dichloroethene (C12DCE), was detected at one location with a low concentration. Vinyl chloride was not detected on the West Bank. Monitoring wells with TCE concentrations greater than the MCL of 5 µg/L included R2D, R3D, and W53A. The MCL for TCE was also exceeded in the samples from extraction well EW1 (7.1 µg/L and 9.9 µg/L), but the concentration at CW6 was below the MCL (see Tables 4.1 and 4.2).

In the portion of the plume north of EW1, CVOCs are located in the deeper portion of the aquifer. Wells north of EW1 that exceeded the MCL for TCE included R2D and R3D. In the southern portion of the plume, in the vicinity of the old landfill, CVOCs are located in the shallower portion of the aquifer. MW53A is the only location south of EW1 that exceeded the MCL for TCE. TCE concentrations have fluctuated at MW53A historically, with no clear upward or downward trend. However, concentrations from 2011 and 2012 are higher than historical values. Carbon tetrachloride was detected at MW53A with a concentration of 1.67 µg/L, which is below the MCL of 5 µg/L. No other CVOC concentrations exceeded the MCL on the West Bank.

Previous Annual Monitoring Reports have described the migration of a relatively high concentration slug of CVOCs in the area of monitoring wells R2D, R3D, and R4D. The slug of CVOCs originated in the vicinity of R2D and has been slowly moving towards EW1 over the last several years. The total CVOC concentration at monitoring well R3D decreased from 203 µg/L in 2011 to 20.7 µg/L in 2012. This decrease may be due to a change in the groundwater flow patterns since EW1 ceased operation. The plume in the

R3D area may have shifted to the north as it is now contained within the capture zone of CW6. When EW1 was operating, the R3D area was near the flow divide between the capture zones of EW1 and CW6. The historical data for R2D, R3D, and R4D are presented below.

<i>Total CVOCs (µg/L)</i>			
<u>Year</u>	<u>R2D</u>	<u>R3D</u>	<u>R4D</u>
1996	1600	2	540
1997	720	5	65/65
1998	320	580	52/58
1999	110	1200	33
2000	45	1800	58
2001	17	1500	13/13
2002	15	1200	36
2003	10	980	39/37
2004	11	899	51
2005	7.5	400	56/57
2006	8.2	480/500	42
2007	9.9	280	1.3
2008	6.5	180	13
2009	7.2/7.4	92	22.4/23.4
2010	6.2	195.7	25.7
2011	11	203.1	27.6
2012	6.38	20.7	4.89

In the far north portion of the plume, within the capture area of City well CW6 (see Figure 4.1), the only detected VOC is TCE and the concentrations reported for CW6 and W55 have generally declined since 2000. Concentrations of TCE at both of these wells are below the MCL and are slightly higher than in 2011. This area of the plume appears to be stable with gradually decreasing TCE concentrations.

The overall areal extent of the contaminant plume did not change significantly relative to 2011.



## 4.2 EAST BANK

East Bank well data are presented in Table 4.1. While tetrachloroethene (PCE) was the original contaminant on the East Bank, the presence of TCE, C12DCE, and vinyl chloride at concentrations that are currently equal to or exceed the PCE concentration in many wells indicates an active natural biodegradation process. For example, at E37A the C12DCE concentration was higher than the PCE and TCE concentrations combined.

PCE was detected at 9 of the 12 East Bank monitoring wells in 2012. Four of those nine wells had concentrations that exceeded the MCL of 5 µg/L. The highest PCE concentration was 41 µg/L at E23A. At E37A, the concentrations of PCE and TCE exceeded their respective MCLs. The MCLs for PCE and vinyl chloride were also exceeded at WW6, and the PCE MCL was exceeded at E22A and E23A.

The areal extent of the East Bank contaminant plume remained steady compared to 2011 (see Figure 4.1). Total CVOC concentrations from 2006 through 2012 for key East Bank wells are shown below:

<i>Total CVOCs (µg/L)</i>							
<u>Well</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
WC3B	18	4.2	1.5	1,460/565.2 <sup>1</sup>	1.24	2.26	3.47
WC5A	8.4	1.8	2.8	12.1	9.86	4.6	1.3
E24A	3.7	1.1	1	13	20	1.4	3.86 <sup>2</sup>
E22A	14	10	ND	231.9	5.03	3.2	25.41
E37A	8.5	34	460	77.35	7.0	140.19	68.06
E23A	47	130	260	154	30.94	115.7	86.52
WW6	78	35	12	29.97	46.34	17.6	45.48
CW3	4.6	4.8	6.4	4.48	4.36	4.03	3.58
IWD	13	11	4.4	7.3	4.67	5.7	NA

Significant decreases in CVOC concentrations occurred at E37A, and E23A, while increases were reported for E22A and WW6. These fluctuations are consistent with the

<sup>1</sup> WC3B was resampled on January 12, 2010, to confirm the October, 2009 result.

<sup>2</sup> 2012 sample collected from E24AR

migration of a higher concentration slug that has moved from the WC3B area and through the E37A/E23A area as it migrates toward CW3 and removal.

The 2012 concentrations of benzene, toluene, ethylbenzene, and xylenes (BTEX) at monitoring well FVD5 were consistent with historical data. The aromatic compounds found in this well are related to the Wausau Energy property and are independent of the Wausau NPL site remediation process.

#### 4.3 EW1

The 2012 influent and effluent laboratory results for EW1 are presented in Table 4.2. The third and fourth quarter 2012 samples were not collected because EW1 was not operating due to the pump removal and repair. Quarterly samples were collected in February and June. TCE was the primary CVOC detected. DCE was also detected in the June sample, but the concentration was less than 1 µg/L.

Influent concentrations of TCE increased slightly from 7.1 µg/L in February to 9.9 µg/L in June. The effluent concentrations indicate that the EW1 treatment system removes about 50 percent of the CVOCs in the extracted groundwater.

The results of the effluent samples were compared to surface water discharge limits for discharge to the Wisconsin River, as calculated by the WDNR. Those discharge limits were presented in the "Remedial Action Plan, Groundwater Extraction, Treatment, and Discharge System", (CRA, 1990). None of the discharge limits were exceeded during 2012 (see Table 4.2).

#### 4.4 HYDRAULIC CAPTURE

Hydraulic capture of the contaminant plume is demonstrated by the water table contours illustrated on Figure 2.1. The water table contours indicate that in November groundwater flow at the Site was toward the two operating extraction wells (CW3 and CW6). At nested well locations, the water table elevations for shallow and deep wells were similar, indicating horizontal flow and hydraulic containment of the shallow and deeper portions of the aquifer. Figures 4.1 and 4.2 also demonstrate that hydraulic containment of the contaminant plume was maintained through 2012.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

### 5.1 CONCLUSIONS

- The two City production wells, CW3 and CW6, to capture the CVOC plume as demonstrated by the hydraulic and chemical data. When operating, the RBC Manufacturing (formerly Marathon Electric) extraction well, EW1, provides additional contaminant removal on the south end of the West Bank plume.
- The East Bank CVOC plume exhibited concentration patterns consistent with continued migration of a higher concentration slug toward CW3. The areal extent of the plume was stable. The presence of PCE daughter products provides evidence of natural attenuation of the East Bank plume.
- The CVOC plume on the West Bank remained stable in its areal extent and concentrations were also stable relative to 2011 data, with the exception of W53A, which exhibited an increase.
- Three West Bank monitoring wells (R2D, R3D, and W53A) and EW1 had TCE concentrations greater than the MCL of 5 µg/L.
- Four East Bank wells had PCE concentrations that exceeded the MCL of 5 µg/L. One well, WW6, had a vinyl chloride concentration that exceeded the MCL of 2 µg/L. The MCL for TCE was exceeded at E37A and E23A.
- EW1 removed approximately 75,000,000 gallons of water in 2012 at an average pumping rate of 271 gallons per minute. The well was not operating from July 16, 2012, through the end of the year due to pump failure and repairs.
- The EW1 treatment system removed approximately 50 percent of the CVOCs from the extracted groundwater. The effluent concentrations from the treatment system were far below the established discharge limits.
- The City production wells operated within the requirements established by USEPA.
- The annual inspection of the pavement and building barrier at Wausau Chemical found the pavement to be in good condition. An asphalt patch was required due to gas line construction and minor cracks were also filled.

## 5.2 RECOMMENDATIONS

- Groundwater monitoring in 2013 should continue as described in the Groundwater Monitoring Plan with the minor modifications discussed in previous reports.
- The Group is in the process of preparing a work plan to conduct a hydrogeological study to assess potential effects to the groundwater remedy with EW1 not operating. The goal is to remove EW1 from the groundwater extraction system in order to achieve a more efficient, sustainable, and cost effective remedy. EW1 will remain non-operational pending USEPA approval.







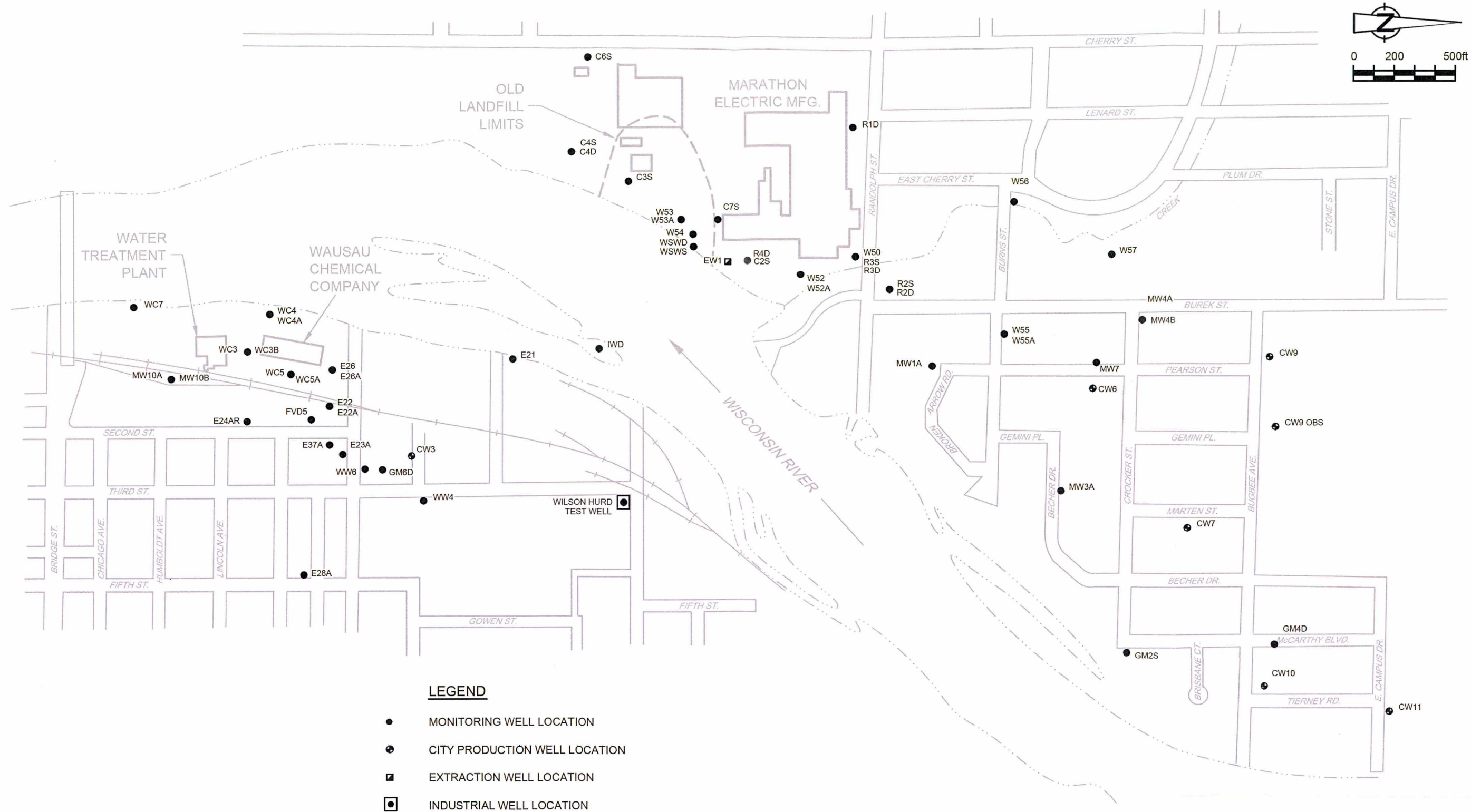


figure 1.2  
 SITE PLAN  
 WAUSAU WATER SUPPLY NPL SITE  
 Wausau, Wisconsin

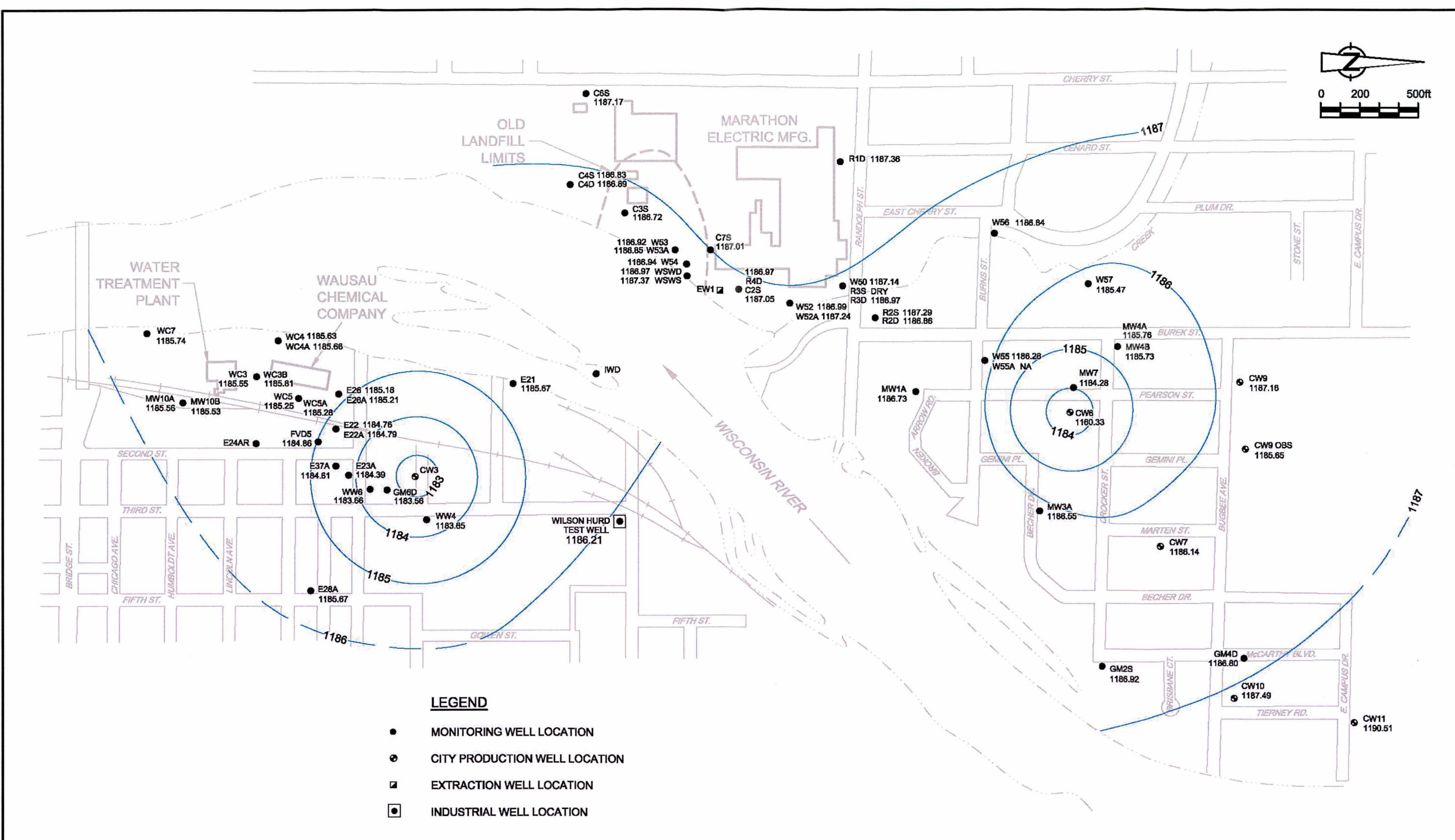


figure 2.1  
 2012 WATER TABLE CONTOURS  
 WAUSAU WATER SUPPLY NPL SITE  
 Wausau, Wisconsin



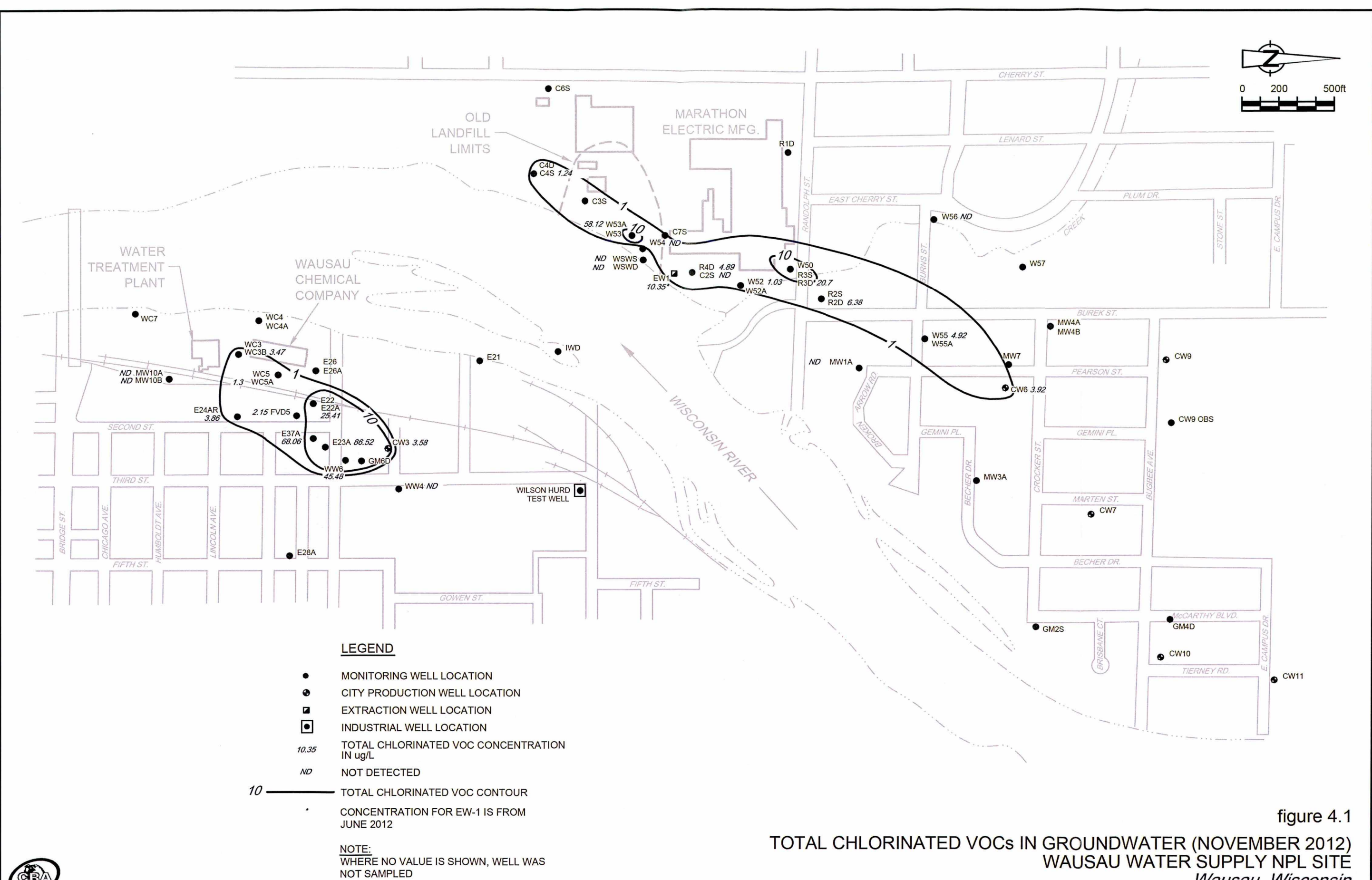


figure 4.1  
 TOTAL CHLORINATED VOCs IN GROUNDWATER (NOVEMBER 2012)  
 WAUSAU WATER SUPPLY NPL SITE  
 Wausau, Wisconsin



SOURCE: RMT INC. FIGURE 1, 5/14/87.

TABLE 2.1

**GROUNDWATER ELEVATIONS - 2012**  
**WAUSAU WATER SUPPLY NPL SITE**  
**WAUSAU, WISCONSIN**

	<i>Reference Elevation</i>		<i>Water Level 11/12/2012</i>	<i>Water Table Elevation 11/12/2012</i>
<b>East Bank</b>				
CW3	1202.15		NA	NA
E21	1197.51		11.84	1185.67
E22	1195.47		10.71	1184.76
E22A	1195.88		11.09	1184.79
E23A	1197.61		13.22	1184.39
E24AR	1209.33	(1),(2)	25.60	1183.73
E24	1210.01	(1)	Abandoned	Abandoned
E24A	1211.07	(1)	Abandoned	Abandoned
E26	1199.02		13.84	1185.18
E26A	1199.13		13.92	1185.21
E28A	1211.60		25.93	1185.67
E37A	1197.84		13.23	1184.61
FVD5	1198.89		14.03	1184.86
GM6D	1198.57		15.01	1183.56
W. HURD	1200.23		14.02	1186.21
IWD	1192.10		NM	NM
MW10A	1210.67		25.11	1185.56
MW10B	1210.37		24.84	1185.53
WC3	1198.26		12.71	1185.55
WC3B	1196.11	(2)	10.30	1185.81
WC4	1196.74		11.11	1185.63
WC4A	1196.57		10.91	1185.66
WC5	1196.62		11.37	1185.25
WC5A	1196.66		11.38	1185.28
WC7	1196.77		11.03	1185.74
WW4	1200.34	(2)	16.69	1183.65
WW6	1200.53		16.87	1183.66
<b>West Bank</b>			<b>11/13/2012</b>	<b>11/13/2012</b>
EW1	NA		NA	NA
CW6	1220.33		60.00	1160.33
CW7	1224.14		38.00	1186.14
CW9	1226.16		39.00	1187.16
CW9 OBS	1224.24		38.59	1185.65
CW10	1218.49		31.00	1187.49
CW11	1216.51		26.00	1190.51
C2S	1219.05		32.00	1187.05
C3S	1220.58		33.86	1186.72
C4S	1216.70		29.87	1186.83
C4D	1216.16		29.27	1186.89
C6S	1221.58		34.41	1187.17

TABLE 2.1

**GROUNDWATER ELEVATIONS - 2012**  
**WAUSAU WATER SUPPLY NPL SITE**  
**WAUSAU, WISCONSIN**

	<i>Reference Elevation</i>	<i>Water Level</i>	<i>Water Table Elevation</i>
<i>West Bank (cont'd)</i>			
C7S	1220.87	33.86	1187.01
GM2S	1211.78	24.86	1186.92
GM4D	1216.35	29.55	1186.80
MW1A	1215.69	28.96	1186.73
MW3A	1220.87	34.32	1186.55
MW4A	1215.48	29.72	1185.76
MW4B	1215.10	29.37	1185.73
MW7	1218.53	34.25	1184.28
R1D	1222.24	34.88	1187.36
R2S	1209.70	22.41	1187.29
R2D	1209.42	22.56	1186.86
R3S	1215.17	Dry	Dry
R3D	1215.42	28.45	1186.97
R4D	1218.90	31.92	1186.98
W50	1215.54	28.40	1187.14
W52	1219.16	32.17	1186.99
W52A	1218.95	31.71	1187.24
W53	1216.67	29.75	1186.92
W53A	1216.90	30.05	1186.85
W54	1216.19	29.25	1186.94
W55	1217.04	30.76	1186.28
W55A	1217.31	NA	NA
W56	1200.01	13.17	1186.84
W57	1201.76 <sup>(2)</sup>	16.29	1185.47
WSWS	1193.04	5.67	1187.37
WSWD	1193.02	6.05	1186.97

## Notes:

Elevations relative to National Geodetic Vertical Datum

<sup>(1)</sup> Wells E24 and E24A were abandoned in 2012, replaced by the installation of E24AR in 2012

<sup>(2)</sup> Reference elevation resurveyed in 2012

TABLE 2.2  
SITE SPECIFIC VOC LIST  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN

Acetone  
Benzene  
Carbon tetrachloride  
Chloroform  
1,1-Dichloroethene  
cis-1,2-Dichloroethene  
Ethylbenzene  
Methylene chloride  
Tetrachloroethene  
Toluene  
1,1,2-Trichloroethane  
Trichloroethene  
Vinyl chloride  
Xylenes

TABLE 2.3

**GROUNDWATER SAMPLING SUMMARY - NOVEMBER 2012**  
**WAUSAU WATER SUPPLY NPL SITE**  
**WAUSAU, WISCONSIN**

<i>Well</i>	<i>pH</i>	<i>Conductivity (us/cm)</i>	<i>Temperature (°C)</i>	<i>Water Clarity</i>	<i>Gallons Removed</i>	<i>Sample ID Number</i>	<i>QA/QC</i>
<b>East Bank</b>							
CW3	6.81	318	9.8	Clear	Grab	W-121113-NE-01	
FVD 5	6.58	346	13.3	Slightly Cloudy	3.0	W-121113-NE-07	
E37A	6.83	437	15.1	Cloudy	6.0	W-121113-NE-09	
E22A	6.48	487	13.8	Cloudy	5.3	W-121113-NE-08	
E23A	6.91	498	13.3	Cloudy	3.8	W-121113-NE-10	
WW6	6.94	233	11.4	Clear	12.0	W-121113-NE-13	
WW4	6.37	599	10.8	Clear	12.0	W-121113-NE-06	
WC5A	6.96	214	12.7	Slightly Cloudy	6.0	W-121113-NE-14	
WC3B	7.12	154	12.7	Slightly Cloudy	7.5	W-121113-NE-11	
WC3B						W-121113-NE-12	FB
MW-10B	6.64	219	11.6	Clear	8.0	W-121113-NE-05	
MW-10A	7.13	159	10.9	Clear	27.0	W-121113-NE-04	
E24AR	6.80	206	14.2	Clear	8.0	W-121113-NE-02	
E24AR						W-121113-NE-03	DUP
IWD	7.01	141	12.4	Clear	4.0	W-111101-NE-23	
<b>West Bank</b>							
R3D	6.57	318	9.3	Clear	54.0	W-121113-NE-19	
R3D						W-121113-NE-20	DUP
C4S	6.49	1312	11.8	Clear	4.0	W-121113-NE-21	MS/MSD
R4D	6.53	640	12.0	Slightly Cloudy	20.0	W-121113-NE-17	MS/MSD
C2S	6.69	650	13.8	Slightly Cloudy	3.0	W-121113-NE-11	
W53A	7.32	727	13.2	Slightly Cloudy	6.0	W-121113-NE-15	
W54	7.40	198	11.8	Slightly Cloudy	18.0	W-121113-NE-16	

TABLE 2.3

**GROUNDWATER SAMPLING SUMMARY - NOVEMBER 2012  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

<i>Well</i>	<i>pH</i>	<i>Conductivity (us/cm)</i>	<i>Temperature (°C)</i>	<i>Water Clarity</i>	<i>Gallons Removed</i>	<i>Sample ID Number</i>	<i>QA/QC</i>
<i>West Bank (cont'd)</i>							
WSWD	7.32	172	12.0	Slightly Cloudy	5.0	W-121118-NE-28	
CW6	7.66	212	10.4	Clear	Grab	W-121114-NE-30	
W56	6.97	748	9.9	Clear	27.0	W-121113-NE-24	
W56						W-121113-NE-25	RB
W55	7.69	164	11.3	Slightly Cloudy	9.0	W-121114-NE-29	
MW-1A	8.19	169	11.3	Cloudy	20.0	W-121114-NE-31	
R2D	7.23	148	11.1	Slightly Cloudy	18.0	W-121114-NE-27	
R2D						W-121114-NE-26	FB
W52	7.39	165	11.0	Slightly Cloudy	15.0	W-121113-NE-22	
W52						W-121113-NE-22	DUP

TABLE 3.1

**MONITORING WELL INSPECTION SUMMARY  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

Date recorded: November 13, 2012

Recorded by: Nick Evans, Nick Coady

<i>Well Name</i>	<i>Total Depth from TOC/Stickup (ft.)</i>	<i>Well ID Visible or Tag Attached?</i>	<i>Casing &amp; Grout Condition</i>	<i>Well Cap Condition (inner/outer)</i>	<i>Lock Condition</i>	<i>Concrete Seal Condition</i>	<i>Ground Condition (subsidence?)</i>	<i>Flush Mount?</i>	<i>Comments</i>
<b>East Bank</b>									
CW3	-----	-----	-----	-----	-----	-----	-----		
E21	132.9/2.3	Yes	Okay	None/ Okay	Okay	Okay	Okay		
E22	90.40/-0.6	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
E22A	22.1/0.3	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
E23A	21.00/-0.5	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
E24AR	33.99/-0.4	Yes	Okay	Okay/Okay	Okay	Okay	Okay	FM	New Well
E24	NA	-----	-----	-----	-----	-----	-----	-----	Abandoned
E24A	NA	-----	-----	-----	-----	-----	-----	-----	Abandoned
E26	94.70/2.70	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
E26A	26.00/2.70	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
E28A	35.1/-0.3	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
E37A	25.4/-0.5	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
FVD5	22.6/1.7	Yes	Okay	None/ Okay	Okay	Okay	Okay		
GM6D	109.4/-0.4	Yes	Okay	Okay/ see note	Okay	Okay	Okay	FM	
W. HURD	102.1/1.4	Yes	Okay	NA/ Okay	Okay	Okay	Okay		
IWD	NM	-----	-----	-----	-----	-----	-----		
MW10A	80.8/2.5	Yes	Okay	None/ Okay	Okay	Okay	Okay		
MW10B	40.7/2.9	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WC3	164.1/2.1	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
WC3B	22.2/-0.3	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
WC4	55.80/1.7	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WC4A	20.7/1.6	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
WC5	55.8/1.7	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WC5A	16.1/1.5	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WC7	55.0/1.6	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WW4	34.9/-0.3	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
WW6	40.1/1.5	Yes	Okay	None/ Okay	Okay	Okay	Okay		



TABLE 3.1

**MONITORING WELL INSPECTION SUMMARY  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

Date recorded: November 13, 2012

Recorded by: Nick Evans, Nick Coady

<i>Well Name</i>	<i>Total Depth from TOC/Stickup (ft.)</i>	<i>Well ID Visible or Tag Attached?</i>	<i>Casing &amp; Grout Condition</i>	<i>Well Cap Condition (inner/outer)</i>	<i>Lock Condition</i>	<i>Concrete Seal Condition</i>	<i>Ground Condition (subsidence?)</i>	<i>Flush Mount?</i>	<i>Comments</i>
<i>West Bank</i>									
EW1	----	----	----	----	----	----	----		
CW6	----	----	----	----	----	----	----		
CW7	----	----	----	----	----	----	----		
CW9	----	----	----	----	----	----	----		
CW9 OBS	103.0/2.4	No	see note	see note	none	Okay	Okay		Inner casing preventing outer top from seating
CW10	----								
C2S	36.1/2.9	Yes	Okay	BP/ Okay	Okay	Okay	Okay		
C3S	40.7/3.2	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
C4S	35.1/3.1	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
C4D	100/2.9	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
C6S	41.4/2.5	Yes	Okay	None/ Okay	Okay	Okay	Okay		
C7S	40.15/2.7	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
GM2S	34.5/-0.5	Yes	Okay	Okay/ see note	Okay	Okay	Okay	FM	Standing water inside vault needs new gasket
GM4D	54.1/1.6	Yes	Okay	None/ Okay	Okay	Okay	Okay		
MW1A	126.1/1.6	Yes	Okay	BP - Okay/ Okay	Okay	Okay	Okay		
MW3A	74.5/-0.3	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
MW4A	100.1/-0.2	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
MW4B	58.66/-0.4	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
MW7	44.2/-0.4	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
R1D	125.1/2.1	Yes	Okay	None/Okay	Okay	Okay	Okay		
R2S	30.7/1.4	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
R2D	124.8/1.8	Yes	Okay	BP - Okay/ Okay	Okay	Okay	Okay		
R3S	26.8/2.6	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
R3D	139.2/2.6	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
R4D	124.8/2.9	Yes	Okay	BP - Okay/ Okay	Okay	Okay	Okay		
W50	85.3/2.5	Yes	Okay	None/ Okay	Okay	Okay	Okay		
W52	116.2/2.5	Yes	Okay	BP - Okay/ Okay	Okay	Okay	Okay		
W52A	38.2/2.5	Yes	Okay	Okay/ Okay	Okay	Okay	Okay		
W53	124.6/-0.6	Yes	Okay	BP/ Okay	Okay	Okay	Okay	FM	
W53A	36.2/-0.45	Yes	Okay	BP - Okay/Okay	Okay	Okay	Okay	FM	
W54	59.9/-0.2	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	

**MONITORING WELL INSPECTION SUMMARY  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

Date recorded: November 13, 2012

Recorded by: Nick Evans, Nick Coady

<i>Well Name</i>	<i>Total Depth from TOC/Stickup (ft.)</i>	<i>Well ID Visible or Tag Attached?</i>	<i>Casing &amp; Grout Condition</i>	<i>Well Cap Condition (inner/outer)</i>	<i>Lock Condition</i>	<i>Concrete Seal Condition</i>	<i>Ground Condition (subsidence?)</i>	<i>Flush Mount?</i>	<i>Comments</i>
<i>West Bank (cont'd)</i>									
W55	115.2/-0.9	Yes	Okay	BP-Okay/ Okay	Okay	Okay	Okay	FM	Old style flush mount, dirt in hole
W55A	NA	Yes	see note	BP-Okay/ Poor	Okay	Okay	Okay	FM	Old style flush mount, cap stuck on
W56	66.9/1.4	Yes	see note	Okay/ Okay	Okay	Okay	Okay	FM	
W57	74.8/-0.2	Yes	Okay	Okay/ Okay	Okay	Okay	Okay	FM	
WSWS	15.7/3.9	Yes	Okay	None/ Okay	Okay	Okay	Okay		
WSWD	140.8/2.8	Yes	Okay	BP-Okay/ Okay	Okay	Okay	Okay		

Notes:

BP - well contains a dedicated bladder pump

TABLE 3.2

**EXTRACTION WELL EW1 PUMPING RATES 2012  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

<i>Date</i>	<i>Elapsed Time (minutes)</i>	<i>Meter Reading</i>	<i>Total Flow (gallons)</i>	<i>Average Flow Rate (gpm)</i>
01/06/12		563,211,000		
02/02/12	38,712	580,777,000	17,566,000	454
03/02/12	41,733	596,972,000	16,195,000	388
04/02/12	44,744	610,066,000	13,094,000	293
05/04/12	46,181	619,496,915	9,430,915	204
05/25/12	30,140	626,196,915	6,700,000	222
07/02/12	54,477	635,098,915	8,902,000	163
07/16/12	20,591	638,260,915	3,162,000	154
<b>Total Gallons 2012</b>		<b>75,049,915</b>	<b>Average Flow 2012</b>	<b>271</b>

## Notes:

- 1st quarter - EW-1 was down for a total of 75 minutes for maintenance.
- 2nd quarter - EW-1 was down for a total of 60 minutes for maintenance.
- 3rd quarter - System shut down after July 16, 2012 for pump repair.  
- No operation for the remainder of the quarter.
- 4th quarter - No operation this quarter.

**WAUSAU WATER SUPPLY WELL PUMPING SUMMARY**  
**WAUSAU WATER SUPPLY NPL SITE**  
**WAUSAU, WISCONSIN**

Hours indicates total hours pumped per month - Gallons indicates millions of		City Well #3	City Well #6	City Well #7	City Well #9	City Well #10	City Well #11
January	Hours	338.9	400.3	284.1	54.4	279.7	54.7
	Gallons	30.982	37.587	37.228	2.977	49.14	9.539
	gpm	1524	1565	2184	912	2928	2906
February	Hours	315	375.2	306.8	193.1	306.4	0
	Gallons	27.428	34.421	35.1	10.494	55.97	0
	gpm	1451	1529	1907	906	3044	--
March	Hours	337.1	401.6	342.8	210.1	289.4	56.7
	Gallons	32.162	36.272	38.94	11.809	56.895	9.886
	gpm	1590	1505	1893	937	3277	2906
April	Hours	267.5	440.1	279.7	215.2	188.4	162.6
	Gallons	25.83	39.487	34.367	12.177	35.685	28.1
	gpm	1609	1495	2048	943	3157	2880
May	Hours	310.5	426.6	279.2	212.8	224.2	295.4
	Gallons	28.935	37.92	34.433	12.781	42.291	51.152
	gpm	1553	1481	2055	1001	3144	2886
June	Hours	363.9	349.7	361.2	311.8	186.3	290.6
	Gallons	34.243	32.181	42.97	18.629	34.33	51.301
	gpm	1568	1534	1983	996	3071	2942
July	Hours	315	424.6	430.4	338	220.9	333.4
	Gallons	30.684	41.631	49.399	18.913	41.65	56.458
	gpm	1623	1634	1913	933	3142	2822
August	Hours	381.5	357.9	346.7	305.6	252.4	259.7
	Gallons	36.702	35.092	39.78	16.486	45.896	44.37
	gpm	1603	1634	1912	899	3031	2848
September	Hours	360.9	354.6	322.7	274.6	214.2	233.2
	Gallons	35.276	35.092	37.143	14.841	40.474	40.691
	gpm	1629	1649	1918	901	3149	2908
October	Hours	315.2	420.2	139.4	102.1	197.9	148.4
	Gallons	29.697	41.531	16.382	5.549	38.82	25.751
	gpm	1570	1647	1959	906	3269	2892
November	Hours	373.8	311.62	190.1	42.5	66	57.8
	Gallons	39.374	31.321	22.217	1.746	11.397	9.968
	gpm	1756	1675	1948	685	2878	2874
December	Hours	359	380.7	182.2	27.8	60.2	93.2
	Gallons	35.265	37.37	22.506	1.511	12.106	16.591
	gpm	1637	1636	2059	906	3352	2967
Average gpm:		1595	1579	1974	932	3115	2886

TABLE 4.1

SUMMARY OF NOVEMBER 2012 LABORATORY RESULTS  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN

Location	Date	MCL	Acetone 5 ug/L	Benzene 700 ug/L	Ethylbenzene 1000 ug/L	Toluene 10000 ug/L	Xylenes (total) 10000 ug/L	m&p-Xylenes 10000 ug/L	o-Xylene 80 ug/L	Chloroform (Trichloromethane) 5 ug/L	Carbon tetrachloride 5 ug/L	Methylene chloride 7 ug/L	1,1-Dichloroethene 5 ug/L	1,1,2-Trichloroethane 5 ug/L	Tetrachloroethene 5 ug/L	Trichloroethene 70 ug/L	cis-1,2-Dichloroethene 2 ug/L	Vinyl chloride 2 ug/L	Total Chlorinated VOCs ug/L
<b>West Bank</b>																			
CW6	11/14/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.92	<1.0	<1.0	3.92
C2S	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
C4S	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.24	<1.0	<1.0	1.24
MW1A	11/14/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
R2D	11/14/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.38	<1.0	<1.0	6.38
R3D	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20.6	<1.0	<1.0	20.6
R3D	11/13/2012	D	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20.7	<1.0	<1.0	20.7
R4D	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.89	<1.0	<1.0	4.89
W52	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
W52	11/13/2012	D	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.03	<1.0	<1.0	1.03
W53A	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.67	<1.0	<1.0	<1.0	<1.0	54.2	2.25	<1.0	58.12
W54	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
W55	11/14/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.92	<1.0	<1.0	4.92
W56	11/13/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
WSWD	11/14/2012		<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND

TABLE 4.1

**SUMMARY OF NOVEMBER 2012 LABORATORY RESULTS  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

Location	Date	MCL	Acetone 5 ug/L	Benzene 700 ug/L	Ethylbenzene 1000 ug/L	Toluene 10000 ug/L	Xylenes (total) 10000 ug/L	m&p-Xylenes 10000 ug/L	o-Xylene 80 ug/L	Chloroform (Trichloromethane) 5 ug/L	Carbon tetrachloride 5 ug/L	Methylene chloride 7 ug/L	1,1-Dichloroethene 5 ug/L	1,1,2-Trichloroethane 5 ug/L	Tetrachloroethene 70 ug/L	Trichloroethene 2 ug/L	cis-1,2-Dichloroethene ug/L	Vinyl chloride Total Chlorinated VOCs ug/L	
East Bank																			
CW3	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.48	< 1.0	1.10	< 1.0	3.58
E22A	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	17.9	< 1.0	7.51	< 1.0	25.41
E23A	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	41.0	7.80	35.8	1.92	86.52
E24AR	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.84	< 1.0	1.02	< 1.0	3.86
E24AR	11/13/2012	D	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.72	< 1.0	< 1.0	< 1.0	2.72
E37A	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	22.8	6.87	36.7	1.69	68.06
FVD5	11/13/2012		< 10	20.0	190	11.2	380	277	104	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.15	< 1.0	< 1.0	< 1.0	2.15
MW10A	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	ND
MW10B	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	ND
WC3B	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	3.47	< 1.0	< 1.0	< 1.0	3.47
WC5A	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.30	< 1.0	< 1.0	< 1.0	1.3
WW4	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	ND
WW6	11/13/2012		< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	7.67	3.30	31.3	3.21	45.48

## Notes:

Units - ug/L

MCL - Maximum Contaminant Levels for drinking water published by the United States Environmental Protection Agency

VOCs - Volatile organic compounds

D - Duplicate Sample

J - Estimated value, below the reporting limit

ND - All VOCs were less than the reporting limit.

- Shaded values exceed the MCL.

TABLE 4.2

**EW1 LABORATORY RESULTS - 2012  
WAUSAU WATER SUPPLY NPL SITE  
WAUSAU, WISCONSIN**

		Acetone	Benzene	Ethylbenzene	Toluene	Xylenes (total)	Carbon tetrachloride	Chloroform	1,1-Dichloroethene	Methylene chloride	1,1,2-Trichloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride
	MCL	10	5	700	1,000	10,000	5	80 <sup>(1)</sup>	7	5	5	5	5	70	2
Location	Date														
Influent	02/02/12	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	7.1	< 1	< 1
Influent	06/13/12	< 10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	9.9	0.45 J	< 1
Effluent	02/02/12	< 10	< 1	< 1	< 1	< 1	< 1	0.67 J	< 1	< 1	< 1	< 1	2.9	< 1	< 1
Effluent	06/13/12	< 10	< 1	< 1	< 1	< 1	< 1	0.63 J	< 1	< 1	< 1	< 1	4.0	0.26 J	< 1
Surface Water Discharge Limit								29,000					41,000	none	

## Notes:

Units - ug/L

MCL - USEPA Maximum Contaminant Level for drinking water.

J - Estimated value, below the reporting limit and above the detection limit

<sup>(1)</sup> MCL for total trihalomethanes

Influent and effluent samples collected in 1st and 2nd quarters 2012



APPENDIX A  
E24AR WELL LOG



# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Wausau Water Supply NPL Site

HOLE DESIGNATION: E24AR

PROJECT NUMBER: 3978

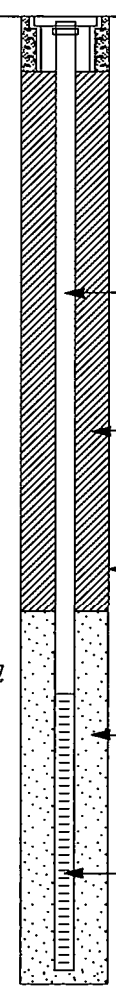
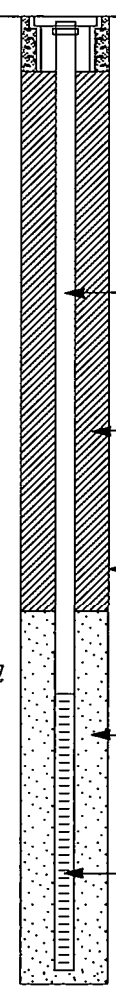
DATE COMPLETED: August 16, 2012

CLIENT: PRP Group

DRILLING METHOD: Rotasonic

LOCATION: Wausau, Wisconsin

FIELD PERSONNEL: R. Field

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	Monitoring Well	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (PPM)
2	Topsoil, silty, with sand, trace gravel, brown, dry to moist	1.10	 2" PVC Casing Bentonite Chips 6" Diameter Borehole Sand 2" PVC Screen	1		4.0		0
4	FILL, mixed sand and gravel, with silt, light reddish brown, dry	4.00		2		5.0		0
6	SP-SAND, with gravel, fine grained, trace silt, light reddish brown, moist			3		5.0		0
8				4		5.0		0
10	GC-Gravel and Cobbles, clayey, cobble and gravel fragments, whitish pink, slow drilling, the sample is hot to the touch, dry to moist	9.00						
12	SP-SAND, with gravel and cobbles, fine to medium grained, dark reddish brown, moist	10.00						
14	GC-Gravel and Cobbles, clayey, gravel and cobble fragments, whitish pink, slow drilling, moist	11.50						
16								
18	SP-SAND, gravelly, fine to medium grained, light reddish brown, moist	17.00						
20	GC-Gravel and Cobbles, clayey, gravel and cobble fragments, whitish pink, slow drilling, moist	17.80						
22	SP-SAND, gravelly, fine to medium grained, light reddish brown, moist to saturated	19.00	 2" PVC Casing Bentonite Chips 6" Diameter Borehole Sand 2" PVC Screen					
24	-with gravel	19.50						
26								
28	SP-SAND, fine to medium grained, trace silt, light reddish brown, saturated	28.00		5		7.0		0
30								
32								
34	SM-SAND, with silt, with gravel, fine grained, dark reddish brown, saturated	34.00						
36	END OF BOREHOLE @ 35.0ft BGS	35.00						
38								
40								
42								
44								
46								
48								

## WELL DETAILS

Screened Interval:

24.50 to 34.50ft BGS

Length: 10ft

Diameter: 2in

Slot Size: #10

Material: PVC

Seal:

2.00 to 21.50ft BGS

Material: Bentonite Chips

Sand Pack:

21.50 to 35.00ft BGS

Material: Sand

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

OVERBURDEN LOG 003978.GPJ CRA CORP GDT 9/17/12

APPENDIX B

LABORATORY REPORTS AND  
DATA QUALITY VALIDATION MEMORANDA

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica North Canton  
4101 Shuffel Street NW  
North Canton, OH 44720  
Tel: (330)497-9396

TestAmerica Job ID: 240-8258-1  
Client Project/Site: 3978, Wausau

For:  
Conestoga-Rovers & Associates, Inc.  
1801 Old Highway 8 NW  
Suite 114  
St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson



Authorized for release by:  
2/13/2012 9:34:28 AM

Denise Heckler  
Project Manager II  
denise.heckler@testamericainc.com

### LINKS

Review your project  
results through

**Total Access**

Have a Question?



Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://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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## Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

### 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.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

**Job ID: 240-8258-1**

**Laboratory: TestAmerica North Canton**

Narrative

### CASE NARRATIVE

**Client: Conestoga-Rovers & Associates, Inc.**

**Project: 3978, Wausau**

**Report Number: 240-8258-1**

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

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

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

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

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

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

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

#### RECEIPT

The samples were received on 02/03/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.0 C.

#### VOLATILE ORGANIC COMPOUNDS (GC-MS).

Samples 02022012-01 (240-8258-1), 02022012-02 (240-8258-2) and TRIP BLANK (240-8258-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 02/09/2012.

No difficulties were encountered during the VOCs analyses.

All quality control parameters were within the acceptance limits.

## Method Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NC

### Protocol References:

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

### Laboratory References:

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



## Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Lab Sample ID	Client Sample ID		Matrix	Collected	Received
240-8258-1	02022012-01	Effluent	Water	02/02/12 10:10	02/03/12 09:20
240-8258-2	02022012-02	Influent	Water	02/02/12 10:15	02/03/12 09:20
240-8258-3	TRIP BLANK		Water	02/02/12 00:00	02/03/12 09:20

## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Client Sample ID: 02022012-01

Lab Sample ID: 240-8258-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.67	J	1.0	0.16	ug/L	1		8260B	Total/NA
Trichloroethene	2.9		1.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: 02022012-02

Lab Sample ID: 240-8258-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.1		1.0	0.17	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-8258-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.1	ug/L	1		8260B	Total/NA

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Client Sample ID: 02022012-01

Lab Sample ID: 240-8258-1

Date Collected: 02/02/12 10:10

Effluent

Matrix: Water

Date Received: 02/03/12 09:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			02/09/12 16:45	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/09/12 16:45	1
Acetone	10	U	10	1.1	ug/L			02/09/12 16:45	1
Benzene	1.0	U	1.0	0.13	ug/L			02/09/12 16:45	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			02/09/12 16:45	1
Chloroform	0.67	J	1.0	0.16	ug/L			02/09/12 16:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 16:45	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			02/09/12 16:45	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			02/09/12 16:45	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			02/09/12 16:45	1
Toluene	1.0	U	1.0	0.13	ug/L			02/09/12 16:45	1
Trichloroethene	2.9		1.0	0.17	ug/L			02/09/12 16:45	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			02/09/12 16:45	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			02/09/12 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 129		02/09/12 16:45	1
4-Bromofluorobenzene (Surr)	88		66 - 117		02/09/12 16:45	1
Toluene-d8 (Surr)	99		74 - 115		02/09/12 16:45	1
Dibromofluoromethane (Surr)	90		75 - 121		02/09/12 16:45	1

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Client Sample ID: 02022012-02

Lab Sample ID: 240-8258-2

Date Collected: 02/02/12 10:15

Influent

Matrix: Water

Date Received: 02/03/12 09:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			02/09/12 17:08	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/09/12 17:08	1
Acetone	10	U	10	1.1	ug/L			02/09/12 17:08	1
Benzene	1.0	U	1.0	0.13	ug/L			02/09/12 17:08	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			02/09/12 17:08	1
Chloroform	1.0	U	1.0	0.16	ug/L			02/09/12 17:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 17:08	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			02/09/12 17:08	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			02/09/12 17:08	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			02/09/12 17:08	1
Toluene	1.0	U	1.0	0.13	ug/L			02/09/12 17:08	1
Trichloroethene	7.1		1.0	0.17	ug/L			02/09/12 17:08	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			02/09/12 17:08	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			02/09/12 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		02/09/12 17:08	1
4-Bromofluorobenzene (Surr)	88		66 - 117		02/09/12 17:08	1
Toluene-d8 (Surr)	98		74 - 115		02/09/12 17:08	1
Dibromofluoromethane (Surr)	92		75 - 121		02/09/12 17:08	1

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-8258-3

Date Collected: 02/02/12 00:00

Matrix: Water

Date Received: 02/03/12 09:20

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			02/09/12 17:30	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/09/12 17:30	1
Acetone	2.0	J	10	1.1	ug/L			02/09/12 17:30	1
Benzene	1.0	U	1.0	0.13	ug/L			02/09/12 17:30	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			02/09/12 17:30	1
Chloroform	1.0	U	1.0	0.16	ug/L			02/09/12 17:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 17:30	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			02/09/12 17:30	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			02/09/12 17:30	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			02/09/12 17:30	1
Toluene	1.0	U	1.0	0.13	ug/L			02/09/12 17:30	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 17:30	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			02/09/12 17:30	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			02/09/12 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 129					02/09/12 17:30	1
4-Bromofluorobenzene (Surr)	84		66 - 117					02/09/12 17:30	1
Toluene-d8 (Surr)	98		74 - 115					02/09/12 17:30	1
Dibromofluoromethane (Surr)	91		75 - 121					02/09/12 17:30	1

## Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

### 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)
240-8258-1	02022012-01	89	88	99	90
240-8258-2	02022012-02	93	88	98	92
240-8258-3	TRIP BLANK	89	84	98	91
LCS 240-33269/4	Lab Control Sample	86	106	102	89
MB 240-33269/5	Method Blank	84	95	99	87

#### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-33269/5

Matrix: Water

Analysis Batch: 33269

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			02/09/12 09:55	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			02/09/12 09:55	1
Acetone	10	U	10	1.1	ug/L			02/09/12 09:55	1
Benzene	1.0	U	1.0	0.13	ug/L			02/09/12 09:55	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			02/09/12 09:55	1
Chloroform	1.0	U	1.0	0.16	ug/L			02/09/12 09:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 09:55	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			02/09/12 09:55	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			02/09/12 09:55	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			02/09/12 09:55	1
Toluene	1.0	U	1.0	0.13	ug/L			02/09/12 09:55	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			02/09/12 09:55	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			02/09/12 09:55	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			02/09/12 09:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 129		02/09/12 09:55	1
4-Bromofluorobenzene (Surr)	95		66 - 117		02/09/12 09:55	1
Toluene-d8 (Surr)	99		74 - 115		02/09/12 09:55	1
Dibromofluoromethane (Surr)	87		75 - 121		02/09/12 09:55	1

Lab Sample ID: LCS 240-33269/4

Matrix: Water

Analysis Batch: 33269

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	10.0	9.95		ug/L		100	80 - 112
1,1-Dichloroethene	10.0	10.1		ug/L		101	78 - 131
Acetone	20.0	20.0		ug/L		100	43 - 136
Benzene	10.0	9.19		ug/L		92	83 - 112
Carbon tetrachloride	10.0	9.97		ug/L		100	66 - 128
Chloroform	10.0	9.86		ug/L		99	79 - 117
cis-1,2-Dichloroethene	10.0	9.08		ug/L		91	80 - 113
Ethylbenzene	10.0	9.78		ug/L		98	83 - 112
m-Xylene & p-Xylene	20.0	19.1		ug/L		96	83 - 113
Methylene Chloride	10.0	10.4		ug/L		104	66 - 131
o-Xylene	10.0	9.26		ug/L		93	83 - 113
Tetrachloroethene	10.0	9.51		ug/L		95	79 - 114
Toluene	10.0	10.2		ug/L		102	84 - 111
Trichloroethene	10.0	8.85		ug/L		89	76 - 117
Vinyl chloride	10.0	8.60		ug/L		86	53 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		63 - 129
4-Bromofluorobenzene (Surr)	106		66 - 117
Toluene-d8 (Surr)	102		74 - 115
Dibromofluoromethane (Surr)	89		75 - 121

## QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

### GC/MS VOA

#### Analysis Batch: 33269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8258-1	02022012-01	Total/NA	Water	8260B	
240-8258-2	02022012-02	Total/NA	Water	8260B	
240-8258-3	TRIP BLANK	Total/NA	Water	8260B	
LCS 240-33269/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-33269/5	Method Blank	Total/NA	Water	8260B	



## Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

**Client Sample ID: 02022012-01**

**Lab Sample ID: 240-8258-1**

Date Collected: 02/02/12 10:10

Matrix: Water

Date Received: 02/03/12 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33269	02/09/12 16:45	LE	TAL NC

**Client Sample ID: 02022012-02**

**Lab Sample ID: 240-8258-2**

Date Collected: 02/02/12 10:15

Matrix: Water

Date Received: 02/03/12 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33269	02/09/12 17:08	LE	TAL NC

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-8258-3**

Date Collected: 02/02/12 00:00

Matrix: Water

Date Received: 02/03/12 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	33269	02/09/12 17:30	LE	TAL NC

### Laboratory References:

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

## Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-8258-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACCLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

☐ Other \_\_\_\_\_

**THE LEADER IN ENVIRONMENTAL TESTING**

TAL 0018- 1 (04/10)

**TestAmerica Cooler Receipt Form/Narrative**  
**North Canton Facility**

Lot Number: 8258

Client PBC Project \_\_\_\_\_ By: [Signature]  
Cooler Received on 2-3-12 Opened on 2-3-12 (Signature)

FedEx UPS DHL FAS Stetson Client Drop Off TestAmerica Courier Other \_\_\_\_\_  
TestAmerica Cooler # \_\_\_\_\_ Multiple Coolers \_\_\_\_\_ Foam Box \_\_\_\_\_ Client Cooler Yes Other \_\_\_\_\_

1. Were custody seals on the outside of the cooler(s)? Yes No Intact? Yes No NA  
If YES, Quantity 1 Quantity Unsalvageable \_\_\_\_\_  
Were custody seals on the outside of cooler(s) signed and dated? Yes No NA  
Were custody seals on the bottle(s)? Yes No  
If YES, are there any exceptions? \_\_\_\_\_
  2. Shippers' packing slip attached to the cooler(s)? Yes No
  3. Did custody papers accompany the sample(s)? Yes No Relinquished by client? Yes No
  4. Were the custody papers signed in the appropriate place? Yes No
  5. Packing material used: Bubble Wrap Foam None Other \_\_\_\_\_
  6. Cooler temperature upon receipt 2.0 °C See back of form for multiple coolers/temps  
METHOD: IR Other \_\_\_\_\_  
COOLANT: Wet Ice Blue Ice Dry Ice Water None
  7. Did all bottles arrive in good condition (Unbroken)? Yes No
  8. Could all bottle labels be reconciled with the COC? Yes No
  9. Were sample(s) at the correct pH upon receipt? Yes No NA
  10. Were correct bottle(s) used for the test(s) indicated? Yes No
  11. Were air bubbles >6 mm in any VOA vials? Yes No NA
  12. Sufficient quantity received to perform indicated analyses? Yes No
  13. Was a trip blank present in the cooler(s)? Yes No Were VOAs on the COC? Yes No
- Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other \_\_\_\_\_  
Concerning \_\_\_\_\_

**14. CHAIN OF CUSTODY**

The following discrepancies occurred:

Recid 1x40 TB net on COC will log

**15. SAMPLE CONDITION**

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

**16. SAMPLE PRESERVATION**

Sample(s) \_\_\_\_\_ were further preserved in Sample \_\_\_\_\_  
Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO<sub>3</sub>; Sulfuric Acid Lot# 041911-H<sub>2</sub>SO<sub>4</sub>; Sodium Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108- (CH<sub>3</sub>COO)<sub>2</sub>ZN/NaOH. What time was preservative added to sample(s)? \_\_\_\_\_

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative  
North Canton Facility

[illegible]

Discrepancies Cont'd:

## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-8258-1

Login Number: 8258

List Source: TestAmerica North Canton

List Number: 1

Creator: Sutek, Nick

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**CONESTOGA-ROVERS  
& ASSOCIATES**


1801 Old Highway 8 NW, Suite #114  
St. Paul, Minnesota 55112  
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www.CRAworld.com

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## MEMORANDUM

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TO: Chuck Ahrens, CRA REF. No.: 003978-10

FROM: Grant Anderson/sb/15  DATE: February 16, 2012

CC: Analytical Data File

RE: **Data Quality Assessment**  
**February 2, 2012 Sampling Event**  
**Wausau Superfund Site - Wausau, Wisconsin**

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The following details a data quality assessment for water samples collected February 2, 2012, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as 02022012-01 (Effluent) and 02022012-02 (Influent) were analyzed for Site list volatile organic compounds (VOCs)<sup>1</sup>. The analyses were performed by TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP)<sup>2</sup>.

### HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses. On the basis of the sample collection date on the chain-of-custody form and analysis dates on the analytical report provided by TestAmerica, the analyses were completed within the specified holding time period.

### SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria, indicating that individual sample performance was adequate.

### METHOD BLANK SAMPLE

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analysis of a method blank sample. The method blank sample was reported to

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<sup>1</sup> VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

<sup>2</sup> Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

be free from detectable concentrations of target analytes, indicating that laboratory contamination was unlikely.

**LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE (LCS/LCSD)**

Overall performance of the analyses was monitored by means of LCS/LCSD data. The LCS recovery and RPD data for the analyses were within control limits criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. Since the MS/MSD spike sample data were derived from a non-project sample, no evaluation of accuracy or precision was made based on the MS/MSD data.

**FIELD QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of a trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank yielded a detection of acetone (2.0 ug/l). However, the associated samples were reported to be free from detectable concentrations of acetone; therefore, no qualification of data was necessary based on trip blank contamination.

**OVERALL ASSESSMENT**

The data were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.



# 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: 240-12309-1

Client Project/Site: 3978, Wausau

For:

Conestoga-Rovers & Associates, Inc.

1801 Old Highway 8 NW

Suite 114

St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson



Authorized for release by:

6/22/2012 9:22:03 AM

Denise Heckler

Project Manager II

denise.heckler@testamericainc.com

### LINKS

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

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

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## Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

### 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.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

**Job ID: 240-12309-1**

**Laboratory: TestAmerica Canton**

**Narrative**

### CASE NARRATIVE

**Client: Conestoga-Rovers & Associates, Inc.**

**Project: 3978, Wausau**

**Report Number: 240-12309-1**

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

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

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

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

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

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

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

#### RECEIPT

The samples were received on 06/14/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 0.8 C.

#### VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 061312-01 INFLUENT (240-12309-1), 061312-02 EFFLUENT (240-12309-2) and TRIP BLANK (240-12309-3) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 06/21/2012.

The laboratory control sample (LCS) for batch 48209 exceeded control limits for Tetrachloroethene. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analyses.

All other quality control parameters were within the acceptance limits.

## Method Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NC

**Protocol References:**

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

**Laboratory References:**

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

## Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-12309-1	061312-01 INFLUENT	Water	06/13/12 13:00	06/14/12 09:00
240-12309-2	061312-02 EFFLUENT	Water	06/13/12 13:10	06/14/12 09:00
240-12309-3	TRIP BLANK	Water	06/13/12 00:00	06/14/12 09:00

## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

### Client Sample ID: 061312-01 INFLUENT

Lab Sample ID: 240-12309-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.45	J	1.0	0.17	ug/L	1		8260B	Total/NA
Trichloroethene	9.9		1.0	0.17	ug/L	1		8260B	Total/NA

### Client Sample ID: 061312-02 EFFLUENT

Lab Sample ID: 240-12309-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.63	J	1.0	0.16	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.26	J	1.0	0.17	ug/L	1		8260B	Total/NA
Trichloroethene	4.0		1.0	0.17	ug/L	1		8260B	Total/NA

### Client Sample ID: TRIP BLANK

Lab Sample ID: 240-12309-3

No Detections

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Client Sample ID: 061312-01 INFLUENT

Lab Sample ID: 240-12309-1

Date Collected: 06/13/12 13:00

Matrix: Water

Date Received: 06/14/12 09:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			06/21/12 06:05	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/21/12 06:05	1
Acetone	10	U	10	1.1	ug/L			06/21/12 06:05	1
Benzene	1.0	U	1.0	0.13	ug/L			06/21/12 06:05	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			06/21/12 06:05	1
Chloroform	1.0	U	1.0	0.16	ug/L			06/21/12 06:05	1
cis-1,2-Dichloroethene	0.45	J	1.0	0.17	ug/L			06/21/12 06:05	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			06/21/12 06:05	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			06/21/12 06:05	1
Tetrachloroethene	1.0	U *	1.0	0.29	ug/L			06/21/12 06:05	1
Toluene	1.0	U	1.0	0.13	ug/L			06/21/12 06:05	1
Trichloroethene	9.9		1.0	0.17	ug/L			06/21/12 06:05	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			06/21/12 06:05	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			06/21/12 06:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 129		06/21/12 06:05	1
4-Bromofluorobenzene (Surr)	78		66 - 117		06/21/12 06:05	1
Toluene-d8 (Surr)	101		74 - 115		06/21/12 06:05	1
Dibromofluoromethane (Surr)	100		75 - 121		06/21/12 06:05	1



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Client Sample ID: 061312-02 EFFLUENT

Lab Sample ID: 240-12309-2

Date Collected: 06/13/12 13:10

Matrix: Water

Date Received: 06/14/12 09:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			06/21/12 05:22	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/21/12 05:22	1
Acetone	10	U	10	1.1	ug/L			06/21/12 05:22	1
Benzene	1.0	U	1.0	0.13	ug/L			06/21/12 05:22	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			06/21/12 05:22	1
Chloroform	0.63	J	1.0	0.16	ug/L			06/21/12 05:22	1
cis-1,2-Dichloroethene	0.26	J	1.0	0.17	ug/L			06/21/12 05:22	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			06/21/12 05:22	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			06/21/12 05:22	1
Tetrachloroethene	1.0	U *	1.0	0.29	ug/L			06/21/12 05:22	1
Toluene	1.0	U	1.0	0.13	ug/L			06/21/12 05:22	1
Trichloroethene	4.0		1.0	0.17	ug/L			06/21/12 05:22	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			06/21/12 05:22	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			06/21/12 05:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 129		06/21/12 05:22	1
4-Bromofluorobenzene (Surr)	79		66 - 117		06/21/12 05:22	1
Toluene-d8 (Surr)	100		74 - 115		06/21/12 05:22	1
Dibromofluoromethane (Surr)	100		75 - 121		06/21/12 05:22	1

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-12309-3

Date Collected: 06/13/12 00:00

Matrix: Water

Date Received: 06/14/12 09:00

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			06/21/12 05:43	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/21/12 05:43	1
Acetone	10	U	10	1.1	ug/L			06/21/12 05:43	1
Benzene	1.0	U	1.0	0.13	ug/L			06/21/12 05:43	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			06/21/12 05:43	1
Chloroform	1.0	U	1.0	0.16	ug/L			06/21/12 05:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			06/21/12 05:43	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			06/21/12 05:43	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			06/21/12 05:43	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			06/21/12 05:43	1
Toluene	1.0	U	1.0	0.13	ug/L			06/21/12 05:43	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			06/21/12 05:43	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			06/21/12 05:43	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			06/21/12 05:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 129					06/21/12 05:43	1
4-Bromofluorobenzene (Surr)	80		66 - 117					06/21/12 05:43	1
Toluene-d8 (Surr)	100		74 - 115					06/21/12 05:43	1
Dibromofluoromethane (Surr)	102		75 - 121					06/21/12 05:43	1

## Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

### 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)
240-12309-1	061312-01 INFLUENT	91	78	101	100
240-12309-2	061312-02 EFFLUENT	90	79	100	100
240-12309-2 MS	061312-02 EFFLUENT	91	85	99	103
240-12309-2 MSD	061312-02 EFFLUENT	91	87	102	99
240-12309-3	TRIP BLANK	91	80	100	102
LCS 240-48209/4	Lab Control Sample	91	90	104	101
MB 240-48209/5	Method Blank	89	82	100	100

#### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-48209/5

Matrix: Water

Analysis Batch: 48209

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			06/20/12 22:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			06/20/12 22:58	1
Acetone	10	U	10	1.1	ug/L			06/20/12 22:58	1
Benzene	1.0	U	1.0	0.13	ug/L			06/20/12 22:58	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			06/20/12 22:58	1
Chloroform	1.0	U	1.0	0.16	ug/L			06/20/12 22:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			06/20/12 22:58	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			06/20/12 22:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			06/20/12 22:58	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			06/20/12 22:58	1
Toluene	1.0	U	1.0	0.13	ug/L			06/20/12 22:58	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			06/20/12 22:58	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			06/20/12 22:58	1
Xylenes, Total	1.0	U	1.0	0.28	ug/L			06/20/12 22:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 129		06/20/12 22:58	1
4-Bromofluorobenzene (Surr)	82		66 - 117		06/20/12 22:58	1
Toluene-d8 (Surr)	100		74 - 115		06/20/12 22:58	1
Dibromofluoromethane (Surr)	100		75 - 121		06/20/12 22:58	1

Lab Sample ID: LCS 240-48209/4

Matrix: Water

Analysis Batch: 48209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	80 - 112
1,1-Dichloroethene	10.0	11.1		ug/L		111	78 - 131
Acetone	20.0	18.3		ug/L		92	43 - 136
Benzene	10.0	10.4		ug/L		104	83 - 112
Carbon tetrachloride	10.0	9.79		ug/L		98	66 - 128
Chloroform	10.0	10.0		ug/L		100	79 - 117
cis-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 113
Ethylbenzene	10.0	9.58		ug/L		96	83 - 112
m-Xylene & p-Xylene	20.0	19.9		ug/L		100	83 - 113
Methylene Chloride	10.0	11.3		ug/L		113	66 - 131
o-Xylene	10.0	9.82		ug/L		98	83 - 113
Tetrachloroethene	10.0	11.8	*	ug/L		118	79 - 114
Toluene	10.0	10.2		ug/L		102	84 - 111
Trichloroethene	10.0	11.7		ug/L		117	76 - 117
Vinyl chloride	10.0	9.92		ug/L		99	53 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		63 - 129
4-Bromofluorobenzene (Surr)	90		66 - 117
Toluene-d8 (Surr)	104		74 - 115
Dibromofluoromethane (Surr)	101		75 - 121

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-12309-2 MS

Matrix: Water

Analysis Batch: 48209

Client Sample ID: 061312-02 EFFLUENT

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	1.0	U	10.0	9.76		ug/L		98	75 - 115
1,1-Dichloroethene	1.0	U	10.0	11.7		ug/L		117	74 - 135
Acetone	10	U	20.0	16.8		ug/L		84	33 - 145
Benzene	1.0	U	10.0	10.6		ug/L		106	72 - 121
Carbon tetrachloride	1.0	U	10.0	10.3		ug/L		103	59 - 129
Chloroform	0.63	J	10.0	10.6		ug/L		100	76 - 118
cis-1,2-Dichloroethene	0.26	J	10.0	10.5		ug/L		102	70 - 120
Ethylbenzene	1.0	U	10.0	9.69		ug/L		97	75 - 116
m-Xylene & p-Xylene	1.0		20.0	20.2		ug/L		101	75 - 117
Methylene Chloride	1.0	U	10.0	10.3		ug/L		103	63 - 128
o-Xylene	1.0		10.0	9.65		ug/L		97	76 - 116
Tetrachloroethene	1.0	U *	10.0	12.3	F	ug/L		123	70 - 117
Toluene	1.0	U	10.0	10.1		ug/L		101	78 - 114
Trichloroethene	4.0		10.0	15.7		ug/L		117	66 - 120
Vinyl chloride	1.0	U	10.0	9.97		ug/L		100	49 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		63 - 129
4-Bromofluorobenzene (Surr)	85		66 - 117
Toluene-d8 (Surr)	99		74 - 115
Dibromofluoromethane (Surr)	103		75 - 121

Lab Sample ID: 240-12309-2 MSD

Matrix: Water

Analysis Batch: 48209

Client Sample ID: 061312-02 EFFLUENT

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-Trichloroethane	1.0	U	10.0	10.1		ug/L		101	75 - 115	3	30
1,1-Dichloroethene	1.0	U	10.0	11.0		ug/L		110	74 - 135	6	30
Acetone	10	U	20.0	16.5		ug/L		83	33 - 145	2	30
Benzene	1.0	U	10.0	10.1		ug/L		101	72 - 121	5	30
Carbon tetrachloride	1.0	U	10.0	10.1		ug/L		101	59 - 129	2	30
Chloroform	0.63	J	10.0	9.89		ug/L		93	76 - 118	7	30
cis-1,2-Dichloroethene	0.26	J	10.0	10.3		ug/L		100	70 - 120	2	30
Ethylbenzene	1.0	U	10.0	9.66		ug/L		97	75 - 116	0	30
m-Xylene & p-Xylene	1.0		20.0	19.6		ug/L		98	75 - 117	3	30
Methylene Chloride	1.0	U	10.0	9.61		ug/L		96	63 - 128	7	30
o-Xylene	1.0		10.0	9.41		ug/L		94	76 - 116	3	30
Tetrachloroethene	1.0	U *	10.0	12.6	F	ug/L		126	70 - 117	2	30
Toluene	1.0	U	10.0	9.96		ug/L		100	78 - 114	1	30
Trichloroethene	4.0		10.0	15.4		ug/L		114	66 - 120	2	30
Vinyl chloride	1.0	U	10.0	9.26		ug/L		93	49 - 130	7	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	91		63 - 129
4-Bromofluorobenzene (Surr)	87		66 - 117
Toluene-d8 (Surr)	102		74 - 115
Dibromofluoromethane (Surr)	99		75 - 121

## QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

### GC/MS VOA

#### Analysis Batch: 48209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-12309-1	061312-01 INFLUENT	Total/NA	Water	8260B	
240-12309-2	061312-02 EFFLUENT	Total/NA	Water	8260B	
240-12309-2 MS	061312-02 EFFLUENT	Total/NA	Water	8260B	
240-12309-2 MSD	061312-02 EFFLUENT	Total/NA	Water	8260B	
240-12309-3	TRIP BLANK	Total/NA	Water	8260B	
LCS 240-48209/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-48209/5	Method Blank	Total/NA	Water	8260B	

## Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

**Client Sample ID: 061312-01 INFLUENT**

**Lab Sample ID: 240-12309-1**

Date Collected: 06/13/12 13:00

Matrix: Water

Date Received: 06/14/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	48209	06/21/12 06:05	RQ	TAL NC

**Client Sample ID: 061312-02 EFFLUENT**

**Lab Sample ID: 240-12309-2**

Date Collected: 06/13/12 13:10

Matrix: Water

Date Received: 06/14/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	48209	06/21/12 05:22	RQ	TAL NC

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 240-12309-3**

Date Collected: 06/13/12 00:00

Matrix: Water

Date Received: 06/14/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	48209	06/21/12 05:43	RQ	TAL NC

### Laboratory References:

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

## Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-12309-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Canton	California	NELAC	9	01144CA
TestAmerica Canton	Connecticut	State Program	1	PH-0590
TestAmerica Canton	Florida	NELAC	4	E87225
TestAmerica Canton	Georgia	State Program	4	N/A
TestAmerica Canton	Illinois	NELAC	5	200004
TestAmerica Canton	Kansas	NELAC	7	E-10336
TestAmerica Canton	Kentucky	State Program	4	58
TestAmerica Canton	L-A-B	DoD ELAP		L2315
TestAmerica Canton	Minnesota	NELAC	5	039-999-348
TestAmerica Canton	Nevada	State Program	9	OH-000482008A
TestAmerica Canton	New Jersey	NELAC	2	OH001
TestAmerica Canton	New York	NELAC	2	10975
TestAmerica Canton	Ohio VAP	State Program	5	CL0024
TestAmerica Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica Canton	USDA	Federal		P330-11-00328
TestAmerica Canton	Virginia	NELAC	3	460175
TestAmerica Canton	Washington	State Program	10	C971
TestAmerica Canton	West Virginia DEP	State Program	3	210
TestAmerica Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.



North Canton

**Regulatory program:**

☐ Other

**THE LEADER IN ENVIRONMENTAL TESTING**

**TestAmerica Laboratories, Inc.**

Date/Time: 6-14-12 900

## TestAmerica North Canton Sample Receipt Form/Narrative

Login # : 12309

Client RBC Site Name \_\_\_\_\_ By: [Signature]  
Cooler Received on 6-14-12 Opened on 6-14-12 (Signature)  
FedEx: 1<sup>st</sup> Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other \_\_\_\_\_  
TestAmerica Cooler # \_\_\_\_\_ Foam Box Client Cooler Box Other \_\_\_\_\_  
Packing material used: Bubble Wrap Foam Plastic Bag None Other \_\_\_\_\_  
COOLANT: Wet Ice Blue Ice Dry Ice Water- None

## 1. Cooler temperature upon receipt

IR GUN# 1 (CF 0°C) Observed Sample Temp. \_\_\_\_\_ °C Corrected Sample Temp. \_\_\_\_\_ °C  
IR GUN# 4G (CF -1°C) Observed Sample Temp. \_\_\_\_\_ °C Corrected Sample Temp. \_\_\_\_\_ °C  
IR GUN# 5G (CF -1°C) Observed Sample Temp. 1.8 °C Corrected Sample Temp. 0.8 °C

Multiple  
on Back

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity \_\_\_\_\_ Yes No  
-Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA  
-Were custody seals on the bottle(s)? Yes No  
3. Shippers' packing slip attached to the cooler(s)? Yes No  
4. Did custody papers accompany the sample(s)? Yes No  
5. Were the custody papers relinquished & signed in the appropriate place? Yes No  
6. Did all bottles arrive in good condition (Unbroken)? Yes No  
7. Could all bottle labels be reconciled with the COC? Yes No  
8. Were correct bottle(s) used for the test(s) indicated? Yes No  
9. Sufficient quantity received to perform indicated analyses? Yes No  
10. Were sample(s) at the correct pH upon receipt? Yes No NA  
11. Were VOAs on the COC? Yes No  
12. Were air bubbles >6 mm in any VOA vials? Yes No NA  
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM \_\_\_\_\_ Date \_\_\_\_\_ by \_\_\_\_\_ via Verbal Voice Mail Other  
Concerning \_\_\_\_\_

## 14. CHAIN OF CUSTODY &amp; SAMPLE DISCREPANCIES

## 15. SAMPLE CONDITION

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

16. SAMPLE PRESERVATION	
Sample(s) _____	were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 110410-HNO <sub>3</sub> ; Sulfuric Acid Lot# 041911-H <sub>2</sub> SO <sub>4</sub> ; Sodium Hydroxide Lot# 121809-NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH <sub>3</sub> COO) <sub>2</sub> Zn/NaOH. What time was preservative added to sample(s)? _____

[illegible][illegible]

## Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-12309-1

Login Number: 12309

List Source: TestAmerica Canton

List Number: 1

Creator: Sutek, Nick

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**CONESTOGA-ROVERS  
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114  
St. Paul, Minnesota 55112  
Telephone: (651) 639-0913 Fax: (651) 639-0923  
www.CRAworld.com

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## MEMORANDUM

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TO: Chuck Ahrens, CRA

FROM: Ruth Mickle/sb/1 *Rm*

CC: Analytical Data File

RE: **Data Quality Assessment  
June 13, 2012 Sampling Event  
Wausau Superfund Site  
Wausau, Wisconsin**

REF. NO.: 003978-10

DATE: July 9, 2012

---

The following details a data quality assessment for water samples collected June 16, 2012, at the Wausau Superfund Site in Wausau, Wisconsin. The samples identified as 061312-01 (Influent) and 061312-02 (Effluent) were analyzed for Site list volatile organic compounds (VOCs)<sup>1</sup>. The analyses were performed by TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio. The quality assurance criteria were defined by the quality assurance project plan (QAPP)<sup>2</sup>.

### HOLDING TIME PERIOD

The holding time period for VOC analyses is 14 days from sample collection to completion of analyses. On the basis of the sample collection date on the chain-of-custody form and analysis dates on the analytical report provided by TestAmerica, the analyses were completed within the specified holding time period.

### SURROGATE COMPOUND PERCENT RECOVERIES (SURROGATE RECOVERIES)

Individual sample performance for VOC analyses was monitored using surrogate recoveries. The surrogate recoveries were within acceptance criteria, indicating that individual sample performance was adequate.

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<sup>1</sup> VOC Method 8260B was derived from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, November 1986 and updates.

<sup>2</sup> Application of quality assurance criteria was consistent with "National Functional Guidelines for Organic Data Review", October 1999.

**METHOD BLANK SAMPLE**

Contamination of samples contributed by laboratory conditions or procedures was monitored by the concurrent preparation and analysis of a method blank sample. The method blank sample was reported to be free from detectable concentrations of target analytes, indicating that laboratory contamination was unlikely.

**LABORATORY CONTROL SAMPLE (LCS)**

Overall performance of the analyses was monitored by means of LCS data. The LCS recovery data for the analyses were within acceptance criteria, indicating that overall performance was adequate.

**MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) RESULTS**

To assess the long-term accuracy and precision of the analytical method on various matrices, matrix spike percent recoveries and relative percent difference (RPD) of the spike recoveries were determined for the analyses. The MS/MSD spike sample data were within acceptance criteria.

**FIELD QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) SAMPLES**

The field QA/QC associated with the sampling event consisted of a trip blank sample.

To evaluate the possibility of contamination arising from sample transport, the environment, and/or shipping, a trip blank sample was submitted to the laboratory for VOC analysis. The trip blank was free of target analytes, indicating that contamination was unlikely during sample transport.

**OVERALL ASSESSMENT**

The data were found to exhibit acceptable levels of accuracy and precision and may be used without qualification.

# TestAmerica

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## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Canton  
4101 Shuffel Street NW  
North Canton, OH 44720  
Tel: (330)497-9396

TestAmerica Job ID: 240-17778-1  
Client Project/Site: 3978, Wausau

For:  
Conestoga-Rovers & Associates, Inc.  
1801 Old Highway 8 NW  
Suite 114  
St. Paul, Minnesota 55112

Attn: Mr. Grant Anderson

*Denise D Heckler*

Authorized for release by:  
12/4/2012 4:32:00 PM

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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.*

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## Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### Qualifiers

#### GCMS Volatiles

Qualifier	Qualifier Description
C9	Calibration Verification recovery was outside the method control limits for this analyte. The LCS for this analyte met CCV acceptance criteria, and was used to validate the batch.
H2	Initial analysis within holding time. Reanalysis verification was past holding time.
M1	The MS and/or MSD were outside control limits.

### Glossary

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

## Case Narrative

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

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**Job ID: 240-17778-1**

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**Laboratory: TestAmerica Canton**

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**Narrative**

**Job Narrative**  
**240-17778-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/17/2012 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

No analytical or quality issues were noted.

## Method Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Method	Method Description	Protocol	Laboratory
SW 8260B	Volatile Organic Compounds		TAL CF
SW 9041A	VOC Preservation Check		TAL CF

### Protocol References:

### Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

# Sample Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-17778-1	W-121113-NE-01 CW3	Water	11/13/12 07:47	11/17/12 09:40
240-17778-2	W-121113-NE-02 E24AR	Water	11/13/12 08:40	11/17/12 09:40
240-17778-3	W-121113-NE-03 E24AR (dup)	Water	11/13/12 08:42	11/17/12 09:40
240-17778-4	W-121113-NE-04 MW10A	Water	11/13/12 09:15	11/17/12 09:40
240-17778-5	W-121113-NE-05 MW10B	Water	11/13/12 09:28	11/17/12 09:40
240-17778-6	W-121113-NE-06 WW4	Water	11/13/12 10:03	11/17/12 09:40
240-17778-7	W-121113-NE-07 FVD5	Water	11/13/12 08:48	11/17/12 09:40
240-17778-8	W-121113-NE-08 E22A	Water	11/13/12 09:10	11/17/12 09:40
240-17778-9	W-121113-NE-09 E37A	Water	11/13/12 09:42	11/17/12 09:40
240-17778-10	W-121113-NE-10 E23A	Water	11/13/12 10:02	11/17/12 09:40
240-17778-11	W-121113-NE-11 F.B. (WC3B)	Water	11/13/12 11:30	11/17/12 09:40
240-17778-12	W-121113-NE-12 WC3B	Water	11/13/12 12:08	11/17/12 09:40
240-17778-13	W-121113-NE-13 WW6	Water	11/13/12 10:39	11/17/12 09:40
240-17778-14	W-121113-NE-14 WC5A	Water	11/13/12 11:11	11/17/12 09:40
240-17778-15	W-121113-NE-15 W53A	Water	11/13/12 13:39	11/17/12 09:40
240-17778-16	W-121113-NE-16 W54	Water	11/13/12 14:44	11/17/12 09:40
240-17778-17	W-121113-NE-17 R4D	Water	11/13/12 16:17	11/17/12 09:40
240-17778-18	W-121113-NE-18 C2S	Water	11/13/12 16:56	11/17/12 09:40
240-17778-19	W-121113-NE-19 R3D	Water	11/13/12 14:28	11/17/12 09:40
240-17778-20	W-121113-NE-20 R3D (dup)	Water	11/13/12 14:29	11/17/12 09:40
240-17778-21	W-121113-NE-21 C4S	Water	11/13/12 15:09	11/17/12 09:40
240-17778-22	W-121113-NE-22 W52	Water	11/13/12 18:10	11/17/12 09:40
240-17778-23	W-121113-NE-23 W52 (dup)	Water	11/13/12 18:11	11/17/12 09:40
240-17778-24	W-121113-NE-24 R.B (W56)	Water	11/13/12 16:25	11/17/12 09:40
240-17778-25	W-121113-NE-25 W56	Water	11/13/12 16:44	11/17/12 09:40
240-17778-26	W-121114-NE-26 F.B. (R2D)	Water	11/14/12 08:20	11/17/12 09:40
240-17778-27	W-121114-NE-27 R2D	Water	11/14/12 09:27	11/17/12 09:40
240-17778-28	W-121114-NE-28 WSWD	Water	11/14/12 11:05	11/17/12 09:40
240-17778-29	W-121114-NE-29 W55	Water	11/14/12 12:22	11/17/12 09:40
240-17778-30	W-121114-NE-30 CW6	Water	11/14/12 09:00	11/17/12 09:40
240-17778-31	W-121114-NE-31 MW1A	Water	11/14/12 14:02	11/17/12 09:40
240-17778-32	TRIP BLANKS	Water	11/13/12 00:00	11/17/12 09:40

## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-01

Lab Sample ID: 240-17778-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.10		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	2.48		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-02

Lab Sample ID: 240-17778-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.02		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	2.84		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-03

Lab Sample ID: 240-17778-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.72		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-04

Lab Sample ID: 240-17778-4

No Detections

Client Sample ID: W-121113-NE-05

Lab Sample ID: 240-17778-5

No Detections

Client Sample ID: W-121113-NE-06

Lab Sample ID: 240-17778-6

No Detections

Client Sample ID: W-121113-NE-07

Lab Sample ID: 240-17778-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	20.0		1.00		ug/L	1.00		SW 8260B	Total
Ethylbenzene	190		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	2.15		1.00		ug/L	1.00		SW 8260B	Total
Toluene	11.2		1.00		ug/L	1.00		SW 8260B	Total
Xylenes, total	380		1.00		ug/L	1.00		SW 8260B	Total
m,p-Xylene	277		1.00		ug/L	1.00		SW 8260B	Total
o-Xylene	104		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-08

Lab Sample ID: 240-17778-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	7.51		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	17.9		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-09

Lab Sample ID: 240-17778-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	36.7		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	22.8		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	6.87		1.00		ug/L	1.00		SW 8260B	Total
Vinyl chloride	1.69		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-10

Lab Sample ID: 240-17778-10

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## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### Client Sample ID: W-121113-NE-10 (Continued)

Lab Sample ID: 240-17778-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	35.8		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	41.0		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	7.80		1.00		ug/L	1.00		SW 8260B	Total
Vinyl chloride	1.92		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-11

Lab Sample ID: 240-17778-11

No Detections

### Client Sample ID: W-121113-NE-12

Lab Sample ID: 240-17778-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.47		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-13

Lab Sample ID: 240-17778-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	31.3		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	7.67		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	3.30		1.00		ug/L	1.00		SW 8260B	Total
Vinyl chloride	3.21		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-14

Lab Sample ID: 240-17778-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.30		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-15

Lab Sample ID: 240-17778-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon Tetrachloride	1.67		1.00		ug/L	1.00		SW 8260B	Total
cis-1,2-Dichloroethene	2.25		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	54.2		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-16

Lab Sample ID: 240-17778-16

No Detections

### Client Sample ID: W-121113-NE-17

Lab Sample ID: 240-17778-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.89		1.00		ug/L	1.00		SW 8260B	Total

### Client Sample ID: W-121113-NE-18

Lab Sample ID: 240-17778-18

No Detections

### Client Sample ID: W-121113-NE-19

Lab Sample ID: 240-17778-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	20.6		1.00		ug/L	1.00		SW 8260B	Total

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## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-20

Lab Sample ID: 240-17778-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	20.7		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-21

Lab Sample ID: 240-17778-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.24		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-22

Lab Sample ID: 240-17778-22

No Detections

Client Sample ID: W-121113-NE-23

Lab Sample ID: 240-17778-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.03		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121113-NE-24

Lab Sample ID: 240-17778-24

No Detections

Client Sample ID: W-121113-NE-25

Lab Sample ID: 240-17778-25

No Detections

Client Sample ID: W-121114-NE-26

Lab Sample ID: 240-17778-26

No Detections

Client Sample ID: W-121114-NE-27

Lab Sample ID: 240-17778-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.38		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121114-NE-28

Lab Sample ID: 240-17778-28

No Detections

Client Sample ID: W-121114-NE-29

Lab Sample ID: 240-17778-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	4.92		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121114-NE-30

Lab Sample ID: 240-17778-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.92		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: W-121114-NE-31

Lab Sample ID: 240-17778-31

No Detections

Client Sample ID: TRIP BLANKS

Lab Sample ID: 240-17778-32

TestAmerica Canton

## Detection Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: TRIP BLANKS (Continued)

Lab Sample ID: 240-17778-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1.80	H2	1.00		ug/L	1.00		SW 8260B	Total

TestAmerica Canton



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-01

Lab Sample ID: 240-17778-1

Date Collected: 11/13/12 07:47

CW3

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
cis-1,2-Dichloroethene	1.10		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Tetrachloroethene	2.48		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:37	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		75 - 120	11/26/12 00:00	11/26/12 12:37	1.00
Toluene-d8	109		80 - 120	11/26/12 00:00	11/26/12 12:37	1.00
4-Bromofluorobenzene	100		75 - 110	11/26/12 00:00	11/26/12 12:37	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-02

E24AR

Lab Sample ID: 240-17778-2

Date Collected: 11/13/12 08:40

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
cis-1,2-Dichloroethene	1.02		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Tetrachloroethene	2.84		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:02	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120				11/26/12 00:00	11/26/12 13:02	1.00
Toluene-d8	107		80 - 120				11/26/12 00:00	11/26/12 13:02	1.00
4-Bromofluorobenzene	101		75 - 110				11/26/12 00:00	11/26/12 13:02	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-03

E24AR (dup)

Lab Sample ID: 240-17778-3

Date Collected: 11/13/12 08:42

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Tetrachloroethene	2.72		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:27	1.00

## Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120	11/26/12 00:00	11/26/12 13:27	1.00
Toluene-d8	108		80 - 120	11/26/12 00:00	11/26/12 13:27	1.00
4-Bromofluorobenzene	99		75 - 110	11/26/12 00:00	11/26/12 13:27	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-04

Lab Sample ID: 240-17778-4

Date Collected: 11/13/12 09:15

MW10A

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 13:52	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 13:52	1.00
Toluene-d8	108		80 - 120				11/26/12 00:00	11/26/12 13:52	1.00
4-Bromofluorobenzene	100		75 - 110				11/26/12 00:00	11/26/12 13:52	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-05

MW10B

Lab Sample ID: 240-17778-5

Date Collected: 11/13/12 09:28

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:17	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		75 - 120	11/26/12 00:00	11/26/12 14:17	1.00
Toluene-d8	109		80 - 120	11/26/12 00:00	11/26/12 14:17	1.00
4-Bromofluorobenzene	102		75 - 110	11/26/12 00:00	11/26/12 14:17	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-06

WW4

Lab Sample ID: 240-17778-6

Matrix: Water

Date Collected: 11/13/12 10:03

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 14:42	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107		75 - 120	11/26/12 00:00	11/26/12 14:42	1.00
Toluene-d8	106		80 - 120	11/26/12 00:00	11/26/12 14:42	1.00
4-Bromofluorobenzene	97		75 - 110	11/26/12 00:00	11/26/12 14:42	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-07

FVD5

Lab Sample ID: 240-17778-7

Date Collected: 11/13/12 08:48

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Benzene	20.0		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Ethylbenzene	190		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Tetrachloroethene	2.15		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Toluene	11.2		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
Xylenes, total	380		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
m,p-Xylene	277		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00
o-Xylene	104		1.00		ug/L		11/26/12 00:00	11/26/12 15:07	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120	11/26/12 00:00	11/26/12 15:07	1.00
Toluene-d8	108		80 - 120	11/26/12 00:00	11/26/12 15:07	1.00
4-Bromofluorobenzene	98		75 - 110	11/26/12 00:00	11/26/12 15:07	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-08

E22A

Lab Sample ID: 240-17778-8

Matrix: Water

Date Collected: 11/13/12 09:10

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
cis-1,2-Dichloroethene	7.51		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Tetrachloroethene	17.9		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:32	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		75 - 120	11/26/12 00:00	11/26/12 15:32	1.00
Toluene-d8	108		80 - 120	11/26/12 00:00	11/26/12 15:32	1.00
4-Bromofluorobenzene	102		75 - 110	11/26/12 00:00	11/26/12 15:32	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-09

Lab Sample ID: 240-17778-9

Date Collected: 11/13/12 09:42

E3 7A

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
cis-1,2-Dichloroethene	36.7		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Tetrachloroethene	22.8		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Trichloroethene	6.87		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Vinyl chloride	1.69		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 15:58	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 15:58	1.00
Toluene-d8	107		80 - 120				11/26/12 00:00	11/26/12 15:58	1.00
4-Bromofluorobenzene	102		75 - 110				11/26/12 00:00	11/26/12 15:58	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-10

E23A

Lab Sample ID: 240-17778-10

Matrix: Water

Date Collected: 11/13/12 10:02

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
cis-1,2-Dichloroethene	35.8		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Tetrachloroethene	41.0		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Trichloroethene	7.80		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Vinyl chloride	1.92		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:23	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 16:23	1.00
Toluene-d8	106		80 - 120				11/26/12 00:00	11/26/12 16:23	1.00
4-Bromofluorobenzene	100		75 - 110				11/26/12 00:00	11/26/12 16:23	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-11

F.B. (WC3B)

Lab Sample ID: 240-17778-11

Date Collected: 11/13/12 11:30

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 16:48	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		75 - 120	11/26/12 00:00	11/26/12 16:48	1.00
Toluene-d8	109		80 - 120	11/26/12 00:00	11/26/12 16:48	1.00
4-Bromofluorobenzene	101		75 - 110	11/26/12 00:00	11/26/12 16:48	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-12

WC3B

Lab Sample ID: 240-17778-12

Date Collected: 11/13/12 12:08

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Tetrachloroethene	3.47		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:13	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 17:13	1.00
Toluene-d8	108		80 - 120				11/26/12 00:00	11/26/12 17:13	1.00
4-Bromofluorobenzene	100		75 - 110				11/26/12 00:00	11/26/12 17:13	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-13

WW6

Lab Sample ID: 240-17778-13

Date Collected: 11/13/12 10:39

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
cis-1,2-Dichloroethene	31.3		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Tetrachloroethene	7.67		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Trichloroethene	3.30		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Vinyl chloride	3.21		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 17:38	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107		75 - 120	11/26/12 00:00	11/26/12 17:38	1.00
Toluene-d8	108		80 - 120	11/26/12 00:00	11/26/12 17:38	1.00
4-Bromofluorobenzene	98		75 - 110	11/26/12 00:00	11/26/12 17:38	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-14

WC5A

Lab Sample ID: 240-17778-14

Matrix: Water

Date Collected: 11/13/12 11:11

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Tetrachloroethene	1.30		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:03	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 18:03	1.00
Toluene-d8	107		80 - 120				11/26/12 00:00	11/26/12 18:03	1.00
4-Bromofluorobenzene	100		75 - 110				11/26/12 00:00	11/26/12 18:03	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-15

W53A

Lab Sample ID: 240-17778-15

Date Collected: 11/13/12 13:39

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Carbon Tetrachloride	1.67		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
cis-1,2-Dichloroethene	2.25		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Trichloroethene	54.2		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 18:28	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/26/12 00:00	11/26/12 18:28	1.00
Toluene-d8	108		80 - 120				11/26/12 00:00	11/26/12 18:28	1.00
4-Bromofluorobenzene	99		75 - 110				11/26/12 00:00	11/26/12 18:28	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-16

Lab Sample ID: 240-17778-16

Date Collected: 11/13/12 14:44

W54

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Vinyl chloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 12:47	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	104		75 - 120	11/27/12 00:00	11/27/12 12:47	1.00
Toluene-d8	110		80 - 120	11/27/12 00:00	11/27/12 12:47	1.00
4-Bromofluorobenzene	100		75 - 110	11/27/12 00:00	11/27/12 12:47	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-17

Lab Sample ID: 240-17778-17

Date Collected: 11/13/12 16:17

R4D

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Trichloroethene	4.89		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 12:11	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120	11/26/12 00:00	11/26/12 12:11	1.00
Toluene-d8	109		80 - 120	11/26/12 00:00	11/26/12 12:11	1.00
4-Bromofluorobenzene	101		75 - 110	11/26/12 00:00	11/26/12 12:11	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-18

Lab Sample ID: 240-17778-18

Date Collected: 11/13/12 16:56

C2S

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:18	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107		75 - 120				11/26/12 00:00	11/26/12 19:18	1.00
Toluene-d8	107		80 - 120				11/26/12 00:00	11/26/12 19:18	1.00
4-Bromofluorobenzene	98		75 - 110				11/26/12 00:00	11/26/12 19:18	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-19

Lab Sample ID: 240-17778-19

Date Collected: 11/13/12 14:28

R3D

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Trichloroethene	20.6		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 19:43	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120	11/26/12 00:00	11/26/12 19:43	1.00
Toluene-d8	111		80 - 120	11/26/12 00:00	11/26/12 19:43	1.00
4-Bromofluorobenzene	101		75 - 110	11/26/12 00:00	11/26/12 19:43	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-20

R3D (dup)

Lab Sample ID: 240-17778-20

Date Collected: 11/13/12 14:29

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Benzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Methylene Chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Trichloroethene	20.7		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Xylenes, total	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
m,p-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 20:08	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		75 - 120				11/26/12 00:00	11/26/12 20:08	1.00
Toluene-d8	113		80 - 120				11/26/12 00:00	11/26/12 20:08	1.00
4-Bromofluorobenzene	101		75 - 110				11/26/12 00:00	11/26/12 20:08	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-21

C4S

Lab Sample ID: 240-17778-21

Date Collected: 11/13/12 15:09

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Trichloroethene	1.24		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Vinyl chloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:12	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	103		75 - 120	11/27/12 00:00	11/27/12 13:12	1.00
Toluene-d8	107		80 - 120	11/27/12 00:00	11/27/12 13:12	1.00
4-Bromofluorobenzene	101		75 - 110	11/27/12 00:00	11/27/12 13:12	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-22

W52

Lab Sample ID: 240-17778-22

Date Collected: 11/13/12 18:10

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Vinyl chloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 13:37	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107		75 - 120	11/27/12 00:00	11/27/12 13:37	1.00
Toluene-d8	107		80 - 120	11/27/12 00:00	11/27/12 13:37	1.00
4-Bromofluorobenzene	98		75 - 110	11/27/12 00:00	11/27/12 13:37	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-23

W52 (dup)

Lab Sample ID: 240-17778-23

Date Collected: 11/13/12 18:11

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Trichloroethene	1.03		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:32	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	110		75 - 120	11/27/12 00:00	11/27/12 01:32	1.00
Toluene-d8	109		80 - 120	11/27/12 00:00	11/27/12 01:32	1.00
4-Bromofluorobenzene	99		75 - 110	11/27/12 00:00	11/27/12 01:32	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-24

R.B (W56)

Lab Sample ID: 240-17778-24

Matrix: Water

Date Collected: 11/13/12 16:25

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 01:56	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120	11/27/12 00:00	11/27/12 01:56	1.00
Toluene-d8	110		80 - 120	11/27/12 00:00	11/27/12 01:56	1.00
4-Bromofluorobenzene	96		75 - 110	11/27/12 00:00	11/27/12 01:56	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton



# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121113-NE-25

W56

Lab Sample ID: 240-17778-25

Date Collected: 11/13/12 16:44

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:21	1.00

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	109		75 - 120	11/27/12 00:00	11/27/12 02:21	1.00
Toluene-d8	111		80 - 120	11/27/12 00:00	11/27/12 02:21	1.00
4-Bromofluorobenzene	97		75 - 110	11/27/12 00:00	11/27/12 02:21	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-26

F.B. (R2D)

Lab Sample ID: 240-17778-26

Matrix: Water

Date Collected: 11/14/12 08:20

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 02:46	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120				11/27/12 00:00	11/27/12 02:46	1.00
Toluene-d8	111		80 - 120				11/27/12 00:00	11/27/12 02:46	1.00
4-Bromofluorobenzene	97		75 - 110				11/27/12 00:00	11/27/12 02:46	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-27

R2D

Lab Sample ID: 240-17778-27

Date Collected: 11/14/12 09:27

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Trichloroethene	6.38		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:11	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	110		75 - 120				11/27/12 00:00	11/27/12 03:11	1.00
Toluene-d8	112		80 - 120				11/27/12 00:00	11/27/12 03:11	1.00
4-Bromofluorobenzene	88		75 - 110				11/27/12 00:00	11/27/12 03:11	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-28

WSWD

Lab Sample ID: 240-17778-28

Date Collected: 11/14/12 11:05

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 03:35	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120				11/27/12 00:00	11/27/12 03:35	1.00
Toluene-d8	110		80 - 120				11/27/12 00:00	11/27/12 03:35	1.00
4-Bromofluorobenzene	98		75 - 110				11/27/12 00:00	11/27/12 03:35	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-29

W55

Lab Sample ID: 240-17778-29

Date Collected: 11/14/12 12:22

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Trichloroethene	4.92		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:00	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	105		75 - 120	11/27/12 00:00	11/27/12 04:00	1.00
Toluene-d8	110		80 - 120	11/27/12 00:00	11/27/12 04:00	1.00
4-Bromofluorobenzene	98		75 - 110	11/27/12 00:00	11/27/12 04:00	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-30

CW6

Lab Sample ID: 240-17778-30

Matrix: Water

Date Collected: 11/14/12 09:00

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Carbon Tetrachloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Trichloroethene	3.92		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Vinyl chloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 14:03	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	106		75 - 120				11/27/12 00:00	11/27/12 14:03	1.00
Toluene-d8	108		80 - 120				11/27/12 00:00	11/27/12 14:03	1.00
4-Bromofluorobenzene	98		75 - 110				11/27/12 00:00	11/27/12 14:03	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-31

MW1A

Lab Sample ID: 240-17778-31

Date Collected: 11/14/12 14:02

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Benzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Carbon Tetrachloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
1,1-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
cis-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Methylene Chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Vinyl chloride	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
Xylenes, total	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
m,p-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 04:49	1.00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	108		75 - 120	11/27/12 00:00	11/27/12 04:49	1.00
Toluene-d8	110		80 - 120	11/27/12 00:00	11/27/12 04:49	1.00
4-Bromofluorobenzene	97		75 - 110	11/27/12 00:00	11/27/12 04:49	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton

# Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 240-17778-32

Date Collected: 11/13/12 00:00

Matrix: Water

Date Received: 11/17/12 09:40

## Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	H2	10.0		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Benzene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Carbon Tetrachloride	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Chloroform	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
1,1-Dichloroethene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
cis-1,2-Dichloroethene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Ethylbenzene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Methylene Chloride	1.80	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Tetrachloroethene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Toluene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
1,1,2-Trichloroethane	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Trichloroethene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Vinyl chloride	ND	H2 C9	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Xylenes, total	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
m,p-Xylene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
o-Xylene	ND	H2	1.00		ug/L		11/27/12 00:00	11/27/12 14:28	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107	H2	75 - 120				11/27/12 00:00	11/27/12 14:28	1.00
Toluene-d8	107	H2	80 - 120				11/27/12 00:00	11/27/12 14:28	1.00
4-Bromofluorobenzene	101	H2	75 - 110				11/27/12 00:00	11/27/12 14:28	1.00

## Method: SW 9041A - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	ND		2.00		units		11/27/12 16:19	11/27/12 16:25	1.00

TestAmerica Canton



## Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### Method: SW 8260B - Volatile Organic Compounds

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (75-110)
240-17778-1	W-121113-NE-01	103	109	100
240-17778-2	W-121113-NE-02	106	107	101
240-17778-3	W-121113-NE-03	108	108	99
240-17778-4	W-121113-NE-04	108	108	100
240-17778-5	W-121113-NE-05	104	109	102
240-17778-6	W-121113-NE-06	107	106	97
240-17778-7	W-121113-NE-07	106	108	98
240-17778-8	W-121113-NE-08	104	108	102
240-17778-9	W-121113-NE-09	108	107	102
240-17778-10	W-121113-NE-10	108	106	100
240-17778-11	W-121113-NE-11	104	109	101
240-17778-12	W-121113-NE-12	108	108	100
240-17778-13	W-121113-NE-13	107	108	98
240-17778-14	W-121113-NE-14	108	107	100
240-17778-15	W-121113-NE-15	108	108	99
240-17778-16	W-121113-NE-16	104	110	100
240-17778-17	W-121113-NE-17	106	109	101
240-17778-18	W-121113-NE-18	107	107	98
240-17778-19	W-121113-NE-19	106	111	101
240-17778-20	W-121113-NE-20	103	113	101
240-17778-21	W-121113-NE-21	103	107	101
240-17778-22	W-121113-NE-22	107	107	98
240-17778-23	W-121113-NE-23	110	109	99
240-17778-24	W-121113-NE-24	108	110	96
240-17778-25	W-121113-NE-25	109	111	97
240-17778-26	W-121114-NE-26	106	111	97
240-17778-27	W-121114-NE-27	110	112	88
240-17778-28	W-121114-NE-28	108	110	98
240-17778-29	W-121114-NE-29	105	110	98
240-17778-30	W-121114-NE-30	106	108	98
240-17778-31	W-121114-NE-31	108	110	97
240-17778-32	TRIP BLANKS	107 H2	107 H2	101 H2

#### Surrogate Legend

DBFM = Dibromofluoromethane

Toluene-d8 = Toluene-d8

BFB = 4-Bromofluorobenzene

### Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (75-110)
12K1219-BLK1	Method Blank	102	108	102
12K1220-BLK1	Method Blank	109	110	97
12K1266-BLK1	Method Blank	107	107	100

#### Surrogate Legend

DBFM = Dibromofluoromethane

TestAmerica Canton

## Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Toluene-d8 = Toluene-d8  
BFB = 4-Bromofluorobenzene

### Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (80-120)
12K1219-BS1	Lab Control Sample	109	108	102
12K1219-MS1	240-17778-17	108	108	101
12K1219-MSD1	240-17778-17	106	108	99
12K1220-BS1	Lab Control Sample	109	108	94
12K1220-MS1	240-17778-21	109	111	96
12K1220-MSD1	240-17778-21	114	111	99
12K1266-BS1	Lab Control Sample	109	108	103
12K1266-BSD1	Lab Control Sample Dup	109	109	102

#### Surrogate Legend

DBFM = Dibromofluoromethane  
Toluene-d8 = Toluene-d8  
BFB = 4-Bromofluorobenzene

### Method: SW 8260B - Volatile Organic Compounds

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	Toluene-d8	BFB
240-17778-21	W-121113-NE-21			

#### Surrogate Legend

DBFM = Dibromofluoromethane  
Toluene-d8 = Toluene-d8  
BFB = 4-Bromofluorobenzene

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## Method: SW 8260B - Volatile Organic Compounds

Lab Sample ID: 12K1219-BLK1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12K1219\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Benzene	ND		0.500		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Carbon Tetrachloride	ND		2.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
1,1-Dichloroethene	ND		2.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Methylene Chloride	ND		5.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
Xylenes, total	ND		3.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
m,p-Xylene	ND		2.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 10:06	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	102		75 - 120	11/26/12 00:00	11/26/12 10:06	1.00
Toluene-d8	108		80 - 120	11/26/12 00:00	11/26/12 10:06	1.00
4-Bromofluorobenzene	102		75 - 110	11/26/12 00:00	11/26/12 10:06	1.00

Lab Sample ID: 12K1219-BS1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12K1219\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.3		ug/L		81	60 - 150
Benzene	20.0	17.6		ug/L		88	70 - 130
Carbon Tetrachloride	20.0	20.9		ug/L		105	55 - 130
Chloroform	20.0	17.7		ug/L		88	70 - 125
1,1-Dichloroethene	20.0	16.7		ug/L		84	60 - 135
trans-1,2-Dichloroethene	20.0	18.1		ug/L		90	60 - 145
Ethylbenzene	20.0	19.9		ug/L		100	70 - 130
Methylene Chloride	20.0	16.9		ug/L		84	55 - 145
Tetrachloroethene	20.0	20.4		ug/L		102	70 - 135
Toluene	20.0	19.6		ug/L		98	70 - 135
1,1,2-Trichloroethane	20.0	16.9		ug/L		85	75 - 125
Trichloroethene	20.0	18.6		ug/L		93	70 - 130
Vinyl chloride	20.0	16.7		ug/L		83	45 - 135
Xylenes, total	60.0	57.4		ug/L		96	70 - 130
m,p-Xylene	40.0	38.1		ug/L		95	70 - 135
o-Xylene	20.0	19.4		ug/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	109		75 - 120
Toluene-d8	108		80 - 120

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.

TestAmerica Job ID: 240-17778-1

Project/Site: 3978, Wausau

## Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1219-BS1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12K1219\_P

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	102		80 - 120

Lab Sample ID: 12K1219-MS1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: 240-17778-17

Prep Type: Total

Prep Batch: 12K1219\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		20.0	10.8		ug/L		54	45 - 150
Benzene	ND		20.0	19.9		ug/L		100	50 - 130
Carbon Tetrachloride	0.0300		20.0	24.7		ug/L		123	35 - 130
Chloroform	ND		20.0	20.4		ug/L		102	55 - 125
1,1-Dichloroethene	ND		20.0	21.0		ug/L		105	35 - 135
trans-1,2-Dichloroethene	0.0400		20.0	20.3		ug/L		101	45 - 145
Ethylbenzene	0.0100		20.0	22.4		ug/L		112	45 - 135
Methylene Chloride	0.0400		20.0	19.0		ug/L		95	45 - 145
Tetrachloroethene	ND		20.0	23.1		ug/L		116	40 - 135
Toluene	0.0100		20.0	21.4		ug/L		107	45 - 135
1,1,2-Trichloroethane	ND		20.0	18.2		ug/L		91	60 - 130
Trichloroethene	4.89		20.0	26.6		ug/L		109	50 - 130
Vinyl chloride	ND		20.0	12.0		ug/L		60	30 - 135
Xylenes, total	ND		60.0	63.9		ug/L		107	40 - 135
m,p-Xylene	ND		40.0	42.9		ug/L		107	40 - 135
o-Xylene	ND		20.0	21.0		ug/L		105	40 - 135

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Dibromofluoromethane	108		75 - 120
Toluene-d8	108		80 - 120
4-Bromofluorobenzene	101		80 - 120

Lab Sample ID: 12K1219-MSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: 240-17778-17

Prep Type: Total

Prep Batch: 12K1219\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		20.0	10.5		ug/L		52	45 - 150	3	35
Benzene	ND		20.0	20.0		ug/L		100	50 - 130	0.3	20
Carbon Tetrachloride	0.0300		20.0	24.5		ug/L		122	35 - 130	0.8	20
Chloroform	ND		20.0	21.1		ug/L		105	55 - 125	3	15
1,1-Dichloroethene	ND		20.0	20.0		ug/L		100	35 - 135	5	30
trans-1,2-Dichloroethene	0.0400		20.0	20.5		ug/L		102	45 - 145	1	35
Ethylbenzene	0.0100		20.0	22.3		ug/L		111	45 - 135	0.8	20
Methylene Chloride	0.0400		20.0	19.4		ug/L		97	45 - 145	2	30
Tetrachloroethene	ND		20.0	23.3		ug/L		117	40 - 135	0.9	20
Toluene	0.0100		20.0	21.6		ug/L		108	45 - 135	1	20
1,1,2-Trichloroethane	ND		20.0	19.4		ug/L		97	60 - 130	6	15
Trichloroethene	4.89		20.0	26.8		ug/L		110	50 - 130	0.6	20
Vinyl chloride	ND		20.0	12.2		ug/L		61	30 - 135	2	20
Xylenes, total	ND		60.0	65.2		ug/L		109	40 - 135	2	20

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1219-MSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1219

Client Sample ID: 240-17778-17

Prep Type: Total

Prep Batch: 12K1219\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
m,p-Xylene	ND		40.0	43.5		ug/L		109	40 - 135	1	20
o-Xylene	ND		20.0	21.7		ug/L		108	40 - 135	3	20

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Matrix Spike Dup Limits
Dibromofluoromethane	106		75 - 120
Toluene-d8	108		80 - 120
4-Bromofluorobenzene	99		80 - 120

Lab Sample ID: 12K1220-BLK1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Benzene	ND		0.500		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Carbon Tetrachloride	ND	C9	2.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Chloroform	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
1,1-Dichloroethene	ND		2.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Ethylbenzene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Methylene Chloride	ND		5.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Tetrachloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Toluene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Trichloroethene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Vinyl chloride	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
Xylenes, total	ND		3.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
m,p-Xylene	ND		2.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00
o-Xylene	ND		1.00		ug/L		11/26/12 00:00	11/26/12 22:38	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Blank Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	109		75 - 120	11/26/12 00:00	11/26/12 22:38	1.00
Toluene-d8	110		80 - 120	11/26/12 00:00	11/26/12 22:38	1.00
4-Bromofluorobenzene	97		75 - 110	11/26/12 00:00	11/26/12 22:38	1.00

Lab Sample ID: 12K1220-BS1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acetone	20.0	12.5		ug/L		63	60 - 150
Benzene	20.0	18.6		ug/L		93	70 - 130
Carbon Tetrachloride	20.0	23.9	C9	ug/L		120	55 - 130
Chloroform	20.0	19.8		ug/L		99	70 - 125
1,1-Dichloroethene	20.0	20.4		ug/L		102	60 - 135
trans-1,2-Dichloroethene	20.0	19.6		ug/L		98	60 - 145
Ethylbenzene	20.0	20.6		ug/L		103	70 - 130
Methylene Chloride	20.0	18.3		ug/L		92	55 - 145

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1220-BS1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	22.0		ug/L		110	70 - 135
Toluene	20.0	20.4		ug/L		102	70 - 135
1,1,2-Trichloroethane	20.0	16.5		ug/L		82	75 - 125
Trichloroethene	20.0	19.7		ug/L		99	70 - 130
Vinyl chloride	20.0	17.5		ug/L		87	45 - 135
Xylenes, total	60.0	56.8		ug/L		95	70 - 130
m,p-Xylene	40.0	37.5		ug/L		94	70 - 135
o-Xylene	20.0	19.3		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	109		75 - 120
Toluene-d8	108		80 - 120
4-Bromofluorobenzene	94		80 - 120

Lab Sample ID: 12K1220-MS1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: 240-17778-21

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		20.0	8.96	M1	ug/L		45	45 - 150
Benzene	ND		20.0	16.3		ug/L		82	50 - 130
Carbon Tetrachloride	0.240		20.0	20.6	C9	ug/L		102	35 - 130
Chloroform	0.130		20.0	17.2		ug/L		86	55 - 125
1,1-Dichloroethene	ND		20.0	18.1		ug/L		90	35 - 135
trans-1,2-Dichloroethene	ND		20.0	16.5		ug/L		83	45 - 145
Ethylbenzene	0.0400		20.0	18.6		ug/L		93	45 - 135
Methylene Chloride	ND		20.0	15.9		ug/L		79	45 - 145
Tetrachloroethene	ND		20.0	19.4		ug/L		97	40 - 135
Toluene	0.0100		20.0	18.3		ug/L		91	45 - 135
1,1,2-Trichloroethane	ND		20.0	15.4		ug/L		77	60 - 130
Trichloroethene	1.29		20.0	19.0		ug/L		88	50 - 130
Vinyl chloride	ND		20.0	17.5		ug/L		88	30 - 135
Xylenes, total	ND		60.0	52.8		ug/L		88	40 - 135
m,p-Xylene	ND		40.0	35.0		ug/L		88	40 - 135
o-Xylene	ND		20.0	17.8		ug/L		89	40 - 135

Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits
Dibromofluoromethane	109		75 - 120
Toluene-d8	111		80 - 120
4-Bromofluorobenzene	96		80 - 120

Lab Sample ID: 12K1220-MSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: 240-17778-21

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Acetone	ND		20.0	7.46	M1	ug/L		37	45 - 150	18	35
Benzene	ND		20.0	16.6		ug/L		83	50 - 130	1	20

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1220-MSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1220

Client Sample ID: 240-17778-21

Prep Type: Total

Prep Batch: 12K1220\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Carbon Tetrachloride	0.240		20.0	21.1	C9	ug/L		104	35 - 130	2	20
Chloroform	0.130		20.0	17.3		ug/L		86	55 - 125	0.2	15
1,1-Dichloroethene	ND		20.0	17.8		ug/L		89	35 - 135	2	30
trans-1,2-Dichloroethene	ND		20.0	17.6		ug/L		88	45 - 145	6	35
Ethylbenzene	0.0400		20.0	18.5		ug/L		92	45 - 135	0.9	20
Methylene Chloride	ND		20.0	15.7		ug/L		79	45 - 145	0.9	30
Tetrachloroethene	ND		20.0	20.4		ug/L		102	40 - 135	5	20
Toluene	0.0100		20.0	18.3		ug/L		91	45 - 135	0.2	20
1,1,2-Trichloroethane	ND		20.0	15.3		ug/L		76	60 - 130	1	15
Trichloroethene	1.29		20.0	18.7		ug/L		87	50 - 130	2	20
Vinyl chloride	ND		20.0	17.2		ug/L		86	30 - 135	2	20
Xylenes, total	ND		60.0	52.2		ug/L		87	40 - 135	1	20
m,p-Xylene	ND		40.0	34.6		ug/L		87	40 - 135	1	20
o-Xylene	ND		20.0	17.6		ug/L		88	40 - 135	1	20

Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits
Dibromofluoromethane	114		75 - 120
Toluene-d8	111		80 - 120
4-Bromofluorobenzene	99		80 - 120

Lab Sample ID: 12K1266-BLK1

Matrix: Water - NonPotable

Analysis Batch: 12K1266

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 12K1266\_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10.0		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Benzene	ND		0.500		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Carbon Tetrachloride	ND		2.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Chloroform	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
1,1-Dichloroethene	ND		2.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
trans-1,2-Dichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Ethylbenzene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Methylene Chloride	ND		5.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Tetrachloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Toluene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
1,1,2-Trichloroethane	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Trichloroethene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Vinyl chloride	ND	C9	1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
Xylenes, total	ND		3.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
m,p-Xylene	ND		2.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00
o-Xylene	ND		1.00		ug/L		11/27/12 00:00	11/27/12 11:04	1.00

Surrogate	Blank %Recovery	Blank Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	107		75 - 120	11/27/12 00:00	11/27/12 11:04	1.00
Toluene-d8	107		80 - 120	11/27/12 00:00	11/27/12 11:04	1.00
4-Bromofluorobenzene	100		75 - 110	11/27/12 00:00	11/27/12 11:04	1.00

TestAmerica Canton

# QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1266-BS1

Matrix: Water - NonPotable

Analysis Batch: 12K1266

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 12K1266\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	14.8		ug/L		74	60 - 150
Benzene	20.0	16.6		ug/L		83	70 - 130
Carbon Tetrachloride	20.0	17.7		ug/L		88	55 - 130
Chloroform	20.0	17.8		ug/L		89	70 - 125
1,1-Dichloroethene	20.0	14.4		ug/L		72	60 - 135
trans-1,2-Dichloroethene	20.0	16.3		ug/L		82	60 - 145
Ethylbenzene	20.0	18.3		ug/L		92	70 - 130
Methylene Chloride	20.0	16.2		ug/L		81	55 - 145
Tetrachloroethene	20.0	18.9		ug/L		95	70 - 135
Toluene	20.0	17.9		ug/L		90	70 - 135
1,1,2-Trichloroethane	20.0	16.8		ug/L		84	75 - 125
Trichloroethene	20.0	17.4		ug/L		87	70 - 130
Vinyl chloride	20.0	15.0	C9	ug/L		75	45 - 135
Xylenes, total	60.0	53.8		ug/L		90	70 - 130
m,p-Xylene	40.0	36.0		ug/L		90	70 - 135
o-Xylene	20.0	17.8		ug/L		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane	109		75 - 120
Toluene-d8	108		80 - 120
4-Bromofluorobenzene	103		80 - 120

Lab Sample ID: 12K1266-BSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1266

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 12K1266\_P

Analyte	Spike Added	LCS Dup Result	LCS Dup Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	20.0	14.9		ug/L		74	60 - 150	0.8	20
Benzene	20.0	17.2		ug/L		86	70 - 130	4	25
Carbon Tetrachloride	20.0	19.0		ug/L		95	55 - 130	7	25
Chloroform	20.0	18.1		ug/L		90	70 - 125	2	15
1,1-Dichloroethene	20.0	16.1		ug/L		80	60 - 135	11	20
trans-1,2-Dichloroethene	20.0	16.9		ug/L		84	60 - 145	3	15
Ethylbenzene	20.0	19.2		ug/L		96	70 - 130	5	35
Methylene Chloride	20.0	16.4		ug/L		82	55 - 145	0.7	20
Tetrachloroethene	20.0	19.5		ug/L		97	70 - 135	3	15
Toluene	20.0	19.1		ug/L		95	70 - 135	6	30
1,1,2-Trichloroethane	20.0	16.3		ug/L		81	75 - 125	3	15
Trichloroethene	20.0	18.0		ug/L		90	70 - 130	3	20
Vinyl chloride	20.0	16.6	C9	ug/L		83	45 - 135	10	20
Xylenes, total	60.0	55.6		ug/L		93	70 - 130	3	35
m,p-Xylene	40.0	37.3		ug/L		93	70 - 135	4	35
o-Xylene	20.0	18.3		ug/L		91	70 - 130	3	35

Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits
Dibromofluoromethane	109		75 - 120
Toluene-d8	109		80 - 120

TestAmerica Canton



## QC Sample Results

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 12K1266-BSD1

Matrix: Water - NonPotable

Analysis Batch: 12K1266

Client Sample ID: Lab Control Sample Dup

Prep Type: Total

Prep Batch: 12K1266\_P

Surrogate	LCS Dup	LCS Dup	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	102		80 - 120

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## GCMS Volatiles

### Analysis Batch: 12K1219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1219-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	12K1219_P
12K1219-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	12K1219_P
12K1219-MS1	240-17778-17	Total	Water - NonPotable	SW 8260B	12K1219_P
12K1219-MSD1	240-17778-17	Total	Water - NonPotable	SW 8260B	12K1219_P
240-17778-1	W-121113-NE-01	Total	Water	SW 8260B	12K1219_P
240-17778-2	W-121113-NE-02	Total	Water	SW 8260B	12K1219_P
240-17778-3	W-121113-NE-03	Total	Water	SW 8260B	12K1219_P
240-17778-4	W-121113-NE-04	Total	Water	SW 8260B	12K1219_P
240-17778-5	W-121113-NE-05	Total	Water	SW 8260B	12K1219_P
240-17778-6	W-121113-NE-06	Total	Water	SW 8260B	12K1219_P
240-17778-7	W-121113-NE-07	Total	Water	SW 8260B	12K1219_P
240-17778-8	W-121113-NE-08	Total	Water	SW 8260B	12K1219_P
240-17778-9	W-121113-NE-09	Total	Water	SW 8260B	12K1219_P
240-17778-10	W-121113-NE-10	Total	Water	SW 8260B	12K1219_P
240-17778-11	W-121113-NE-11	Total	Water	SW 8260B	12K1219_P
240-17778-12	W-121113-NE-12	Total	Water	SW 8260B	12K1219_P
240-17778-13	W-121113-NE-13	Total	Water	SW 8260B	12K1219_P
240-17778-14	W-121113-NE-14	Total	Water	SW 8260B	12K1219_P
240-17778-15	W-121113-NE-15	Total	Water	SW 8260B	12K1219_P
240-17778-17	W-121113-NE-17	Total	Water	SW 8260B	12K1219_P
240-17778-18	W-121113-NE-18	Total	Water	SW 8260B	12K1219_P
240-17778-19	W-121113-NE-19	Total	Water	SW 8260B	12K1219_P
240-17778-20	W-121113-NE-20	Total	Water	SW 8260B	12K1219_P

### Analysis Batch: 12K1220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1220-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	12K1220_P
12K1220-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	12K1220_P
12K1220-MS1	240-17778-21	Total	Water - NonPotable	SW 8260B	12K1220_P
12K1220-MSD1	240-17778-21	Total	Water - NonPotable	SW 8260B	12K1220_P
240-17778-23	W-121113-NE-23	Total	Water	SW 8260B	12K1220_P
240-17778-24	W-121113-NE-24	Total	Water	SW 8260B	12K1220_P
240-17778-25	W-121113-NE-25	Total	Water	SW 8260B	12K1220_P
240-17778-26	W-121114-NE-26	Total	Water	SW 8260B	12K1220_P
240-17778-27	W-121114-NE-27	Total	Water	SW 8260B	12K1220_P
240-17778-28	W-121114-NE-28	Total	Water	SW 8260B	12K1220_P
240-17778-29	W-121114-NE-29	Total	Water	SW 8260B	12K1220_P
240-17778-31	W-121114-NE-31	Total	Water	SW 8260B	12K1220_P

### Analysis Batch: 12K1246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-17778-1	W-121113-NE-01	Total	Water	SW 9041A	12K1246_P
240-17778-2	W-121113-NE-02	Total	Water	SW 9041A	12K1246_P
240-17778-3	W-121113-NE-03	Total	Water	SW 9041A	12K1246_P
240-17778-4	W-121113-NE-04	Total	Water	SW 9041A	12K1246_P

TestAmerica Canton

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## GCMS Volatiles (Continued)

### Analysis Batch: 12K1246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-17778-5	W-121113-NE-05	Total	Water	SW 9041A	12K1246_P
240-17778-6	W-121113-NE-06	Total	Water	SW 9041A	12K1246_P
240-17778-7	W-121113-NE-07	Total	Water	SW 9041A	12K1246_P
240-17778-8	W-121113-NE-08	Total	Water	SW 9041A	12K1246_P
240-17778-9	W-121113-NE-09	Total	Water	SW 9041A	12K1246_P
240-17778-10	W-121113-NE-10	Total	Water	SW 9041A	12K1246_P
240-17778-11	W-121113-NE-11	Total	Water	SW 9041A	12K1246_P
240-17778-12	W-121113-NE-12	Total	Water	SW 9041A	12K1246_P
240-17778-13	W-121113-NE-13	Total	Water	SW 9041A	12K1246_P
240-17778-14	W-121113-NE-14	Total	Water	SW 9041A	12K1246_P
240-17778-15	W-121113-NE-15	Total	Water	SW 9041A	12K1246_P
240-17778-16	W-121113-NE-16	Total	Water	SW 9041A	12K1246_P
240-17778-17	W-121113-NE-17	Total	Water	SW 9041A	12K1246_P
240-17778-18	W-121113-NE-18	Total	Water	SW 9041A	12K1246_P
240-17778-19	W-121113-NE-19	Total	Water	SW 9041A	12K1246_P
240-17778-20	W-121113-NE-20	Total	Water	SW 9041A	12K1246_P
240-17778-21	W-121113-NE-21	Total	Water	SW 9041A	12K1246_P
240-17778-22	W-121113-NE-22	Total	Water	SW 9041A	12K1246_P
240-17778-23	W-121113-NE-23	Total	Water	SW 9041A	12K1246_P
240-17778-24	W-121113-NE-24	Total	Water	SW 9041A	12K1246_P
240-17778-25	W-121113-NE-25	Total	Water	SW 9041A	12K1246_P
240-17778-26	W-121114-NE-26	Total	Water	SW 9041A	12K1246_P
240-17778-27	W-121114-NE-27	Total	Water	SW 9041A	12K1246_P
240-17778-28	W-121114-NE-28	Total	Water	SW 9041A	12K1246_P
240-17778-29	W-121114-NE-29	Total	Water	SW 9041A	12K1246_P
240-17778-30	W-121114-NE-30	Total	Water	SW 9041A	12K1246_P
240-17778-31	W-121114-NE-31	Total	Water	SW 9041A	12K1246_P
240-17778-32	TRIP BLANKS	Total	Water	SW 9041A	12K1246_P

### Analysis Batch: 12K1266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1266-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	12K1266_P
12K1266-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	12K1266_P
12K1266-BSD1	Lab Control Sample Dup	Total	Water - NonPotable	SW 8260B	12K1266_P
240-17778-16	W-121113-NE-16	Total	Water	SW 8260B	12K1266_P
240-17778-21	W-121113-NE-21	Total	Water	SW 8260B	12K1266_P
240-17778-22	W-121113-NE-22	Total	Water	SW 8260B	12K1266_P
240-17778-30	W-121114-NE-30	Total	Water	SW 8260B	12K1266_P
240-17778-32	TRIP BLANKS	Total	Water	SW 8260B	12K1266_P

### Prep Batch: 12K1219\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1219-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
12K1219-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
12K1219-MS1	240-17778-17	Total	Water - NonPotable	SW 5030B	

TestAmerica Canton

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## GCMS Volatiles (Continued)

### Prep Batch: 12K1219\_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1219-MSD1	240-17778-17	Total	Water - NonPotable	SW 5030B	
240-17778-1	W-121113-NE-01	Total	Water	SW 5030B	
240-17778-2	W-121113-NE-02	Total	Water	SW 5030B	
240-17778-3	W-121113-NE-03	Total	Water	SW 5030B	
240-17778-4	W-121113-NE-04	Total	Water	SW 5030B	
240-17778-5	W-121113-NE-05	Total	Water	SW 5030B	
240-17778-6	W-121113-NE-06	Total	Water	SW 5030B	
240-17778-7	W-121113-NE-07	Total	Water	SW 5030B	
240-17778-8	W-121113-NE-08	Total	Water	SW 5030B	
240-17778-9	W-121113-NE-09	Total	Water	SW 5030B	
240-17778-10	W-121113-NE-10	Total	Water	SW 5030B	
240-17778-11	W-121113-NE-11	Total	Water	SW 5030B	
240-17778-12	W-121113-NE-12	Total	Water	SW 5030B	
240-17778-13	W-121113-NE-13	Total	Water	SW 5030B	
240-17778-14	W-121113-NE-14	Total	Water	SW 5030B	
240-17778-15	W-121113-NE-15	Total	Water	SW 5030B	
240-17778-17	W-121113-NE-17	Total	Water	SW 5030B	
240-17778-18	W-121113-NE-18	Total	Water	SW 5030B	
240-17778-19	W-121113-NE-19	Total	Water	SW 5030B	
240-17778-20	W-121113-NE-20	Total	Water	SW 5030B	

### Prep Batch: 12K1220\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1220-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
12K1220-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
12K1220-MS1	240-17778-21	Total	Water - NonPotable	SW 5030B	
12K1220-MSD1	240-17778-21	Total	Water - NonPotable	SW 5030B	
240-17778-23	W-121113-NE-23	Total	Water	SW 5030B	
240-17778-24	W-121113-NE-24	Total	Water	SW 5030B	
240-17778-25	W-121113-NE-25	Total	Water	SW 5030B	
240-17778-26	W-121114-NE-26	Total	Water	SW 5030B	
240-17778-27	W-121114-NE-27	Total	Water	SW 5030B	
240-17778-28	W-121114-NE-28	Total	Water	SW 5030B	
240-17778-29	W-121114-NE-29	Total	Water	SW 5030B	
240-17778-31	W-121114-NE-31	Total	Water	SW 5030B	

### Prep Batch: 12K1246\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-17778-1	W-121113-NE-01	Total	Water	Default Prep VOC	
240-17778-2	W-121113-NE-02	Total	Water	Default Prep VOC	
240-17778-3	W-121113-NE-03	Total	Water	Default Prep VOC	
240-17778-4	W-121113-NE-04	Total	Water	Default Prep VOC	
240-17778-5	W-121113-NE-05	Total	Water	Default Prep VOC	

TestAmerica Canton

# QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

## GCMS Volatiles (Continued)

### Prep Batch: 12K1246\_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-17778-6	W-121113-NE-06	Total	Water	Default Prep VOC	
240-17778-7	W-121113-NE-07	Total	Water	Default Prep VOC	
240-17778-8	W-121113-NE-08	Total	Water	Default Prep VOC	
240-17778-9	W-121113-NE-09	Total	Water	Default Prep VOC	
240-17778-10	W-121113-NE-10	Total	Water	Default Prep VOC	
240-17778-11	W-121113-NE-11	Total	Water	Default Prep VOC	
240-17778-12	W-121113-NE-12	Total	Water	Default Prep VOC	
240-17778-13	W-121113-NE-13	Total	Water	Default Prep VOC	
240-17778-14	W-121113-NE-14	Total	Water	Default Prep VOC	
240-17778-15	W-121113-NE-15	Total	Water	Default Prep VOC	
240-17778-16	W-121113-NE-16	Total	Water	Default Prep VOC	
240-17778-17	W-121113-NE-17	Total	Water	Default Prep VOC	
240-17778-18	W-121113-NE-18	Total	Water	Default Prep VOC	
240-17778-19	W-121113-NE-19	Total	Water	Default Prep VOC	
240-17778-20	W-121113-NE-20	Total	Water	Default Prep VOC	
240-17778-21	W-121113-NE-21	Total	Water	Default Prep VOC	
240-17778-22	W-121113-NE-22	Total	Water	Default Prep VOC	
240-17778-23	W-121113-NE-23	Total	Water	Default Prep VOC	
240-17778-24	W-121113-NE-24	Total	Water	Default Prep VOC	
240-17778-25	W-121113-NE-25	Total	Water	Default Prep VOC	
240-17778-26	W-121114-NE-26	Total	Water	Default Prep VOC	
240-17778-27	W-121114-NE-27	Total	Water	Default Prep VOC	
240-17778-28	W-121114-NE-28	Total	Water	Default Prep VOC	
240-17778-29	W-121114-NE-29	Total	Water	Default Prep VOC	
240-17778-30	W-121114-NE-30	Total	Water	Default Prep VOC	
240-17778-31	W-121114-NE-31	Total	Water	Default Prep VOC	
240-17778-32	TRIP BLANKS	Total	Water	Default Prep VOC	

TestAmerica Canton

## QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### GCMS Volatiles (Continued)

#### Prep Batch: 12K1266\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
12K1266-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
12K1266-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
12K1266-BSD1	Lab Control Sample Dup	Total	Water - NonPotable	SW 5030B	
240-17778-16	W-121113-NE-16	Total	Water	SW 5030B	
240-17778-21	W-121113-NE-21	Total	Water	SW 5030B	
240-17778-22	W-121113-NE-22	Total	Water	SW 5030B	
240-17778-30	W-121114-NE-30	Total	Water	SW 5030B	
240-17778-32	TRIP BLANKS	Total	Water	SW 5030B	

#### Analysis Batch: 12K1220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-17778-21	W-121113-NE-21	Total	Water	SW 8260B	

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-01**

**Lab Sample ID: 240-17778-1**

Date Collected: 11/13/12 07:47

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 12:37	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-02**

**Lab Sample ID: 240-17778-2**

Date Collected: 11/13/12 08:40

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 13:02	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-03**

**Lab Sample ID: 240-17778-3**

Date Collected: 11/13/12 08:42

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 13:27	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-04**

**Lab Sample ID: 240-17778-4**

Date Collected: 11/13/12 09:15

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 13:52	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-05**

**Lab Sample ID: 240-17778-5**

Date Collected: 11/13/12 09:28

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 14:17	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-05**

**Lab Sample ID: 240-17778-5**

Date Collected: 11/13/12 09:28

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-06**

**Lab Sample ID: 240-17778-6**

Date Collected: 11/13/12 10:03

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 14:42	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-07**

**Lab Sample ID: 240-17778-7**

Date Collected: 11/13/12 08:48

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 15:07	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-08**

**Lab Sample ID: 240-17778-8**

Date Collected: 11/13/12 09:10

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 15:32	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-09**

**Lab Sample ID: 240-17778-9**

Date Collected: 11/13/12 09:42

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 15:58	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

TestAmerica Canton



# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-10**

**Lab Sample ID: 240-17778-10**

Date Collected: 11/13/12 10:02

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 16:23	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-11**

**Lab Sample ID: 240-17778-11**

Date Collected: 11/13/12 11:30

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 16:48	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-12**

**Lab Sample ID: 240-17778-12**

Date Collected: 11/13/12 12:08

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 17:13	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-13**

**Lab Sample ID: 240-17778-13**

Date Collected: 11/13/12 10:39

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 17:38	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-14**

**Lab Sample ID: 240-17778-14**

Date Collected: 11/13/12 11:11

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 18:03	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-14**

**Lab Sample ID: 240-17778-14**

Date Collected: 11/13/12 11:11

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-15**

**Lab Sample ID: 240-17778-15**

Date Collected: 11/13/12 13:39

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 18:28	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-16**

**Lab Sample ID: 240-17778-16**

Date Collected: 11/13/12 14:44

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1266_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1266	11/27/12 12:47	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-17**

**Lab Sample ID: 240-17778-17**

Date Collected: 11/13/12 16:17

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 12:11	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-18**

**Lab Sample ID: 240-17778-18**

Date Collected: 11/13/12 16:56

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 19:18	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-19**

**Lab Sample ID: 240-17778-19**

Date Collected: 11/13/12 14:28

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 19:43	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-20**

**Lab Sample ID: 240-17778-20**

Date Collected: 11/13/12 14:29

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1219_P	11/26/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1219	11/26/12 20:08	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-21**

**Lab Sample ID: 240-17778-21**

Date Collected: 11/13/12 15:09

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1266_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1266	11/27/12 13:12	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/26/12 23:27		TAL CF

**Client Sample ID: W-121113-NE-22**

**Lab Sample ID: 240-17778-22**

Date Collected: 11/13/12 18:10

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1266_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1266	11/27/12 13:37	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-23**

**Lab Sample ID: 240-17778-23**

Date Collected: 11/13/12 18:11

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 01:32	SJN	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: W-121113-NE-23**

**Lab Sample ID: 240-17778-23**

Date Collected: 11/13/12 18:11

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-24**

**Lab Sample ID: 240-17778-24**

Date Collected: 11/13/12 16:25

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 01:56	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121113-NE-25**

**Lab Sample ID: 240-17778-25**

Date Collected: 11/13/12 16:44

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 02:21	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121114-NE-26**

**Lab Sample ID: 240-17778-26**

Date Collected: 11/14/12 08:20

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 02:46	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Client Sample ID: W-121114-NE-27**

**Lab Sample ID: 240-17778-27**

Date Collected: 11/14/12 09:27

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 03:11	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

Client Sample ID: W-121114-NE-28

Lab Sample ID: 240-17778-28

Date Collected: 11/14/12 11:05

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 03:35	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

Client Sample ID: W-121114-NE-29

Lab Sample ID: 240-17778-29

Date Collected: 11/14/12 12:22

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 04:00	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

Client Sample ID: W-121114-NE-30

Lab Sample ID: 240-17778-30

Date Collected: 11/14/12 09:00

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1266_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1266	11/27/12 14:03	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

Client Sample ID: W-121114-NE-31

Lab Sample ID: 240-17778-31

Date Collected: 11/14/12 14:02

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1220_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1220	11/27/12 04:49	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

Client Sample ID: TRIP BLANKS

Lab Sample ID: 240-17778-32

Date Collected: 11/13/12 00:00

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	12K1266_P	11/27/12 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	12K1266	11/27/12 14:28	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	12K1246_P	11/27/12 16:19	TCH	TAL CF

TestAmerica Canton

# Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

**Client Sample ID: TRIP BLANKS**

**Lab Sample ID: 240-17778-32**

Date Collected: 11/13/12 00:00

Matrix: Water

Date Received: 11/17/12 09:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Analysis	SW 9041A		1.00	12K1246	11/27/12 16:25	TCH	TAL CF

**Laboratory References:**

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

## Certification Summary

Client: Conestoga-Rovers & Associates, Inc.  
Project/Site: 3978, Wausau

TestAmerica Job ID: 240-17778-1

### 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	NELAC	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAC	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAC	5	200004	07-31-13
Kansas	NELAC	7	E-10336	01-31-13
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	02-28-13
Minnesota	NELAC	5	039-999-348	12-31-12
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAC	2	OH001	06-30-13
New York	NELAC	2	10975	04-01-13
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAC	3	68-00340	08-31-13
Texas	NELAC	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAC	3	460175	09-14-13
Washington	State Program	10	C971	01-12-13
West Virginia DEP	State Program	3	210	12-31-12
Wisconsin	State Program	5	999518190	08-31-13

### Laboratory: TestAmerica Cedar Falls

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

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA - LAP	IHLAP		101044	11-01-14
Illinois	NELAC	5	200024	11-29-12
Iowa	State Program	7	7	12-01-13
Kansas	NELAC	7	E-10341	01-31-13
Minnesota	NELAC	5	019-999-319	12-31-13
North Dakota	State Program	8	R-186	09-29-13
Oregon	NELAC	10	IA100001	09-29-13
Wisconsin	State Program	5	999917270	08-31-13





# CHAIN OF CUSTODY RECORD

<b>CONESTOGA-ROVERS &amp; ASSOCIATES</b> <u>St. Paul MN</u> <u>651 639 0913</u>			SHIPPED TO (Laboratory Name): <u>TA. N. Canton</u>			REFERENCE NUMBER: <u>3978</u>		
SAMPLER'S SIGNATURE: <u>[Signature]</u>			PRINTED NAME: <u>Nick Evans</u>			REMARKS <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">                     Please contact                      Grant Anderson                      w/ any questions                      @ 651 639 0913                 </div>		
SEQ. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers			
	11/3/12	1656	W-121113-NE-18	H <sub>2</sub> O	3	X		
		1428	19		3	X		
		1429	20		3	X		
		1509	21 MS/MSD		3	X		
		1810	22		3	X		
		1811	23		3	X		
		1625	24		3	X		
		1644	25		3	X		
	11/14/12	820	W-121114-NE-26		3	X		
		927	27		3	X		
		1105	28		3	X		
		1222	29		3	X		
		900	30		3	X		
		1402	31		3	X		
	-	-	Tap Blanks		2	X		
TOTAL NUMBER OF CONTAINERS					HEALTH/CHEMICAL HAZARDS			
RELINQUISHED BY: <u>[Signature]</u>			DATE: <u>11/16/12</u>		RECEIVED BY:		DATE:	
①			TIME: <u>1600</u>		①		TIME:	
RELINQUISHED BY:			DATE:		RECEIVED BY:		DATE:	
②			TIME:		②		TIME:	
RELINQUISHED BY:			DATE:		RECEIVED BY:		DATE:	
③			TIME:		③		TIME:	
METHOD OF SHIPMENT: <u>FedEx priority overnight Sat Delivery</u>					WAY BILL No.			
White — Fully Executed Copy Yellow — Receiving Laboratory Copy Pink — Shipper Copy Goldenrod — Sampler Copy			SAMPLE TEAM: <u>NEvans</u> <u>N. Condy</u>		RECEIVED FOR LABORATORY BY: <u>[Signature]</u> <b>Nº CRA 22353</b> DATE: <u>11/17/12</u> TIME: <u>0940</u>			

## TestAmerica Canton Sample Receipt Form/Narrative

Login # : 17778

Client CRASite Name 003978By: Lance Hudson

(Signature)

Cooler Received on 11/17/12Opened on 11-19-12FedEx: 1<sup>st</sup> Grd ☒ Exp ☐ UPS ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other \_\_\_\_\_TestAmerica Cooler # K879 Foam Box ☐ Client Cooler ☐ Box ☐ Other \_\_\_\_\_Packing material used: Bubble Wrap ☐ Foam ☐ Plastic Bag ☐ None ☐ Other \_\_\_\_\_COOLANT: Wet Ice ☐ Blue Ice ☐ Dry Ice ☐ Water ☐ None

## 1. Cooler temperature upon receipt

IR GUN# 1 (CF -2 °C) Observed Sample Temp. \_\_\_\_\_ °C Corrected Sample Temp. \_\_\_\_\_ °C

IR GUN# 4G (CF 0 °C) Observed Sample Temp. \_\_\_\_\_ °C Corrected Sample Temp. \_\_\_\_\_ °C

IR GUN# 5G (CF 0 °C) Observed Sample Temp. \_\_\_\_\_ °C Corrected Sample Temp. \_\_\_\_\_ °C

IR GUN# 8 (CF 0 °C) Observed Sample Temp. 1.2 °C Corrected Sample Temp. 1.2 °C☐ Multiple  
on Back2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 ☒ 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 ☐ No3. Shippers' packing slip attached to the cooler(s)? ☒ Yes ☐ No4. Did custody papers accompany the sample(s)? ☒ Yes ☐ No5. Were the custody papers relinquished & signed in the appropriate place? ☒ Yes ☐ No6. Did all bottles arrive in good condition (Unbroken)? ☒ Yes ☐ No7. Could all bottle labels be reconciled with the COC? ☒ Yes ☐ No8. Were correct bottle(s) used for the test(s) indicated? ☒ Yes ☐ No9. Sufficient quantity received to perform indicated analyses? ☒ Yes ☐ No10. Were sample(s) at the correct pH upon receipt? ☒ Yes ☐ No ☒ NA11. Were VOAs on the COC? ☒ Yes ☐ No12. Were air bubbles >6 mm in any VOA vials? ☒ Yes ☐ No ☒ NA13. 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 &amp; SAMPLE DISCREPANCIES

## 15. SAMPLE CONDITION

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

Sample(s) \_\_\_\_\_ were received in a broken container.

Sample(s) \_\_\_\_\_ were received with bubble &gt;6 mm in diameter. (Notify PM)

## 16. SAMPLE PRESERVATION

Sample(s) \_\_\_\_\_ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 031512-HNO<sub>3</sub>; Sulfuric Acid Lot# 041911-H<sub>2</sub>SO<sub>4</sub>; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH<sub>3</sub>COO)<sub>2</sub>ZN/NaOH. What time was preservative added to sample(s)? \_\_\_\_\_

[illegible]



**CONESTOGA-ROVERS  
& ASSOCIATES**

1801 Old Highway 8 NW, Suite #114  
St. Paul, Minnesota 55112  
Telephone: (651) 639-0913 Fax: (651) 639-0923  
www.CRAworld.com


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## MEMORANDUM

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TO: Chuck Ahrens, CRA

REF. NO.: 003978

FROM: Ruth Mickle/sb/2 

DATE: January 15, 2013

RE: Analytical Results and QA/QC Verification  
Groundwater Sampling Program  
Wausau Superfund Site  
Wausau, Wisconsin  
November 2012

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### INTRODUCTION

Monitoring well water samples were collected in support of the groundwater monitoring program at the Wausau Superfund Site during November 13-14, 2012. Samples were submitted to TestAmerica Laboratories, Inc. (TestAmerica) located in Canton, Ohio for Site list volatile organic compound (VOC) analyses. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2.

Standard CRA report deliverables were reported by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, laboratory control samples (LCS), and matrix spikes; and field QA/QC samples. The QA/QC criteria by which the data have been assessed are outlined in the respective method and the following documents:

- i) "Remedial Design/Remedial Action Quality Assurance Project Plan (QAPP), Wausau Superfund Site"; November 1995, Conestoga-Rovers & Associates, Report 7.
- ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999, United States Environmental Protection Agency (USEPA) 540/R 99/008.
- iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," February 1994, USEPA 540/R 94/013.

Items ii) and iii) will subsequently be referred to as the "Guidelines".

### SAMPLE HOLDING TIME AND PRESERVATION

The sample holding time criteria for the analyses are summarized in Table 2. Sample chain of custody documents and the analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All shipped samples were properly preserved and delivered on ice and stored by the laboratory at the required temperature (0-6°C).

#### **LABORATORY METHOD BLANK ANALYSES**

The purpose of assessing the results of laboratory method blank analyses is to determine the existence and magnitude of sample contamination introduced during analysis. Laboratory method blanks are prepared from a certified analyte-free matrix and analyzed with the samples.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per analytical batch. All VOC method blank results were non-detect.

#### **SURROGATE SPIKE RECOVERIES**

In accordance with the methods employed, all samples, blanks, and QA/QC samples analyzed for VOCs are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of individual sample matrices on analytical efficiency.

All surrogate recoveries were acceptable, indicating good analytical efficiency.

#### **LABORATORY CONTROL SAMPLE ANALYSES**

LCS analyses serve as a monitor of the overall performance of all steps in the analysis, including the sample preparation. LCS were analyzed using the same sample preparation, analytical methods, and QA/QC procedures employed for the investigative samples. The laboratory established the organic LCS control limits internally.

All LCS recoveries were within the established control limits, indicating acceptable overall laboratory performance.

#### **MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES**

To evaluate the effects of sample matrices on the preparation, measurement procedures, and accuracy of a particular analysis, samples are spiked in duplicate 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. The laboratory established the organic MS/MSD control limits internally.

MS/MSD analyses were performed as specified in Table 1.

All recoveries and RPDs were acceptable, demonstrating good analytical accuracy and precision.

## FIELD QA/QC

The field QA/QC samples consisted of one trip blank, two field blanks, one rinsate blank and three field duplicate sample sets.

### Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was collected and submitted to the laboratory for VOC analysis. The trip blank was non-detect with the exception of a low concentration of methylene chloride. All associated sample results were non-detect and were not impacted by the indicated contamination.

### Field Blank Sample Analysis

To assess ambient conditions at the site, two field blanks were submitted for analysis, as identified in Table 1. All results were non-detect for the compounds of interest.

### Rinsate Blank Sample Analysis

To assess sampling conditions at the site, one rinsate blank was submitted for analysis, as identified in Table 1. All results were non-detect for the compounds of interest.

### Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, 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 RL, the evaluation criteria is one times the RL value for water samples.

The field duplicate results were within acceptable agreement, demonstrating good sampling and analytical precision.

## ANALYTE REPORTING

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the practical quantitation limit (PQL) but greater than the method detection limit (MDL) were qualified as estimated (J) unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the PQL.

## CONCLUSION

Based on this assessment, the data produced by TA were found to exhibit acceptable levels of accuracy and precision based on the provided information and may be used without qualification.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY  
GROUNDWATER SAMPLING - NOVEMBER 13 & 14, 2012  
WAUSAU SUPERFUND SITE  
WAUSAU, WISCONSIN

Sample Identification	Location	Matrix	QC Samples	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/ Parameters
						VOC
TA Lot #240-17778-1						
TRIP BLANKS	Lab	water		11/13/2012	11/13/2012	x
W-121113-NE-01	CW3	water		11/13/2012	7:47:00 AM	x
W-121113-NE-02	E24AR	water		11/13/2012	8:40:00 AM	x
W-121113-NE-03	E24AR	water	DUP(-02)	11/13/2012	8:42:00 AM	x
W-121113-NE-04	MW10A	water		11/13/2012	9:15:00 AM	x
W-121113-NE-05	MW10B	water		11/13/2012	9:28:00 AM	x
W-121113-NE-06	WW4	water		11/13/2012	10:03:00 AM	x
W-121113-NE-07	FVD5	water		11/13/2012	8:48:00 AM	x
W-121113-NE-08	E22A	water		11/13/2012	9:10:00 AM	x
W-121113-NE-09	E37A	water		11/13/2012	9:42:00 AM	x
W-121113-NE-10	E23A	water		11/13/2012	10:02:00 AM	x
W-121113-NE-11	WC3B	water	Field Blank	11/13/2012	11:30:00 AM	x
W-121113-NE-12	WC3B	water		11/13/2012	12:08:00 PM	x
W-121113-NE-13	WW6	water		11/13/2012	10:39:00 AM	x
W-121113-NE-14	WC5A	water		11/13/2012	11:11:00 AM	x
W-121113-NE-15	W53A	water		11/13/2012	1:39:00 PM	x
W-121113-NE-16	W54	water		11/13/2012	2:44:00 PM	x
W-121113-NE-17	R4D	water	MS/MSD	11/13/2012	4:17:00 PM	x
W-121113-NE-18	C2S	water		11/13/2012	4:56:00 PM	x
W-121113-NE-19	R3D	water		11/13/2012	2:28:00 PM	x
W-121113-NE-20	R3D	water	DUP(-19)	11/13/2012	2:29:00 PM	x
W-121113-NE-21	C4S	water	MS/MSD	11/13/2012	3:09:00 PM	x
W-121113-NE-22	W52	water		11/13/2012	6:10:00 PM	x
W-121113-NE-23	W52	water	DUP(-22)	11/13/2012	6:11:00 PM	x
W-121113-NE-24	W56	water	Rinsate Blank	11/13/2012	4:25:00 PM	x
W-121113-NE-25	W56	water		11/13/2012	4:44:00 PM	x
W-121114-NE-26	R2D	water	Field Blank	11/14/2012	8:20:00 AM	x
W-121114-NE-27	R2D	water		11/14/2012	9:27:00 AM	x
W-121114-NE-28	WSWD	water		11/14/2012	11:05:00 AM	x
W-121114-NE-29	W55	water		11/14/2012	12:22:00 PM	x
W-121114-NE-30	CW6	water		11/14/2012	9:00:00 AM	x
W-121114-NE-31	MW1A	water		11/14/2012	2:02:00 PM	x

## Notes:

DUP-Field Duplicate Sample of sample in parenthesis  
MS/MSD-Matrix Spike/Matrix Spike Duplicate  
QC-Quality Control  
VOC - Volatile Organic Compounds

TABLE 2

SUMMARY OF ANALYTICAL METHOD, HOLDING TIME PERIOD, AND PRESERVATIVES  
GROUNDWATER SAMPLING - NOVEMBER 13 & 14, 2012  
WAUSAU SUPERFUND SITE  
WAUSAU, WISCONSIN

<i>Parameter</i>	<i>Method</i> <sup>1</sup>	<i>Matrix</i>	<i>Holding Time</i>	<i>Preservation</i>
VOC	SW8260B	water	- 14 days from sample collection to completion of analysis	pH<2, Iced, 4 ± 2° C

Notes:

<sup>1</sup> Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 3rd Edition, and Promulgated updates, November 19:  
VOC - Volatile Organic Compounds



APPENDIX C

WAUSAU CHEMICAL PAVEMENT INSPECTION REPORT

TABLE 1

PAVEMENT BARRIER INSPECTION LOG  
WAUSAU CHEMICAL CORP.

<i>Inspection Date</i>	<i>Inspector</i>	<i>Condition of Cap</i>	<i>Recommendations</i>	<i>Have Recommendations From Previous Inspection Been Implemented?</i>
7/2/2012	Rob Flashinski	Overall condition is very good. Recent work by the gas company has been patched thoroughly. All existing cracks have been filled.	None	None existed.