

SEMI-ANNUAL DATA SUMMARY REPORT

NIAGARA COUNTY REFUSE DISTRICT SITE

Wheatfield, Niagara County, New York

(NYSDEC Site No. 9-32-026)

SUBMITTED TO:



**UNITED STATES
ENVIRONMENTAL PROTECTION
AGENCY**



**NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**

SUBMITTED FOR:

**NIAGARA COUNTY REFUSE DISTRICT
AND PRP GROUP**

PREPARED BY:

PARSONS

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July 2015

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PARSONS

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SECTION 1

INTRODUCTION

The Niagara County Refuse Site Potentially Responsible Parties (PRP) Group completed a remedial action at the Niagara County Refuse Site (Site), Wheatfield, New York in 2000. The remedial action was conducted in accordance with the United States Environmental Protection Agency (USEPA) Record of Decision (USEPA, 1993) and the United States District Court Consent Decree (USEPA, 1995). The PRP Group is currently performing operations, maintenance, and monitoring (OM&M) in accordance with the USEPA-approved OM&M Manual (CRA, 2000), and subsequent approved modifications. This data report summarizes the second quarter monitoring activities conducted from April through June 2015.

1.1 PROCEDURES

1.1.1 Effluent Sampling

The current Industrial Wastewater Discharge Permit (Appendix A) was issued by the City of North Tonawanda, and is effective from March 31, 2013 through April 1, 2016. The current permit has a reduced analytical parameter list compared to the original permit, and a semi-annual sampling frequency. Prior to March 2007, samples were collected monthly. During the current reporting period (April through June 2015), an effluent sample was collected on April 16. Effluent samples are collected from Wet Well A, which receives water from the leachate collection system surrounding the landfill. Composite 24-hour samples are collected from Wet Well A using an automated sampler. The next effluent sample is scheduled to be collected in October 2015.

1.1.2 Groundwater Sampling

Samples were collected from wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S in April 2015. These four wells are screened in the shallow overburden soil. Groundwater sampling on an annual schedule commenced in 2006. As approved in discussions with the USEPA, the dedicated bladder pumps used to purge and sample the wells in the past were replaced with dedicated disposable HDPE bailers.

Each groundwater monitoring well was purged prior to sample collection using a dedicated disposable HDPE bailer. Each of the wells was bailed dry the day prior to sampling. Water quality parameters including pH, temperature, conductivity, and turbidity of the purge water were periodically measured and recorded. Purge water was placed in an onsite wet-well. Wet well water is discharged to the City of North Tonawanda publicly owned treatment works (POTW). The dedicated disposable bailer was also used to collect the groundwater samples.

Since 2006, volatile organic compounds (VOC) and semi-volatile organic compound (SVOC) samples have been collected every other year and metals samples have been

collected annually. In April 2015, in accordance with this schedule, groundwater samples were collected and analyzed for:

- Volatile organics using EPA method 8260;
- Semivolatile organics using EPA method 8270;
- Mercury using EPA method 245.1 and method SW-7470; and
- Inorganics using EPA method 200.7 and method SW-6010.

Both total and dissolved analyses were completed for all inorganics. The groundwater samples were analyzed by TestAmerica Laboratories of Amherst, New York. A chain-of-custody (COC) accompanied the sample bottles from the laboratory, to the field, and back to the laboratory.

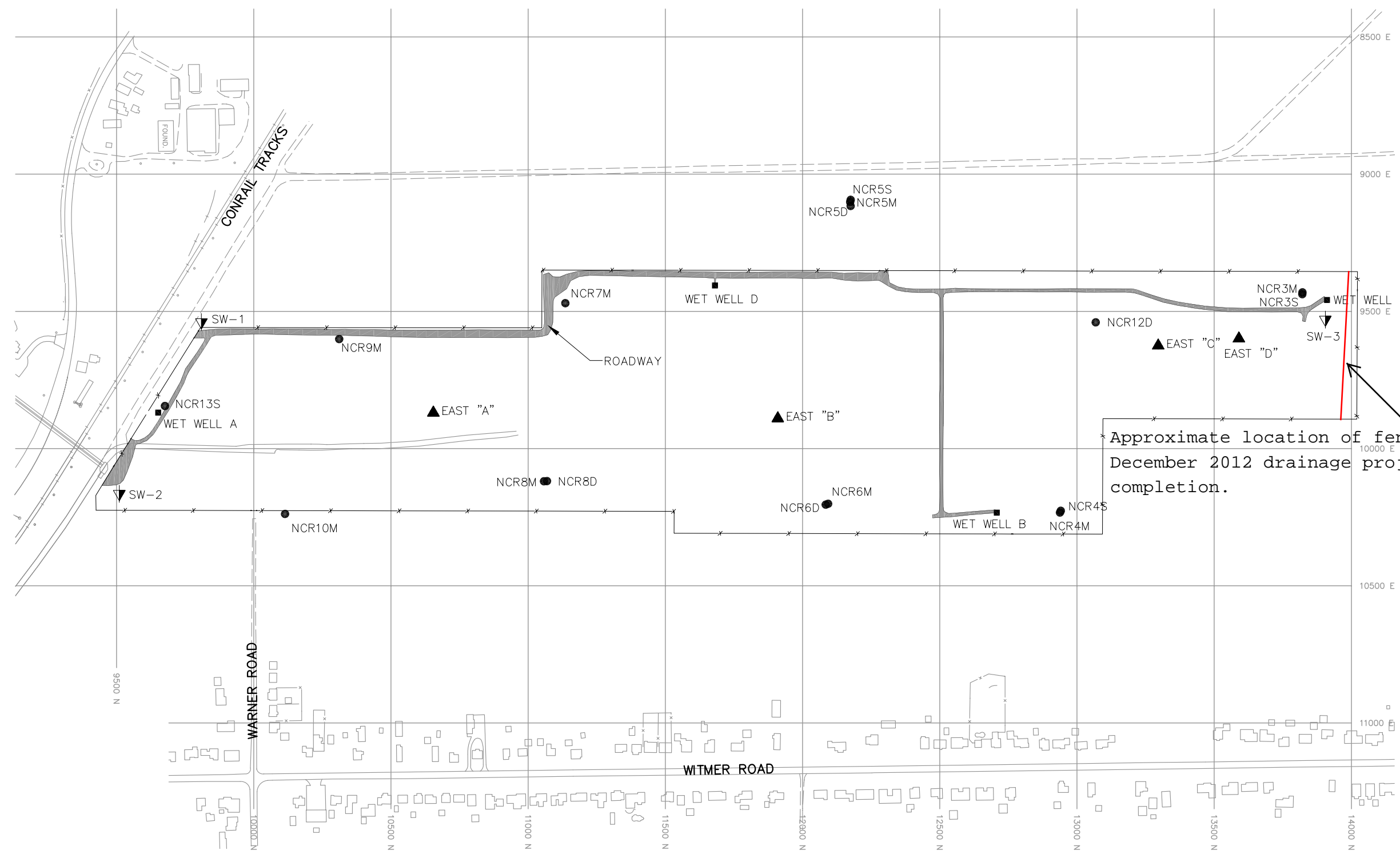
As noted in previous reports, due to slow recovery times and low water levels in the wells to be sampled after purging, collection of the required groundwater volume for all groundwater and quality assurance samples is often not possible. During the April 2015 sampling event, however, each of the wells contained adequate water for sampling to be completed.

1.1.3 Water Level Measurements

Water levels were measured during monthly Site inspections in April, May, and June 2015. Water levels were measured from four observation well locations (Piezometers East A, East B, East C, and East D), four effluent monitoring locations (Wet Wells A, B, C, and D), and four monitoring well locations (NCR-3S, NCR-4S, NCR-5S, and NCR-13S). The water levels were measured with an electronic water level indicator, and reported as an elevation above mean sea level. Figure 1.1 shows the locations of the water level monitoring points.

1.1.4 Site Inspections

Monthly Site inspections were conducted on April 10, May 13, and June 2, 2015. During the Site inspections, the manholes, wet wells, landfill cap, wetlands, perimeter fence, drainage ditches, swale outlets, culverts, gas vents, and monitoring wells were each visually inspected.



Approximate location of fence after
December 2012 drainage project
completion.

LEGEND

- ▲ EAST "A" WATER LEVEL MONITORING WELL LOCATION
- ▼ SW-2 SURFACE WATER MONITORING LOCATION
- WET WELL A EFFLUENT MONITORING LOCATION
- NCR13S GROUNDWATER QUALITY MONITORING LOCATION

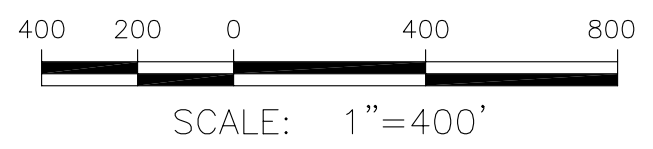


FIGURE 1.1
NIAGARA COUNTY REFUSE SITE WHEATFIELD, NEW YORK
SITE PLAN
PARSONS
180 LAWRENCE BELL DRIVE, SUITE 104, WILLIAMSVILLE, N.Y. 14221, PHONE: 716-633-7074

SECTION 2

RESULTS

This section describes the results of the second quarter OM&M activities conducted from April through June 2015. Activities during this quarter included water level measurements, monthly Site inspections, groundwater sampling, effluent sampling, clearing the entrance roadway, repairs to the perimeter fence, and the repair of a wet well float.

2.1 EFFLUENT SAMPLES

One effluent sample was collected during the reporting period (April 16, 2015). The effluent sample was collected by O&M Enterprises, and analyzed by the City of North Tonawanda. The analytical results are used by the City to confirm that the effluent received from the Site meets the criteria for acceptance by the City treatment system. These data are not presented in the quarterly or semi-annual monitoring reports, but will be summarized in the 2015 annual monitoring report. The current City of North Tonawanda Industrial Wastewater Discharge Permit (March 31, 2013 through April 1, 2016) and chain-of-custody for the April 2015 sampling event have been included in Appendix A. The next effluent sample is scheduled to be collected in October 2015.

2.2 GROUNDWATER ANALYTICAL RESULTS

Analytical results for the sampling event during this reporting period are summarized in Table 2.1. The results were compared to NYSDEC ambient water quality standards (AWQS), NYSDOH maximum contaminant levels (MCLs), and USEPA MCLs (see Table 2.1). The groundwater samples collected during this reporting period were analyzed for VOCs, SVOCs, and total and dissolved metals.

The analytical results received from the laboratory are presented in Appendix B, along with the COC. A Sample Collection Data Sheet, which includes purge volumes, sample date, time, description, required analyses, and the COC number for each well, is included in Appendix B. This sheet also indicates which well was used to collect the matrix spike (MS) and the matrix spike duplicate (MSD). Well purging information, including pH, conductivity, turbidity, odor, comments, and well volumes, is also provided in Appendix B.

April 2015 Event

Monitoring wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S were sampled on April 24, 2015. The locations of the monitoring wells are provided in Figure 1.1. The data validation report is presented in Appendix C.

No volatile organic compounds were detected. One semivolatile organic compound and 14 metals were identified in one or more of the groundwater samples. Five of the detected metals exceeded either the NYSDEC AWQS, NYSDOH MCLs, or USEPA MCLs (screening criteria), which is consistent with previous sampling events. In general, the detected values are consistent with ranges observed in previous sampling events. Plots of selected total metals concentrations over time are presented in Figures 2.1A through Figure 2.1J. Key results are summarized below.

- Di-n-butyl phthalate was detected at less than 0.5 ug/L in each of the four samples. The NYSDEC AWQS and NYSDOH MCL for di-n-butyl phthalate is 50 ug/L.
- Total aluminum exceeded the NYSDEC AWQS in three of the four samples. Historically, total aluminum has been above the NYSDEC AWQS. Dissolved aluminum was below the analytical detection limits in each of the samples.
- Total copper was identified in each of the samples and was above the NYSDEC AWQS in three of the samples (NCR-3S, NCR-5S, and NCR-13S). Typically, total copper has exceeded the NYSDEC AWQS in two or more of the groundwater samples. Dissolved copper was detected in two of the four samples at concentrations below the NYSDEC AWQS.
- Total iron was identified in each of the samples but only exceeded both the AWQS and the NYSDOH MCL in the sample from NCR-4S. The Record of Decision (ROD) (USEPA, 1993) identifies iron as typically exceeding MCLs in the regional groundwater. Dissolved iron was not detected in any of the samples.
- Total and dissolved magnesium were identified in each of the four samples and exceeded the AWQS guidance value (not a standard) in each of the samples. Historically, total magnesium has exceeded the AWQS guidance value.
- Total and dissolved sodium were found above the NYSDEC AWQS, the NYSDOH MCL, and USEPA MCL in one of the four samples (NCR-4S). The ROD identifies sodium as typically exceeding MCLs in the regional groundwater.
- In general, the dissolved metals results were lower concentration with fewer exceedances than the respective total metals results.

Groundwater analytical results were reviewed and validated by Parsons for usability (see Appendix C for the complete report). The laboratory data packages were found to be of good overall quality. Groundwater samples were collected, properly preserved, shipped under a COC record, and received at the laboratory within one day of sampling. The analytical results are considered compliant and usable. A summary of the data validation report is provided below:

All volatile organic data was considered compliant and acceptable in accordance with the validation. While all semivolatile sample results were considered usable following data validation, several items were found to be noncompliant:

- Surrogate recoveries – All sample surrogate recoveries were considered acceptable and within QC limits with the exception of the low surrogate recovery for p-terphenyl-d14 (QC limit 67-150%R) in NCR-4S (57%R). Validation qualification of this sample was not required.
- MS/MSD precision and accuracy – All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits with the exception of the low MS/MSD accuracy results for bis(2-ethylhexyl)phthalate during the spiked analyses of parent sample NCR-5S. Validation qualification of this sample was not required.
- LCS recoveries – All LCS recoveries were considered acceptable and within QC limits with the exception of the high LCS recoveries for 3-nitroaniline and 3,3'-dichlorobenzidine associated with all samples. Validation qualification of these samples was not required since the compounds were not detected.
- Blank contamination – The laboratory method blank associated with all samples contained benzaldehyde and butylbenzylphthalate less than the reporting limits. Therefore, results for these compounds less than validation action concentrations were considered not detected and qualified “U” for the affected samples.
- Continuing calibrations – All continuing calibration compounds were considered acceptable with relative response factors (RRFs) greater than 0.05 and percent differences (%Ds) within +/-20% with the exception of benzaldehyde (-43.8%D) in the continuing calibration associated with all samples. Therefore, sample results for this compound which were nondetects were considered estimated and qualified “UJ”.

While all metals sample results were considered usable following data validation, several items were found to be noncompliant:

- Blank contamination – The laboratory preparation blank contained total copper, total manganese, total zinc, dissolved manganese, dissolved potassium, dissolved sodium, and dissolved zinc below reporting limits. Validation qualification of the sample results was not required since samples were not affected by the contamination in this blank.

- Matrix spike recoveries – all matrix spike recoveries were considered acceptable and within the 75 – 125%R QC limit for all analytes with the exception of the high matrix spike recoveries for total aluminum, total iron, total manganese, total sodium, and dissolved sodium associated with sample NCR-5S. Therefore, positive results for these analytes were considered estimated, possibly bias high, and qualified “J+” for this sample.
- Serial dilutions – All serial dilution results were considered acceptable with %D less than 10% with the exception of total barium, total calcium, total iron, total magnesium, total manganese, and total sodium associated with sample NCR-5S. Therefore, the results for these analytes were considered estimated and qualified “J” for this sample.

2.3 WATER LEVELS

Results of water level measurements collected during this reporting period are presented in Appendix D. Water levels were collected from the monitoring locations on April 10, May 13, and June 2, 2015. Water levels in the monitoring wells generally decreased over the reporting quarter. Measured water levels were consistent with the levels observed in previous years between April and June. In June, the piezometer East B appeared to have collapsed and a water level could not be collected. Also in June, a thick oil-like substance was identified in the piezometer East D floating on the water in the well.

2.4 SITE INSPECTIONS

A summary of the Site inspection findings is included in Table 2.2. Copies of the Site Inspection Logs have been included in Appendix E.

Each of the inspections found the manholes and wet wells to be in good condition. Water levels were measured in the wet wells during the inspections and recorded on the water level record forms.

Examination of the landfill cap vegetative cover included checking for erosion, bare areas, wash-outs, leachate seeps, height of vegetation, and assessing the condition of the vegetation. No surface erosion or leachate seeps were noted. The grass covering on the landfill was noted as in a condition typical for early spring during the April inspection, short in April and May, and tall in June

Additionally, the access roads were examined for erosion, potholes/puddles, and obstructions. All aspects of the access roads that were examined were deemed acceptable.

The wetlands were visually examined to assess the condition of the vegetation, change in water levels, and to observe general conditions. Wetland vegetation was noted to be normal for early spring conditions during the April and May inspections, and good during the June inspection. The wetland water level was noted as high during the April inspection, low during the May inspection, and normal during the June inspection. The

general condition of the wetlands was noted as good during each of the three site inspections.

All other parts of the landfill system which were examined, including the drainage ditches, swale outlets, culverts, and gas vents, were found to be in acceptable condition during the reporting period.

2.5 MAINTENANCE

Scheduled maintenance during the reporting period included mowing paths to the wells and along the perimeter fence, repairing the perimeter fence, pulling the wet well pumps for cleaning and testing, and testing wet well floats and the autodialer. Scheduled maintenance during the reporting period was completed as follows:

- On May 8, a hole in the perimeter fence was repaired on the east side of the site.
- On June 5, the wet well pumps were pulled, cleaned, tested with a volt meter, and re-installed.
- On June 8, the floats, alarm lights, and autodialer system were checked for proper operation.
- On June 10, the perimeter of the site was mowed along the perimeter fence, and paths to wet wells and monitoring wells were mowed.

Unscheduled maintenance during the reporting period was completed as follows:

- On April 10, a tree limb that had fallen and was blocking the access road to the site was removed.
- On May 13, a faulty float switch was identified in Wet Well B and was replaced.
- Copies of the Maintenance Record Logs have been included in Appendix F.

No major repairs were required during the reporting period.

2.6 OM&M OVERSIGHT

Parsons' Quality Assurance (QA) work included periodic oversight of OM&M activities by O&M Enterprises, Inc., review of monthly inspection and monitoring data, and periodic communications with O&M Enterprises. Upon completion of work performed by O&M Enterprises, routine activity report forms were completed. Parsons reviewed the report forms for completeness, and recorded problems, if any, on the forms (Appendices D, E, and F).

**Table 2.1
Detected Analytes in Groundwater Samples
Niagara County Refuse Site
Wheatfield, Niagara County, New York**

CAS NO.	COMPOUND	Sample ID: Lab Id: Source: SDG: Matrix: Sampled: Validated:	NYS DEC AWQS*	NYS DOH MCL	US EPA MCL	NCR-3S 480-79130-1 TALBUFF 480-79130-1 WATER 4/24/15 6/29/2015	NCR-4S 480-79130-2 TALBUFF 480-79130-1 WATER 4/24/15 6/29/2015	NCR-5S 480-79130-3 TALBUFF 480-79130-1 WATER 4/24/15 6/29/2015	NCR-13S 480-79130-4 TALBUFF 480-79130-1 WATER 4/24/15 6/29/2015	Field Duplicate 480-79130-5 TALBUFF 480-79130-1 WATER 4/24/15 6/29/2015 DUP of NCR-13S
84-74-2	DI-N-BUTYL PHTHALATE	ug/L	50	50	-	0.44 J	0.41 J	0.28 J	0.38 J	0.41 J
7429-90-5	ALUMINUM	ug/L	100	-	-	ND	660	980 J+	150 J	140 J
7440-39-3	BARIIUM	ug/L	1000	2000	2000	43	62	130 J	55	54
7440-43-9	CADMIUM	ug/L	5	5	5	0.55 J	0.53 J	0.56 J	0.78 J	0.86 J
7440-70-2	CALCIUM	ug/L	-	-	-	111,000	134,000	76,000 J	154,000	152,000
7440-47-3	CHROMIUM	ug/L	50	100	100	ND	ND	1.2 J	1.2 J	1.3 J
7440-50-8	COPPER	ug/L	5	-	-	7.6 J	3 J	6.6 J	6 J	5.8 J
7439-89-6	IRON	ug/L	300 ⁺	300 ⁺	-	290	1,600	790 J	220	200
7439-95-4	MAGNESIUM	ug/L	35,000 ⁺	-	-	62,000	45,900	41,500 J	51,700	51,600
7439-96-5	MANGANESE	ug/L	300 ⁺	300 ⁺	-	5.7	160	18 J	1.7 J	1.7 J
7440-02-0	NICKEL	ug/L	100	-	-	2.1 J	1.7 J	2.3 J	3.3 J	3.0 J
7440-09-7	POTASSIUM	ug/L	-	-	-	2,700	12,900	1,000	1,500	1,400
7440-23-5	SODIUM	ug/L	20,000	20,000	20,000	5,600	27,700	17,300 J	14,100	13,900
7440-62-2	VANADIUM	ug/L	14	-	-	ND	ND	1.5 J	ND	ND
7440-66-6	ZINC	ug/L	2,000 ⁺	5,000	-	33	53	29	26	26
METALS (Dissolved)										
7440-39-3	BARIIUM	ug/L	1000	2000	2000	39	61	120	48	56
7440-43-9	CADMIUM	ug/L	5	5	5	0.9 J	ND	ND	0.61 J	0.71 J
7440-70-2	CALCIUM	ug/L	-	-	-	109,000	137,000	70,200	136,000	142,000
7440-47-3	CHROMIUM	ug/L	50	100	100	ND	ND	ND	1.5 J	1.6 J
7440-50-8	COPPER	ug/L	5	-	-	3.3 J	ND	1.7 J	ND	ND
7439-95-4	MAGNESIUM	ug/L	35,000 ⁺	-	-	62,000	46,200	41,600	56,900	51,100
7439-96-5	MANGANESE	ug/L	300 ⁺	300 ⁺	-	1.5 J	8.8	0.69 J	1.1 J	0.69 J
7440-02-0	NICKEL	ug/L	100	-	-	1.6 J	1.3 J	ND	1.4 J	1.5 J
7440-09-7	POTASSIUM	ug/L	-	-	-	2,100	14,300	500	1,000	1,400
7440-23-5	SODIUM	ug/L	20,000	20,000	20,000	6,400	29,400	15,500 J+	14,600	12,600
7440-66-6	ZINC	ug/L	2,000 ⁺	5,000	-	27	22	3.4 J	36	27

* = NYSDEC Ambient Water Quality Standards + = Guidance value
> = Sum of iron and manganese should not exceed 500 ug/L NYSDEC or 300 ug/L NYSDOH.

J = estimated value. - = No standard identified.

Boxed values exceed NYSDEC AWQS.

Bold values exceed NYSDOH maximum contaminant levels (MCL)

Shaded values exceed USEPA maximum contaminant levels

Table 2.2
Quarterly Site Inspection Results Summary

Inspection Item	Acceptable	Requires Action	Comments
Manholes	X		
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		Water level was noted to be high in April, low in May and normal during the June inspections. Water levels were within the historical range.
Perimeter Fence	X		Minor damage was observed and repaired on May 8.
Condition of Roads	X		No potholes were observed.
Integrity of the Cap	X		No erosion was observed. Vegetation was short during the April and May inspections and noted to be tall in June.
Drainage Ditches/Swales	X		Vegetation in the ditches and swales was noted to be typical for early spring conditions in April and May and normal in June.
Gas Venting System	X		
Wells	X		Water levels were measured monthly.
Culverts	X		
Other	X		In June, an apparent collapse in East B was observed and an oil-like substance was identified floating on the water in East D.

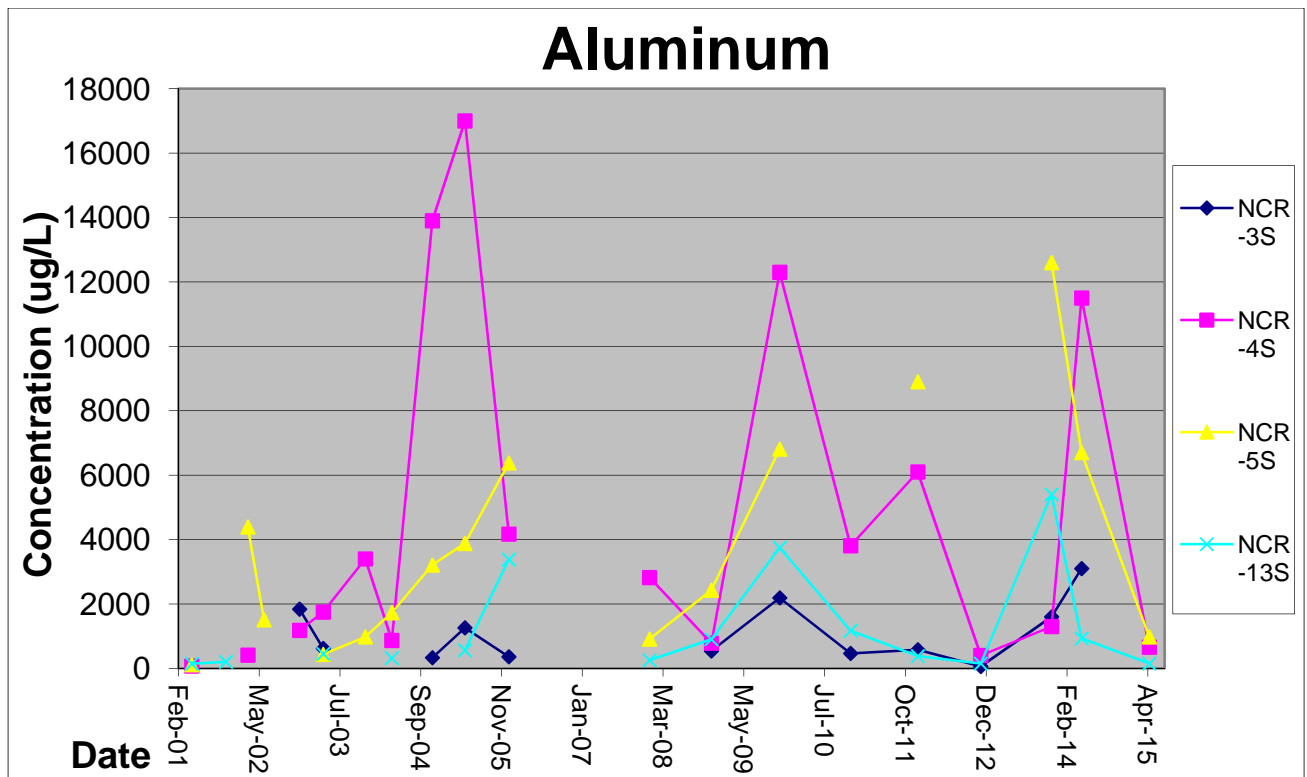


Figure 2.1A: Plot of Historical Aluminum Concentration

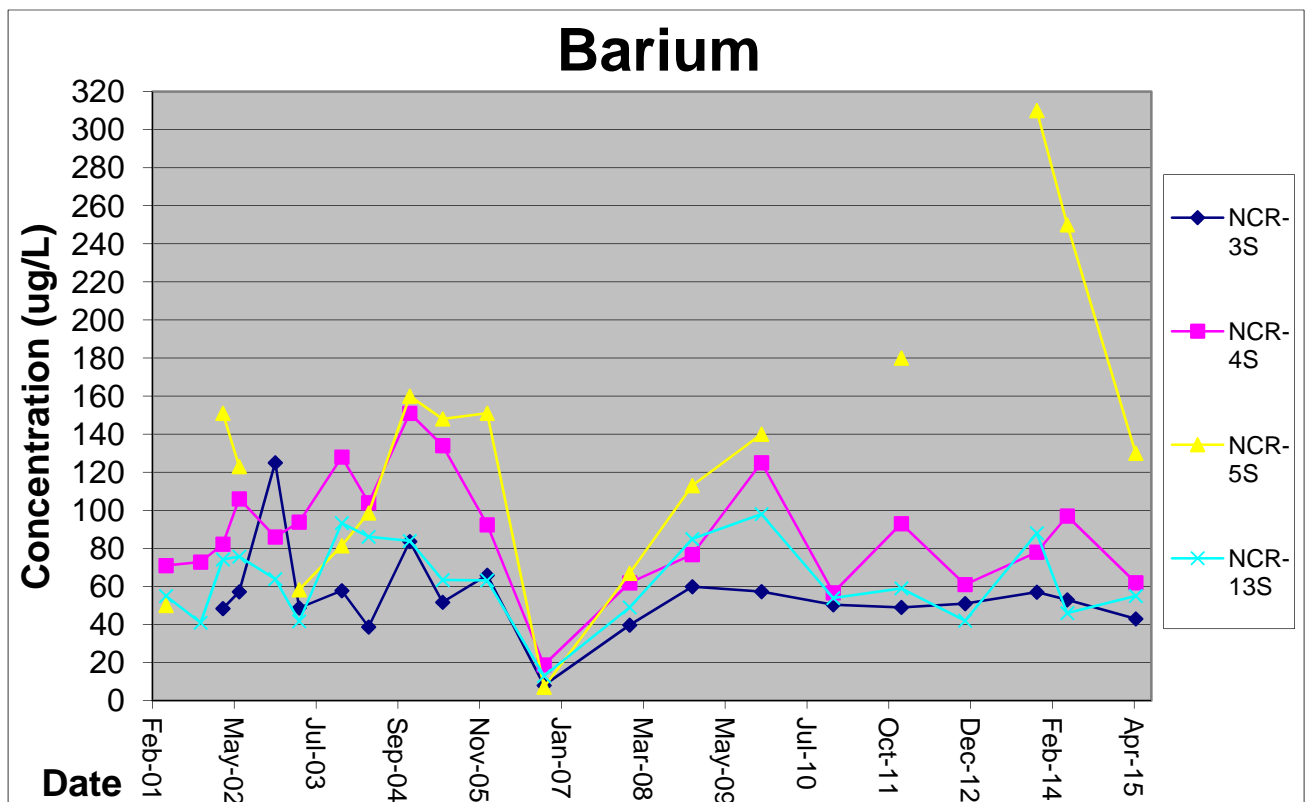


Figure 2.1B: Plot of Historical Barium Concentration

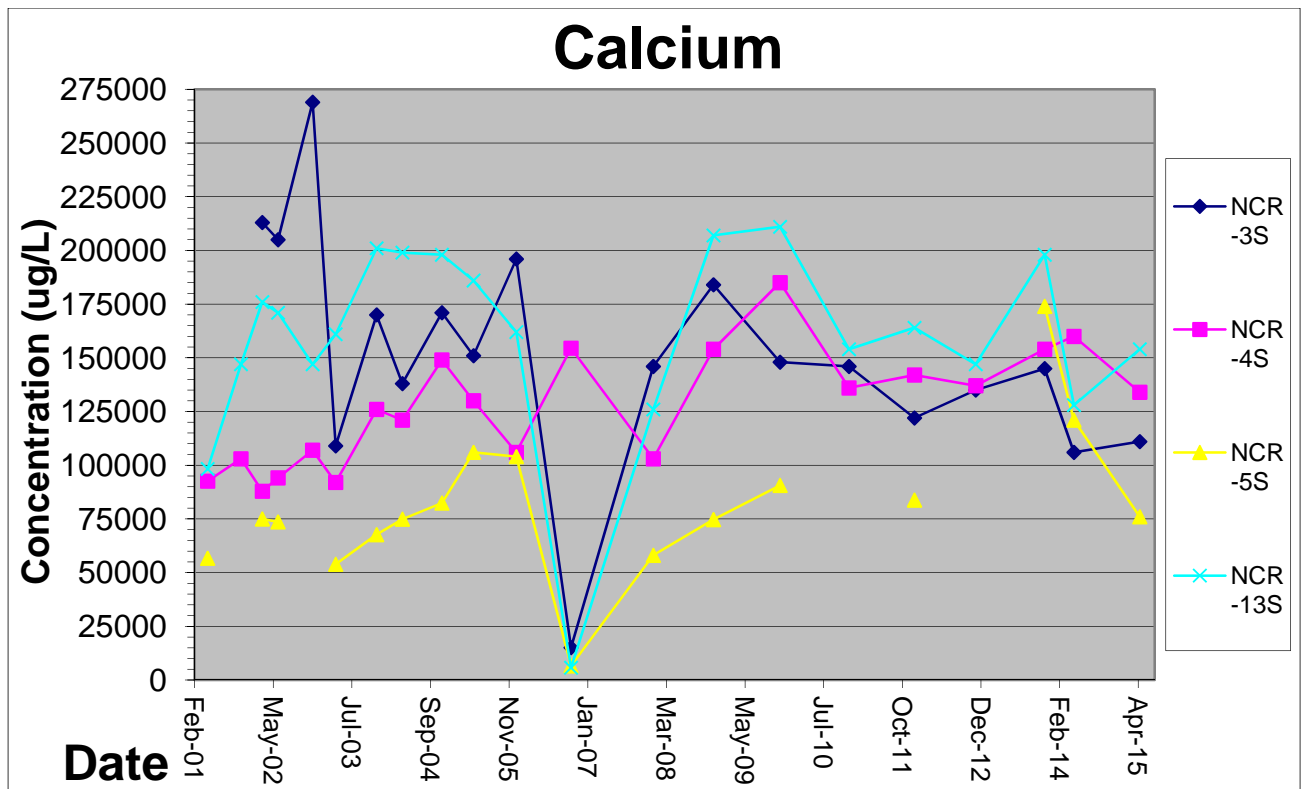


Figure 2.1C: Plot of Historical Calcium Concentration

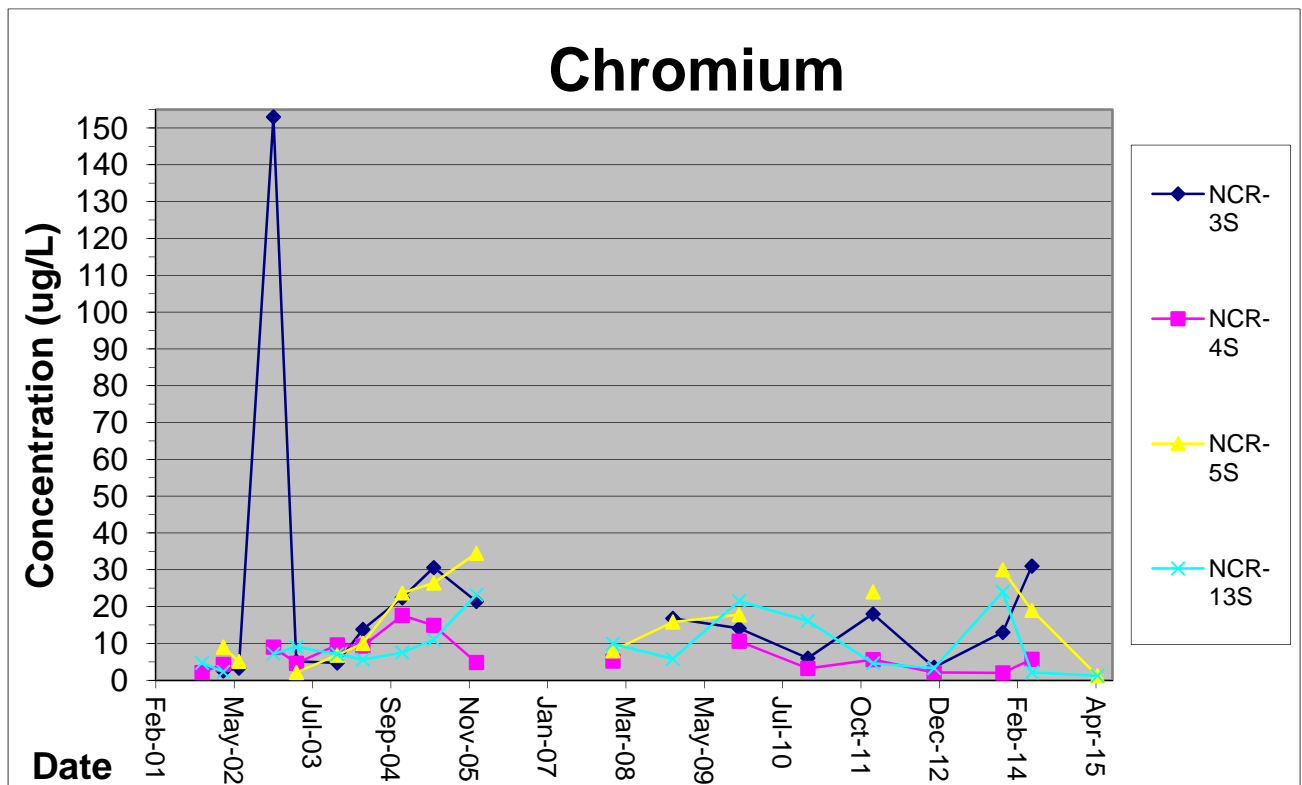


Figure 2.1D: Plot of Historical Chromium Concentration

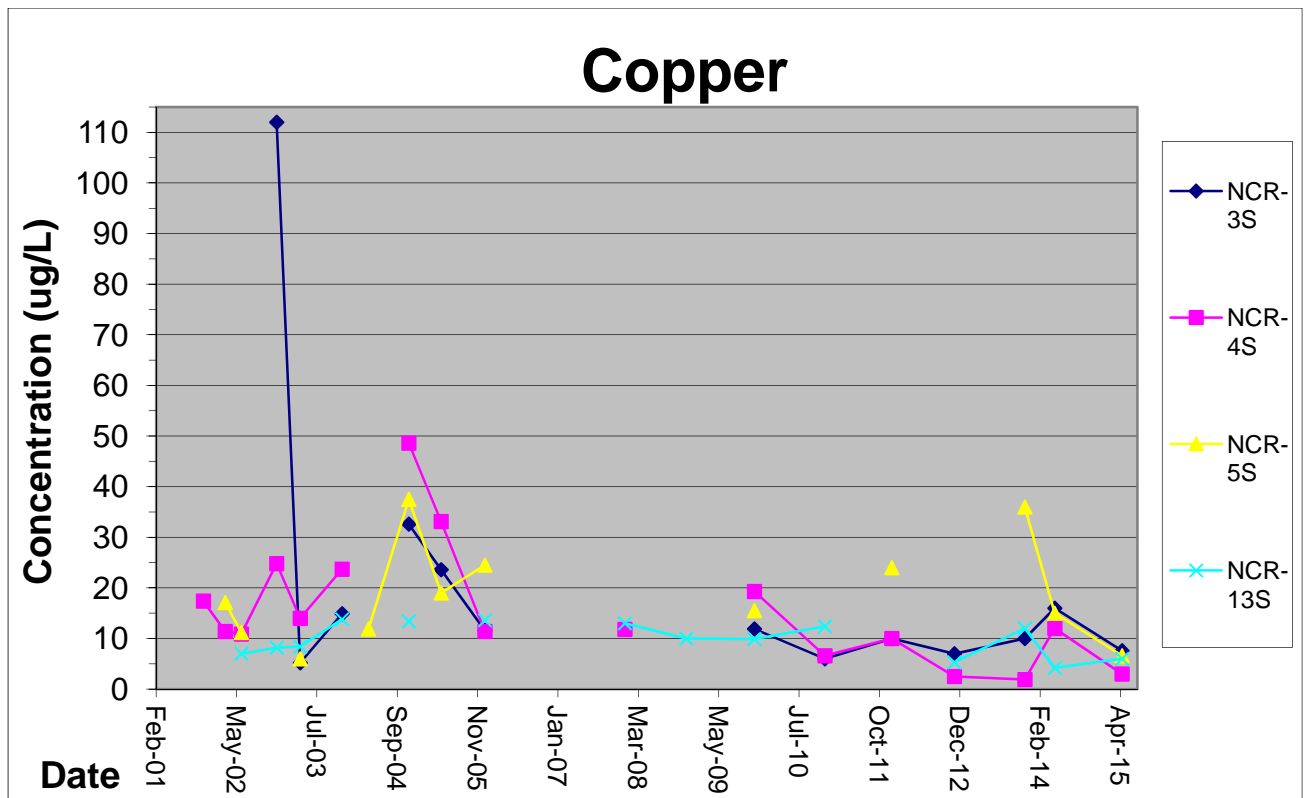


Figure 2.1E: Plot of Historical Copper Concentration

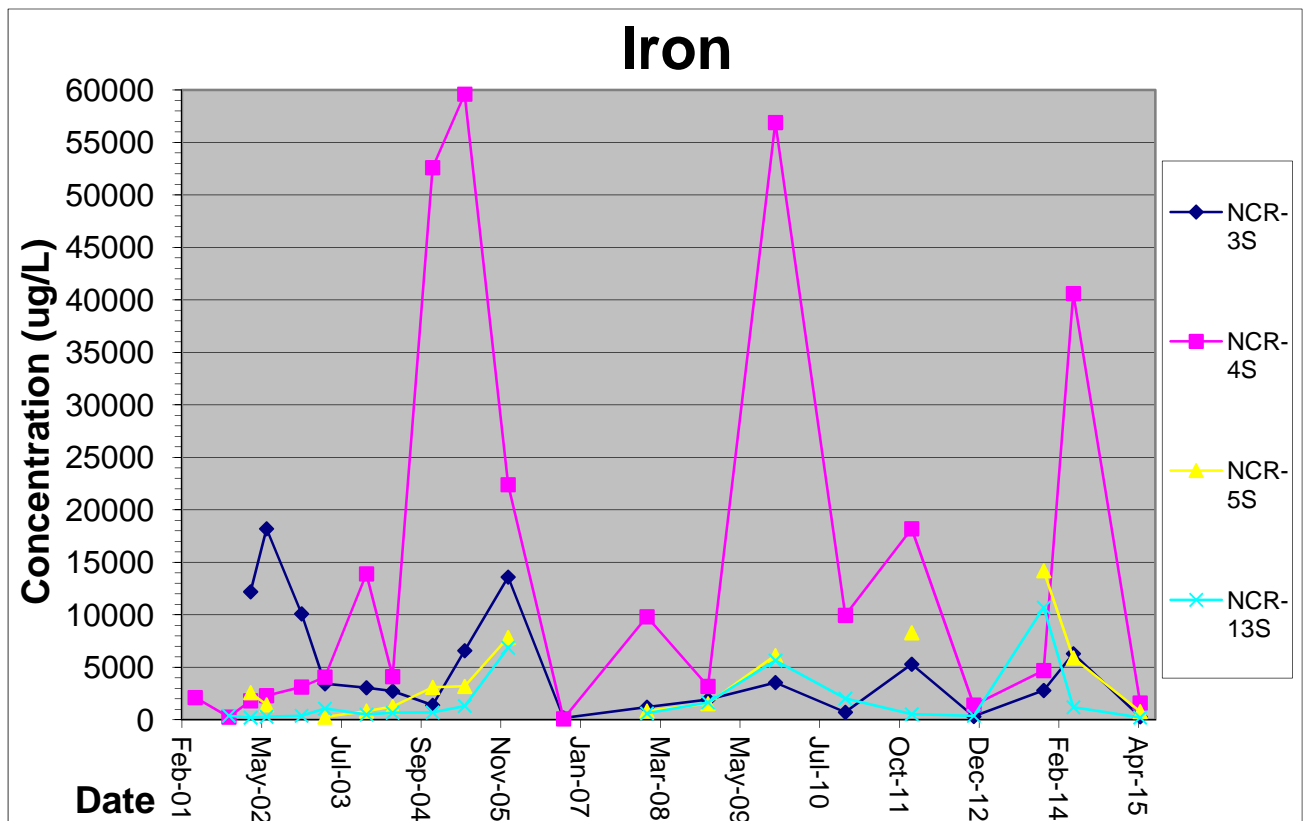


Figure 2.1F: Plot of Historical Iron Concentration

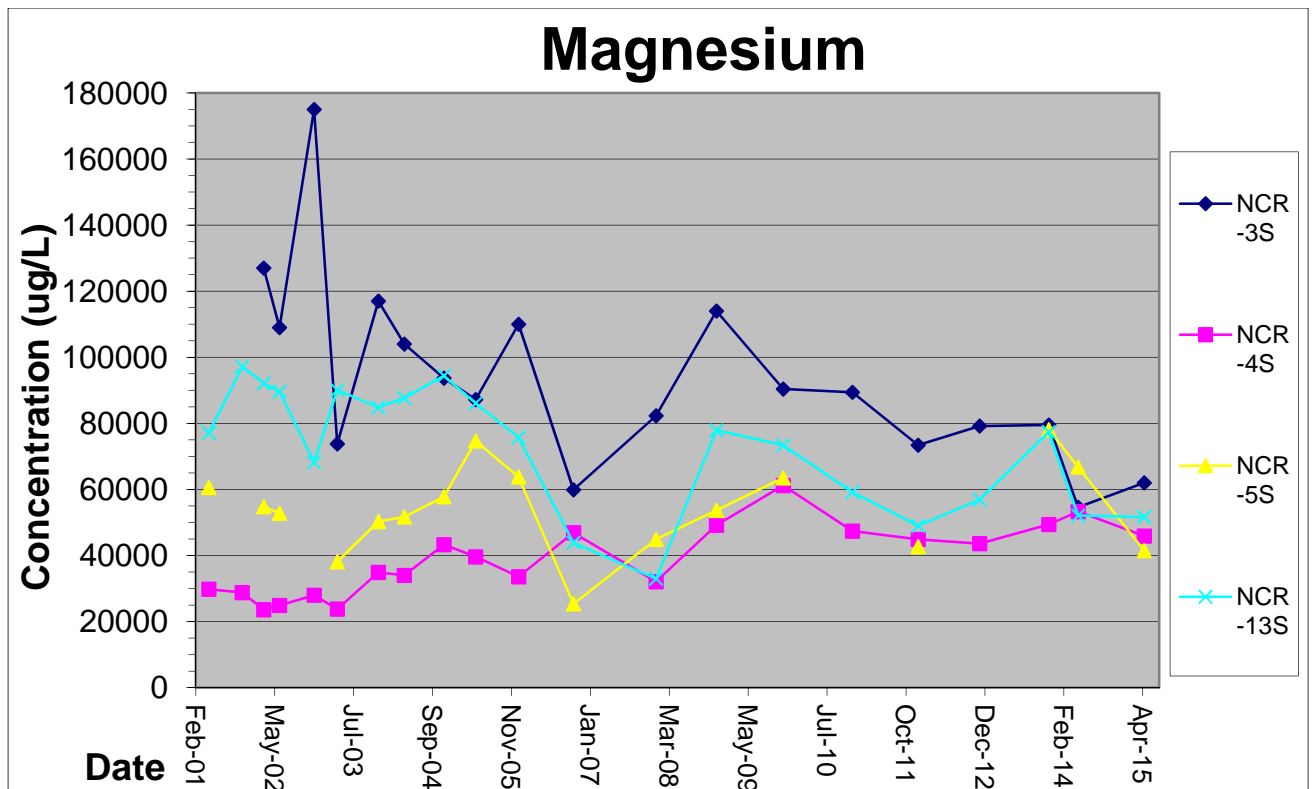


Figure 2.1G: Plot of Historical Magnesium Concentration

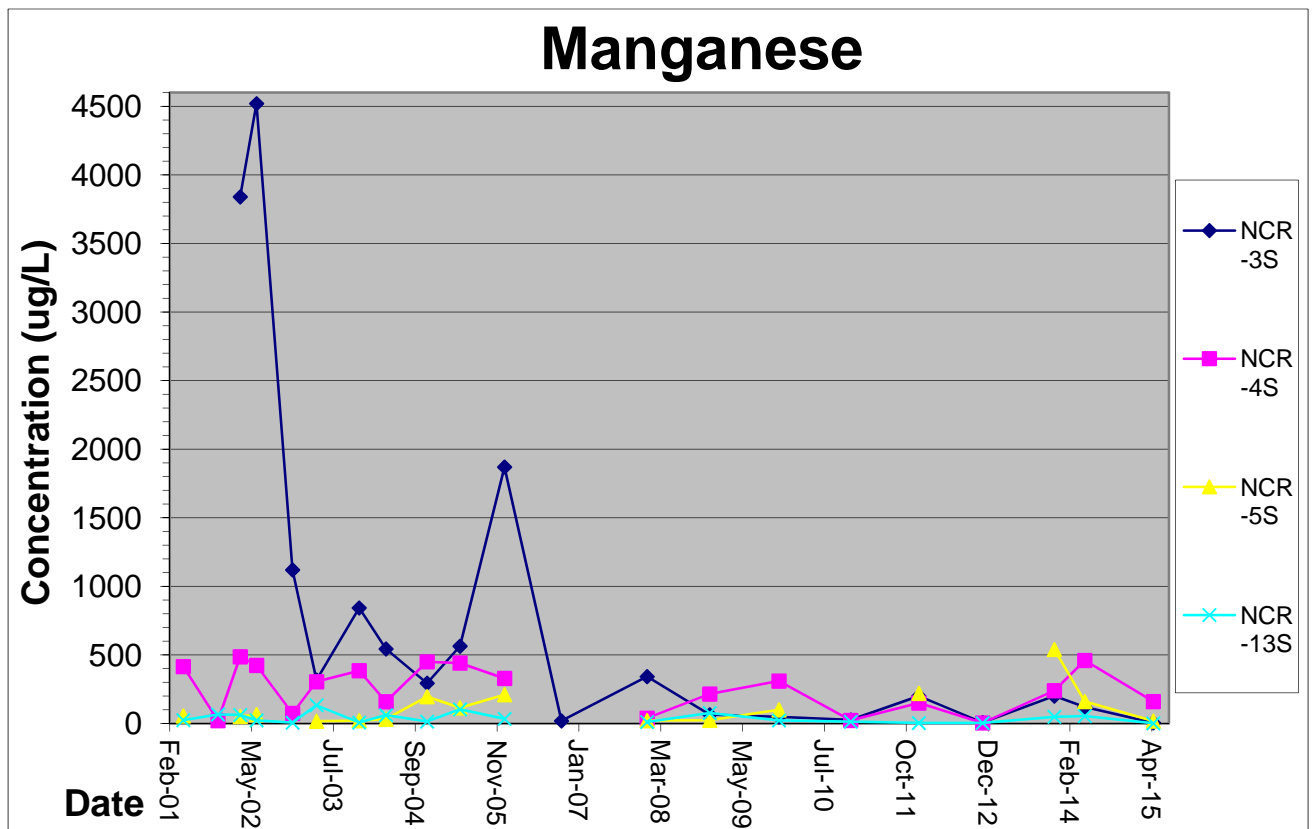


Figure 2.1H: Plot of Historical Manganese Concentration

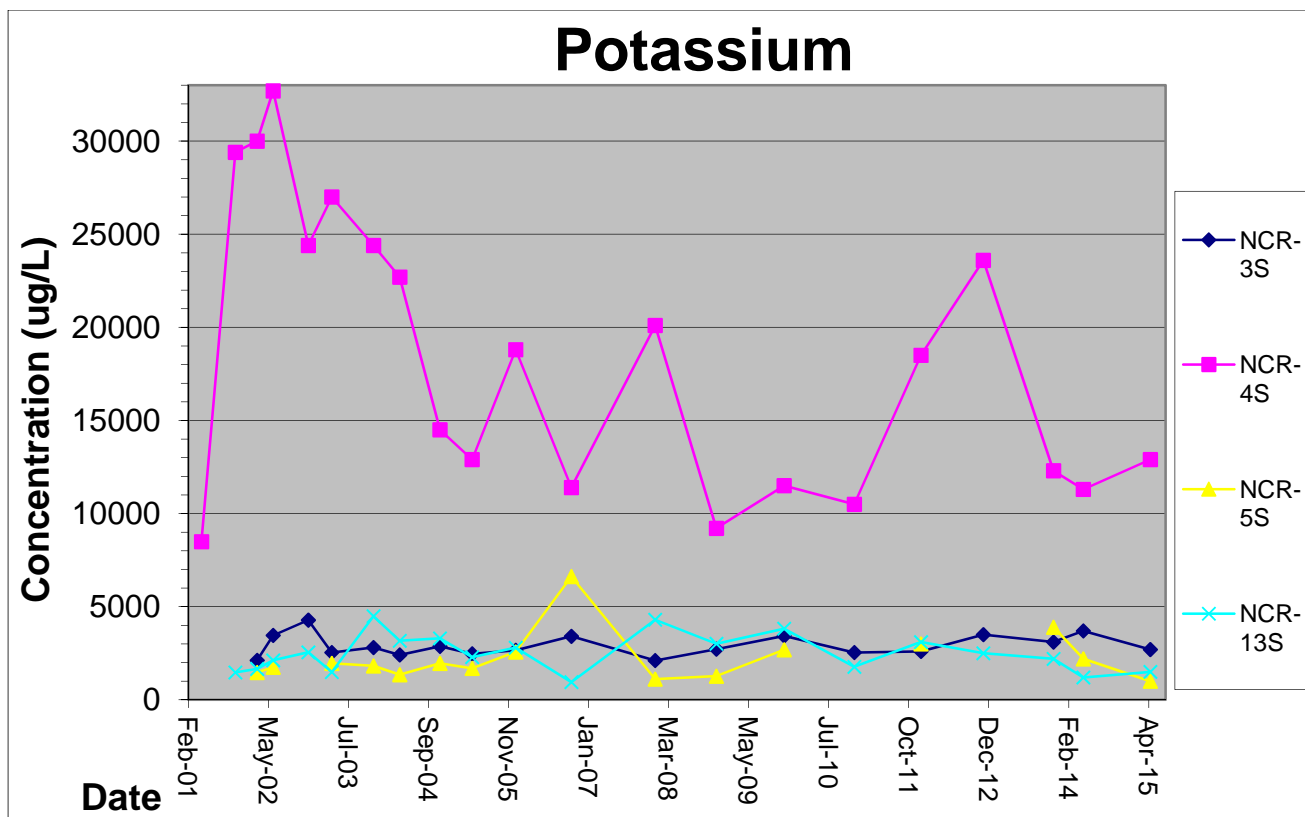


Figure 2.1I: Plot of Historical Potassium Concentration

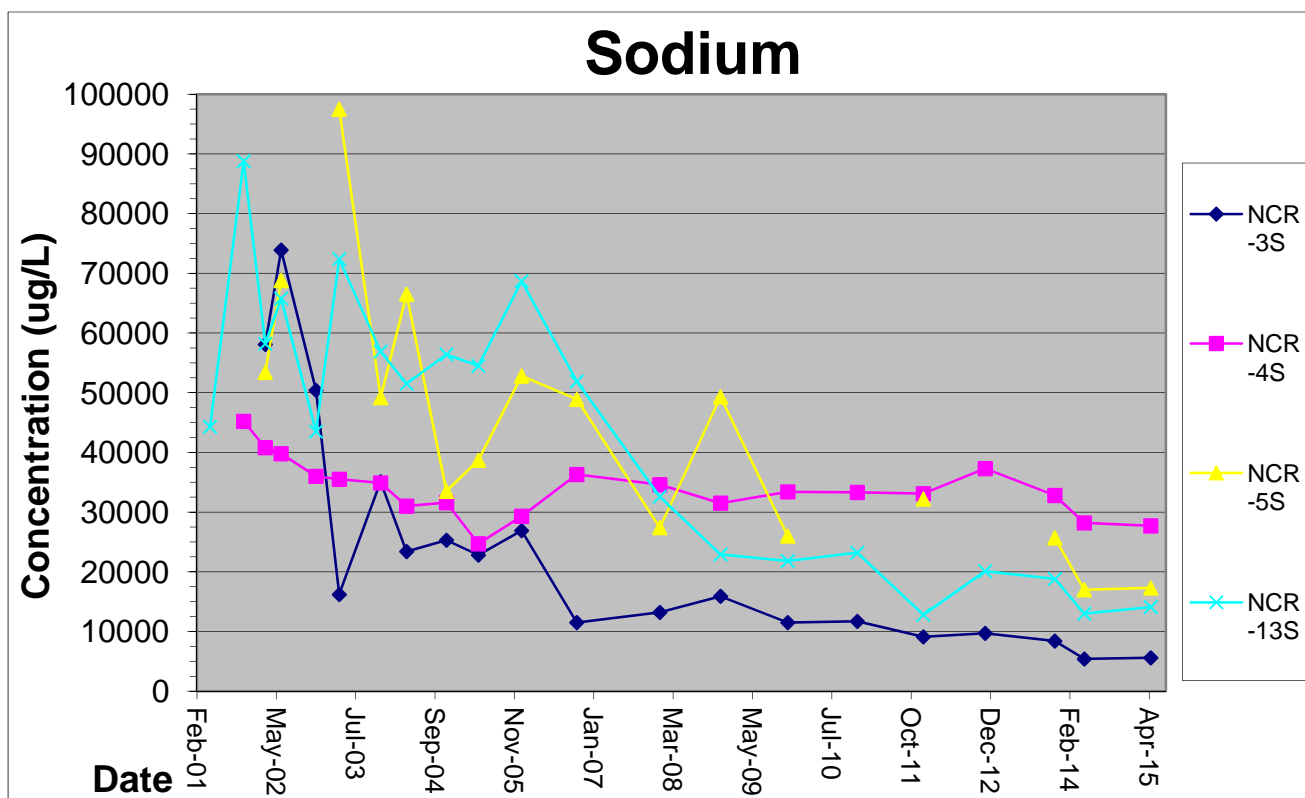


Figure 2.1J: Plot of Historical Sodium Concentration

SECTION 3

SUMMARY AND CONCLUSIONS

The following summary and conclusions were developed based on the data collected during this reporting period:

- The landfill was inspected monthly and was appropriately maintained. No major repairs were required during the reporting period.
- Annual groundwater samples were collected on April 24, 2015. Five total metals parameters exceeded either the NYSDEC AWQS, NYSDOH MCLs, or USEPA MCLs, which is consistent with previous sampling events. In general, detected values appear to be consistent with ranges observed in previous sampling events.
- Eleven dissolved metals were identified in one or more of the groundwater samples. Two of the detected dissolved metals exceeded either the NYSDEC AWQS, NYSDOH MCLs, or USEPA MCLs. Dissolved metals were generally found at lower concentrations than the respective total metal analyte.
- Water levels were measured in the wet wells, monitoring wells, and the observation wells on a monthly basis. Water levels in the monitoring wells generally decreased during the reporting period. Measured water levels were consistent with levels observed in previous years between April and June.
- Wetlands vegetation was in a condition typical for early spring during the April and May inspections and normal during the June inspection. The wetlands vegetation will continue to be visually assessed during the monthly site inspections.

SECTION 4

REFERENCES

Record of Decision, Niagara County Refuse Site, Wheatfield, Niagara County, New York; United States Environmental Protection Agency, September 1993.

Consent Decree, Docket 946-849; United States Environmental Protection Agency, February 3, 1995.

Operations, Maintenance and Monitoring Manual for Niagara County Refuse District Site Remedial Construction, Wheatfield, Niagara County, New York; Conestoga-Rovers & Associates, December 2000.

APPENDIX A

**CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER
DISCHARGE PERMIT AND CHAIN-OF-CUSTODY**

**CITY OF NORTH TONAWANDA
INDUSTRIAL WASTEWATER DISCHARGE PERMIT**

Permit Number: 2628010

In accordance with the provisions of the Clean Water Act as amended, all terms and conditions set forth in this permit, the City of North Tonawanda Local Sewer Use Ordinance and any applicable Federal, State or local laws or regulations, authorization is hereby granted to:

Niagara County Department of Public Works
Engineering Department

59 Park Avenue

Lockport, NY 14094

Site: Niagara County Refuse Site

Witmer Road

Town of Wheatfield, NY 14120

Classified by S.I.C. Number(s): N/A

for the discharge of ground water and other wastes generated during Remedial Action construction and implementation into the City of North Tonawanda Sewerage System.

This permit is granted in accordance with an application filed in the offices of the Water/Wastewater Superintendent located at 830 River Road, and in conformity with specifications and other required data submitted in support of the above named application, all of which are filed with and considered part of this permit. This permit is also granted in accordance with discharge limitations and requirements, monitoring and reporting requirements, and all other conditions set forth in Parts I and II hereof.

Effective this 31st day of March, 2013

To expire the 1st day of April, 2016



David A. Scott, Water Works Superintendent

Signed this 4th day of March, 2013

PERMIT NUMBER: 2628011**Part I
Page 2 of 4****PART I. SPECIFIC CONDITIONS****A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning the effective date of this permit and lasting until the expiration date, discharge from the permitted facility outfall(s) shall be limited and monitored by the permittee as specified below (Refer to attached map for sampling and monitoring sites).

Sample Point	Parameter	Discharge Limitations mg/l except pH Daily Max.	Sampling Period	Sampling Type
001	Total Flow		1 Sampling Day Monthly	continuous
	pH	Monitor Only	1 Sampling Day Monthly	grab
	Aluminum	2.0	1 Sampling Day semi-annual	24 hr comp.
	Lead	4.6	1 Sampling Day semi-annual	24 hr comp.
	Iron	10	1 Sampling Day semi-annual	24 hr comp.
	Magnesium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
	Sodium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
	BOD	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
	Total Suspended Solids	Monitor Only	1 Sampling Day semi-annual	24 hr comp.

PERMIT NUMBER: 2628011**Part I
Page 3 of 4****PART I. SPECIFIC CONDITIONS****B. DISCHARGE MONITORING AND REPORTING REQUIREMENTS**

During the period beginning the effective date of this permit and lasting until the expiration date, discharge monitoring results shall be summarized and reported by the permittee no later than the days specified below.

Sample Point	Parameter	Initial Monitoring Report	Subsequent Monitoring Reports
001	Total Flow	January 31, 2007	Semi-annual
	Lead	January 31, 2007	Semi-annual
	Iron	January 31, 2007	Semi-annual
	Magnesium	January 31, 2007	Semi-annual
	Sodium	January 31, 2007	Semi-annual
	pH	January 31, 2007	Semi-annual
	BOD	January 31, 2007	Semi-annual
	Total Suspended Solids	January 31, 2007	Semi-annual

PERMIT NUMBER: 2628011**Part I
Page 4 of 4****PART I. SPECIFIC CONDITIONS****C. SPECIAL REQUIREMENTS**

- 1) This permit is written for a duration of three (3) years. Upon renewal of this permit, all parameters will be re-evaluated to develop a parameter list based on chemical concentrations present in the extracted groundwater.
- 2) Frequency of monitoring is to be re-evaluated yearly.
- 3) All monitoring reports (initial and subsequent), are to be received by the Superintendent, no later than thirty (30) days after receipt of validated data.
- 4) It is required that the Permittee have a Site Operations Manual available at all times. All emergency phone numbers must be listed in an appropriate place for easy access by operations personnel. The Permittee shall not discharge into the City of North Tonawanda sewerage treatment works during WWTP overflow conditions. The Permittee is required to cease all pumping operations upon verbal request of the North Tonawanda Water/Wastewater Superintendent or his designee. Pumping operations shall not recommence until approval by the North Tonawanda Water/Wastewater Superintendent or his designee.
- 5) Analysts are required to use GC/MS method detection limits for most organics (if GC/MS is appropriate); GC/ECD for PCB's/Pesticides and GF method detection limits for metals (where GF is appropriate), as contained in attachment 5 of the NYSDEC TOGs 1.3.8 – New Discharges to Publicly Owned Treatment Works – dated 10/26/94.

EFFLUENT SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME: NIAGARA COUNTY REFUSE SITE

SAMPLE LOCATION: WET WELL A

SAMPLING CREW MEMBERS: RC Becken

DATE OF SAMPLE COLLECTION: 01/4/15/15
(MM D D Y Y)

Sample Time: 0730

Sample ID Number: 041515 RC8 EFF

pH	5.41	6.35	6.01
----	------	------	------

Temperature	48.6	49.3	48.2
-------------	------	------	------

Conductivity	1.10	1.19	1.3
--------------	------	------	-----

Turbidity	2.1	1.37	2.25
-----------	-----	------	------

Instantaneous Flow Velocity:

Total Flow:

Sample Description: Wet Well A effluent

Analysis Required: volatiles & wet chemistry

Chain-of-Custody Number: Niagara County Refuse Site

Shipping Manifest Number:

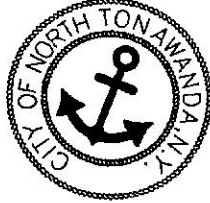
Additional Comments:

flow finished	5556.300	
flow start	5535.4000	
	209,000	total

FP-7C

CITY OF NORTH TONAWANDA WATER WORKS
WASTEWATER DEPARTMENT
830 RIVER ROAD
NORTH TONAWANDA, NEW YORK 14120
PHONE: (716) 695 - 8560
FAX: (716) 695 - 8563

David A. Scott
Superintendent



Don Alesse
Chief Operator

Kelley J. Williams
Maintenance Supervisor

William M. Davignon
Lab Director/Chemist

CHAIN OF CUSTODY
Sampling Record
NIAGARA COUNTY REFUSE SITE

DATE: April 15 & 16, 2015

SITE NAME: NIAGARA COUNTY REFUSE SITE

NAME (Signature) Richard C Becker

NAME (Print) Richard C Becker

SPL #	SAMPLE NAME	DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	#OF BTLS
01	041515 RCBEFF	4/15/15	0730	Wet Well A	wet chemistry	1
02	041515 RCBEFF	4/15/15 - 4/16/15	0730-0730	Wet Well A	volatiles	3

FLWS: FINAL METER READING 55563000
INITIAL METER READING 55354000
DAILY FLOW 209,000

RELINQUISHED BY: Richard C Becker

RECEIVED BY: [Signature]

DATE: 4/16/15

TIME: 7:45 AM

APPENDIX B
ANALYTICAL DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-79130-1

Client Project/Site: City of North Tonawanda - NCRS

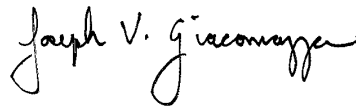
For:

N Tonawanda Water Works

830 River Road

North Tonawanda, New York 14120

Attn: William Davignon



Authorized for release by:

5/7/2015 3:31:54 PM

Joe Giacomazza, Project Management Assistant II

joe.giacomazza@testamericainc.com

Designee for

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance 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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Job ID: 480-79130-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-79130-1

Receipt

The samples were received on 4/24/2015 12:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.5° C and 3.8° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 239792 was outside the method criteria for the following analyte: 3-Nitroaniline. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8270D: The laboratory control sample (LCS) for batch 239033 recovered outside control limits for the following analyte: 3-Nitroaniline. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The laboratory control sample (LCS) for batch 239033 recovered outside control limits for the following analytes: 3-Nitroaniline and 3,3-Dichlorobenzidine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 239787 recovered above the upper control limit for 3,3-Dichlorobenzidine and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: NCR-3S (480-79130-1), NCR-4S (480-79130-2), NCR-5S (480-79130-3), NCR-5S (480-79130-3[MS]), NCR-5S (480-79130-3[MSD]), NCR-13S (480-79130-4), Field Dup 1 (480-79130-5) and (CCVIS 480-239787/4).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 239787 was outside the method criteria for the following analyte: Benzaldehyde. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows two of these surrogates to be outside acceptance criteria without performing re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: NCR-4S (480-79130-2), NCR-5S (480-79130-3[MS]) and NCR-5S (480-79130-3[MSD]). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-240971/16) contained dissolved aluminum, copper, iron, manganese, and zinc outside the control limits. The reported sample (MB 480-240307/1-B) associated with this CCVL was either below the laboratory's standard reporting limit for these analytes or contained these analytes at concentrations greater than 10X the value found in the CCVL; therefore, re-analysis of the sample was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Lab Sample ID: 480-79130-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.30	J B	4.6	0.24	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.44	J	4.6	0.28	ug/L	1		8270D	Total/NA
Barium	0.043		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00055	J	0.0010	0.00050	mg/L	1		6010C	Total/NA
Calcium	111		0.50	0.10	mg/L	1		6010C	Total/NA
Copper	0.0076	J B	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.29		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	62.0		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.0057	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0021	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	2.7		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	5.6		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.033	B	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.039		0.0020	0.00070	mg/L	1		6010C	Dissolved
Cadmium	0.00090	J	0.0010	0.00050	mg/L	1		6010C	Dissolved
Calcium	109		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0033	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium	62.0		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.0015	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel	0.0016	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium	2.1	B	0.50	0.10	mg/L	1		6010C	Dissolved
Sodium	6.4	B	1.0	0.32	mg/L	1		6010C	Dissolved
Zinc	0.027	B	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Butyl benzyl phthalate	0.55	J B	4.6	0.39	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.41	J	4.6	0.29	ug/L	1		8270D	Total/NA
Aluminum	0.66		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.062		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00053	J	0.0010	0.00050	mg/L	1		6010C	Total/NA
Calcium	134		0.50	0.10	mg/L	1		6010C	Total/NA
Copper	0.0030	J B	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	1.6		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	45.9		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.16	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0017	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	12.9		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	27.7		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.053	B	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.061		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	137		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium	46.2		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.0088	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel	0.0013	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium	14.3	B	0.50	0.10	mg/L	1		6010C	Dissolved
Sodium	29.4	B	1.0	0.32	mg/L	1		6010C	Dissolved
Zinc	0.022	B	0.010	0.0015	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.29	J B	4.5	0.24	ug/L	1		8270D	Total/NA
Butyl benzyl phthalate	0.45	J B	4.5	0.38	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.28	J	4.5	0.28	ug/L	1		8270D	Total/NA
Aluminum	0.98	F1	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.13		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00056	J	0.0010	0.00050	mg/L	1		6010C	Total/NA
Calcium	76.0		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0012	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.0066	J B	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.79	F1	0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	41.5		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.018	B F1	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0023	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	1.0		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	17.3	F1	1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.0015	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	0.029	B	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.12		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium	70.2		0.50	0.10	mg/L	1		6010C	Dissolved
Copper	0.0017	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium	41.6		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.00069	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium	0.50	B	0.50	0.10	mg/L	1		6010C	Dissolved
Sodium	15.5	B F1	1.0	0.32	mg/L	1		6010C	Dissolved
Zinc	0.0034	J B	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.27	J B	4.5	0.24	ug/L	1		8270D	Total/NA
Butyl benzyl phthalate	0.42	J B	4.5	0.38	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.38	J	4.5	0.28	ug/L	1		8270D	Total/NA
Aluminum	0.15	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.055		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00078	J	0.0010	0.00050	mg/L	1		6010C	Total/NA
Calcium	154		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0012	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.0060	J B	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.22		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	51.7		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.0017	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0033	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	1.5		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	14.1		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.026	B	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.048		0.0020	0.00070	mg/L	1		6010C	Dissolved
Cadmium	0.00061	J	0.0010	0.00050	mg/L	1		6010C	Dissolved
Calcium	136		0.50	0.10	mg/L	1		6010C	Dissolved
Chromium	0.0015	J	0.0040	0.0010	mg/L	1		6010C	Dissolved
Magnesium	56.9		0.20	0.043	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S (Continued)

Lab Sample ID: 480-79130-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.0011	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel	0.0014	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium	1.0	B	0.50	0.10	mg/L	1		6010C	Dissolved
Sodium	14.6	B	1.0	0.32	mg/L	1		6010C	Dissolved
Zinc	0.036	B	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzaldehyde	0.27	J B	4.6	0.25	ug/L	1		8270D	Total/NA
Butyl benzyl phthalate	0.52	J B	4.6	0.39	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	0.41	J	4.6	0.28	ug/L	1		8270D	Total/NA
Aluminum	0.14	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.054		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00086	J	0.0010	0.00050	mg/L	1		6010C	Total/NA
Calcium	152		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0013	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.0058	J B	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.20		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	51.6		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.0017	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0030	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	1.4		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	13.9		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.026	B	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium	0.056		0.0020	0.00070	mg/L	1		6010C	Dissolved
Cadmium	0.00071	J	0.0010	0.00050	mg/L	1		6010C	Dissolved
Calcium	142		0.50	0.10	mg/L	1		6010C	Dissolved
Chromium	0.0016	J	0.0040	0.0010	mg/L	1		6010C	Dissolved
Magnesium	51.1		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese	0.00069	J B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel	0.0015	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium	1.4	B	0.50	0.10	mg/L	1		6010C	Dissolved
Sodium	12.6	B	1.0	0.32	mg/L	1		6010C	Dissolved
Zinc	0.027	B	0.010	0.0015	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Lab Sample ID: 480-79130-1

Date Collected: 04/24/15 09:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/15 05:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/15 05:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/15 05:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/02/15 05:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/15 05:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/15 05:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/02/15 05:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/02/15 05:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/02/15 05:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/02/15 05:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/15 05:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/15 05:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/02/15 05:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/02/15 05:23	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/15 05:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/15 05:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/15 05:23	1
Acetone	ND		10	3.0	ug/L			05/02/15 05:23	1
Benzene	ND		1.0	0.41	ug/L			05/02/15 05:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/15 05:23	1
Bromoform	ND		1.0	0.26	ug/L			05/02/15 05:23	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/15 05:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/15 05:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/15 05:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/15 05:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/15 05:23	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/15 05:23	1
Chloroform	ND		1.0	0.34	ug/L			05/02/15 05:23	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/15 05:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/02/15 05:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/15 05:23	1
Cyclohexane	ND		1.0	0.18	ug/L			05/02/15 05:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/02/15 05:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/15 05:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/02/15 05:23	1
Methyl acetate	ND		2.5	0.50	ug/L			05/02/15 05:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/02/15 05:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/02/15 05:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/15 05:23	1
Styrene	ND		1.0	0.73	ug/L			05/02/15 05:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/15 05:23	1
Toluene	ND		1.0	0.51	ug/L			05/02/15 05:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/02/15 05:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/15 05:23	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/15 05:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/02/15 05:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/15 05:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/15 05:23	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Lab Sample ID: 480-79130-1

Date Collected: 04/24/15 09:30

Matrix: Water

Date Received: 04/24/15 12:10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		66 - 137		05/02/15 05:23	1
Toluene-d8 (Surr)	96		71 - 126		05/02/15 05:23	1
4-Bromofluorobenzene (Surr)	95		73 - 120		05/02/15 05:23	1
Dibromofluoromethane (Surr)	101		60 - 140		05/02/15 05:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.6	0.60	ug/L		04/28/15 08:23	05/01/15 00:36	1
bis (2-chloroisopropyl) ether	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4,5-Trichlorophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4,6-Trichlorophenol	ND		4.6	0.56	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4-Dichlorophenol	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4-Dimethylphenol	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4-Dinitrophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,4-Dinitrotoluene	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 00:36	1
2,6-Dinitrotoluene	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Chloronaphthalene	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Chlorophenol	ND		4.6	0.48	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Methylnaphthalene	ND		4.6	0.55	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Methylphenol	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Nitroaniline	ND		9.1	0.38	ug/L		04/28/15 08:23	05/01/15 00:36	1
2-Nitrophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 00:36	1
3,3'-Dichlorobenzidine	ND	*	4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
3-Nitroaniline	ND	*	9.1	0.44	ug/L		04/28/15 08:23	05/01/15 00:36	1
4,6-Dinitro-2-methylphenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Bromophenyl phenyl ether	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Chloro-3-methylphenol	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Chloroaniline	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Chlorophenyl phenyl ether	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Methylphenol	ND		9.1	0.33	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Nitroaniline	ND		9.1	0.23	ug/L		04/28/15 08:23	05/01/15 00:36	1
4-Nitrophenol	ND		9.1	1.4	ug/L		04/28/15 08:23	05/01/15 00:36	1
Acenaphthene	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 00:36	1
Acenaphthylene	ND		4.6	0.35	ug/L		04/28/15 08:23	05/01/15 00:36	1
Acetophenone	ND		4.6	0.49	ug/L		04/28/15 08:23	05/01/15 00:36	1
Anthracene	ND		4.6	0.26	ug/L		04/28/15 08:23	05/01/15 00:36	1
Atrazine	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzaldehyde	0.30	J B	4.6	0.24	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzo(a)anthracene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzo(a)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzo(b)fluoranthene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzo(g,h,i)perylene	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 00:36	1
Benzo(k)fluoranthene	ND		4.6	0.67	ug/L		04/28/15 08:23	05/01/15 00:36	1
Bis(2-chloroethoxy)methane	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 00:36	1
Bis(2-chloroethyl)ether	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
Bis(2-ethylhexyl) phthalate	ND		4.6	1.6	ug/L		04/28/15 08:23	05/01/15 00:36	1
Butyl benzyl phthalate	ND		4.6	0.38	ug/L		04/28/15 08:23	05/01/15 00:36	1
Caprolactam	ND		4.6	2.0	ug/L		04/28/15 08:23	05/01/15 00:36	1
Carbazole	ND		4.6	0.27	ug/L		04/28/15 08:23	05/01/15 00:36	1
Chrysene	ND		4.6	0.30	ug/L		04/28/15 08:23	05/01/15 00:36	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Lab Sample ID: 480-79130-1

Date Collected: 04/24/15 09:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	0.44	J	4.6	0.28	ug/L		04/28/15 08:23	05/01/15 00:36	1
Di-n-octyl phthalate	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 00:36	1
Dibenz(a,h)anthracene	ND		4.6	0.38	ug/L		04/28/15 08:23	05/01/15 00:36	1
Dibenzofuran	ND		9.1	0.46	ug/L		04/28/15 08:23	05/01/15 00:36	1
Diethyl phthalate	ND		4.6	0.20	ug/L		04/28/15 08:23	05/01/15 00:36	1
Dimethyl phthalate	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 00:36	1
Fluoranthene	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
Fluorene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 00:36	1
Hexachlorobenzene	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 00:36	1
Hexachlorobutadiene	ND		4.6	0.62	ug/L		04/28/15 08:23	05/01/15 00:36	1
Hexachlorocyclopentadiene	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 00:36	1
Hexachloroethane	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 00:36	1
Indeno(1,2,3-cd)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 00:36	1
Isophorone	ND		4.6	0.39	ug/L		04/28/15 08:23	05/01/15 00:36	1
N-Nitrosodi-n-propylamine	ND		4.6	0.49	ug/L		04/28/15 08:23	05/01/15 00:36	1
N-Nitrosodiphenylamine	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 00:36	1
Naphthalene	ND		4.6	0.69	ug/L		04/28/15 08:23	05/01/15 00:36	1
Nitrobenzene	ND		4.6	0.26	ug/L		04/28/15 08:23	05/01/15 00:36	1
Pentachlorophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 00:36	1
Phenanthrene	ND		4.6	0.40	ug/L		04/28/15 08:23	05/01/15 00:36	1
Phenol	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 00:36	1
Pyrene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>2,4,6-Tribromophenol</i>	77		52 - 132				04/28/15 08:23	05/01/15 00:36	1
<i>2-Fluorobiphenyl</i>	91		48 - 120				04/28/15 08:23	05/01/15 00:36	1
<i>2-Fluorophenol</i>	59		20 - 120				04/28/15 08:23	05/01/15 00:36	1
<i>Nitrobenzene-d5</i>	82		46 - 120				04/28/15 08:23	05/01/15 00:36	1
<i>p-Terphenyl-d14</i>	72		67 - 150				04/28/15 08:23	05/01/15 00:36	1
<i>Phenol-d5</i>	41		16 - 120				04/28/15 08:23	05/01/15 00:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/28/15 16:32	04/29/15 19:07	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 19:07	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 19:07	1
Barium	0.043		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 19:07	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 19:07	1
Cadmium	0.00055	J	0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 19:07	1
Calcium	111		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:07	1
Chromium	ND		0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 19:07	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 19:07	1
Copper	0.0076	J B	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 19:07	1
Iron	0.29		0.050	0.019	mg/L		04/28/15 16:32	04/29/15 19:07	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 19:07	1
Magnesium	62.0		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 19:07	1
Manganese	0.0057	B	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 19:07	1
Nickel	0.0021	J	0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 19:07	1
Potassium	2.7		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:07	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 19:07	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Lab Sample ID: 480-79130-1

Date Collected: 04/24/15 09:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 19:07	1
Sodium	5.6		1.0	0.32	mg/L		04/28/15 16:32	04/29/15 19:07	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 19:07	1
Vanadium	ND		0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 19:07	1
Zinc	0.033	B	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 19:07	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/05/15 12:56	05/06/15 18:18	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 18:18	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 18:18	1
Barium	0.039		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 18:18	1
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 18:18	1
Cadmium	0.00090	J	0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 18:18	1
Calcium	109		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:18	1
Chromium	ND		0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 18:18	1
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 18:18	1
Copper	0.0033	J	0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 18:18	1
Iron	ND		0.050	0.019	mg/L		05/05/15 12:56	05/06/15 18:18	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 18:18	1
Magnesium	62.0		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 18:18	1
Manganese	0.0015	J B	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 18:18	1
Nickel	0.0016	J	0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 18:18	1
Potassium	2.1	B	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:18	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 18:18	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 18:18	1
Sodium	6.4	B	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 18:18	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 18:18	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 18:18	1
Zinc	0.027	B	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 18:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:44	1

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/15 05:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/15 05:50	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/15 05:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/02/15 05:50	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/15 05:50	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/15 05:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/02/15 05:50	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/02/15 05:50	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/02/15 05:50	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/02/15 05:50	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/15 05:50	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/15 05:50	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/02/15 05:50	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/02/15 05:50	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/15 05:50	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/15 05:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/15 05:50	1
Acetone	ND		10	3.0	ug/L			05/02/15 05:50	1
Benzene	ND		1.0	0.41	ug/L			05/02/15 05:50	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/15 05:50	1
Bromoform	ND		1.0	0.26	ug/L			05/02/15 05:50	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/15 05:50	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/15 05:50	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/15 05:50	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/15 05:50	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/15 05:50	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/15 05:50	1
Chloroform	ND		1.0	0.34	ug/L			05/02/15 05:50	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/15 05:50	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/02/15 05:50	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/15 05:50	1
Cyclohexane	ND		1.0	0.18	ug/L			05/02/15 05:50	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/02/15 05:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/15 05:50	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/02/15 05:50	1
Methyl acetate	ND		2.5	0.50	ug/L			05/02/15 05:50	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/02/15 05:50	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/02/15 05:50	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/15 05:50	1
Styrene	ND		1.0	0.73	ug/L			05/02/15 05:50	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/15 05:50	1
Toluene	ND		1.0	0.51	ug/L			05/02/15 05:50	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/02/15 05:50	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/15 05:50	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/15 05:50	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/02/15 05:50	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/15 05:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/15 05:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137					05/02/15 05:50	1
Toluene-d8 (Surr)	95		71 - 126					05/02/15 05:50	1
4-Bromofluorobenzene (Surr)	94		73 - 120					05/02/15 05:50	1
Dibromofluoromethane (Surr)	99		60 - 140					05/02/15 05:50	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.6	0.60	ug/L		04/28/15 08:23	05/01/15 01:06	1
bis (2-chloroisopropyl) ether	ND		4.6	0.48	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4,5-Trichlorophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4,6-Trichlorophenol	ND		4.6	0.56	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4-Dichlorophenol	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4-Dimethylphenol	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4-Dinitrophenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,4-Dinitrotoluene	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 01:06	1
2,6-Dinitrotoluene	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Chloronaphthalene	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Chlorophenol	ND		4.6	0.49	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Methylnaphthalene	ND		4.6	0.55	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Methylphenol	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Nitroaniline	ND		9.2	0.39	ug/L		04/28/15 08:23	05/01/15 01:06	1
2-Nitrophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 01:06	1
3,3'-Dichlorobenzidine	ND	*	4.6	0.37	ug/L		04/28/15 08:23	05/01/15 01:06	1
3-Nitroaniline	ND	*	9.2	0.44	ug/L		04/28/15 08:23	05/01/15 01:06	1
4,6-Dinitro-2-methylphenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Bromophenyl phenyl ether	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Chloro-3-methylphenol	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Chloroaniline	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Chlorophenyl phenyl ether	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Methylphenol	ND		9.2	0.33	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Nitroaniline	ND		9.2	0.23	ug/L		04/28/15 08:23	05/01/15 01:06	1
4-Nitrophenol	ND		9.2	1.4	ug/L		04/28/15 08:23	05/01/15 01:06	1
Acenaphthene	ND		4.6	0.38	ug/L		04/28/15 08:23	05/01/15 01:06	1
Acenaphthylene	ND		4.6	0.35	ug/L		04/28/15 08:23	05/01/15 01:06	1
Acetophenone	ND		4.6	0.50	ug/L		04/28/15 08:23	05/01/15 01:06	1
Anthracene	ND		4.6	0.26	ug/L		04/28/15 08:23	05/01/15 01:06	1
Atrazine	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzaldehyde	ND		4.6	0.25	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzo(a)anthracene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzo(a)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzo(b)fluoranthene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzo(g,h,i)perylene	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 01:06	1
Benzo(k)fluoranthene	ND		4.6	0.67	ug/L		04/28/15 08:23	05/01/15 01:06	1
Bis(2-chloroethoxy)methane	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 01:06	1
Bis(2-chloroethyl)ether	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 01:06	1
Bis(2-ethylhexyl) phthalate	ND		4.6	1.7	ug/L		04/28/15 08:23	05/01/15 01:06	1
Butyl benzyl phthalate	0.55	J B	4.6	0.39	ug/L		04/28/15 08:23	05/01/15 01:06	1
Caprolactam	ND		4.6	2.0	ug/L		04/28/15 08:23	05/01/15 01:06	1
Carbazole	ND		4.6	0.28	ug/L		04/28/15 08:23	05/01/15 01:06	1
Chrysene	ND		4.6	0.30	ug/L		04/28/15 08:23	05/01/15 01:06	1
Di-n-butyl phthalate	0.41	J	4.6	0.29	ug/L		04/28/15 08:23	05/01/15 01:06	1
Di-n-octyl phthalate	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 01:06	1
Dibenz(a,h)anthracene	ND		4.6	0.39	ug/L		04/28/15 08:23	05/01/15 01:06	1
Dibenzofuran	ND		9.2	0.47	ug/L		04/28/15 08:23	05/01/15 01:06	1
Diethyl phthalate	ND		4.6	0.20	ug/L		04/28/15 08:23	05/01/15 01:06	1
Dimethyl phthalate	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 01:06	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 01:06	1
Fluorene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 01:06	1
Hexachlorobenzene	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 01:06	1
Hexachlorobutadiene	ND		4.6	0.63	ug/L		04/28/15 08:23	05/01/15 01:06	1
Hexachlorocyclopentadiene	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 01:06	1
Hexachloroethane	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 01:06	1
Indeno(1,2,3-cd)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 01:06	1
Isophorone	ND		4.6	0.40	ug/L		04/28/15 08:23	05/01/15 01:06	1
N-Nitrosodi-n-propylamine	ND		4.6	0.50	ug/L		04/28/15 08:23	05/01/15 01:06	1
N-Nitrosodiphenylamine	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 01:06	1
Naphthalene	ND		4.6	0.70	ug/L		04/28/15 08:23	05/01/15 01:06	1
Nitrobenzene	ND		4.6	0.27	ug/L		04/28/15 08:23	05/01/15 01:06	1
Pentachlorophenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 01:06	1
Phenanthrene	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 01:06	1
Phenol	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 01:06	1
Pyrene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 01:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		52 - 132				04/28/15 08:23	05/01/15 01:06	1
2-Fluorobiphenyl	89		48 - 120				04/28/15 08:23	05/01/15 01:06	1
2-Fluorophenol	58		20 - 120				04/28/15 08:23	05/01/15 01:06	1
Nitrobenzene-d5	83		46 - 120				04/28/15 08:23	05/01/15 01:06	1
p-Terphenyl-d14	57	X	67 - 150				04/28/15 08:23	05/01/15 01:06	1
Phenol-d5	41		16 - 120				04/28/15 08:23	05/01/15 01:06	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.66		0.20	0.060	mg/L		04/28/15 16:32	04/29/15 19:09	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 19:09	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 19:09	1
Barium	0.062		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 19:09	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 19:09	1
Cadmium	0.00053	J	0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 19:09	1
Calcium	134		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:09	1
Chromium	ND		0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 19:09	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 19:09	1
Copper	0.0030	J B	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 19:09	1
Iron	1.6		0.050	0.019	mg/L		04/28/15 16:32	04/29/15 19:09	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 19:09	1
Magnesium	45.9		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 19:09	1
Manganese	0.16	B	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 19:09	1
Nickel	0.0017	J	0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 19:09	1
Potassium	12.9		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:09	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 19:09	1
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 19:09	1
Sodium	27.7		1.0	0.32	mg/L		04/28/15 16:32	04/29/15 19:09	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 19:09	1
Vanadium	ND		0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 19:09	1
Zinc	0.053	B	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 19:09	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-4S

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/05/15 12:56	05/06/15 18:21	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 18:21	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 18:21	1
Barium	0.061		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 18:21	1
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 18:21	1
Cadmium	ND		0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 18:21	1
Calcium	137		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:21	1
Chromium	ND		0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 18:21	1
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 18:21	1
Copper	ND		0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 18:21	1
Iron	ND		0.050	0.019	mg/L		05/05/15 12:56	05/06/15 18:21	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 18:21	1
Magnesium	46.2		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 18:21	1
Manganese	0.0088	B	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 18:21	1
Nickel	0.0013	J	0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 18:21	1
Potassium	14.3	B	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:21	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 18:21	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 18:21	1
Sodium	29.4	B	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 18:21	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 18:21	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 18:21	1
Zinc	0.022	B	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 18:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:39	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:45	1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/15 06:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/15 06:18	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/15 06:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/02/15 06:18	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/15 06:18	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/15 06:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/02/15 06:18	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/02/15 06:18	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/02/15 06:18	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/02/15 06:18	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/15 06:18	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/15 06:18	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/02/15 06:18	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/02/15 06:18	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/15 06:18	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/15 06:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/15 06:18	1
Acetone	ND		10	3.0	ug/L			05/02/15 06:18	1
Benzene	ND		1.0	0.41	ug/L			05/02/15 06:18	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/15 06:18	1
Bromoform	ND		1.0	0.26	ug/L			05/02/15 06:18	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/15 06:18	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/15 06:18	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/15 06:18	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/15 06:18	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/15 06:18	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/15 06:18	1
Chloroform	ND		1.0	0.34	ug/L			05/02/15 06:18	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/15 06:18	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/02/15 06:18	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/15 06:18	1
Cyclohexane	ND		1.0	0.18	ug/L			05/02/15 06:18	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/02/15 06:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/15 06:18	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/02/15 06:18	1
Methyl acetate	ND		2.5	0.50	ug/L			05/02/15 06:18	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/02/15 06:18	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/02/15 06:18	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/15 06:18	1
Styrene	ND		1.0	0.73	ug/L			05/02/15 06:18	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/15 06:18	1
Toluene	ND		1.0	0.51	ug/L			05/02/15 06:18	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/02/15 06:18	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/15 06:18	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/15 06:18	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/02/15 06:18	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/15 06:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/15 06:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137		05/02/15 06:18	1
Toluene-d8 (Surr)	96		71 - 126		05/02/15 06:18	1
4-Bromofluorobenzene (Surr)	95		73 - 120		05/02/15 06:18	1
Dibromofluoromethane (Surr)	98		60 - 140		05/02/15 06:18	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.5	0.59	ug/L		04/28/15 08:23	05/01/15 01:36	1
bis (2-chloroisopropyl) ether	ND		4.5	0.47	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,4,5-Trichlorophenol	ND		4.5	0.44	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,4,6-Trichlorophenol	ND		4.5	0.55	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,4-Dichlorophenol	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,4-Dimethylphenol	ND		4.5	0.45	ug/L		04/28/15 08:23	05/01/15 01:36	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,4-Dinitrotoluene	ND		4.5	0.41	ug/L		04/28/15 08:23	05/01/15 01:36	1
2,6-Dinitrotoluene	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Chloronaphthalene	ND		4.5	0.42	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Chlorophenol	ND		4.5	0.48	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Methylnaphthalene	ND		4.5	0.55	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Methylphenol	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Nitroaniline	ND		9.1	0.38	ug/L		04/28/15 08:23	05/01/15 01:36	1
2-Nitrophenol	ND		4.5	0.44	ug/L		04/28/15 08:23	05/01/15 01:36	1
3,3'-Dichlorobenzidine	ND	* F1 F2	4.5	0.36	ug/L		04/28/15 08:23	05/01/15 01:36	1
3-Nitroaniline	ND	* F2	9.1	0.44	ug/L		04/28/15 08:23	05/01/15 01:36	1
4,6-Dinitro-2-methylphenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Bromophenyl phenyl ether	ND		4.5	0.41	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Chloro-3-methylphenol	ND		4.5	0.41	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Chloroaniline	ND	F1 F2	4.5	0.54	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Chlorophenyl phenyl ether	ND		4.5	0.32	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Methylphenol	ND		9.1	0.33	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Nitroaniline	ND		9.1	0.23	ug/L		04/28/15 08:23	05/01/15 01:36	1
4-Nitrophenol	ND		9.1	1.4	ug/L		04/28/15 08:23	05/01/15 01:36	1
Acenaphthene	ND		4.5	0.37	ug/L		04/28/15 08:23	05/01/15 01:36	1
Acenaphthylene	ND		4.5	0.35	ug/L		04/28/15 08:23	05/01/15 01:36	1
Acetophenone	ND		4.5	0.49	ug/L		04/28/15 08:23	05/01/15 01:36	1
Anthracene	ND		4.5	0.25	ug/L		04/28/15 08:23	05/01/15 01:36	1
Atrazine	ND	F2	4.5	0.42	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzaldehyde	0.29	J B	4.5	0.24	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzo(a)anthracene	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzo(a)pyrene	ND	F1	4.5	0.43	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzo(b)fluoranthene	ND		4.5	0.31	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzo(g,h,i)perylene	ND	F1	4.5	0.32	ug/L		04/28/15 08:23	05/01/15 01:36	1
Benzo(k)fluoranthene	ND	F1	4.5	0.66	ug/L		04/28/15 08:23	05/01/15 01:36	1
Bis(2-chloroethoxy)methane	ND		4.5	0.32	ug/L		04/28/15 08:23	05/01/15 01:36	1
Bis(2-chloroethyl)ether	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 01:36	1
Bis(2-ethylhexyl) phthalate	ND	F1	4.5	1.6	ug/L		04/28/15 08:23	05/01/15 01:36	1
Butyl benzyl phthalate	0.45	J B	4.5	0.38	ug/L		04/28/15 08:23	05/01/15 01:36	1
Caprolactam	ND		4.5	2.0	ug/L		04/28/15 08:23	05/01/15 01:36	1
Carbazole	ND		4.5	0.27	ug/L		04/28/15 08:23	05/01/15 01:36	1
Chrysene	ND	F1	4.5	0.30	ug/L		04/28/15 08:23	05/01/15 01:36	1
Di-n-butyl phthalate	0.28	J	4.5	0.28	ug/L		04/28/15 08:23	05/01/15 01:36	1
Di-n-octyl phthalate	ND	F1	4.5	0.43	ug/L		04/28/15 08:23	05/01/15 01:36	1
Dibenz(a,h)anthracene	ND	F1	4.5	0.38	ug/L		04/28/15 08:23	05/01/15 01:36	1
Dibenzofuran	ND		9.1	0.46	ug/L		04/28/15 08:23	05/01/15 01:36	1
Diethyl phthalate	ND		4.5	0.20	ug/L		04/28/15 08:23	05/01/15 01:36	1
Dimethyl phthalate	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 01:36	1
Fluoranthene	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 01:36	1
Fluorene	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 01:36	1
Hexachlorobenzene	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 01:36	1
Hexachlorobutadiene	ND		4.5	0.62	ug/L		04/28/15 08:23	05/01/15 01:36	1
Hexachlorocyclopentadiene	ND		4.5	0.54	ug/L		04/28/15 08:23	05/01/15 01:36	1
Hexachloroethane	ND		4.5	0.54	ug/L		04/28/15 08:23	05/01/15 01:36	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	ND	F1	4.5	0.43	ug/L		04/28/15 08:23	05/01/15 01:36	1
Isophorone	ND		4.5	0.39	ug/L		04/28/15 08:23	05/01/15 01:36	1
N-Nitrosodi-n-propylamine	ND		4.5	0.49	ug/L		04/28/15 08:23	05/01/15 01:36	1
N-Nitrosodiphenylamine	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 01:36	1
Naphthalene	ND		4.5	0.69	ug/L		04/28/15 08:23	05/01/15 01:36	1
Nitrobenzene	ND		4.5	0.26	ug/L		04/28/15 08:23	05/01/15 01:36	1
Pentachlorophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 01:36	1
Phenanthrene	ND		4.5	0.40	ug/L		04/28/15 08:23	05/01/15 01:36	1
Phenol	ND		4.5	0.35	ug/L		04/28/15 08:23	05/01/15 01:36	1
Pyrene	ND		4.5	0.31	ug/L		04/28/15 08:23	05/01/15 01:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		52 - 132				04/28/15 08:23	05/01/15 01:36	1
2-Fluorobiphenyl	87		48 - 120				04/28/15 08:23	05/01/15 01:36	1
2-Fluorophenol	51		20 - 120				04/28/15 08:23	05/01/15 01:36	1
Nitrobenzene-d5	75		46 - 120				04/28/15 08:23	05/01/15 01:36	1
p-Terphenyl-d14	70		67 - 150				04/28/15 08:23	05/01/15 01:36	1
Phenol-d5	38		16 - 120				04/28/15 08:23	05/01/15 01:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.98	F1	0.20	0.060	mg/L		04/28/15 16:32	04/29/15 19:20	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 19:20	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 19:20	1
Barium	0.13		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 19:20	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 19:20	1
Cadmium	0.00056	J	0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 19:20	1
Calcium	76.0		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:20	1
Chromium	0.0012	J	0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 19:20	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 19:20	1
Copper	0.0066	J B	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 19:20	1
Iron	0.79	F1	0.050	0.019	mg/L		04/28/15 16:32	04/29/15 19:20	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 19:20	1
Magnesium	41.5		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 19:20	1
Manganese	0.018	B F1	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 19:20	1
Nickel	0.0023	J	0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 19:20	1
Potassium	1.0		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:20	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 19:20	1
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 19:20	1
Sodium	17.3	F1	1.0	0.32	mg/L		04/28/15 16:32	04/29/15 19:20	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 19:20	1
Vanadium	0.0015	J	0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 19:20	1
Zinc	0.029	B	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 19:20	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/05/15 12:56	05/06/15 18:23	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 18:23	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 18:23	1
Barium	0.12		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 18:23	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 18:23	1
Cadmium	ND		0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 18:23	1
Calcium	70.2		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:23	1
Chromium	ND		0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 18:23	1
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 18:23	1
Copper	0.0017	J	0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 18:23	1
Iron	ND		0.050	0.019	mg/L		05/05/15 12:56	05/06/15 18:23	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 18:23	1
Magnesium	41.6		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 18:23	1
Manganese	0.00069	J B	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 18:23	1
Nickel	ND		0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 18:23	1
Potassium	0.50	B	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:23	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 18:23	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 18:23	1
Sodium	15.5	B F1	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 18:23	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 18:23	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 18:23	1
Zinc	0.0034	J B	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 18:23	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:47	1

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/15 06:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/15 06:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/15 06:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/02/15 06:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/15 06:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/15 06:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/02/15 06:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/02/15 06:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/02/15 06:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/02/15 06:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/15 06:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/15 06:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/02/15 06:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/02/15 06:45	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/15 06:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/15 06:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/15 06:45	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			05/02/15 06:45	1
Benzene	ND		1.0	0.41	ug/L			05/02/15 06:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/15 06:45	1
Bromoform	ND		1.0	0.26	ug/L			05/02/15 06:45	1
Bromomethane	ND		1.0	0.69	ug/L			05/02/15 06:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/15 06:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/15 06:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/15 06:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/15 06:45	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/15 06:45	1
Chloroform	ND		1.0	0.34	ug/L			05/02/15 06:45	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/15 06:45	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/02/15 06:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/15 06:45	1
Cyclohexane	ND		1.0	0.18	ug/L			05/02/15 06:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/02/15 06:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/15 06:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/02/15 06:45	1
Methyl acetate	ND		2.5	0.50	ug/L			05/02/15 06:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/02/15 06:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/02/15 06:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/15 06:45	1
Styrene	ND		1.0	0.73	ug/L			05/02/15 06:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/15 06:45	1
Toluene	ND		1.0	0.51	ug/L			05/02/15 06:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/02/15 06:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/15 06:45	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/15 06:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/02/15 06:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/15 06:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/15 06:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		66 - 137		05/02/15 06:45	1
Toluene-d8 (Surr)	96		71 - 126		05/02/15 06:45	1
4-Bromofluorobenzene (Surr)	95		73 - 120		05/02/15 06:45	1
Dibromofluoromethane (Surr)	101		60 - 140		05/02/15 06:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.5	0.59	ug/L		04/28/15 08:23	05/01/15 02:06	1
bis (2-chloroisopropyl) ether	ND		4.5	0.47	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4,5-Trichlorophenol	ND		4.5	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4,6-Trichlorophenol	ND		4.5	0.55	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4-Dichlorophenol	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4-Dimethylphenol	ND		4.5	0.45	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4-Dinitrophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,4-Dinitrotoluene	ND		4.5	0.40	ug/L		04/28/15 08:23	05/01/15 02:06	1
2,6-Dinitrotoluene	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 02:06	1
2-Chloronaphthalene	ND		4.5	0.42	ug/L		04/28/15 08:23	05/01/15 02:06	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		4.5	0.48	ug/L		04/28/15 08:23	05/01/15 02:06	1
2-Methylnaphthalene	ND		4.5	0.54	ug/L		04/28/15 08:23	05/01/15 02:06	1
2-Methylphenol	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 02:06	1
2-Nitroaniline	ND		9.1	0.38	ug/L		04/28/15 08:23	05/01/15 02:06	1
2-Nitrophenol	ND		4.5	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
3,3'-Dichlorobenzidine	ND	*	4.5	0.36	ug/L		04/28/15 08:23	05/01/15 02:06	1
3-Nitroaniline	ND	*	9.1	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
4,6-Dinitro-2-methylphenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Bromophenyl phenyl ether	ND		4.5	0.41	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Chloro-3-methylphenol	ND		4.5	0.41	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Chloroaniline	ND		4.5	0.53	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Chlorophenyl phenyl ether	ND		4.5	0.32	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Methylphenol	ND		9.1	0.33	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Nitroaniline	ND		9.1	0.23	ug/L		04/28/15 08:23	05/01/15 02:06	1
4-Nitrophenol	ND		9.1	1.4	ug/L		04/28/15 08:23	05/01/15 02:06	1
Acenaphthene	ND		4.5	0.37	ug/L		04/28/15 08:23	05/01/15 02:06	1
Acenaphthylene	ND		4.5	0.34	ug/L		04/28/15 08:23	05/01/15 02:06	1
Acetophenone	ND		4.5	0.49	ug/L		04/28/15 08:23	05/01/15 02:06	1
Anthracene	ND		4.5	0.25	ug/L		04/28/15 08:23	05/01/15 02:06	1
Atrazine	ND		4.5	0.42	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzaldehyde	0.27	J B	4.5	0.24	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzo(a)anthracene	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzo(a)pyrene	ND		4.5	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzo(b)fluoranthene	ND		4.5	0.31	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzo(g,h,i)perylene	ND		4.5	0.32	ug/L		04/28/15 08:23	05/01/15 02:06	1
Benzo(k)fluoranthene	ND		4.5	0.66	ug/L		04/28/15 08:23	05/01/15 02:06	1
Bis(2-chloroethoxy)methane	ND		4.5	0.32	ug/L		04/28/15 08:23	05/01/15 02:06	1
Bis(2-chloroethyl)ether	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 02:06	1
Bis(2-ethylhexyl) phthalate	ND		4.5	1.6	ug/L		04/28/15 08:23	05/01/15 02:06	1
Butyl benzyl phthalate	0.42	J B	4.5	0.38	ug/L		04/28/15 08:23	05/01/15 02:06	1
Caprolactam	ND		4.5	2.0	ug/L		04/28/15 08:23	05/01/15 02:06	1
Carbazole	ND		4.5	0.27	ug/L		04/28/15 08:23	05/01/15 02:06	1
Chrysene	ND		4.5	0.30	ug/L		04/28/15 08:23	05/01/15 02:06	1
Di-n-butyl phthalate	0.38	J	4.5	0.28	ug/L		04/28/15 08:23	05/01/15 02:06	1
Di-n-octyl phthalate	ND		4.5	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
Dibenz(a,h)anthracene	ND		4.5	0.38	ug/L		04/28/15 08:23	05/01/15 02:06	1
Dibenzofuran	ND		9.1	0.46	ug/L		04/28/15 08:23	05/01/15 02:06	1
Diethyl phthalate	ND		4.5	0.20	ug/L		04/28/15 08:23	05/01/15 02:06	1
Dimethyl phthalate	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 02:06	1
Fluoranthene	ND		4.5	0.36	ug/L		04/28/15 08:23	05/01/15 02:06	1
Fluorene	ND		4.5	0.33	ug/L		04/28/15 08:23	05/01/15 02:06	1
Hexachlorobenzene	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 02:06	1
Hexachlorobutadiene	ND		4.5	0.62	ug/L		04/28/15 08:23	05/01/15 02:06	1
Hexachlorocyclopentadiene	ND		4.5	0.53	ug/L		04/28/15 08:23	05/01/15 02:06	1
Hexachloroethane	ND		4.5	0.53	ug/L		04/28/15 08:23	05/01/15 02:06	1
Indeno(1,2,3-cd)pyrene	ND		4.5	0.43	ug/L		04/28/15 08:23	05/01/15 02:06	1
Isophorone	ND		4.5	0.39	ug/L		04/28/15 08:23	05/01/15 02:06	1
N-Nitrosodi-n-propylamine	ND		4.5	0.49	ug/L		04/28/15 08:23	05/01/15 02:06	1
N-Nitrosodiphenylamine	ND		4.5	0.46	ug/L		04/28/15 08:23	05/01/15 02:06	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		4.5	0.69	ug/L		04/28/15 08:23	05/01/15 02:06	1
Nitrobenzene	ND		4.5	0.26	ug/L		04/28/15 08:23	05/01/15 02:06	1
Pentachlorophenol	ND		9.1	2.0	ug/L		04/28/15 08:23	05/01/15 02:06	1
Phenanthrene	ND		4.5	0.40	ug/L		04/28/15 08:23	05/01/15 02:06	1
Phenol	ND		4.5	0.35	ug/L		04/28/15 08:23	05/01/15 02:06	1
Pyrene	ND		4.5	0.31	ug/L		04/28/15 08:23	05/01/15 02:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		52 - 132	04/28/15 08:23	05/01/15 02:06	1
2-Fluorobiphenyl	81		48 - 120	04/28/15 08:23	05/01/15 02:06	1
2-Fluorophenol	50		20 - 120	04/28/15 08:23	05/01/15 02:06	1
Nitrobenzene-d5	74		46 - 120	04/28/15 08:23	05/01/15 02:06	1
p-Terphenyl-d14	71		67 - 150	04/28/15 08:23	05/01/15 02:06	1
Phenol-d5	34		16 - 120	04/28/15 08:23	05/01/15 02:06	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.15	J	0.20	0.060	mg/L		04/28/15 16:32	04/29/15 19:33	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 19:33	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 19:33	1
Barium	0.055		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 19:33	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 19:33	1
Cadmium	0.00078	J	0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 19:33	1
Calcium	154		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:33	1
Chromium	0.0012	J	0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 19:33	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 19:33	1
Copper	0.0060	J B	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 19:33	1
Iron	0.22		0.050	0.019	mg/L		04/28/15 16:32	04/29/15 19:33	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 19:33	1
Magnesium	51.7		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 19:33	1
Manganese	0.0017	J B	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 19:33	1
Nickel	0.0033	J	0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 19:33	1
Potassium	1.5		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:33	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 19:33	1
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 19:33	1
Sodium	14.1		1.0	0.32	mg/L		04/28/15 16:32	04/29/15 19:33	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 19:33	1
Vanadium	ND		0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 19:33	1
Zinc	0.026	B	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 19:33	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/05/15 12:56	05/06/15 18:45	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 18:45	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 18:45	1
Barium	0.048		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 18:45	1
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 18:45	1
Cadmium	0.00061	J	0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 18:45	1
Calcium	136		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:45	1
Chromium	0.0015	J	0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 18:45	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 18:45	1
Copper	ND		0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 18:45	1
Iron	ND		0.050	0.019	mg/L		05/05/15 12:56	05/06/15 18:45	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 18:45	1
Magnesium	56.9		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 18:45	1
Manganese	0.0011	J B	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 18:45	1
Nickel	0.0014	J	0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 18:45	1
Potassium	1.0	B	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:45	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 18:45	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 18:45	1
Sodium	14.6	B	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 18:45	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 18:45	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 18:45	1
Zinc	0.036	B	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 18:45	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:57	1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/02/15 07:13	1
1,1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/02/15 07:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/02/15 07:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/02/15 07:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/02/15 07:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/02/15 07:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/02/15 07:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/02/15 07:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/02/15 07:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/02/15 07:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/02/15 07:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/02/15 07:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/02/15 07:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/02/15 07:13	1
2-Hexanone	ND		5.0	1.2	ug/L			05/02/15 07:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/02/15 07:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/02/15 07:13	1
Acetone	ND		10	3.0	ug/L			05/02/15 07:13	1
Benzene	ND		1.0	0.41	ug/L			05/02/15 07:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/02/15 07:13	1
Bromoform	ND		1.0	0.26	ug/L			05/02/15 07:13	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			05/02/15 07:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/02/15 07:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/02/15 07:13	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/02/15 07:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/02/15 07:13	1
Chloroethane	ND		1.0	0.32	ug/L			05/02/15 07:13	1
Chloroform	ND		1.0	0.34	ug/L			05/02/15 07:13	1
Chloromethane	ND		1.0	0.35	ug/L			05/02/15 07:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/02/15 07:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/02/15 07:13	1
Cyclohexane	ND		1.0	0.18	ug/L			05/02/15 07:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/02/15 07:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/02/15 07:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/02/15 07:13	1
Methyl acetate	ND		2.5	0.50	ug/L			05/02/15 07:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/02/15 07:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/02/15 07:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/02/15 07:13	1
Styrene	ND		1.0	0.73	ug/L			05/02/15 07:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/02/15 07:13	1
Toluene	ND		1.0	0.51	ug/L			05/02/15 07:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/02/15 07:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/02/15 07:13	1
Trichloroethene	ND		1.0	0.46	ug/L			05/02/15 07:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/02/15 07:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/02/15 07:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/02/15 07:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		66 - 137		05/02/15 07:13	1
Toluene-d8 (Surr)	95		71 - 126		05/02/15 07:13	1
4-Bromofluorobenzene (Surr)	94		73 - 120		05/02/15 07:13	1
Dibromofluoromethane (Surr)	98		60 - 140		05/02/15 07:13	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.6	0.60	ug/L		04/28/15 08:23	05/01/15 02:36	1
bis (2-chloroisopropyl) ether	ND		4.6	0.48	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4,5-Trichlorophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4,6-Trichlorophenol	ND		4.6	0.56	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4-Dichlorophenol	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4-Dimethylphenol	ND		4.6	0.46	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4-Dinitrophenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,4-Dinitrotoluene	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 02:36	1
2,6-Dinitrotoluene	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 02:36	1
2-Chloronaphthalene	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 02:36	1
2-Chlorophenol	ND		4.6	0.49	ug/L		04/28/15 08:23	05/01/15 02:36	1
2-Methylnaphthalene	ND		4.6	0.55	ug/L		04/28/15 08:23	05/01/15 02:36	1
2-Methylphenol	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 02:36	1
2-Nitroaniline	ND		9.2	0.39	ug/L		04/28/15 08:23	05/01/15 02:36	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		4.6	0.44	ug/L		04/28/15 08:23	05/01/15 02:36	1
3,3'-Dichlorobenzidine	ND	*	4.6	0.37	ug/L		04/28/15 08:23	05/01/15 02:36	1
3-Nitroaniline	ND	*	9.2	0.44	ug/L		04/28/15 08:23	05/01/15 02:36	1
4,6-Dinitro-2-methylphenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Bromophenyl phenyl ether	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Chloro-3-methylphenol	ND		4.6	0.41	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Chloroaniline	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Chlorophenyl phenyl ether	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Methylphenol	ND		9.2	0.33	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Nitroaniline	ND		9.2	0.23	ug/L		04/28/15 08:23	05/01/15 02:36	1
4-Nitrophenol	ND		9.2	1.4	ug/L		04/28/15 08:23	05/01/15 02:36	1
Acenaphthene	ND		4.6	0.38	ug/L		04/28/15 08:23	05/01/15 02:36	1
Acenaphthylene	ND		4.6	0.35	ug/L		04/28/15 08:23	05/01/15 02:36	1
Acetophenone	ND		4.6	0.50	ug/L		04/28/15 08:23	05/01/15 02:36	1
Anthracene	ND		4.6	0.26	ug/L		04/28/15 08:23	05/01/15 02:36	1
Atrazine	ND		4.6	0.42	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzaldehyde	0.27	J B	4.6	0.25	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzo(a)anthracene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzo(a)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzo(b)fluoranthene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzo(g,h,i)perylene	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 02:36	1
Benzo(k)fluoranthene	ND		4.6	0.67	ug/L		04/28/15 08:23	05/01/15 02:36	1
Bis(2-chloroethoxy)methane	ND		4.6	0.32	ug/L		04/28/15 08:23	05/01/15 02:36	1
Bis(2-chloroethyl)ether	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 02:36	1
Bis(2-ethylhexyl) phthalate	ND		4.6	1.7	ug/L		04/28/15 08:23	05/01/15 02:36	1
Butyl benzyl phthalate	0.52	J B	4.6	0.39	ug/L		04/28/15 08:23	05/01/15 02:36	1
Caprolactam	ND		4.6	2.0	ug/L		04/28/15 08:23	05/01/15 02:36	1
Carbazole	ND		4.6	0.28	ug/L		04/28/15 08:23	05/01/15 02:36	1
Chrysene	ND		4.6	0.30	ug/L		04/28/15 08:23	05/01/15 02:36	1
Di-n-butyl phthalate	0.41	J	4.6	0.28	ug/L		04/28/15 08:23	05/01/15 02:36	1
Di-n-octyl phthalate	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 02:36	1
Dibenz(a,h)anthracene	ND		4.6	0.39	ug/L		04/28/15 08:23	05/01/15 02:36	1
Dibenzofuran	ND		9.2	0.47	ug/L		04/28/15 08:23	05/01/15 02:36	1
Diethyl phthalate	ND		4.6	0.20	ug/L		04/28/15 08:23	05/01/15 02:36	1
Dimethyl phthalate	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 02:36	1
Fluoranthene	ND		4.6	0.37	ug/L		04/28/15 08:23	05/01/15 02:36	1
Fluorene	ND		4.6	0.33	ug/L		04/28/15 08:23	05/01/15 02:36	1
Hexachlorobenzene	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 02:36	1
Hexachlorobutadiene	ND		4.6	0.62	ug/L		04/28/15 08:23	05/01/15 02:36	1
Hexachlorocyclopentadiene	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 02:36	1
Hexachloroethane	ND		4.6	0.54	ug/L		04/28/15 08:23	05/01/15 02:36	1
Indeno(1,2,3-cd)pyrene	ND		4.6	0.43	ug/L		04/28/15 08:23	05/01/15 02:36	1
Isophorone	ND		4.6	0.39	ug/L		04/28/15 08:23	05/01/15 02:36	1
N-Nitrosodi-n-propylamine	ND		4.6	0.50	ug/L		04/28/15 08:23	05/01/15 02:36	1
N-Nitrosodiphenylamine	ND		4.6	0.47	ug/L		04/28/15 08:23	05/01/15 02:36	1
Naphthalene	ND		4.6	0.70	ug/L		04/28/15 08:23	05/01/15 02:36	1
Nitrobenzene	ND		4.6	0.27	ug/L		04/28/15 08:23	05/01/15 02:36	1
Pentachlorophenol	ND		9.2	2.0	ug/L		04/28/15 08:23	05/01/15 02:36	1
Phenanthrene	ND		4.6	0.40	ug/L		04/28/15 08:23	05/01/15 02:36	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		4.6	0.36	ug/L		04/28/15 08:23	05/01/15 02:36	1
Pyrene	ND		4.6	0.31	ug/L		04/28/15 08:23	05/01/15 02:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		52 - 132				04/28/15 08:23	05/01/15 02:36	1
2-Fluorobiphenyl	87		48 - 120				04/28/15 08:23	05/01/15 02:36	1
2-Fluorophenol	49		20 - 120				04/28/15 08:23	05/01/15 02:36	1
Nitrobenzene-d5	79		46 - 120				04/28/15 08:23	05/01/15 02:36	1
p-Terphenyl-d14	79		67 - 150				04/28/15 08:23	05/01/15 02:36	1
Phenol-d5	37		16 - 120				04/28/15 08:23	05/01/15 02:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.14	J	0.20	0.060	mg/L		04/28/15 16:32	04/29/15 19:36	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 19:36	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 19:36	1
Barium	0.054		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 19:36	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 19:36	1
Cadmium	0.00086	J	0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 19:36	1
Calcium	152		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:36	1
Chromium	0.0013	J	0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 19:36	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 19:36	1
Copper	0.0058	J B	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 19:36	1
Iron	0.20		0.050	0.019	mg/L		04/28/15 16:32	04/29/15 19:36	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 19:36	1
Magnesium	51.6		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 19:36	1
Manganese	0.0017	J B	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 19:36	1
Nickel	0.0030	J	0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 19:36	1
Potassium	1.4		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 19:36	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 19:36	1
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 19:36	1
Sodium	13.9		1.0	0.32	mg/L		04/28/15 16:32	04/29/15 19:36	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 19:36	1
Vanadium	ND		0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 19:36	1
Zinc	0.026	B	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 19:36	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/05/15 12:56	05/06/15 18:48	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 18:48	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 18:48	1
Barium	0.056		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 18:48	1
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 18:48	1
Cadmium	0.00071	J	0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 18:48	1
Calcium	142		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:48	1
Chromium	0.0016	J	0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 18:48	1
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 18:48	1
Copper	ND		0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 18:48	1
Iron	ND		0.050	0.019	mg/L		05/05/15 12:56	05/06/15 18:48	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 18:48	1

TestAmerica Buffalo

Client Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Method: 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	51.1		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 18:48	1
Manganese	0.00069	J B	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 18:48	1
Nickel	0.0015	J	0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 18:48	1
Potassium	1.4	B	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 18:48	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 18:48	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 18:48	1
Sodium	12.6	B	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 18:48	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 18:48	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 18:48	1
Zinc	0.027	B	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 18:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:58	1

Surrogate Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (66-137)	TOL (71-126)	BFB (73-120)	DBFM (60-140)
480-79130-1	NCR-3S	106	96	95	101
480-79130-2	NCR-4S	102	95	94	99
480-79130-3	NCR-5S	102	96	95	98
480-79130-3 MS	NCR-5S	101	96	98	99
480-79130-3 MSD	NCR-5S	100	98	99	98
480-79130-4	NCR-13S	104	96	95	101
480-79130-5	Field Dup 1	102	95	94	98
LCS 480-240100/4	Lab Control Sample	98	97	100	95
MB 480-240100/6	Method Blank	99	96	96	97

Surrogate Legend

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

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	TPH (67-150)	PHL (16-120)
480-79130-1	NCR-3S	77	91	59	82	72	41
480-79130-2	NCR-4S	86	89	58	83	57 X	41
480-79130-3	NCR-5S	82	87	51	75	70	38
480-79130-3 MS	NCR-5S	84	82	60	89	56 X	43
480-79130-3 MSD	NCR-5S	93	87	61	85	63 X	46
480-79130-4	NCR-13S	73	81	50	74	71	34
480-79130-5	Field Dup 1	68	87	49	79	79	37
LCS 480-239033/2-A	Lab Control Sample	92	86	70	89	99	52
MB 480-239033/1-A	Method Blank	75	76	58	75	96	43

Surrogate Legend

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-240100/6

Matrix: Water

Analysis Batch: 240100

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			05/01/15 23:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			05/01/15 23:41	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			05/01/15 23:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			05/01/15 23:41	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			05/01/15 23:41	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			05/01/15 23:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			05/01/15 23:41	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			05/01/15 23:41	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			05/01/15 23:41	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			05/01/15 23:41	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			05/01/15 23:41	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			05/01/15 23:41	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			05/01/15 23:41	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			05/01/15 23:41	1
2-Hexanone	ND		5.0	1.2	ug/L			05/01/15 23:41	1
2-Butanone (MEK)	ND		10	1.3	ug/L			05/01/15 23:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			05/01/15 23:41	1
Acetone	ND		10	3.0	ug/L			05/01/15 23:41	1
Benzene	ND		1.0	0.41	ug/L			05/01/15 23:41	1
Bromodichloromethane	ND		1.0	0.39	ug/L			05/01/15 23:41	1
Bromoform	ND		1.0	0.26	ug/L			05/01/15 23:41	1
Bromomethane	ND		1.0	0.69	ug/L			05/01/15 23:41	1
Carbon disulfide	ND		1.0	0.19	ug/L			05/01/15 23:41	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			05/01/15 23:41	1
Chlorobenzene	ND		1.0	0.75	ug/L			05/01/15 23:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			05/01/15 23:41	1
Chloroethane	ND		1.0	0.32	ug/L			05/01/15 23:41	1
Chloroform	ND		1.0	0.34	ug/L			05/01/15 23:41	1
Chloromethane	ND		1.0	0.35	ug/L			05/01/15 23:41	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			05/01/15 23:41	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			05/01/15 23:41	1
Cyclohexane	ND		1.0	0.18	ug/L			05/01/15 23:41	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			05/01/15 23:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			05/01/15 23:41	1
Isopropylbenzene	ND		1.0	0.79	ug/L			05/01/15 23:41	1
Methyl acetate	ND		2.5	0.50	ug/L			05/01/15 23:41	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			05/01/15 23:41	1
Methylcyclohexane	ND		1.0	0.16	ug/L			05/01/15 23:41	1
Methylene Chloride	ND		1.0	0.44	ug/L			05/01/15 23:41	1
Styrene	ND		1.0	0.73	ug/L			05/01/15 23:41	1
Tetrachloroethene	ND		1.0	0.36	ug/L			05/01/15 23:41	1
Toluene	ND		1.0	0.51	ug/L			05/01/15 23:41	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			05/01/15 23:41	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			05/01/15 23:41	1
Trichloroethene	ND		1.0	0.46	ug/L			05/01/15 23:41	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			05/01/15 23:41	1
Vinyl chloride	ND		1.0	0.90	ug/L			05/01/15 23:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			05/01/15 23:41	1

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-240100/6

Matrix: Water

Analysis Batch: 240100

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	99		66 - 137		05/01/15 23:41	1
Toluene-d8 (Surr)	96		71 - 126		05/01/15 23:41	1
4-Bromofluorobenzene (Surr)	96		73 - 120		05/01/15 23:41	1
Dibromofluoromethane (Surr)	97		60 - 140		05/01/15 23:41	1

Lab Sample ID: LCS 480-240100/4

Matrix: Water

Analysis Batch: 240100

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	25.0	22.9		ug/L		92	58 - 121
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 127
Benzene	25.0	23.9		ug/L		96	71 - 124
Chlorobenzene	25.0	23.6		ug/L		94	72 - 120
cis-1,2-Dichloroethene	25.0	23.5		ug/L		94	74 - 124
Ethylbenzene	25.0	24.3		ug/L		97	77 - 123
Methyl tert-butyl ether	25.0	23.9		ug/L		96	64 - 127
Tetrachloroethene	25.0	24.0		ug/L		96	74 - 122
Toluene	25.0	23.8		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	23.3		ug/L		93	73 - 127
Trichloroethene	25.0	24.0		ug/L		96	74 - 123

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	98		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	100		73 - 120
Dibromofluoromethane (Surr)	95		60 - 140

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 240100

Client Sample ID: NCR-5S

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	ND		25.0	24.0		ug/L		96	58 - 121
1,2-Dichlorobenzene	ND		25.0	23.4		ug/L		93	80 - 124
1,2-Dichloroethane	ND		25.0	26.5		ug/L		106	75 - 127
Benzene	ND		25.0	25.4		ug/L		102	71 - 124
Chlorobenzene	ND		25.0	23.6		ug/L		94	72 - 120
cis-1,2-Dichloroethene	ND		25.0	25.4		ug/L		101	74 - 124
Ethylbenzene	ND		25.0	23.1		ug/L		93	77 - 123
Methyl tert-butyl ether	ND		25.0	25.8		ug/L		103	64 - 127
Tetrachloroethene	ND		25.0	22.2		ug/L		89	74 - 122
Toluene	ND		25.0	23.6		ug/L		94	80 - 122
trans-1,2-Dichloroethene	ND		25.0	24.9		ug/L		99	73 - 127
Trichloroethene	ND		25.0	24.5		ug/L		98	74 - 123

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 240100

Client Sample ID: NCR-5S

Prep Type: Total/NA

<i>Surrogate</i>	<i>MS</i> <i>%Recovery</i>	<i>MS</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
Toluene-d8 (Surr)	96		71 - 126
4-Bromofluorobenzene (Surr)	98		73 - 120
Dibromofluoromethane (Surr)	99		60 - 140

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 240100

Client Sample ID: NCR-5S

Prep Type: Total/NA

<i>Analyte</i>	<i>Sample</i> <i>Result</i>	<i>Sample</i> <i>Qualifier</i>	<i>Spike</i> <i>Added</i>	<i>MSD</i> <i>Result</i>	<i>MSD</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>	<i>RPD</i>	<i>RPD</i> <i>Limit</i>
1,1-Dichloroethane	ND		25.0	26.4		ug/L		106	71 - 129	0	20
1,1-Dichloroethene	ND		25.0	24.2		ug/L		97	58 - 121	1	16
1,2-Dichlorobenzene	ND		25.0	24.2		ug/L		97	80 - 124	3	20
1,2-Dichloroethane	ND		25.0	26.8		ug/L		107	75 - 127	1	20
Benzene	ND		25.0	25.8		ug/L		103	71 - 124	1	13
Chlorobenzene	ND		25.0	24.3		ug/L		97	72 - 120	3	25
cis-1,2-Dichloroethene	ND		25.0	25.6		ug/L		102	74 - 124	1	15
Ethylbenzene	ND		25.0	23.9		ug/L		96	77 - 123	3	15
Methyl tert-butyl ether	ND		25.0	26.1		ug/L		105	64 - 127	1	37
Tetrachloroethene	ND		25.0	22.8		ug/L		91	74 - 122	3	20
Toluene	ND		25.0	24.3		ug/L		97	80 - 122	3	15
trans-1,2-Dichloroethene	ND		25.0	25.1		ug/L		101	73 - 127	1	20
Trichloroethene	ND		25.0	25.1		ug/L		100	74 - 123	2	16

<i>Surrogate</i>	<i>MSD</i> <i>%Recovery</i>	<i>MSD</i> <i>Qualifier</i>	<i>Limits</i>
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
Toluene-d8 (Surr)	98		71 - 126
4-Bromofluorobenzene (Surr)	99		73 - 120
Dibromofluoromethane (Surr)	98		60 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-239033/1-A

Matrix: Water

Analysis Batch: 239792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 239033

<i>Analyte</i>	<i>MB</i> <i>Result</i>	<i>MB</i> <i>Qualifier</i>	<i>RL</i>	<i>MDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Biphenyl	ND		5.0	0.65	ug/L		04/28/15 08:23	04/30/15 12:04	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		04/28/15 08:23	04/30/15 12:04	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		04/28/15 08:23	04/30/15 12:04	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		04/28/15 08:23	04/30/15 12:04	1

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-239033/1-A

Matrix: Water

Analysis Batch: 239792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 239033

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Chlorophenol	ND		5.0	0.53	ug/L		04/28/15 08:23	04/30/15 12:04	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		04/28/15 08:23	04/30/15 12:04	1
2-Methylphenol	ND		5.0	0.40	ug/L		04/28/15 08:23	04/30/15 12:04	1
2-Nitroaniline	ND		10	0.42	ug/L		04/28/15 08:23	04/30/15 12:04	1
2-Nitrophenol	ND		5.0	0.48	ug/L		04/28/15 08:23	04/30/15 12:04	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		04/28/15 08:23	04/30/15 12:04	1
3-Nitroaniline	ND		10	0.48	ug/L		04/28/15 08:23	04/30/15 12:04	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Chloroaniline	ND		5.0	0.59	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Methylphenol	ND		10	0.36	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Nitroaniline	ND		10	0.25	ug/L		04/28/15 08:23	04/30/15 12:04	1
4-Nitrophenol	ND		10	1.5	ug/L		04/28/15 08:23	04/30/15 12:04	1
Acenaphthene	ND		5.0	0.41	ug/L		04/28/15 08:23	04/30/15 12:04	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/28/15 08:23	04/30/15 12:04	1
Acetophenone	ND		5.0	0.54	ug/L		04/28/15 08:23	04/30/15 12:04	1
Anthracene	ND		5.0	0.28	ug/L		04/28/15 08:23	04/30/15 12:04	1
Atrazine	ND		5.0	0.46	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzaldehyde	0.280	J	5.0	0.27	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		04/28/15 08:23	04/30/15 12:04	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		04/28/15 08:23	04/30/15 12:04	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		04/28/15 08:23	04/30/15 12:04	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		04/28/15 08:23	04/30/15 12:04	1
Bis(2-ethylhexyl) phthalate	ND		5.0	1.8	ug/L		04/28/15 08:23	04/30/15 12:04	1
Butyl benzyl phthalate	0.590	J	5.0	0.42	ug/L		04/28/15 08:23	04/30/15 12:04	1
Caprolactam	ND		5.0	2.2	ug/L		04/28/15 08:23	04/30/15 12:04	1
Carbazole	ND		5.0	0.30	ug/L		04/28/15 08:23	04/30/15 12:04	1
Chrysene	ND		5.0	0.33	ug/L		04/28/15 08:23	04/30/15 12:04	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		04/28/15 08:23	04/30/15 12:04	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		04/28/15 08:23	04/30/15 12:04	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/28/15 08:23	04/30/15 12:04	1
Dibenzofuran	ND		10	0.51	ug/L		04/28/15 08:23	04/30/15 12:04	1
Diethyl phthalate	ND		5.0	0.22	ug/L		04/28/15 08:23	04/30/15 12:04	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		04/28/15 08:23	04/30/15 12:04	1
Fluoranthene	ND		5.0	0.40	ug/L		04/28/15 08:23	04/30/15 12:04	1
Fluorene	ND		5.0	0.36	ug/L		04/28/15 08:23	04/30/15 12:04	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		04/28/15 08:23	04/30/15 12:04	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		04/28/15 08:23	04/30/15 12:04	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		04/28/15 08:23	04/30/15 12:04	1
Hexachloroethane	ND		5.0	0.59	ug/L		04/28/15 08:23	04/30/15 12:04	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		04/28/15 08:23	04/30/15 12:04	1
Isophorone	ND		5.0	0.43	ug/L		04/28/15 08:23	04/30/15 12:04	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		04/28/15 08:23	04/30/15 12:04	1

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-239033/1-A

Matrix: Water

Analysis Batch: 239792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 239033

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		04/28/15 08:23	04/30/15 12:04	1
Naphthalene	ND		5.0	0.76	ug/L		04/28/15 08:23	04/30/15 12:04	1
Nitrobenzene	ND		5.0	0.29	ug/L		04/28/15 08:23	04/30/15 12:04	1
Pentachlorophenol	ND		10	2.2	ug/L		04/28/15 08:23	04/30/15 12:04	1
Phenanthrene	ND		5.0	0.44	ug/L		04/28/15 08:23	04/30/15 12:04	1
Phenol	ND		5.0	0.39	ug/L		04/28/15 08:23	04/30/15 12:04	1
Pyrene	ND		5.0	0.34	ug/L		04/28/15 08:23	04/30/15 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		52 - 132	04/28/15 08:23	04/30/15 12:04	1
2-Fluorobiphenyl	76		48 - 120	04/28/15 08:23	04/30/15 12:04	1
2-Fluorophenol	58		20 - 120	04/28/15 08:23	04/30/15 12:04	1
Nitrobenzene-d5	75		46 - 120	04/28/15 08:23	04/30/15 12:04	1
p-Terphenyl-d14	96		67 - 150	04/28/15 08:23	04/30/15 12:04	1
Phenol-d5	43		16 - 120	04/28/15 08:23	04/30/15 12:04	1

Lab Sample ID: LCS 480-239033/2-A

Matrix: Water

Analysis Batch: 239792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 239033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	16.0	15.0		ug/L		93	65 - 154
2-Chlorophenol	16.0	13.3		ug/L		83	48 - 120
4-Chloro-3-methylphenol	16.0	15.7		ug/L		98	64 - 120
4-Nitrophenol	32.0	26.5		ug/L		83	16 - 120
Acenaphthene	16.0	14.0		ug/L		87	60 - 120
Bis(2-ethylhexyl) phthalate	16.0	16.2		ug/L		101	53 - 158
Fluorene	16.0	14.7		ug/L		92	55 - 143
Hexachloroethane	16.0	12.9		ug/L		81	14 - 101
N-Nitrosodi-n-propylamine	16.0	14.6		ug/L		91	56 - 120
Pentachlorophenol	32.0	25.6		ug/L		80	39 - 136
Phenol	16.0	8.74		ug/L		55	17 - 120
Pyrene	16.0	14.8		ug/L		92	58 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	92		52 - 132
2-Fluorobiphenyl	86		48 - 120
2-Fluorophenol	70		20 - 120
Nitrobenzene-d5	89		46 - 120
p-Terphenyl-d14	99		67 - 150
Phenol-d5	52		16 - 120

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 239787

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239033

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	ND		14.7	13.2		ug/L		90	62 - 148

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 239787

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239033

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
2-Chlorophenol	ND		14.7	11.0		ug/L		75	48 - 120
4-Chloro-3-methylphenol	ND		14.7	14.0		ug/L		95	64 - 120
4-Nitrophenol	ND		29.4	21.9		ug/L		75	16 - 120
Acenaphthene	ND		14.7	12.0		ug/L		82	60 - 120
Bis(2-ethylhexyl) phthalate	ND	F1	14.7	6.69	F1	ug/L		46	53 - 158
Fluorene	ND		14.7	12.4		ug/L		85	55 - 143
Hexachloroethane	ND		14.7	11.6		ug/L		79	14 - 101
N-Nitrosodi-n-propylamine	ND		14.7	12.8		ug/L		87	56 - 120
Pentachlorophenol	ND		29.4	23.3		ug/L		79	39 - 136
Phenol	ND		14.7	6.47		ug/L		44	17 - 120
Pyrene	ND		14.7	11.8		ug/L		80	58 - 136

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol	84		52 - 132
2-Fluorobiphenyl	82		48 - 120
2-Fluorophenol	60		20 - 120
Nitrobenzene-d5	89		46 - 120
p-Terphenyl-d14	56	X	67 - 150
Phenol-d5	43		16 - 120

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 239787

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239033

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier	Added	Result	Qualifier					RPD	Limit
2,4-Dinitrotoluene	ND		14.7	13.7		ug/L		93	62 - 148	4	20
2-Chlorophenol	ND		14.7	11.4		ug/L		78	48 - 120	3	25
4-Chloro-3-methylphenol	ND		14.7	13.0		ug/L		88	64 - 120	7	27
4-Nitrophenol	ND		29.4	23.3		ug/L		79	16 - 120	6	48
Acenaphthene	ND		14.7	12.7		ug/L		86	60 - 120	6	24
Bis(2-ethylhexyl) phthalate	ND	F1	14.7	7.51	F1	ug/L		51	53 - 158	12	15
Fluorene	ND		14.7	13.4		ug/L		91	55 - 143	7	15
Hexachloroethane	ND		14.7	11.2		ug/L		76	14 - 101	3	46
N-Nitrosodi-n-propylamine	ND		14.7	13.1		ug/L		89	56 - 120	2	31
Pentachlorophenol	ND		29.4	24.1		ug/L		82	39 - 136	3	37
Phenol	ND		14.7	6.76		ug/L		46	17 - 120	4	34
Pyrene	ND		14.7	12.5		ug/L		85	58 - 136	6	19

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol	93		52 - 132
2-Fluorobiphenyl	87		48 - 120
2-Fluorophenol	61		20 - 120
Nitrobenzene-d5	85		46 - 120
p-Terphenyl-d14	63	X	67 - 150
Phenol-d5	46		16 - 120

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-239216/1-A

Matrix: Water

Analysis Batch: 239576

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 239216

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		04/28/15 16:32	04/29/15 18:32	1
Antimony	ND		0.020	0.0068	mg/L		04/28/15 16:32	04/29/15 18:32	1
Arsenic	ND		0.010	0.0056	mg/L		04/28/15 16:32	04/29/15 18:32	1
Barium	ND		0.0020	0.00070	mg/L		04/28/15 16:32	04/29/15 18:32	1
Beryllium	ND		0.0020	0.00030	mg/L		04/28/15 16:32	04/29/15 18:32	1
Cadmium	ND		0.0010	0.00050	mg/L		04/28/15 16:32	04/29/15 18:32	1
Calcium	ND		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 18:32	1
Chromium	ND		0.0040	0.0010	mg/L		04/28/15 16:32	04/29/15 18:32	1
Cobalt	ND		0.0040	0.00063	mg/L		04/28/15 16:32	04/29/15 18:32	1
Copper	0.00182	J	0.010	0.0016	mg/L		04/28/15 16:32	04/29/15 18:32	1
Iron	ND		0.050	0.019	mg/L		04/28/15 16:32	04/29/15 18:32	1
Lead	ND		0.0050	0.0030	mg/L		04/28/15 16:32	04/29/15 18:32	1
Magnesium	ND		0.20	0.043	mg/L		04/28/15 16:32	04/29/15 18:32	1
Manganese	0.000860	J	0.0030	0.00040	mg/L		04/28/15 16:32	04/29/15 18:32	1
Nickel	ND		0.010	0.0013	mg/L		04/28/15 16:32	04/29/15 18:32	1
Potassium	ND		0.50	0.10	mg/L		04/28/15 16:32	04/29/15 18:32	1
Selenium	ND		0.015	0.0087	mg/L		04/28/15 16:32	04/29/15 18:32	1
Silver	ND		0.0030	0.0017	mg/L		04/28/15 16:32	04/29/15 18:32	1
Sodium	ND		1.0	0.32	mg/L		04/28/15 16:32	04/29/15 18:32	1
Thallium	ND		0.020	0.010	mg/L		04/28/15 16:32	04/29/15 18:32	1
Vanadium	ND		0.0050	0.0015	mg/L		04/28/15 16:32	04/29/15 18:32	1
Zinc	0.00432	J	0.010	0.0015	mg/L		04/28/15 16:32	04/29/15 18:32	1

Lab Sample ID: LCS 480-239216/2-A

Matrix: Water

Analysis Batch: 239576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 239216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.34		mg/L		103	80 - 120
Antimony	0.200	0.196		mg/L		98	80 - 120
Arsenic	0.200	0.198		mg/L		99	80 - 120
Barium	0.200	0.203		mg/L		101	80 - 120
Beryllium	0.200	0.199		mg/L		99	80 - 120
Cadmium	0.200	0.203		mg/L		101	80 - 120
Calcium	10.0	9.64		mg/L		96	80 - 120
Chromium	0.200	0.202		mg/L		101	80 - 120
Cobalt	0.200	0.202		mg/L		101	80 - 120
Copper	0.200	0.200		mg/L		100	80 - 120
Iron	10.0	9.88		mg/L		99	80 - 120
Lead	0.200	0.195		mg/L		98	80 - 120
Magnesium	10.0	10.13		mg/L		101	80 - 120
Manganese	0.200	0.206		mg/L		103	80 - 120
Nickel	0.200	0.196		mg/L		98	80 - 120
Potassium	10.0	9.83		mg/L		98	80 - 120
Selenium	0.200	0.204		mg/L		102	80 - 120
Silver	0.0500	0.0496		mg/L		99	80 - 120
Sodium	10.0	9.75		mg/L		97	80 - 120
Thallium	0.200	0.206		mg/L		103	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-239216/2-A

Matrix: Water

Analysis Batch: 239576

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 239216

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	0.200	0.207		mg/L		103	80 - 120
Zinc	0.200	0.202		mg/L		101	80 - 120

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 239576

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239216

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.98	F1	10.0	15.50	F1	mg/L		145	75 - 125
Antimony	ND		0.200	0.203		mg/L		101	75 - 125
Arsenic	ND		0.200	0.211		mg/L		105	75 - 125
Barium	0.13		0.200	0.365		mg/L		120	75 - 125
Beryllium	ND		0.200	0.203		mg/L		102	75 - 125
Cadmium	0.00056	J	0.200	0.209		mg/L		104	75 - 125
Calcium	76.0		10.0	96.51	4	mg/L		205	75 - 125
Chromium	0.0012	J	0.200	0.210		mg/L		104	75 - 125
Cobalt	ND		0.200	0.209		mg/L		105	75 - 125
Copper	0.0066	J B	0.200	0.216		mg/L		105	75 - 125
Iron	0.79	F1	10.0	13.43	F1	mg/L		126	75 - 125
Lead	ND		0.200	0.205		mg/L		102	75 - 125
Magnesium	41.5		10.0	55.64	4	mg/L		142	75 - 125
Manganese	0.018	B F1	0.200	0.294	F1	mg/L		138	75 - 125
Nickel	0.0023	J	0.200	0.209		mg/L		103	75 - 125
Potassium	1.0		10.0	11.86		mg/L		108	75 - 125
Selenium	ND		0.200	0.208		mg/L		104	75 - 125
Silver	ND		0.0500	0.0520		mg/L		104	75 - 125
Sodium	17.3	F1	10.0	27.73		mg/L		105	75 - 125
Thallium	ND		0.200	0.210		mg/L		105	75 - 125
Vanadium	0.0015	J	0.200	0.218		mg/L		109	75 - 125
Zinc	0.029	B	0.200	0.252		mg/L		112	75 - 125

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 239576

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239216

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.98	F1	10.0	14.32	F1	mg/L		133	75 - 125	8	20
Antimony	ND		0.200	0.202		mg/L		101	75 - 125	0	20
Arsenic	ND		0.200	0.207		mg/L		104	75 - 125	2	20
Barium	0.13		0.200	0.356		mg/L		115	75 - 125	2	20
Beryllium	ND		0.200	0.203		mg/L		102	75 - 125	0	20
Cadmium	0.00056	J	0.200	0.210		mg/L		105	75 - 125	0	20
Calcium	76.0		10.0	85.68	4	mg/L		97	75 - 125	12	20
Chromium	0.0012	J	0.200	0.213		mg/L		106	75 - 125	1	20
Cobalt	ND		0.200	0.209		mg/L		105	75 - 125	0	20
Copper	0.0066	J B	0.200	0.214		mg/L		104	75 - 125	1	20
Iron	0.79	F1	10.0	12.01		mg/L		112	75 - 125	11	20
Lead	ND		0.200	0.203		mg/L		102	75 - 125	1	20
Magnesium	41.5		10.0	50.92	4	mg/L		95	75 - 125	9	20

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 239576

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239216

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Manganese	0.018	B F1	0.200	0.258		mg/L		120	75 - 125	13	20
Nickel	0.0023	J	0.200	0.211		mg/L		104	75 - 125	1	20
Potassium	1.0		10.0	10.99		mg/L		100	75 - 125	8	20
Selenium	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Silver	ND		0.0500	0.0516		mg/L		103	75 - 125	1	20
Sodium	17.3	F1	10.0	32.88	F1	mg/L		156	75 - 125	17	20
Thallium	ND		0.200	0.214		mg/L		107	75 - 125	2	20
Vanadium	0.0015	J	0.200	0.213		mg/L		106	75 - 125	2	20
Zinc	0.029	B	0.200	0.222		mg/L		97	75 - 125	13	20

Lab Sample ID: MB 480-240307/1-B

Matrix: Water

Analysis Batch: 240971

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 240612

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aluminum	ND	^	0.20	0.060	mg/L		05/05/15 12:56	05/06/15 17:23	1
Antimony	ND		0.020	0.0068	mg/L		05/05/15 12:56	05/06/15 17:23	1
Arsenic	ND		0.010	0.0056	mg/L		05/05/15 12:56	05/06/15 17:23	1
Barium	ND		0.0020	0.00070	mg/L		05/05/15 12:56	05/06/15 17:23	1
Beryllium	ND		0.0020	0.00030	mg/L		05/05/15 12:56	05/06/15 17:23	1
Cadmium	ND		0.0010	0.00050	mg/L		05/05/15 12:56	05/06/15 17:23	1
Calcium	ND		0.50	0.10	mg/L		05/05/15 12:56	05/06/15 17:23	1
Chromium	ND		0.0040	0.0010	mg/L		05/05/15 12:56	05/06/15 17:23	1
Cobalt	ND		0.0040	0.00063	mg/L		05/05/15 12:56	05/06/15 17:23	1
Copper	ND	^	0.010	0.0016	mg/L		05/05/15 12:56	05/06/15 17:23	1
Iron	ND	^	0.050	0.019	mg/L		05/05/15 12:56	05/06/15 17:23	1
Lead	ND		0.0050	0.0030	mg/L		05/05/15 12:56	05/06/15 17:23	1
Magnesium	ND		0.20	0.043	mg/L		05/05/15 12:56	05/06/15 17:23	1
Manganese	0.000510	J ^	0.0030	0.00040	mg/L		05/05/15 12:56	05/06/15 17:23	1
Nickel	ND		0.010	0.0013	mg/L		05/05/15 12:56	05/06/15 17:23	1
Potassium	0.118	J	0.50	0.10	mg/L		05/05/15 12:56	05/06/15 17:23	1
Selenium	ND		0.015	0.0087	mg/L		05/05/15 12:56	05/06/15 17:23	1
Silver	ND		0.0030	0.0017	mg/L		05/05/15 12:56	05/06/15 17:23	1
Sodium	0.646	J	1.0	0.32	mg/L		05/05/15 12:56	05/06/15 17:23	1
Thallium	ND		0.020	0.010	mg/L		05/05/15 12:56	05/06/15 17:23	1
Vanadium	ND		0.0050	0.0015	mg/L		05/05/15 12:56	05/06/15 17:23	1
Zinc	0.00205	J ^	0.010	0.0015	mg/L		05/05/15 12:56	05/06/15 17:23	1

Lab Sample ID: LCS 480-240307/2-B

Matrix: Water

Analysis Batch: 240971

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 240612

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
							Added
Aluminum	10.0	9.94		mg/L		99	80 - 120
Antimony	0.200	0.194		mg/L		97	80 - 120
Arsenic	0.200	0.194		mg/L		97	80 - 120
Barium	0.200	0.198		mg/L		99	80 - 120
Beryllium	0.200	0.193		mg/L		97	80 - 120
Cadmium	0.200	0.203		mg/L		101	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-240307/2-B

Matrix: Water

Analysis Batch: 240971

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 240612

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	10.0	9.40		mg/L		94	80 - 120
Chromium	0.200	0.207		mg/L		103	80 - 120
Cobalt	0.200	0.201		mg/L		101	80 - 120
Copper	0.200	0.204		mg/L		102	80 - 120
Iron	10.0	9.33		mg/L		93	80 - 120
Lead	0.200	0.198		mg/L		99	80 - 120
Magnesium	10.0	10.32		mg/L		103	80 - 120
Manganese	0.200	0.197		mg/L		98	80 - 120
Nickel	0.200	0.200		mg/L		100	80 - 120
Potassium	10.0	9.77		mg/L		98	80 - 120
Selenium	0.200	0.199		mg/L		100	80 - 120
Silver	0.0500	0.0522		mg/L		104	80 - 120
Sodium	10.0	9.73		mg/L		97	80 - 120
Thallium	0.200	0.202		mg/L		101	80 - 120
Vanadium	0.200	0.214		mg/L		107	80 - 120
Zinc	0.200	0.211		mg/L		105	80 - 120

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 240971

Client Sample ID: NCR-5S

Prep Type: Dissolved

Prep Batch: 240612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	ND		10.0	10.11		mg/L		101	75 - 125
Antimony	ND		0.200	0.200		mg/L		100	75 - 125
Arsenic	ND		0.200	0.201		mg/L		100	75 - 125
Barium	0.12		0.200	0.319		mg/L		101	75 - 125
Beryllium	ND		0.200	0.198		mg/L		99	75 - 125
Cadmium	ND		0.200	0.209		mg/L		104	75 - 125
Calcium	70.2		10.0	79.62	4	mg/L		94	75 - 125
Chromium	ND		0.200	0.207		mg/L		104	75 - 125
Cobalt	ND		0.200	0.205		mg/L		103	75 - 125
Copper	0.0017	J	0.200	0.209		mg/L		104	75 - 125
Iron	ND		10.0	9.30		mg/L		93	75 - 125
Lead	ND		0.200	0.205		mg/L		103	75 - 125
Magnesium	41.6		10.0	51.51	4	mg/L		99	75 - 125
Manganese	0.00069	J B	0.200	0.195		mg/L		97	75 - 125
Nickel	ND		0.200	0.204		mg/L		102	75 - 125
Potassium	0.50	B	10.0	10.71		mg/L		102	75 - 125
Selenium	ND		0.200	0.205		mg/L		102	75 - 125
Silver	ND		0.0500	0.0530		mg/L		106	75 - 125
Sodium	15.5	B F1	10.0	27.25		mg/L		118	75 - 125
Thallium	ND		0.200	0.209		mg/L		104	75 - 125
Vanadium	ND		0.200	0.217		mg/L		109	75 - 125
Zinc	0.0034	J B	0.200	0.210		mg/L		103	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 240971

Client Sample ID: NCR-5S

Prep Type: Dissolved

Prep Batch: 240612

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Aluminum	ND		10.0	10.24		mg/L		102	75 - 125	1	20	
Antimony	ND		0.200	0.200		mg/L		100	75 - 125	0	20	
Arsenic	ND		0.200	0.200		mg/L		100	75 - 125	0	20	
Barium	0.12		0.200	0.316		mg/L		99	75 - 125	1	20	
Beryllium	ND		0.200	0.201		mg/L		100	75 - 125	1	20	
Cadmium	ND		0.200	0.207		mg/L		104	75 - 125	1	20	
Calcium	70.2		10.0	80.11	4	mg/L		99	75 - 125	1	20	
Chromium	ND		0.200	0.208		mg/L		104	75 - 125	0	20	
Cobalt	ND		0.200	0.204		mg/L		102	75 - 125	1	20	
Copper	0.0017	J	0.200	0.210		mg/L		104	75 - 125	0	20	
Iron	ND		10.0	9.47		mg/L		95	75 - 125	2	20	
Lead	ND		0.200	0.203		mg/L		101	75 - 125	1	20	
Magnesium	41.6		10.0	51.02	4	mg/L		94	75 - 125	1	20	
Manganese	0.00069	J B	0.200	0.195		mg/L		97	75 - 125	0	20	
Nickel	ND		0.200	0.203		mg/L		101	75 - 125	1	20	
Potassium	0.50	B	10.0	10.79		mg/L		103	75 - 125	1	20	
Selenium	ND		0.200	0.203		mg/L		102	75 - 125	1	20	
Silver	ND		0.0500	0.0529		mg/L		106	75 - 125	0	20	
Sodium	15.5	B F1	10.0	29.43	F1	mg/L		140	75 - 125	8	20	
Thallium	ND		0.200	0.207		mg/L		103	75 - 125	1	20	
Vanadium	ND		0.200	0.215		mg/L		108	75 - 125	1	20	
Zinc	0.0034	J B	0.200	0.216		mg/L		106	75 - 125	3	20	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-239895/1-A

Matrix: Water

Analysis Batch: 240038

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 239895

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00012	mg/L		05/01/15 09:15	05/01/15 12:19	1

Lab Sample ID: LCS 480-239895/2-A

Matrix: Water

Analysis Batch: 240038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 239895

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec.	
		Result	Qualifier				Limits	RPD
Mercury	0.00667	0.00692		mg/L		104	80 - 120	

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 240038

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239895

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	RPD
Mercury	ND		0.00667	0.00642		mg/L		96	80 - 120	

TestAmerica Buffalo

QC Sample Results

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 240038

Client Sample ID: NCR-5S

Prep Type: Total/NA

Prep Batch: 239895

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00645		mg/L		97	80 - 120	1	20

Lab Sample ID: MB 480-240307/1-C

Matrix: Water

Analysis Batch: 240832

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 240704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/06/15 07:40	05/06/15 11:17	1

Lab Sample ID: LCS 480-240307/2-C

Matrix: Water

Analysis Batch: 240832

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 240704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00667		mg/L		100	80 - 120

Lab Sample ID: 480-79130-3 MS

Matrix: Water

Analysis Batch: 240832

Client Sample ID: NCR-5S

Prep Type: Dissolved

Prep Batch: 240704

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00667	0.00667		mg/L		100	80 - 120

Lab Sample ID: 480-79130-3 MSD

Matrix: Water

Analysis Batch: 240832

Client Sample ID: NCR-5S

Prep Type: Dissolved

Prep Batch: 240704

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00652		mg/L		98	80 - 120	2	20

QC Association Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

GC/MS VOA

Analysis Batch: 240100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	8260C	
480-79130-2	NCR-4S	Total/NA	Water	8260C	
480-79130-3	NCR-5S	Total/NA	Water	8260C	
480-79130-3 MS	NCR-5S	Total/NA	Water	8260C	
480-79130-3 MSD	NCR-5S	Total/NA	Water	8260C	
480-79130-4	NCR-13S	Total/NA	Water	8260C	
480-79130-5	Field Dup 1	Total/NA	Water	8260C	
LCS 480-240100/4	Lab Control Sample	Total/NA	Water	8260C	
MB 480-240100/6	Method Blank	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 239033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	3510C	
480-79130-2	NCR-4S	Total/NA	Water	3510C	
480-79130-3	NCR-5S	Total/NA	Water	3510C	
480-79130-3 MS	NCR-5S	Total/NA	Water	3510C	
480-79130-3 MSD	NCR-5S	Total/NA	Water	3510C	
480-79130-4	NCR-13S	Total/NA	Water	3510C	
480-79130-5	Field Dup 1	Total/NA	Water	3510C	
LCS 480-239033/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-239033/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 239787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	8270D	239033
480-79130-2	NCR-4S	Total/NA	Water	8270D	239033
480-79130-3	NCR-5S	Total/NA	Water	8270D	239033
480-79130-3 MS	NCR-5S	Total/NA	Water	8270D	239033
480-79130-3 MSD	NCR-5S	Total/NA	Water	8270D	239033
480-79130-4	NCR-13S	Total/NA	Water	8270D	239033
480-79130-5	Field Dup 1	Total/NA	Water	8270D	239033

Analysis Batch: 239792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-239033/2-A	Lab Control Sample	Total/NA	Water	8270D	239033
MB 480-239033/1-A	Method Blank	Total/NA	Water	8270D	239033

Metals

Prep Batch: 239216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	3005A	
480-79130-2	NCR-4S	Total/NA	Water	3005A	
480-79130-3	NCR-5S	Total/NA	Water	3005A	
480-79130-3 MS	NCR-5S	Total/NA	Water	3005A	
480-79130-3 MSD	NCR-5S	Total/NA	Water	3005A	
480-79130-4	NCR-13S	Total/NA	Water	3005A	
480-79130-5	Field Dup 1	Total/NA	Water	3005A	

TestAmerica Buffalo

QC Association Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Metals (Continued)

Prep Batch: 239216 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-239216/2-A	Lab Control Sample	Total/NA	Water	3005A	
MB 480-239216/1-A	Method Blank	Total/NA	Water	3005A	

Analysis Batch: 239576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	6010C	239216
480-79130-2	NCR-4S	Total/NA	Water	6010C	239216
480-79130-3	NCR-5S	Total/NA	Water	6010C	239216
480-79130-3 MS	NCR-5S	Total/NA	Water	6010C	239216
480-79130-3 MSD	NCR-5S	Total/NA	Water	6010C	239216
480-79130-4	NCR-13S	Total/NA	Water	6010C	239216
480-79130-5	Field Dup 1	Total/NA	Water	6010C	239216
LCS 480-239216/2-A	Lab Control Sample	Total/NA	Water	6010C	239216
MB 480-239216/1-A	Method Blank	Total/NA	Water	6010C	239216

Prep Batch: 239895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	7470A	
480-79130-2	NCR-4S	Total/NA	Water	7470A	
480-79130-3	NCR-5S	Total/NA	Water	7470A	
480-79130-3 MS	NCR-5S	Total/NA	Water	7470A	
480-79130-3 MSD	NCR-5S	Total/NA	Water	7470A	
480-79130-4	NCR-13S	Total/NA	Water	7470A	
480-79130-5	Field Dup 1	Total/NA	Water	7470A	
LCS 480-239895/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 480-239895/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 240038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Total/NA	Water	7470A	239895
480-79130-2	NCR-4S	Total/NA	Water	7470A	239895
480-79130-3	NCR-5S	Total/NA	Water	7470A	239895
480-79130-3 MS	NCR-5S	Total/NA	Water	7470A	239895
480-79130-3 MSD	NCR-5S	Total/NA	Water	7470A	239895
480-79130-4	NCR-13S	Total/NA	Water	7470A	239895
480-79130-5	Field Dup 1	Total/NA	Water	7470A	239895
LCS 480-239895/2-A	Lab Control Sample	Total/NA	Water	7470A	239895
MB 480-239895/1-A	Method Blank	Total/NA	Water	7470A	239895

Filtration Batch: 240307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Dissolved	Water	FILTRATION	
480-79130-2	NCR-4S	Dissolved	Water	FILTRATION	
480-79130-3	NCR-5S	Dissolved	Water	FILTRATION	
480-79130-3 MS	NCR-5S	Dissolved	Water	FILTRATION	
480-79130-3 MSD	NCR-5S	Dissolved	Water	FILTRATION	
480-79130-4	NCR-13S	Dissolved	Water	FILTRATION	
480-79130-5	Field Dup 1	Dissolved	Water	FILTRATION	
LCS 480-240307/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 480-240307/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 480-240307/1-B	Method Blank	Dissolved	Water	FILTRATION	

TestAmerica Buffalo

QC Association Summary

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Metals (Continued)

Filtration Batch: 240307 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-240307/1-C	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 240612

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Dissolved	Water	3005A	240307
480-79130-2	NCR-4S	Dissolved	Water	3005A	240307
480-79130-3	NCR-5S	Dissolved	Water	3005A	240307
480-79130-3 MS	NCR-5S	Dissolved	Water	3005A	240307
480-79130-3 MSD	NCR-5S	Dissolved	Water	3005A	240307
480-79130-4	NCR-13S	Dissolved	Water	3005A	240307
480-79130-5	Field Dup 1	Dissolved	Water	3005A	240307
LCS 480-240307/2-B	Lab Control Sample	Dissolved	Water	3005A	240307
MB 480-240307/1-B	Method Blank	Dissolved	Water	3005A	240307

Prep Batch: 240704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Dissolved	Water	7470A	240307
480-79130-2	NCR-4S	Dissolved	Water	7470A	240307
480-79130-3	NCR-5S	Dissolved	Water	7470A	240307
480-79130-3 MS	NCR-5S	Dissolved	Water	7470A	240307
480-79130-3 MSD	NCR-5S	Dissolved	Water	7470A	240307
480-79130-4	NCR-13S	Dissolved	Water	7470A	240307
480-79130-5	Field Dup 1	Dissolved	Water	7470A	240307
LCS 480-240307/2-C	Lab Control Sample	Dissolved	Water	7470A	240307
MB 480-240307/1-C	Method Blank	Dissolved	Water	7470A	240307

Analysis Batch: 240832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Dissolved	Water	7470A	240704
480-79130-2	NCR-4S	Dissolved	Water	7470A	240704
480-79130-3	NCR-5S	Dissolved	Water	7470A	240704
480-79130-3 MS	NCR-5S	Dissolved	Water	7470A	240704
480-79130-3 MSD	NCR-5S	Dissolved	Water	7470A	240704
480-79130-4	NCR-13S	Dissolved	Water	7470A	240704
480-79130-5	Field Dup 1	Dissolved	Water	7470A	240704
LCS 480-240307/2-C	Lab Control Sample	Dissolved	Water	7470A	240704
MB 480-240307/1-C	Method Blank	Dissolved	Water	7470A	240704

Analysis Batch: 240971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-79130-1	NCR-3S	Dissolved	Water	6010C	240612
480-79130-2	NCR-4S	Dissolved	Water	6010C	240612
480-79130-3	NCR-5S	Dissolved	Water	6010C	240612
480-79130-3 MS	NCR-5S	Dissolved	Water	6010C	240612
480-79130-3 MSD	NCR-5S	Dissolved	Water	6010C	240612
480-79130-4	NCR-13S	Dissolved	Water	6010C	240612
480-79130-5	Field Dup 1	Dissolved	Water	6010C	240612
LCS 480-240307/2-B	Lab Control Sample	Dissolved	Water	6010C	240612
MB 480-240307/1-B	Method Blank	Dissolved	Water	6010C	240612

TestAmerica Buffalo

Lab Chronicle

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-3S

Date Collected: 04/24/15 09:30

Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240100	05/02/15 05:23	EDB	TAL BUF
Total/NA	Prep	3510C			239033	04/28/15 08:23	RJS	TAL BUF
Total/NA	Analysis	8270D		1	239787	05/01/15 00:36	LMW	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	3005A			240612	05/05/15 12:56	TAS	TAL BUF
Dissolved	Analysis	6010C		1	240971	05/06/15 18:18	LMH	TAL BUF
Total/NA	Prep	3005A			239216	04/28/15 16:32	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	239576	04/29/15 19:07	AMH	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	7470A			240704	05/06/15 07:40	LRK	TAL BUF
Dissolved	Analysis	7470A		1	240832	05/06/15 11:44	LRK	TAL BUF
Total/NA	Prep	7470A			239895	05/01/15 09:15	LRK	TAL BUF
Total/NA	Analysis	7470A		1	240038	05/01/15 12:35	LRK	TAL BUF

Client Sample ID: NCR-4S

Date Collected: 04/24/15 09:00

Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240100	05/02/15 05:50	EDB	TAL BUF
Total/NA	Prep	3510C			239033	04/28/15 08:23	RJS	TAL BUF
Total/NA	Analysis	8270D		1	239787	05/01/15 01:06	LMW	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	3005A			240612	05/05/15 12:56	TAS	TAL BUF
Dissolved	Analysis	6010C		1	240971	05/06/15 18:21	LMH	TAL BUF
Total/NA	Prep	3005A			239216	04/28/15 16:32	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	239576	04/29/15 19:09	AMH	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	7470A			240704	05/06/15 07:40	LRK	TAL BUF
Dissolved	Analysis	7470A		1	240832	05/06/15 11:45	LRK	TAL BUF
Total/NA	Prep	7470A			239895	05/01/15 09:15	LRK	TAL BUF
Total/NA	Analysis	7470A		1	240038	05/01/15 12:39	LRK	TAL BUF

Client Sample ID: NCR-5S

Date Collected: 04/24/15 10:30

Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240100	05/02/15 06:18	EDB	TAL BUF
Total/NA	Prep	3510C			239033	04/28/15 08:23	RJS	TAL BUF
Total/NA	Analysis	8270D		1	239787	05/01/15 01:36	LMW	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	3005A			240612	05/05/15 12:56	TAS	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: N Tonawanda Water Works
 Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-5S

Lab Sample ID: 480-79130-3

Date Collected: 04/24/15 10:30

Matrix: Water

Date Received: 04/24/15 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010C		1	240971	05/06/15 18:23	LMH	TAL BUF
Total/NA	Prep	3005A			239216	04/28/15 16:32	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	239576	04/29/15 19:20	AMH	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	7470A			240704	05/06/15 07:40	LRK	TAL BUF
Dissolved	Analysis	7470A		1	240832	05/06/15 11:47	LRK	TAL BUF
Total/NA	Prep	7470A			239895	05/01/15 09:15	LRK	TAL BUF
Total/NA	Analysis	7470A		1	240038	05/01/15 12:41	LRK	TAL BUF

Client Sample ID: NCR-13S

Lab Sample ID: 480-79130-4

Date Collected: 04/24/15 11:00

Matrix: Water

Date Received: 04/24/15 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240100	05/02/15 06:45	EDB	TAL BUF
Total/NA	Prep	3510C			239033	04/28/15 08:23	RJS	TAL BUF
Total/NA	Analysis	8270D		1	239787	05/01/15 02:06	LMW	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	3005A			240612	05/05/15 12:56	TAS	TAL BUF
Dissolved	Analysis	6010C		1	240971	05/06/15 18:45	LMH	TAL BUF
Total/NA	Prep	3005A			239216	04/28/15 16:32	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	239576	04/29/15 19:33	AMH	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	7470A			240704	05/06/15 07:40	LRK	TAL BUF
Dissolved	Analysis	7470A		1	240832	05/06/15 11:57	LRK	TAL BUF
Total/NA	Prep	7470A			239895	05/01/15 09:15	LRK	TAL BUF
Total/NA	Analysis	7470A		1	240038	05/01/15 12:48	LRK	TAL BUF

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240100	05/02/15 07:13	EDB	TAL BUF
Total/NA	Prep	3510C			239033	04/28/15 08:23	RJS	TAL BUF
Total/NA	Analysis	8270D		1	239787	05/01/15 02:36	LMW	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	3005A			240612	05/05/15 12:56	TAS	TAL BUF
Dissolved	Analysis	6010C		1	240971	05/06/15 18:48	LMH	TAL BUF
Total/NA	Prep	3005A			239216	04/28/15 16:32	KJ1	TAL BUF
Total/NA	Analysis	6010C		1	239576	04/29/15 19:36	AMH	TAL BUF
Dissolved	Filtration	FILTRATION			240307	05/04/15 09:03	TAS	TAL BUF
Dissolved	Prep	7470A			240704	05/06/15 07:40	LRK	TAL BUF
Dissolved	Analysis	7470A		1	240832	05/06/15 11:58	LRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1

Lab Sample ID: 480-79130-5

Date Collected: 04/24/15 00:00

Matrix: Water

Date Received: 04/24/15 12:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			239895	05/01/15 09:15	LRK	TAL BUF
Total/NA	Analysis	7470A		1	240038	05/01/15 12:49	LRK	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

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Certification Summary

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

- 1
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Method Summary

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600



Sample Summary

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-79130-1	NCR-3S	Water	04/24/15 09:30	04/24/15 12:10
480-79130-2	NCR-4S	Water	04/24/15 09:00	04/24/15 12:10
480-79130-3	NCR-5S	Water	04/24/15 10:30	04/24/15 12:10
480-79130-4	NCR-13S	Water	04/24/15 11:00	04/24/15 12:10
480-79130-5	Field Dup 1	Water	04/24/15 00:00	04/24/15 12:10

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Detection Limit Exceptions Summary

Client: N Tonawanda Water Works
Project/Site: City of North Tonawanda - NCRS

TestAmerica Job ID: 480-79130-1

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
6010C	Water	Arsenic	mg/L	0.010	0.015
6010C	Water	Cadmium	mg/L	0.0010	0.002
6010C	Water	Lead	mg/L	0.0050	0.01
6010C	Water	Selenium	mg/L	0.015	0.025
6010C	Water	Silver	mg/L	0.0030	0.006

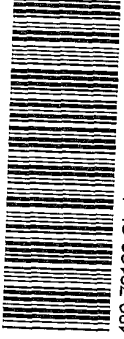
TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



TESTENCE



480-79130 Chain of Custody

Client Information
 Company: N Tonawanda Water Works
 Address: 830 River Road
 City: North Tonawanda
 State, Zip: NY, 14120
 Phone: (716) 695-8560
 Email: wmd_ntwwip@live.com
 Project Name: City of North Tonawanda - NCRS
 Site: New York

Client Contact
 Name: Richard C Becker
 Phone: (716) 435-8500
 E-Mail: judy.stone@testamericainc.com

Lab PVI: Stone, Judy L
Carrier T1:

Analysis Requested:

6010C - (MOD) Local Method	A	N	N	N	N
8270D - TCL SVOA - OLM04.2	A	N	N	N	N
8260C - (MOD) TCL list OLM04.2	A	N	N	N	N
6010C, 7470A	A	N	N	N	N
Field Filtered Sample (Yes or No)	X				
Field Form MS/MSD (Yes or No)	X				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, On-water/soil)	Field Filtered Sample (Yes or No)	Field Form MS/MSD (Yes or No)	6010C, 7470A	8260C - (MOD) TCL list OLM04.2	8270D - TCL SVOA - OLM04.2	6010C - (MOD) Local Method	7470A - Mercury	Total Number of Containers	Special Instructions/Note:
NCR-3S	4/24/15		0930	Water	X	X	N	1	3	2	1	1	
NCR-4S	4/24/15		0900	Water	X	X	N	1	3	2	1	1	
NCR-5S	4/24/15		1030	Water	X	X	N	1	3	2	1	1	
NCR-13S	4/24/15		1100	Water	X	X	N	1	3	2	1	1	
Field Dup 1	4/24/15			Water	X	X	N	1	3	2	1	1	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Unknown Radiological Poison B

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:

Relinquished by: Richard C Becker
 Date/Time: 4/24/15 1720
 Company: O+M Est. Company

Relinquished by: [Signature]
 Date/Time: [Signature]
 Company: [Signature] Company

Relinquished by: [Signature]
 Date/Time: [Signature]
 Company: [Signature] Company

Custody Seals Intact: Δ Yes Δ No
 Custody Seal No.: # 1 35,38

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements:

Method of Shipment: hand deliver
 Date/Time: 4/24/15 1200
 Company: TA OXF Company

Method of Shipment: [Signature]
 Date/Time: [Signature]
 Company: [Signature] Company

Method of Shipment: [Signature]
 Date/Time: [Signature]
 Company: [Signature] Company

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: N Tonawanda Water Works

Job Number: 480-79130-1

Login Number: 79130

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	O+M ENT
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	



GROUNDWATER SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME:

NIAGARA COUNTY REFUSE SITE

SAMPLING CREW MEMBERS:

Richard C. Becken

DATE OF SAMPLE COLLECTION:

04/24/15
(M M D D Y Y)

Sample ID, Number	Well Number	Well Volume (Gallons)	Volume Purged (Gallons)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number	Shipping Manifest Number
NCR 3S	NCR 3S	0.35	~0.65 gal	0730	second water sample	MS/MSD MS/MSD MS/MSD	480-444-51-11922.1	
NCR 4S	NCR 4S	0.33	~0.5 gal	0900				
NCR 5S	NCR 5S	0.775	~1.75 gal	1030				
NCR 13S	NCR 13S	0.498	~1.1 gal	1100				
NCR 5S	(MS/MSD) *			1030				
	(Duplicate) *							
NCR 13S	(Rinse Blank) *							

Note: * QA/QC sample (see QAPP for explanation of how to collect and label these samples). Collect MS/MSD and duplicate from one of the four monitoring wells listed above. Create a unique sample ID for the blind duplicate using NCR 6S for the well number. Write the name of the well where the MS/MSD and duplicate were actually collected in the well number boxes under "MS/MSD" and "Duplicate" above.

Additional Comments:

FP-5A

Chain of Custody Record

Client Information
 Client Contact: William Davignon
 Company: N Tonawanda Water Works
 Address: 830 River Road
 City: North Tonawanda
 State, Zip: NY, 14120
 Phone: 716 691-2600
 Email: wmd_nhw@live.com
 Project Name: City of North Tonawanda - NCRS
 Site: New York
 Project #: 48002901
 SSOV#:
 Sampler: Richard C. Baker
 Lab PM: Judy L. Stone
 Email: judy.stone@testamericainc.com
 Carrier Tracking No(s):
 COC No: 480-66837-16922-1
 Page: Page 1 of 1
 Job #:

Analysis Requested
 Due Date Requested:
 TAT Requested (days):
 Purchase Order not required
 YOC #:
 Field Filtered Sample (Yes or No)
 Perform MS/MSD (Yes or No)
 6010C, 7470A
 8280C - (MOD) TCL list OLM04.2
 8270D - TCL SVOA - OLM04.2
 6010C - (MOD) Local Method
 7470A - Mercury
 Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 M - Hexane
 N - None
 O - AsnAcO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecalhydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)
 Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other, A=air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of containers	Special Instructions/Note:
NGC-23	4/18/11		0730	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6010C, 7470A	8	
NGC-43	4/18/11		0130	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8280C - (MOD) TCL list OLM04.2	8	
NGC-53	4/18/11		0330	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8270D - TCL SVOA - OLM04.2	8	
NGC-103	4/18/11		1130	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	6010C - (MOD) Local Method	8	
NGC-103	4/18/11		1130	Water		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	7470A - Mercury	8	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify)
 Empty Kit Relinquished by:
 Relinquished by: Richard C. Baker
 Date/Time: 4/18/11 12:10
 Company:
 Relinquished by:
 Date/Time:
 Company:
 Custody Seats Intact: Yes No
 Custody Seal No.:
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:
 Method of Shipment: Road Deliver
 Date/Time: 4/18/11 12:00
 Company: TRC
 Resealed by:
 Date/Time:
 Company:
 Cooler Temperature(s) °C and Other Remarks:

GROUNDWATER PURGING AND SAMPLING • COMPLETION CHECKLIST

BEFORE GOING TO SITE:

- Confirm well numbers, location, and accessibility.
- Review of project documents (i.e., QAPP, HSCP, and sampling procedures in the OM&M Manual), sampling QA/QC, and site-specific sampling requirements.
- Historical well data; depth, pH, performance and disposition of purge water.
- Site access notification and coordination.
- Coordinated with laboratory.
- Procured, inventoried, and inspected all equipment and supplies.
- Prepared, calibrated, and performed required maintenance on equipment.

AT SITE:

- Instruments calibrated daily.
- Sampling equipment decontaminated in accordance with the QAPP.
- Initial well measurements logged.
- Well volume calculated and specified volumes removed.
- Purged water collected.
- Specified samples and QA/QC samples taken per Quality Assurance Project Plan (QAPP).
- Samples properly labeled, preserved, and packed.
- Well was secured after completion of sampling.
- Sample dates, times, locations and sample numbers recorded in applicable log(s).
- Samples properly stored if not shipped/delivered to lab same day.
- Samples shipped with complete and accurate Chain-of-Custody record.

AFTER SAMPLING:

- All equipment has been maintained, decontaminated, and returned.
- Sampling information reduced and required sample keys and field data distributed.
- Chain-of-Custody records filed.
- Expendable stock supplies replaced.
- Access keys and well cap keys returned.
- Arranged disposal/treatment for purged water and decontamination fluids.
- Confirm all samples collected.

Completed by: Richard L. Babin

Date: 4/24/15

FP-4B

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 04/23/15 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump Poly Bailer

WELL NUMBER: NCR 35

ONE WELL VOLUME: 0.35 gallons

FIVE WELL VOLUMES: 1.75 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	0.35	0.35				
pH	7.0	7.2				
TEMPERATURE	48.7	49.3				
CONDUCTIVITY	1.48	1.49				
TURBIDITY	3.55	9.64				
COLOR	clear	clear				
ODOR	none	none				
COMMENTS	well dry	well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15
DATE

Richard Becken
PRINT NAME

Richard Becken
SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site
 DATE: 04/23/15 (MM DD YY)
 CREW MEMBERS: RC Becken
 PURGING METHOD: Dedicated Bladder Pump Poly Bailer
 WELL NUMBER: WEL 135
 ONE WELL VOLUME: 1.98 gallons
 FIVE WELL VOLUMES: 2.49 gallons
 (See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.5	~.3	~.5			
pH	6.7	7.0	6.9			
TEMPERATURE	50.1	49.8	49.6			
CONDUCTIVITY	1.45	1.51	1.50			
TURBIDITY	52.6	2.4	9.32			
COLOR	clear	clear	clear			
ODOR	None	None	None			
COMMENTS		well dry	well dry			

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15
DATE

Richard C Becken
PRINT NAME

Richard C Becken
SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 04/23/15 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: ~~Dedicated Bladder Pump~~ Poly Bladder

WELL NUMBER: WCR 55

ONE WELL VOLUME: 2,775 gallons

FIVE WELL VOLUMES: 3,888 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~ 2,775	~ 2,775	~ 2,775			
pH	7.5	7.0	7.27			
TEMPERATURE	49.1	48.8	47.5			
CONDUCTIVITY	0.65	0.7	0.71			
TURBIDITY	315	240	264			
COLOR	slightly cloudy	clear	slightly cloudy			
ODOR	none	none	none			
COMMENTS		well no	well no			

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15
DATE

Richard C Becken
PRINT NAME

Richard C Becken
SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 04|23|15 (MM DD YY)

CREW MEMBERS: RC Becker

PURGING METHOD: ~~Dedicated Bladder Pump~~ Poly Bagler

WELL NUMBER: NCR 45

ONE WELL VOLUME: 0.33 gallons

FIVE WELL VOLUMES: 1.66 gallons

(See Section 4.2.4.1 of the OM&M Manual and Table FP-4.1 to calculate well volumes based on current water levels.)

WELL VOLUME	1	2	3	4	5	TOT/AVG
VOLUME PURGED (total)	~.33	~.2				
pH	6.8	6.6				
TEMPERATURE	48.5	49.2				
CONDUCTIVITY	1.03	1.07				
TURBIDITY	1000+	1000+				
COLOR	tan/ cloudy	tan/ cloudy				
ODOR	none	none				
COMMENTS	well dry	well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15
DATE

Richard C Becker
PRINT NAME

Richard C Becker
SIGNATURE

FP-4C

APPENDIX C
DATA VALIDATION REPORT

**DATA USABILITY SUMMARY REPORT
FOR
NIAGARA COUNTY REFUSE SITE**

Prepared By:

PARSONS

301 Plainfield Road, Suite 350
Syracuse, NY 13212
Phone: (315) 451-9560
Fax: (315) 451-9570

JULY 2015

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LIST OF ATTACHMENTS

Attachment A - Validated Laboratory Data

SECTION 1

DATA USABILITY SUMMARY

Groundwater samples were collected from the Niagara County Refuse site in North Tonawanda, New York on April 24, 2015. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan,
- USEPA SW-846 analytical methodologies,
- USEPA Region II Standard Operating Procedures (SOPs) for organic and inorganic data review.

The analytical laboratory for this project was Test America Laboratory (TAL) in Buffalo, New York. This laboratory is certified to conduct project analyses through the National Environmental Laboratory Accreditation Program (NELAP).

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 45 days for the groundwater samples.

The data packages received from TAL were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

Groundwater samples were collected, properly preserved, shipped under a COC record, and received at TAL within one day of sampling. All samples were received intact and in good condition at TAL.

1.3 LABORATORY ANALYTICAL METHODS

Groundwater samples were collected from the site and analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and total and dissolved metals. Summaries of issues concerning this laboratory analysis are presented in Subsections 1.3.1 through 1.3.3. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) are discussed in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" - not detected at the value given,
- "UJ" - estimated and not detected at the value given,
- "J" - estimated at the value given,
- "J+" - estimated biased high at the value given,
- "J-" - estimated biased low at the value given,
- "N" - presumptive evidence at the value given, and
- "R" - unusable value.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

Groundwater samples collected from the site were analyzed for target compound list (TCL) VOCs using the USEPA SW-846 8260C analytical method. The reported results for the TCL VOC samples did not require qualification based upon data validation. The reported TCL VOC analytical results were 100% complete (i.e., usable) for the groundwater data presented by TAL. PARCCS requirements were met.

1.3.2 Semivolatile Organic Analysis

Groundwater samples collected from the site were analyzed for TCL SVOCs using the USEPA SW-846 8270D analytical method. Certain TCL SVOC sample results were considered estimated based upon instrument calibrations. The reported TCL SVOC analytical results were 100% complete (i.e., usable) for the groundwater data presented by TAL. PARCCS requirements were met.

1.3.3 Metals Analysis

Groundwater samples collected from the site were analyzed for total and dissolved metals using the USEPA SW-846 6010C/7470A analytical methods. Certain metals results were considered estimated based upon matrix spike recoveries and serial dilutions. All of the metals data were considered usable and 100% complete for the groundwater data presented by TAL. PARCCS requirements were met.

SECTION 2

DATA VALIDATION REPORT

2.1 GROUNDWATER DATA

Data review has been completed for data packages generated by TAL containing groundwater samples collected from the Niagara County Refuse site. The specific samples contained in these data packages, the analyses performed, and a usability summary are presented in Table 2.1-1. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. The samples were contained within sample delivery group (SDG) 480-79130-1. The validated laboratory data are presented in Attachment A.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic and inorganic data review. This data validation and usability report is presented by analysis type.

2.1.1 TCL Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank contamination
- Instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All TCL volatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The TCL volatile data presented by TAL were 100% complete (i.e., usable) for groundwater. The validated TCL volatile laboratory data are tabulated and presented in Attachment A.

2.1.2 TCL Semivolatiles

The following items were reviewed for compliance in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank contamination
- Instrument performance
- Sample result verification and identification
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of surrogate recoveries, MS/MSD precision and accuracy, LCS recoveries, blank contamination, and continuing calibrations as discussed below.

Surrogate Recoveries

All sample surrogate recoveries were considered acceptable and within QC limits with the exception of the low surrogate recovery for p-terphenyl-d14 (QC limit 67-150%R) in NCR-4S (57%R). Validation qualification of this sample was not required.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked project samples with the exception of the low MS/MSD accuracy results for bis(2-ethylhexyl)phthalate during the spiked analyses of parent sample NCR-5S. Validation qualification of this sample was not required.

LCS Recoveries

All LCS recoveries were considered acceptable and within QC limits with the exception of the high LCS recoveries for 3-nitroaniline and 3,3'-dichlorobenzidine associated with all samples. Validation qualification of these samples was not required since these compounds were not detected.

Blank Contamination

The laboratory method blank associated with all samples contained benzaldehyde and butylbenzylphthalate less than the reporting limits at concentrations of 0.28 and 0.59 µg/L, respectively. Therefore, results for these compounds less than validation action concentrations were considered not detected and qualified "U" for the affected samples.

Continuing Calibrations

All continuing calibration compounds were considered acceptable with relative response factors (RRFs) greater than 0.05 and percent differences (%Ds) within ±20% with the exception of benzaldehyde (-43.8%D) in the continuing calibration associated with all project samples. Therefore, sample results for this compound which were nondetects were considered estimated and qualified "UJ".

Usability

All semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The semivolatile data presented by TAL were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A.

2.1.3 Total and Dissolved Metals

The following items were reviewed for compliancy in the metals analysis:

- Custody documentation
- Holding times
- Initial and continuing calibration verifications
- Initial and continuing calibration and laboratory preparation blank contamination
- Inductively coupled plasma (ICP) interference check sample (ICS)
- MS/MSD recoveries
- Laboratory duplicate precision
- Laboratory control sample recoveries
- ICP serial dilution

- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination, matrix spike recoveries, and serial dilutions as discussed below.

Blank Contamination

The laboratory preparation blank associated with the project samples contained total copper, total manganese, total zinc, dissolved manganese, dissolved potassium, dissolved sodium, and dissolved zinc below reporting limits at concentrations of 0.00182, 0.00086, 0.00432, 0.00051, 0.118, 0.646, and 0.00205 mg/L, respectively. Validation qualification of the sample results was not required since samples were not affected by the contamination in this blank.

Matrix Spike Recoveries

All matrix spike recoveries were considered acceptable and within the 75-125%R QC limit for all analytes with the exception of the high matrix spike recoveries for total aluminum (144%R, 133%R), total iron (126%R), total manganese (138%R), total sodium (156%R), and dissolved sodium (140%R) associated with sample NCR-5S. Therefore, positive results for these analytes were considered estimated, possibly biased high, and qualified “J+” for this sample.

Serial Dilutions

All serial dilution results were considered acceptable with %D less than 10% with the exception of total barium (26%D), total calcium (26%D), total iron (23%D), total magnesium (21%D), total manganese (26%D), and total sodium (18%D) associated with sample NCR-5S. Therefore, the results for these analytes were considered estimated and qualified “J” for this sample.

Usability

All metals sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, comparability, and sensitivity. The metals data presented by TAL were 100% complete with all metals data considered valid and usable. The validated metals laboratory data are tabulated and presented in Attachment A.

TABLE 2.1-1
SUMMARY OF SAMPLE ANALYSES AND USABILITY
NIAGARA COUNTY REFUSE SITE

<u>SAMPLE ID</u>	<u>MATRIX</u>	<u>SAMPLE DATE</u>	<u>VOCs</u>	<u>SVOCs</u>	<u>METALS</u>
NCR-3S	Water	4/24/15	OK	OK	OK
NCR-4S	Water	4/24/15	OK	OK	OK
NCR-5S	Water	4/24/15	OK	OK	OK
NCR-13S	Water	4/24/15	OK	OK	OK
FIELD DUP 1	Water	4/24/15	OK	OK	OK
			5	5	5

NOTES: OK - Sample analysis considered valid and usable.

ATTACHMENT A
VALIDATED LABORATORY DATA

							Dup of NCR-13S
City of North Tonawanda NY1A8791 216 Payne Ave North Tonawanda, NY C/O Niagara County Refuse Site Validated Groundwater Sampling Event April 2015		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	NCR-3S NCR-3S 480-79130-1 TALBUFF 480-79130-1 WATER 4/24/2015 9:30 6/29/2015	NCR-4S NCR-4S 480-79130-2 TALBUFF 480-79130-1 WATER 4/24/2015 9:00 6/29/2015	NCR-5S NCR-5S 480-79130-3 TALBUFF 480-79130-1 WATER 4/24/2015 10:30 6/29/2015	NCR-13S NCR-13S 480-79130-4 TALBUFF 480-79130-1 WATER 4/24/2015 11:00 6/29/2015	NCR-13S Field Dup 1 480-79130-5 TALBUFF 480-79130-1 WATER 4/24/2015 0:00 6/29/2015
CAS NO.	COMPOUND	UNITS:					
	VOLATILES						
71-55-6	1,1,1-TRICHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-34-3	1,1-DICHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-35-4	1,1-DICHLOROETHENE	ug/L	1 U	1 U	1 U	1 U	1 U
120-82-1	1,2,4-TRICHLOROBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/L	1 U	1 U	1 U	1 U	1 U
106-93-4	1,2-DIBROMOETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
95-50-1	1,2-DICHLOROBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
107-06-2	1,2-DICHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
78-87-5	1,2-DICHLOROPROPANE	ug/L	1 U	1 U	1 U	1 U	1 U
541-73-1	1,3-DICHLOROBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
106-46-7	1,4-DICHLOROBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
591-78-6	2-HEXANONE	ug/L	5 U	5 U	5 U	5 U	5 U
67-64-1	ACETONE	ug/L	10 U	10 U	10 U	10 U	10 U
71-43-2	BENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
75-27-4	BROMODICHLOROMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-25-2	BROMOFORM	ug/L	1 U	1 U	1 U	1 U	1 U
74-83-9	BROMOMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-15-0	CARBON DISULFIDE	ug/L	1 U	1 U	1 U	1 U	1 U
56-23-5	CARBON TETRACHLORIDE	ug/L	1 U	1 U	1 U	1 U	1 U
108-90-7	CHLOROBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
75-00-3	CHLOROETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
67-66-3	CHLOROFORM	ug/L	1 U	1 U	1 U	1 U	1 U
74-87-3	CHLOROMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/L	1 U	1 U	1 U	1 U	1 U
10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/L	1 U	1 U	1 U	1 U	1 U
110-82-7	CYCLOHEXANE	ug/L	1 U	1 U	1 U	1 U	1 U
124-48-1	DIBROMOCHLOROMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
1330-20-7	DIMETHYL BENZENE	ug/L	2 U	2 U	2 U	2 U	2 U
100-41-4	ETHYLBENZENE	ug/L	1 U	1 U	1 U	1 U	1 U
98-82-8	ISOPROPYLBENZENE (CUMENE)	ug/L	1 U	1 U	1 U	1 U	1 U
79-20-9	METHYL ACETATE	ug/L	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	ug/L	10 U	10 U	10 U	10 U	10 U
108-10-1	METHYL ISOBUTYL KETONE	ug/L	5 U	5 U	5 U	5 U	5 U
108-87-2	METHYLCYCLOHEXANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-09-2	METHYLENE CHLORIDE	ug/L	1 U	1 U	1 U	1 U	1 U
100-42-5	STYRENE	ug/L	1 U	1 U	1 U	1 U	1 U
1634-04-4	TERT-BUTYL METHYL ETHER	ug/L	1 U	1 U	1 U	1 U	1 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/L	1 U	1 U	1 U	1 U	1 U
108-88-3	TOLUENE	ug/L	1 U	1 U	1 U	1 U	1 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/L	1 U	1 U	1 U	1 U	1 U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/L	1 U	1 U	1 U	1 U	1 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/L	1 U	1 U	1 U	1 U	1 U
75-69-4	TRICHLOROFUOROMETHANE	ug/L	1 U	1 U	1 U	1 U	1 U
75-01-4	VINYL CHLORIDE	ug/L	1 U	1 U	1 U	1 U	1 U

						Dup of NCR-13S	
City of North Tonawanda NY1A8791 216 Payne Ave North Tonawanda, NY C/O Niagara County Refuse Site Validated Groundwater Sampling Event April 2015		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	NCR-3S NCR-3S 480-79130-1 TALBUFF 480-79130-1 WATER 4/24/2015 9:30 6/29/2015	NCR-4S NCR-4S 480-79130-2 TALBUFF 480-79130-1 WATER 4/24/2015 9:00 6/29/2015	NCR-5S NCR-5S 480-79130-3 TALBUFF 480-79130-1 WATER 4/24/2015 10:30 6/29/2015	NCR-13S NCR-13S 480-79130-4 TALBUFF 480-79130-1 WATER 4/24/2015 11:00 6/29/2015	NCR-13S Field Dup 1 480-79130-5 TALBUFF 480-79130-1 WATER 4/24/2015 0:00 6/29/2015
CAS NO.	COMPOUND	UNITS:					
	SEMIVOLATILES						
95-95-4	2,4,5-TRICHLOROPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
88-06-2	2,4,6-TRICHLOROPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
120-83-2	2,4-DICHLOROPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
105-67-9	2,4-DIMETHYLPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
51-28-5	2,4-DINITROPHENOL	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
121-14-2	2,4-DINITROTOLUENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
606-20-2	2,6-DINITROTOLUENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
91-58-7	2-CHLORONAPHTHALENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
95-57-8	2-CHLOROPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
91-57-6	2-METHYLNAPHTHALENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
95-48-7	2-METHYLPHENOL (O-CRESOL)	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
88-74-4	2-NITROANILINE	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
88-75-5	2-NITROPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
91-94-1	3,3'-DICHLOROBENZIDINE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
99-09-2	3-NITROANILINE	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
101-55-3	4-BROMOPHENYL PHENYL ETHER	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
59-50-7	4-CHLORO-3-METHYLPHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
106-47-8	4-CHLOROANILINE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
106-44-5	4-METHYLPHENOL (P-CRESOL)	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
100-01-6	4-NITROANILINE	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
100-02-7	4-NITROPHENOL	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
83-32-9	ACENAPHTHENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
208-96-8	ACENAPHTHYLENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
98-86-2	ACETOPHENONE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
120-12-7	ANTHRACENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
1912-24-9	ATRAZINE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
100-52-7	BENZALDEHYDE	ug/L	4.6 UJ	4.6 UJ	4.5 UJ	4.5 UJ	4.6 UJ
56-55-3	BENZO(A)ANTHRACENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
50-32-8	BENZO(A)PYRENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
205-99-2	BENZO(B)FLUORANTHENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
191-24-2	BENZO(G,H,I)PERYLENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
207-08-9	BENZO(K)FLUORANTHENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
85-68-7	BENZYL BUTYL PHTHALATE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
92-52-4	BIPHENYL (DIPHENYL)	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
111-91-1	BIS(2-CHLOROETHOXY) METHANE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
111-44-4	BIS(2-CHLOROETHYL) ETHER	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
105-60-2	CAPROLACTAM	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
86-74-8	CARBAZOLE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
218-01-9	CHRYSENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
53-70-3	DIBENZ(A,H)ANTHRACENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
132-64-9	DIBENZOFURAN	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
84-66-2	DIETHYL PHTHALATE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
131-11-3	DIMETHYL PHTHALATE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
84-74-2	DI-N-BUTYL PHTHALATE	ug/L	0.44 J	0.41 J	0.28 J	0.38 J	0.41 J
117-84-0	DI-N-OCTYLPHTHALATE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
206-44-0	FLUORANTHENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
86-73-7	FLUORENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
118-74-1	HEXACHLOROBENZENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
87-68-3	HEXACHLOROBUTADIENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
67-72-1	HEXACHLOROETHANE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
193-39-5	INDENO(1,2,3-C,D)PYRENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
78-59-1	ISOPHORONE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
91-20-3	NAPHTHALENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
98-95-3	NITROBENZENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
621-64-7	N-NITROSODI-N-PROPYLAMINE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
86-30-6	N-NITROSODIPHENYLAMINE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
87-86-5	PENTACHLOROPHENOL	ug/L	9.1 U	9.2 U	9.1 U	9.1 U	9.2 U
85-01-8	PHENANTHRENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
108-95-2	PHENOL	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U
129-00-0	PYRENE	ug/L	4.6 U	4.6 U	4.5 U	4.5 U	4.6 U

						Dup of NCR-13S	
City of North Tonawanda NY1A8791 216 Payne Ave North Tonawanda, NY C/O Niagara County Refuse Site Validated Groundwater Sampling Event April 2015		Location ID: Sample ID: Lab Sample Id: Source: SDG: Matrix: Sampled: Validated:	NCR-3S NCR-3S 480-79130-1 TALBUFF 480-79130-1 WATER 4/24/2015 9:30 6/29/2015	NCR-4S NCR-4S 480-79130-2 TALBUFF 480-79130-1 WATER 4/24/2015 9:00 6/29/2015	NCR-5S NCR-5S 480-79130-3 TALBUFF 480-79130-1 WATER 4/24/2015 10:30 6/29/2015	NCR-13S NCR-13S 480-79130-4 TALBUFF 480-79130-1 WATER 4/24/2015 11:00 6/29/2015	NCR-13S Field Dup 1 480-79130-5 TALBUFF 480-79130-1 WATER 4/24/2015 0:00 6/29/2015
CAS NO.	COMPOUND	UNITS:					
METALS							
7429-90-5	ALUMINUM	mg/L	0.06 U	0.66	0.98 J+	0.15 J	0.14 J
7440-36-0	ANTIMONY	mg/L	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
7440-38-2	ARSENIC	mg/L	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
7440-39-3	BARIUM	mg/L	0.043	0.062	0.13 J	0.055	0.054
7440-41-7	BERYLLIUM	mg/L	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
7440-43-9	CADMIUM	mg/L	0.00055 J	0.00053 J	0.00056 J	0.00078 J	0.00086 J
7440-70-2	CALCIUM	mg/L	111	134	76 J	154	152
7440-47-3	CHROMIUM, TOTAL	mg/L	0.001 U	0.001 U	0.0012 J	0.0012 J	0.0013 J
7440-48-4	COBALT	mg/L	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
7440-50-8	COPPER	mg/L	0.0076 J	0.003 J	0.0066 J	0.006 J	0.0058 J
7439-89-6	IRON	mg/L	0.29	1.6	0.79 J	0.22	0.2
7439-92-1	LEAD	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
7439-95-4	MAGNESIUM	mg/L	62	45.9	41.5 J	51.7	51.6
7439-96-5	MANGANESE	mg/L	0.0057	0.16	0.018 J	0.0017 J	0.0017 J
7439-97-6	MERCURY	mg/L	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
7440-02-0	NICKEL	mg/L	0.0021 J	0.0017 J	0.0023 J	0.0033 J	0.003 J
7440-09-7	POTASSIUM	mg/L	2.7	12.9	1	1.5	1.4
7782-49-2	SELENIUM	mg/L	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U
7440-22-4	SILVER	mg/L	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
7440-23-5	SODIUM	mg/L	5.6	27.7	17.3 J	14.1	13.9
7440-28-0	THALLIUM	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
7440-62-2	VANADIUM	mg/L	0.0015 U	0.0015 U	0.0015 J	0.0015 U	0.0015 U
7440-66-6	ZINC	mg/L	0.033	0.053	0.029	0.026	0.026
DISSOLVED METALS							
7429-90-5	ALUMINUM	mg/L	0.06 U	0.06 U	0.06 U	0.06 U	0.06 U
7440-36-0	ANTIMONY	mg/L	0.0068 U	0.0068 U	0.0068 U	0.0068 U	0.0068 U
7440-38-2	ARSENIC	mg/L	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
7440-39-3	BARIUM	mg/L	0.039	0.061	0.12	0.048	0.056
7440-41-7	BERYLLIUM	mg/L	0.0003 U	0.0003 U	0.0003 U	0.0003 U	0.0003 U
7440-43-9	CADMIUM	mg/L	0.0009 J	0.0005 U	0.0005 U	0.00061 J	0.00071 J
7440-70-2	CALCIUM	mg/L	109	137	70.2	136	142
7440-47-3	CHROMIUM, TOTAL	mg/L	0.001 U	0.001 U	0.001 U	0.0015 J	0.0016 J
7440-48-4	COBALT	mg/L	0.00063 U	0.00063 U	0.00063 U	0.00063 U	0.00063 U
7440-50-8	COPPER	mg/L	0.0033 J	0.0016 U	0.0017 J	0.0016 U	0.0016 U
7439-89-6	IRON	mg/L	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U
7439-92-1	LEAD	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U
7439-95-4	MAGNESIUM	mg/L	62	46.2	41.6	56.9	51.1
7439-96-5	MANGANESE	mg/L	0.0015 J	0.0088	0.00069 J	0.0011 J	0.00069 J
7439-97-6	MERCURY	mg/L	0.00012 U	0.00012 U	0.00012 U	0.00012 U	0.00012 U
7440-02-0	NICKEL	mg/L	0.0016 J	0.0013 J	0.0013 U	0.0014 J	0.0015 J
7440-09-7	POTASSIUM	mg/L	2.1	14.3	0.5	1	1.4
7782-49-2	SELENIUM	mg/L	0.0087 U	0.0087 U	0.0087 U	0.0087 U	0.0087 U
7440-22-4	SILVER	mg/L	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U
7440-23-5	SODIUM	mg/L	6.4	29.4	15.5 J+	14.6	12.6
7440-28-0	THALLIUM	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
7440-62-2	VANADIUM	mg/L	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U
7440-66-6	ZINC	mg/L	0.027	0.022	0.0034 J	0.036	0.027

APPENDIX D
WATER LEVEL RECORDS

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 4/10/2015
(MM DD YY)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	12:45	598.93	26.89	572.04
EAST "B"	12:25	596.23	15.8	580.43
EAST "C"	11:55	598.69	20.45	578.24
EAST "D"	11:35	593.20	15.82	577.38
NCR-3S	10:50	579.60	2.91	576.69
NCR-4S	11:10	577.88	1.6	576.28
NCR-5S	10:50	579.34	5.46	573.88
NCR-13S	8:55	577.15	3.5	573.65

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:45		~13"
WW B	11:25		~6"
WW C	10:35		~5"
WW D	10:10		~25" pump running

Total System Flow	Time of Measurement
5335200	9:45

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 5/13/2015
(MM DD YY)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:55	598.93	26.97	571.96
EAST "B"	12:10	596.23	20.05	576.18
EAST "C"	12:25	598.69	21.27	577.42
EAST "D"	12:45	593.20	17.4	575.8
NCR-3S	10:25	579.60	4.71	574.89
NCR-4S	11:00	577.88	3.4	574.48
NCR-5S	11:30	579.34	8.43	570.91
NCR-13S	9:40	577.15	7	570.15

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:30		~8"
WW B	10:55		~4-5 ft
WW C	10:20		~5"
WW D	11:15		~5"

Total System Flow	Time of Measurement
589775	9:30

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY
REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 6/2/2015
(MM DD YY)

CREW MEMBERS: RC Becken

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:55	598.93	23.93	575
EAST "B"	12:10	596.23	NA	NA
EAST "C"	12:25	598.69	21.16	577.53
EAST "D"	12:45	593.20	19.51	573.69
NCR-3S	10:25	579.60	dry	
NCR-4S	11:00	577.88	3.1	574.78
NCR-5S	11:30	579.34	9.51	569.83
NCR-13S	9:40	577.15	7.54	569.61

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:30		~6"
WW B	10:55		~7"
WW C	10:20		~5"
WW D	11:15		~4"

Total System Flow	Time of Measurement
596070	9:30

FP-3D

APPENDIX E
MONTHLY INSPECTION LOGS

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

INSPECTOR(S): RC Becken

DATE: 4/10/2015
(MM DD YY)

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
1	Perimeter collection System/Off-Site Forcemain		
	Manholes		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of manhole	none	good
	- flow conditions	none	no apparent flow
	Wet Wells		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of wet well	none	good
2	Landfill Cap		
	Vegetated Soil Cover		
	- erosion	none	no
	- bare areas	none	no
	- washouts	none	no
	- leachate seeps	none	no
	- length of vegetation	none	short
	- dead/dying vegetation	none	typical for early Spring

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 4/10/2015
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
2	Landfill Cap (continued)		
<input type="checkbox"/>	Access Roads	none	no
<input type="checkbox"/>	- bare areas, dead/dying veg.	none	no
<input type="checkbox"/>	- erosion	none	no
<input type="checkbox"/>	- potholes or puddles	none	no
<input type="checkbox"/>	- obstruction	none	no
3	Wetlands (Area "F")		
<input type="checkbox"/>	- dead/dying vegetation	none	typical for early Spring
<input type="checkbox"/>	- change in water budget	none	high
<input type="checkbox"/>	- general conditions of wetlands	none	good
4	Other Site Systems		
<input type="checkbox"/>	Perimeter Fence		
<input type="checkbox"/>	- integrity of fence	none	good
<input type="checkbox"/>	- integrity of gates	none	good
<input type="checkbox"/>	- integrity of locks	none	good
<input type="checkbox"/>	- placement and condition of signs	none	good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 4/10/2015
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
4	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches/	none	no
<input type="checkbox"/>	Swale Outlets	none	no
<input type="checkbox"/>	- sediment buildup	none	good
<input type="checkbox"/>	- erosion	none	none
<input type="checkbox"/>	- condition of erosion protection	none	typical for early Spring
<input type="checkbox"/>	- flow obstructions	none	good
<input type="checkbox"/>	- dead/dying vegetation	none	good
<input type="checkbox"/>	- cable concrete/gabion mats and riprap	none	
<input type="checkbox"/>	Culverts	none	no
<input type="checkbox"/>	- sediment build-up	none	no
<input type="checkbox"/>	- erosion	none	good
<input type="checkbox"/>	- condition of erosion protection	none	no
<input type="checkbox"/>	- flow obstructions	none	
<input type="checkbox"/>	Gas Vents	none	intact
<input type="checkbox"/>	Wells	none	yes

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

INSPECTOR(S): RC Becken

DATE: 5/13/2015
(MM DD YY)

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
1	Perimeter collection System/Off-Site Forcemain		
	Manholes		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of manhole	none	good
	- flow conditions	none	no flow
	Wet Wells		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of wet well	none	good
2	Landfill Cap		
	Vegetated Soil Cover		
	- erosion	none	none
	- bare areas	none	none
	- washouts	none	none
	- leachate seeps	none	none
	- length of vegetation	none	short
	- dead/dying vegetation	none	none

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 5/13/2015
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
2	Landfill Cap (continued)		
<input type="checkbox"/>	Access Roads	none	none
<input type="checkbox"/>	- bare areas, dead/dying veg.	none	none
<input type="checkbox"/>	- erosion	none	none
<input type="checkbox"/>	- potholes or puddles	none	none
<input type="checkbox"/>	- obstruction	none	none
3	Wetlands (Area "F")		
<input type="checkbox"/>	- dead/dying vegetation	none	Conditions typical for spring
<input type="checkbox"/>	- change in water budget	none	low
<input type="checkbox"/>	- general conditions of wetlands	none	good
4	Other Site Systems		
<input type="checkbox"/>	Perimeter Fence		
<input type="checkbox"/>	- integrity of fence	none	good
<input type="checkbox"/>	- integrity of gates	none	good
<input type="checkbox"/>	- integrity of locks	none	good
<input type="checkbox"/>	- placement and condition of signs	none	good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 5/13/2015
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
4	Other Site Systems (continued)		
<input type="checkbox"/>	Drainage Ditches/	none	none
<input type="checkbox"/>	Swale Outlets	none	none
<input type="checkbox"/>	- sediment buildup	none	good
<input type="checkbox"/>	- erosion	none	none
<input type="checkbox"/>	- condition of erosion protection	none	conditions typical for spring
<input type="checkbox"/>	- flow obstructions	none	good
<input type="checkbox"/>	- dead/dying vegetation	none	good
<input type="checkbox"/>	- cable concrete/gabion mats and riprap	none	good
<input type="checkbox"/>	Culverts	none	none
<input type="checkbox"/>	- sediment build-up	none	none
<input type="checkbox"/>	- erosion	none	good
<input type="checkbox"/>	- condition of erosion protection	none	none
<input type="checkbox"/>	- flow obstructions	none	none
<input type="checkbox"/>	Gas Vents	none	intact
<input type="checkbox"/>	Wells	none	yes

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

INSPECTOR(S): RC Becken

DATE: 6/2/2015
(MM DD YY)

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
1	Perimeter collection System/Off-Site Forcemain		
	Manholes		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of manhole	none	good
	- flow conditions	none	no flow
	Wet Wells		
	- cover on securely	none	yes
	- condition of cover	none	good
	- condition of inside of wet well	none	good
2	Landfill Cap		
	Vegetated Soil Cover		
	- erosion	none	none
	- bare areas	none	none
	- washouts	none	none
	- leachate seeps	none	none
	- length of vegetation	none	tall
	- dead/dying vegetation	none	none

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 6/2/2015
(MM DD YY)

INSPECTOR(S): RC Becken

<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
2	Landfill Cap (continued)		
<input type="checkbox"/>	Access Roads	- bare areas, dead/dying veg.	none
<input type="checkbox"/>		- erosion	none
<input type="checkbox"/>		- potholes or puddles	none
<input type="checkbox"/>		- obstruction	none
3	Wetlands (Area "F")		
<input type="checkbox"/>		- dead/dying vegetation	none
<input type="checkbox"/>		- change in water budget	normal
<input type="checkbox"/>		- general conditions of wetlands	good
4	Other Site Systems		
<input type="checkbox"/>	Perimeter Fence		
<input type="checkbox"/>		- integrity of fence	good
<input type="checkbox"/>		- integrity of gates	good
<input type="checkbox"/>		- integrity of locks	good
<input type="checkbox"/>		- placement and condition of signs	good

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 6/2/2015
(MM DD YY)

INSPECTOR(S): RC Becken

	<i>Item</i>	<i>Inspect For</i>	<i>Action Required</i>	<i>Comments</i>
4	Other Site Systems (continued)			
	Drainage Ditches/	- sediment buildup	none	none
	Swale Outlets	- erosion	none	none
		- condition of erosion protection	none	good
		- flow obstructions	none	none
		- dead/dying vegetation	none	none
		- cable concrete/gabion mats and riprap	none	good
	Culverts	- sediment build-up	none	none
		- erosion	none	none
		- condition of erosion protection	none	good
		- flow obstructions	none	none
	Gas Vents	- intact/damage	none	intact
	Wells	- locks secure	none	yes

APPENDIX F
MAINTENANCE RECORD LOGS

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 4/10/2015
Time 8:30
Scheduled/Unscheduled: unscheduled
Type of Maintenance Performed: remove tree limb blocking entrance road

2. Company Performing Maintenance _____
Name: O&M Enterprises, Inc.
Address: 7134 Marigold Dr
North Tonawanda, NY
Contact Name: Rick Becken

3. Methods Used:

chain saw

Description of Material Removed:
tree limb

Problems/Comments:
none

DATE 4/10/2015 INSPECTOR RC Becken INSPECTOR'S SIGNATURE _____
FORM 2

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 5/8/2015

Time 900

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: repair fence

2. Company Performing Maintenance _____

Name: O&M Enterprises

Address: 7134 Marigold Dr

N. Tonawanda NY 14120

Contact Name: Rick Becken

3. Methods Used:

used hand tools to repair fence east side of landfill

Description of Material Removed:

none

Problems/Comments:

none

police complaint # 29753

Niagara County sheriff

5/8/2015
DATE

RC Becken
INSPECTOR

INSPECTOR'S SIGNATURE

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 6/5/2015

Time 9:00

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: clean and test pumps

2. Company Performing Maintenance _____

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Dr.

North Tonawanda, NY

Contact Name: Rick Becken

3. Methods Used:

pull pumps clean and test

Description of Material Removed:

none

Problems/Comments:

none

6/5/2015 RC Becken
DATE INSPECTOR INSPECTOR'S SIGNATURE

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 6/8/2015
Time 10:00
Scheduled/Unscheduled: scheduled
Type of Maintenance Performed: test alarm floats and autodailer

2. Company Performing Maintenance _____
Name: O&M Enterprises, Inc.
Address: 7134 Marigold Dr.
North Tonawanda, NY
Contact Name: Rick Becken

3. Methods Used:
raise float and check that autodailer and alarm light in control shed operate properly

Description of Material Removed:
none

Problems/Comments:
none

6/8/2015 RC Becken
DATE INSPECTOR INSPECTOR'S SIGNATURE

MAINTENANCE RECORD LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

CREW MEMBERS: RC Becken

1. Date 6/10/2015

Time 9:00

Scheduled/Unscheduled:

Type of Maintenance Performed: mow perimeter and around wells

2. Company Performing Maintenance _____

Name: O&M Enterprises, Inc.

Address: 7134 Marigold Dr.

North Tonawanda, NY

Contact Name: Rick Becken

3. Methods Used:

tractor and mower

Description of Material Removed:

none

Problems/Comments:

none

6/10/2015
DATE

RC Becken
INSPECTOR

INSPECTOR'S SIGNATURE

APPENDIX G
COMPACT DISK CONTAINING REPORT