2015 ANNUAL MONITORING 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 DEPARMENT OF ENVIRONMENTAL CONSERVATION

SUBMITTED BY:

Niagara County Refuse District and PRP Group

PREPARED BY:

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February 2016

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Submitted To:

The New York State Department of Environmental Conservation Division of Hazardous Waste Remediation

and

United States Environmental Protection Agency

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SECTION 1
INTRODUCTION

1.1 INTRODUCTION

In accordance with the United States Environmental Protection Agency (USEPA) Record of Decision (USEPA, 1993), the United States District Court Consent Decree (USA, 1995), and the USEPA-approved Operation, Maintenance, and Monitoring (OM&M) Manual (CRA, 2000), the Niagara County Refuse Site Potentially Responsible Parties (PRP) Group performed a remedial action at the Niagara County Refuse Site (Site), Wheatfield, New York. The PRP Group currently provides site-related OM&M services. This Annual Monitoring Report summarizes monitoring activities from January through December 2015.

The Site is a closed municipal landfill, approximately 60 acres in size, located along the eastern border of the Town of Wheatfield, New York, and the western border of the City of North Tonawanda, New York. The southern edge of the Site lies approximately 500 feet north of the Niagara River. A perimeter collection system and a perimeter barrier system are used to provide hydraulic containment of Site-related leachate and groundwater. These systems began operation in November of 2000.

1.2 PROCEDURES

1.2.1 Groundwater Sampling

In accordance with the OM&M Manual (CRA, 2000), 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 materials. Groundwater sampling on an annual schedule commenced in 2006.

Each groundwater monitoring well was purged prior to sample collection using a dedicated disposable HDPE bailer. Each well was bailed dry the day prior to sampling. Physical parameters including pH, temperature, conductivity, and turbidity of the purge water were periodically measured and recorded. All 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 (VOCs) and semi-volatile organic compound (SVOCs) samples have been collected every other year and total metals samples have been collected annually. In April 2015, in accordance with this schedule, groundwater samples were collected and analyzed for:

- VOCs in accordance with EPA Method 8260;
- SVOCs in accordance with EPA Method 8270;
- Mercury in accordance with EPA Method 245.1 and Method SW-7470; and
- Inorganics in accordance with EPA Method 200.7 and Method SW-6010.

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.

Beginning in 2014, in addition to total metals samples, dissolved metals samples were also collected and analyzed. Dissolved metals samples were collected based on comments in the USEPA's Third Five Year Review Report (September 2014) concerning metals concentrations and the potential for sample turbidity to change the total metals concentrations. Sampling for dissolved metals is currently planned to continue in future annual groundwater sampling events.

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.

1.2.2 Effluent Sampling

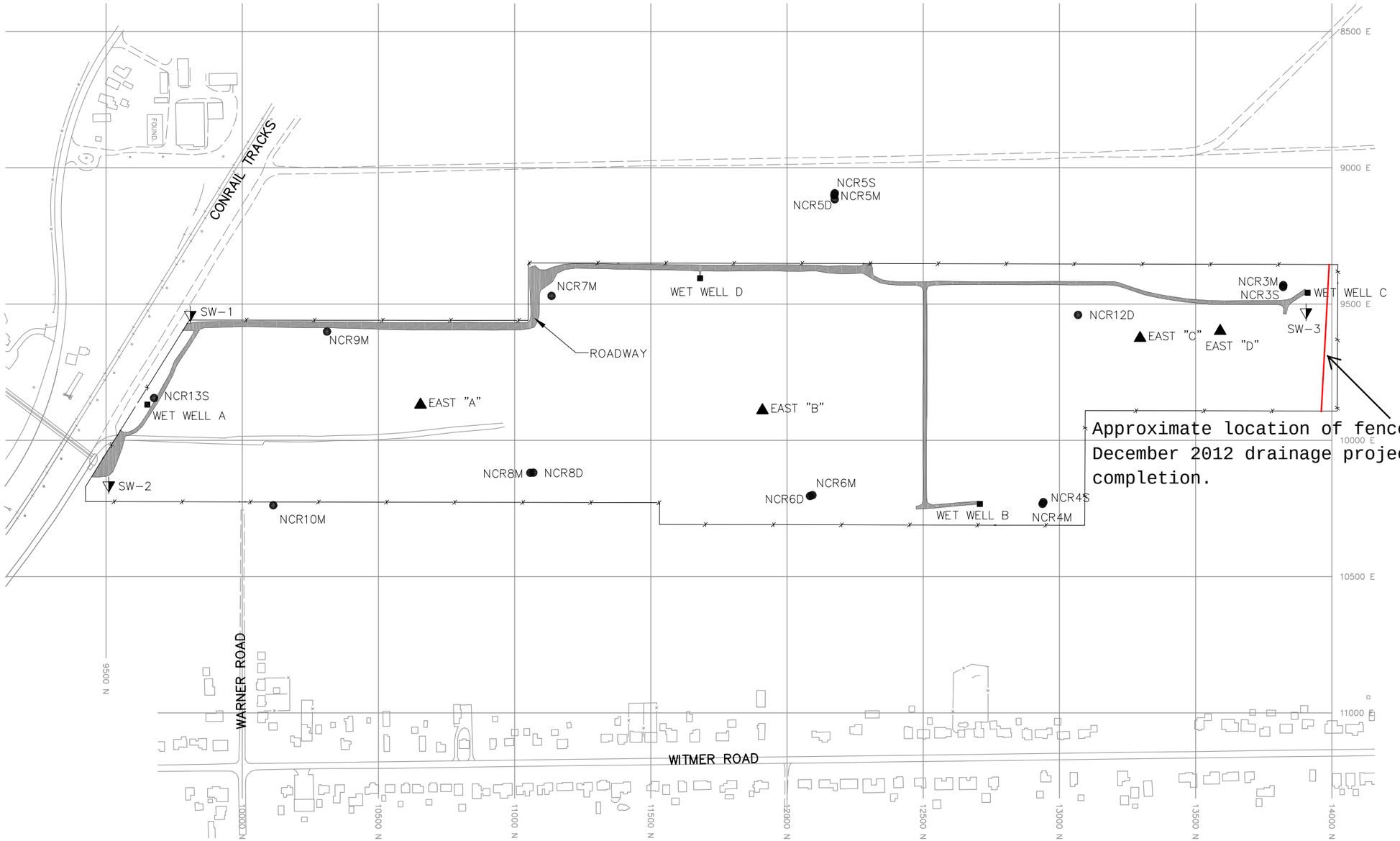
Groundwater from the perimeter collection system is discharged to the City of North Tonawanda treatment system without pre-treatment. A monitoring station in Wet Well A allows both the effluent water quality and the volume of effluent to be verified by the City of North Tonawanda. In compliance with the City of North Tonawanda Industrial Wastewater Discharge Permit, the effluent was sampled monthly through February 2007. A revised permit was issued covering from February 2007 through March 2010, requiring only semi-annual sampling. A new Industrial Wastewater Discharge Permit (Appendix A) was issued by the City of North Tonawanda in 2013 and is effective from March 31, 2013 through April 1, 2016. The new permit has a reduced analytical parameter list compared to the original permit, and continues to require a semi-annual sampling frequency. Semi-annual samples were collected in April and October 2015. The effluent samples are collected in compliance with the permit using the procedures identified in the OM&M Manual. Effluent samples are analyzed by the City of North Tonawanda. The sole purpose of these analyses is for compliance with the Industrial Wastewater Discharge Permit.

1.2.3 Water Levels

Water levels were measured in four monitoring well locations and at four wet well locations inside the limits of the landfill. Water level measurements were collected monthly during 2015. 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.

1.2.4 Site Inspections

The Site was inspected by O&M Enterprises, Inc. on a monthly basis, in accordance with procedures in the OM&M Manual. The perimeter collection system, offsite force main, wetlands, perimeter fence, drainage ditches, swale outlets, culverts, gas vents, wells, and landfill cap were visually inspected.



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

400 200 0 400 800

SCALE: 1"=400'

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

P:\738641-NCRfs\cad\38641C001.dwg, 02/27/04 at 07:27, MAB, 1=1
No XREFs

SECTION 2
RESULTS

2.1 ANALYTICAL RESULTS

2.1.1 Effluent Samples

Effluent samples were collected in April and October 2015 by O&M Enterprises, Inc. and analyzed by the City of North Tonawanda. The analytical results from these samples were used by the City to confirm that the effluent received from the Site met the criteria for acceptance by the City treatment system. All analytical results were found to be compliant with the March 31, 2013 discharge permit. Effluent analytical results for 2015 and the permit are presented in Appendix A.

2.1.2 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). This reporting period includes months 181 to 192, since the start-up of the perimeter collection system in November 2000. The collection of quarterly and semi-annual groundwater samples has been completed as outlined in the OM&M Manual. Annual collection of groundwater samples began in 2006. Groundwater sample analytes are currently scheduled to include metals annually, and VOCs and SVOCs every two years, as approved by the USEPA (see Appendix B). The groundwater samples collected during this reporting period were analyzed for VOCs, SVOCs, and total and dissolved metals.

Beginning in 2014, in addition to total metals samples, dissolved metals samples were also collected and analyzed. Sampling for dissolved metals is currently planned to continue in future annual groundwater sampling events. Table 2.1 illustrates that most of the inorganic analytes have greater total concentrations than dissolved concentrations, indicating that suspended sediment in the groundwater samples are contributing to the increased concentration of the total metals analyses.

The analytical results received from the laboratory are presented in Appendix C, along with the COC. A Sample Collection Data Sheet, which includes required and actual purge volumes, sample date, time, description, required analyses, and the COC number for each well, is included in Appendix C. 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 C.

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 D.

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, dissolved metals results were detected at lower concentration with fewer exceedances than the respective total metals results.

Data Validation

Groundwater analytical results were reviewed and validated by Parsons for usability (see Appendix D for the complete data validation 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. Key points from the data validation report are 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.

2.2 SITE INSPECTIONS

Monthly Site inspections were conducted between January and December 2015. During the inspections, the perimeter collection system, offsite force main, manholes, wet wells, landfill cap, wetlands, perimeter fence, drainage ditches, swale outlets, culverts, gas vents,

and monitoring wells were each visually inspected. A summary of the inspection findings is included in Table 2.2. Copies of the Monthly 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 in the wet wells were measured during each inspection visit (see Table 2.3). Examination of the landfill cap vegetative cover included checking for erosion, bare areas, washouts, leachate seeps, length of vegetation, and dead/dying vegetation. Additionally, during the examination of the landfill cap, the access roads were examined for bare areas, dead/dying vegetation, erosion, potholes/puddles, and obstructions. No surface erosion, bare spots, or leachate seeps were noted. The landfill cap vegetation was noted to be tall in January, snow covered in February, and March, short during the April, May, September, October, November, and December site inspections, and tall in the June through August inspections. The landfill cap was mowed in September.

Post-construction monitoring of the wetland replacement was performed annually between 2001 and 2005. Monitoring results indicated that the wetland creation was successful. Although the formal annual inspections are no longer required, monthly visual inspection of the wetlands has continued, to document general conditions. A drainage project was completed by the City of North Tonawanda in December 2012. This project included excavation of a drainage ditch across the northern end of the landfill property, north of the landfill's northern perimeter collection system and perimeter barrier system in an effort to alleviate seasonal flooding in the yards of homes along Witmer Road. The excavation was oriented through the wetlands in an east-west direction. The drainage project does not appear to have affected the water balance or the established vegetation in the wetland area.

The wetlands were visually examined during monthly inspections for growth and propagation of wetland species, dead/dying vegetation, presence of invasive species (i.e., purple loosestrife), change in water budget, and general conditions. No signs of damage to the wetlands due to loss of vegetation, or changes in the water budget, were observed during each of the inspections. Water levels in the wetlands were noted as normal in January, March, June through August and November, ice and snow covered in February, high in April, and low in May, September, October, and December. Wetland vegetation was noted as normal for the time of year or as in good condition (no dead or dying vegetation) during each of the inspections in 2015 except for February when the wetlands were snow covered.

Overall the landfill system, including the perimeter fence, drainage ditches, swale outlets, culverts, gas vents, monitoring wells, and wetlands were found to be in acceptable condition.

2.3 MAINTENANCE

Scheduled maintenance during 2015 included:

- Snow was shoveled from the wells and wet wells to improve access.
- A hole in the perimeter fence was repaired on the east side of the site.
- The wet well pumps were pulled, cleaned, tested with a volt meter, and re-installed.

- The floats, alarm lights, and autodialer system were checked for proper operation.
- The perimeter of the site was mowed along the perimeter fence, and paths to wet wells and monitoring wells were mowed.
- The landfill cap was mowed and brush along the roadway was cut and pushed back.

Occasional unscheduled maintenance at the landfill is required. During this reporting period, the following items requiring unscheduled maintenance were addressed.

- 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.
- On August 14, the discharge hose from Wet Well A was repaired.
- On September 13, the discharge hose from Wet Well B was repaired.
- On December 1, a tree that had fallen across the site entrance way was removed.

Maintenance Record Logs are included in Appendix F.

2.4 WATER LEVELS

Monthly water level measurements were collected to (1) ensure that water levels inside the landfill are lowered by the operation of the perimeter collection system; and (2) allow planning for groundwater sampling dates, when the maximum number of wells could be sampled. Water levels were collected from the wet wells, the piezometers (hydraulic monitoring locations) within the limits of the landfill, and the groundwater monitoring wells (see Figure 1.1). Water levels in the wet wells were collected during the monthly inspections and recorded on water level records (Appendix G). The water level data, including depths to water and elevations, are summarized on Table 2.3. During 2015, water levels were collected from the monitoring wells on a monthly basis. Water levels generally varied (rose or fell) between 1.3 and 4.1 feet over the course of the year.

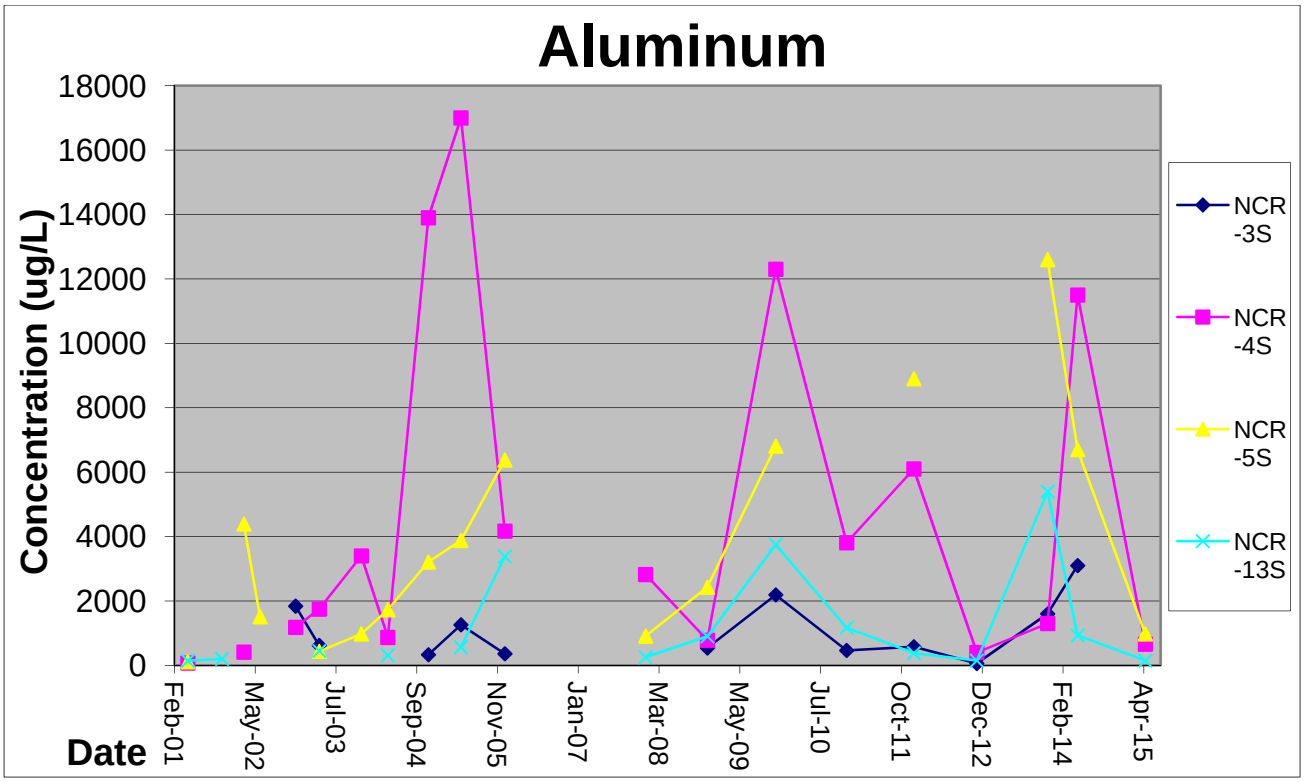


Figure 2.1A: Plot of Historical Aluminum Concentration

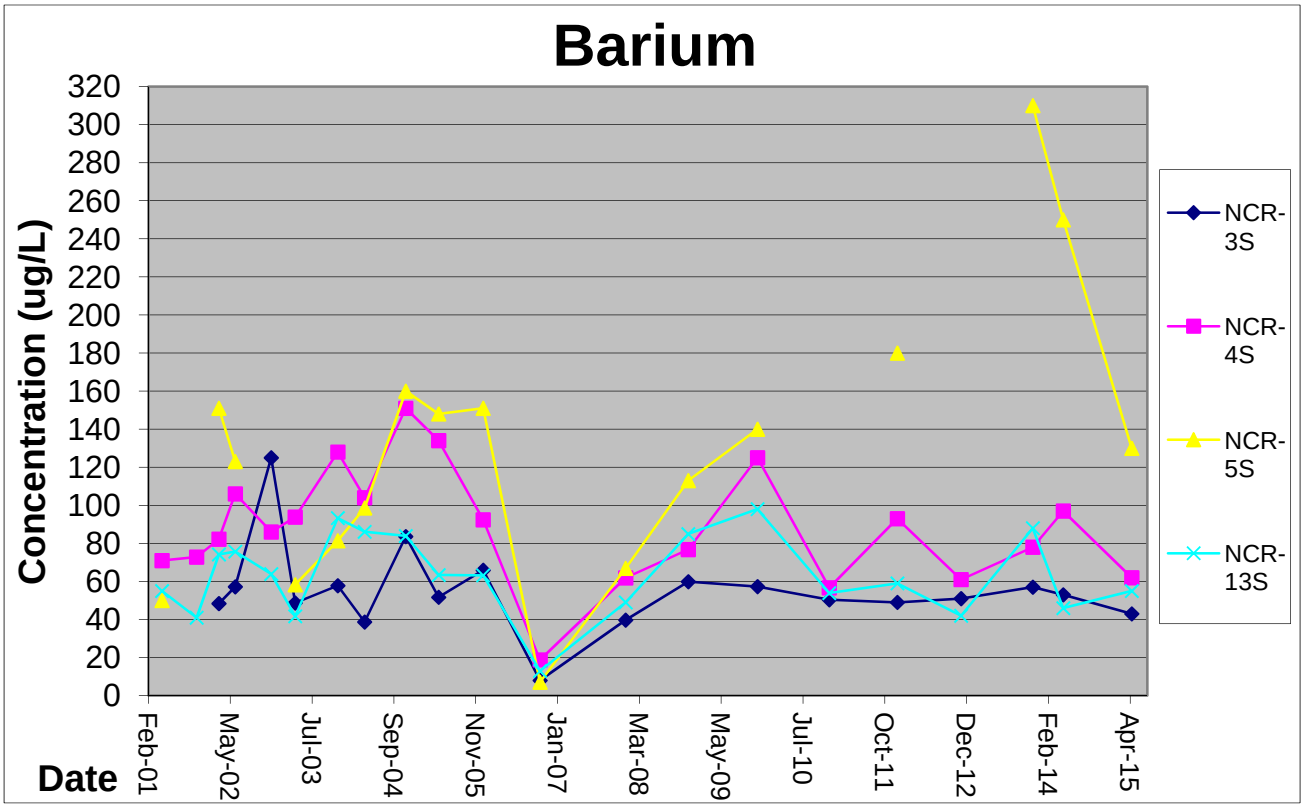


Figure 2.1B: Plot of Historical Barium Concentration

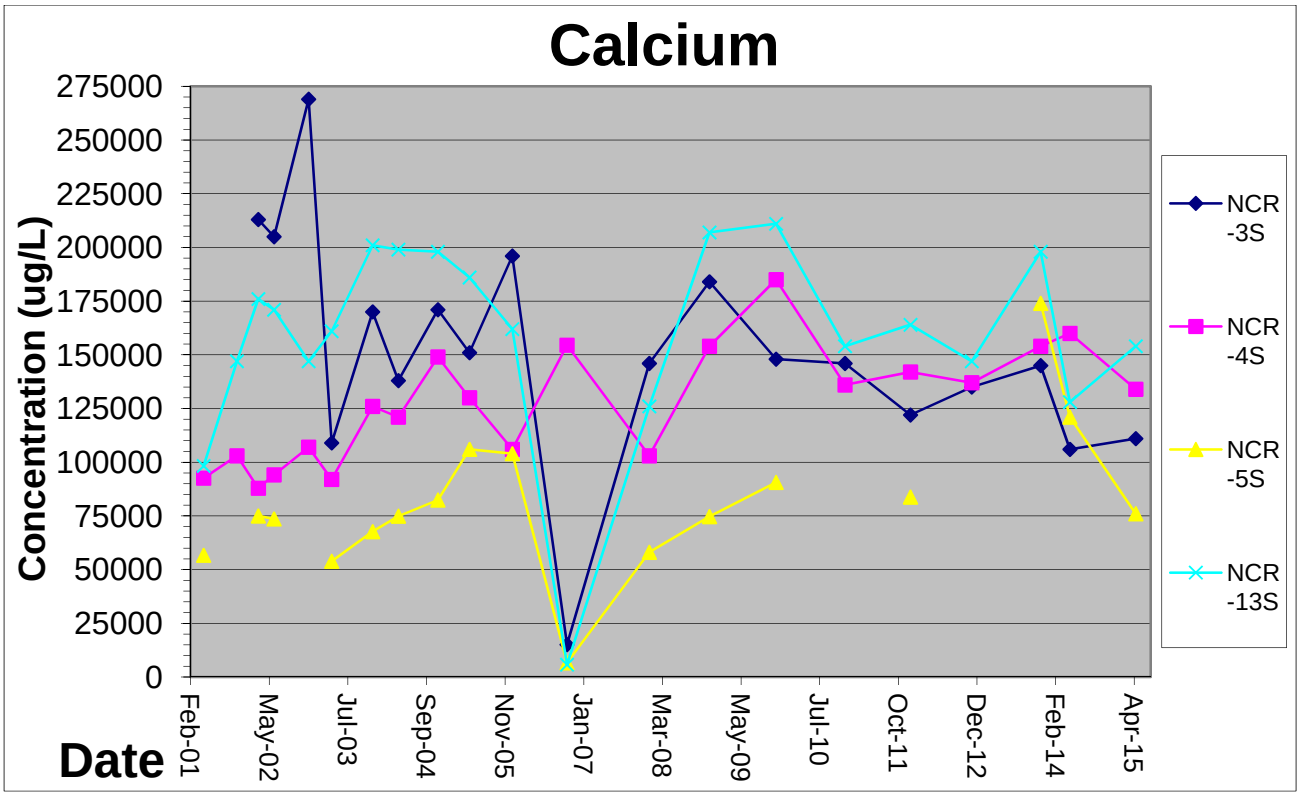


Figure 2.1C: Plot of Historical Calcium Concentration

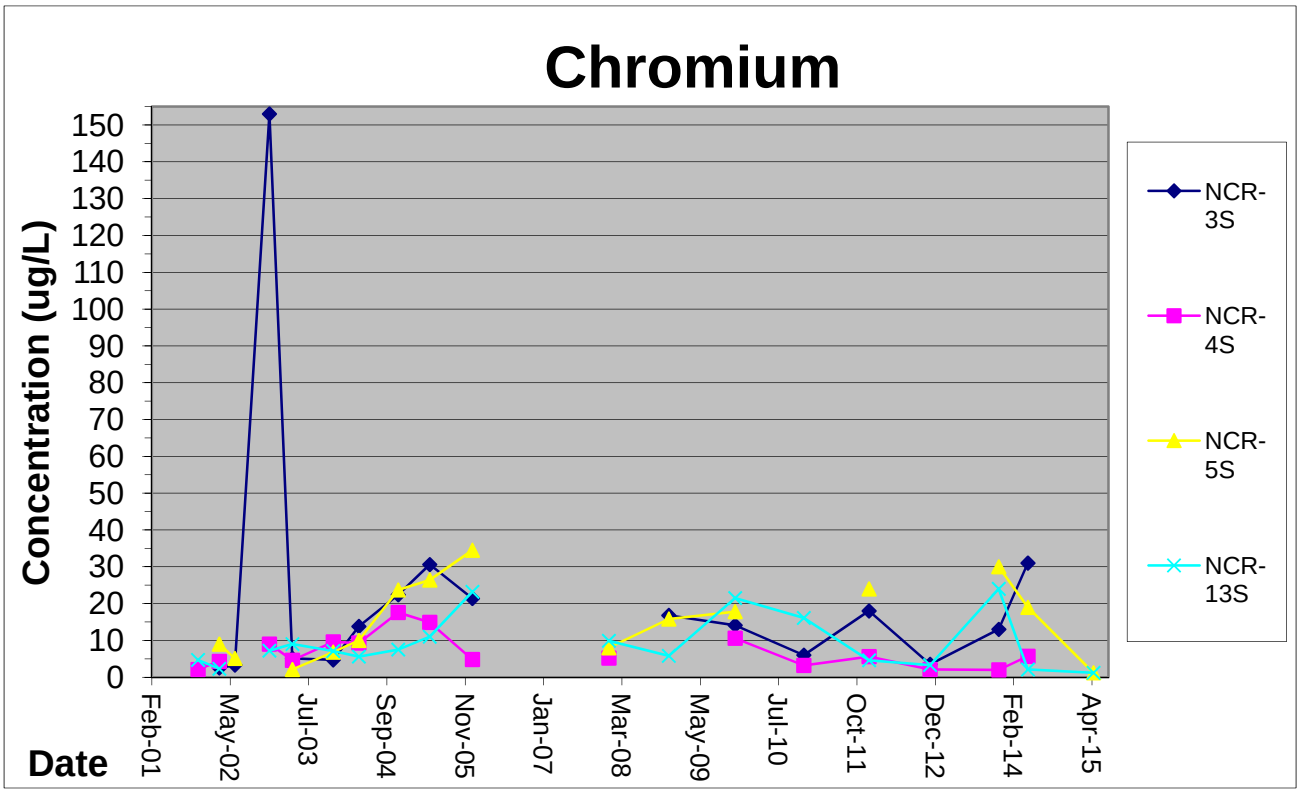


Figure 2.1D: Plot of Historical Chromium Concentration

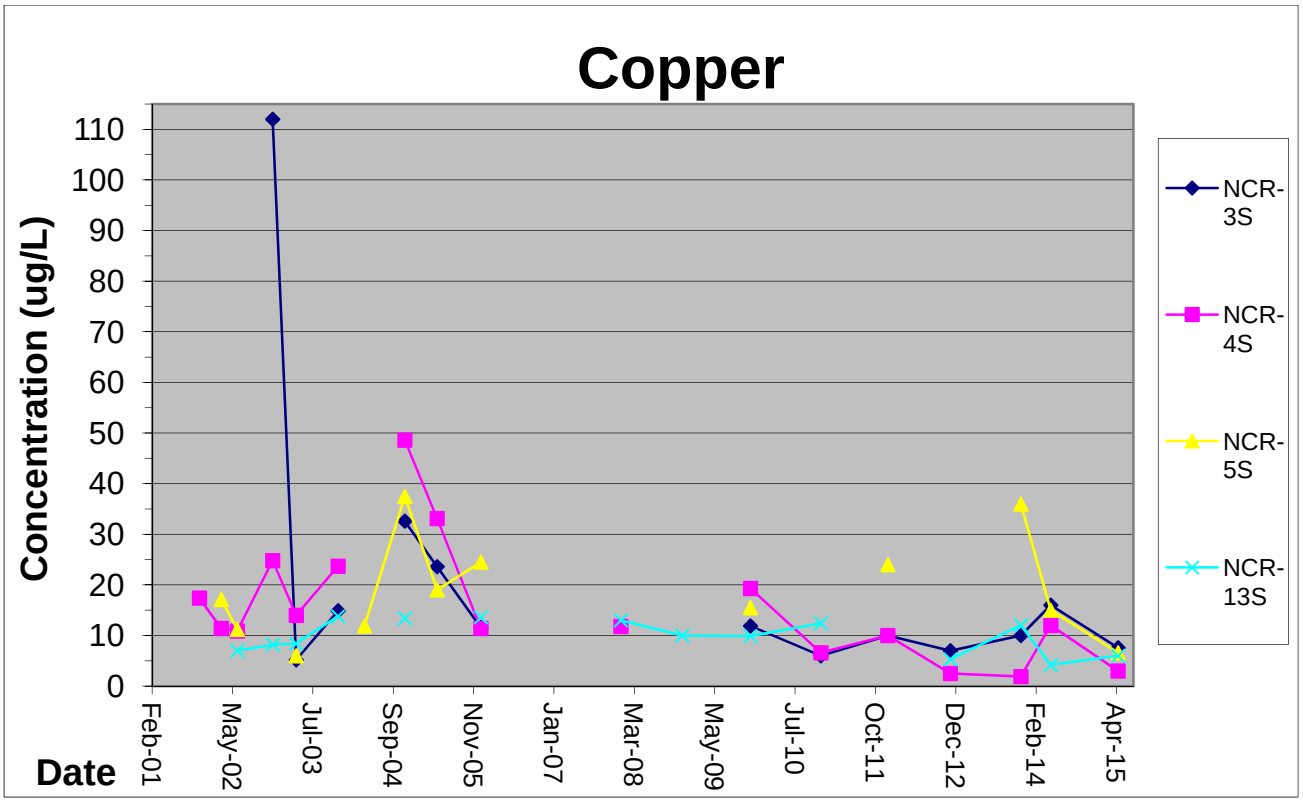


Figure 2.1E: Plot of Historical Copper Concentration

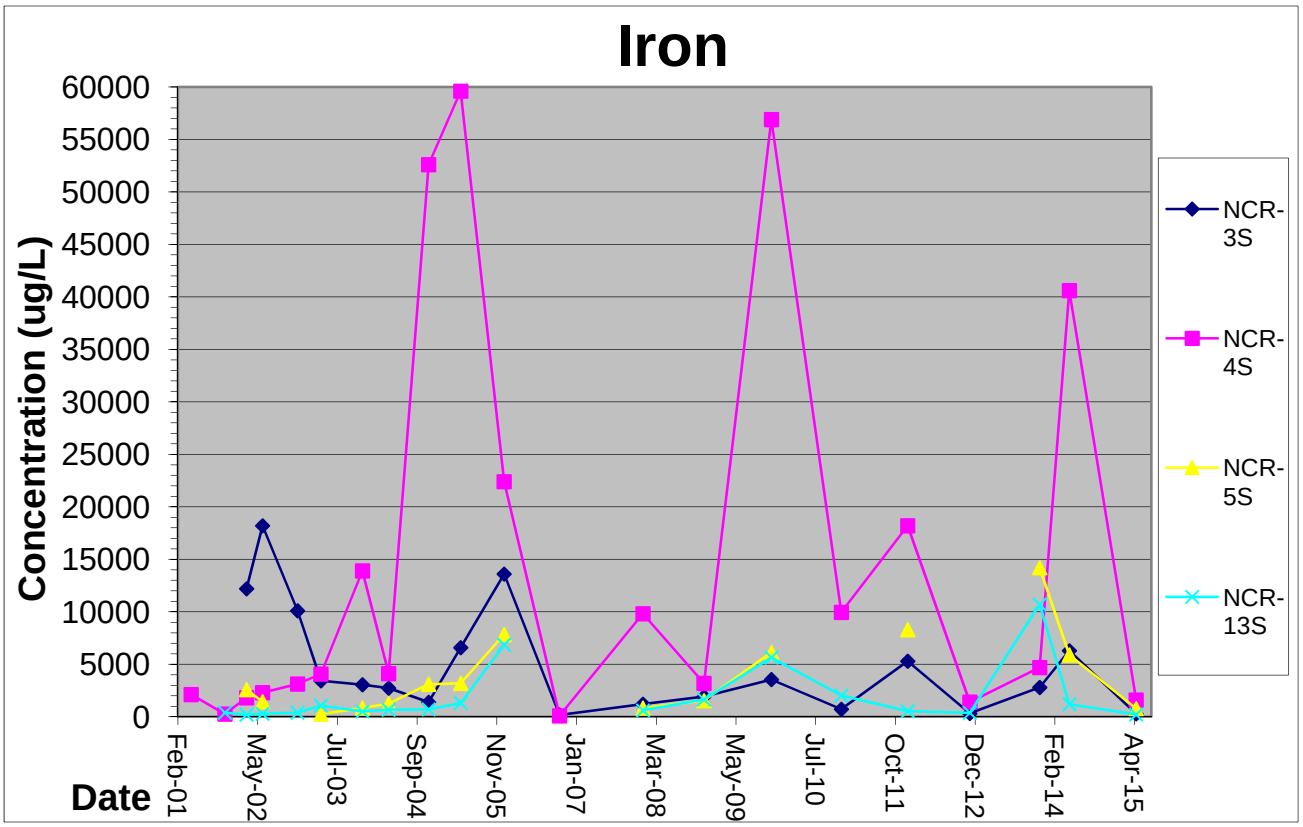


Figure 2.1F: Plot of Historical Iron Concentration

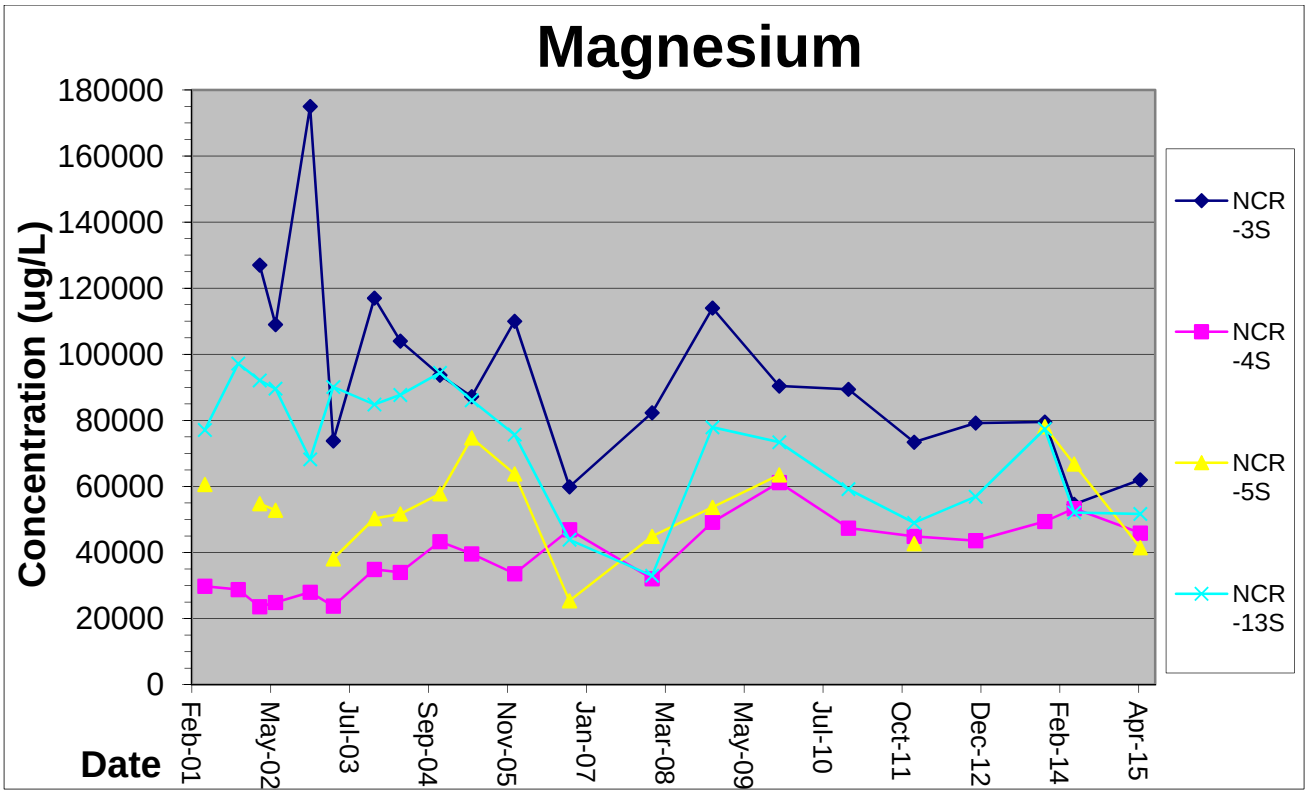


Figure 2.1G: Plot of Historical Magnesium Concentration

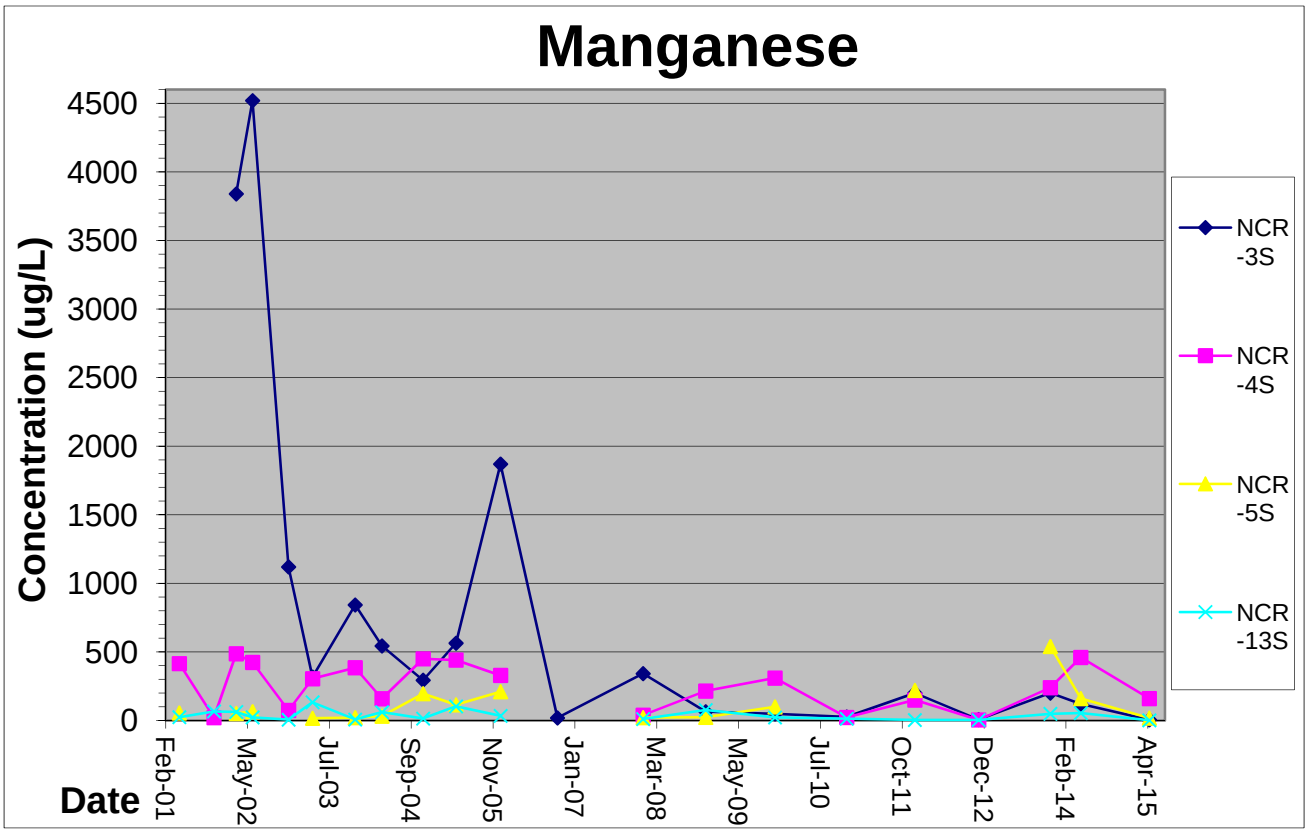


Figure 2.1H: Plot of Historical Manganese Concentration

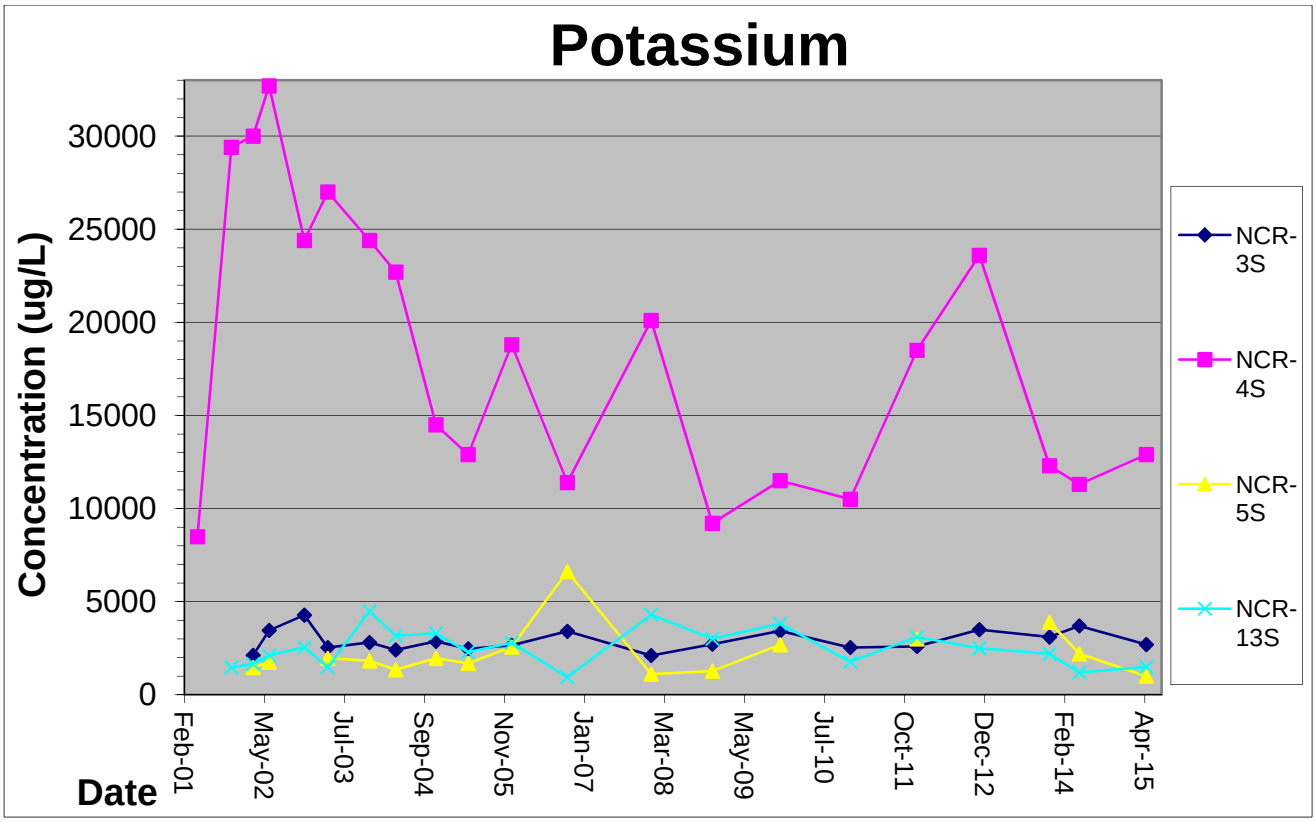


Figure 2.1I: Plot of Historical Potassium Concentration

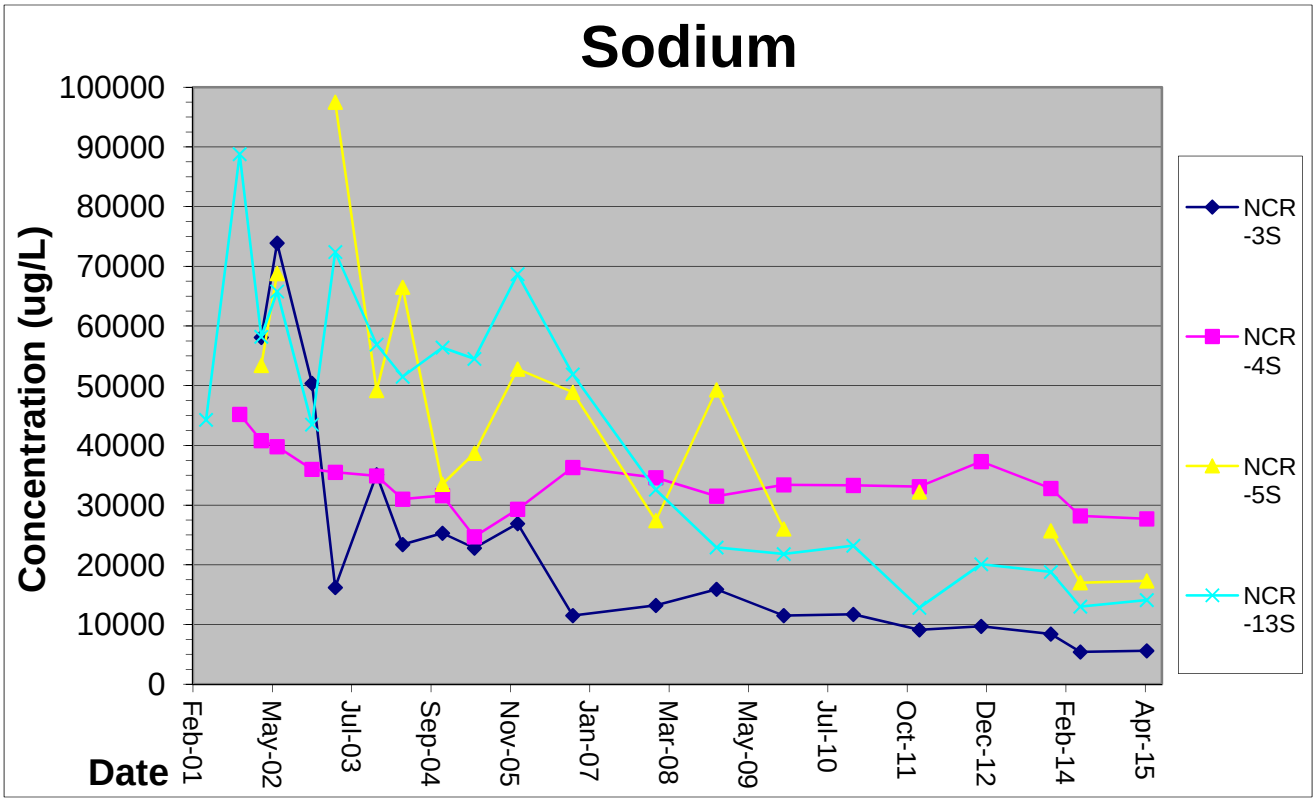


Figure 2.1J: Plot of Historical Sodium Concentration

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

City of North Tonawanda 216 Payne Ave North Tonawanda, NY C/O Niagara Co. Refuse Site Validated Groundwater Data April 2015		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
CAS NO.	COMPOUND	UNITS:								
	VOLATILES									
	NONE DETECTED									
	SEMIVOLATILES									
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
	METALS (Total)									
7429-90-5	ALUMINUM	ug/L	100	-	-	ND	660	980 J+	150 J	140 J
7440-39-3	BARIUM	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	BARIUM	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 Monthly Site Inspection Summary

Inspection Item	Acceptable	Not Acceptable	Comments
Manholes	X		
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		A lower than normal water level was noted during the May, September, October, and December inspections. A higher than normal water level was noted during the April site inspection. The wetlands were ice and snow covered in February. Normal water levels were observed during the other monthly inspections.
Perimeter Fence	X		One hole was repaired in 2015.
Condition of Roads	X		No erosion or other problems.
Integrity of the Cap	X		No problems were noted in 2015.
Drainage Ditches/Swales	X		
Gas Venting System	X		
Wells	X		Water levels were measured monthly.
Culverts	X		
Vegetative Cover	X		Height of vegetation on the cap was noted as snow covered during the February and March inspections, short during the April, May, and September through December inspections, and tall during the January, June through August inspections. The cap was mowed in September 2015.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	12/5/2000 Depth to Water (ft)	12/5/2000 Elevation (ft. msl)	1/8/2001 Depth to Water (ft)	1/8/2001 Elevation (ft. msl)	2/1/2001 Depth to Water (ft)	2/1/2001 Elevation (ft. msl)	3/8/2001 Depth to Water (ft)	3/8/2001 Elevation (ft. msl)	4/4/2001 Depth to Water (ft)	4/4/2001 Elevation (ft. msl)	5/8/2001 Depth to Water (ft)	5/8/2001 Elevation (ft. msl)	6/5/2001 Depth to Water (ft)	6/5/2001 Elevation (ft. msl)	7/2/2001 Depth to Water (ft)	7/2/2001 Elevation (ft. msl)	8/1/2001 Depth to Water (ft)	8/1/2001 Elevation (ft. msl)	9/5/2001 Depth to Water (ft)	9/5/2001 Elevation (ft. msl)	10/4/2001 Depth to Water (ft)	10/4/2001 Elevation (ft. msl)	11/5/2001 Depth to Water (ft)	11/5/2001 Elevation (ft. msl)	12/11/2001 Depth to Water (ft)	12/11/2001 Elevation (ft. msl)
East "A"	598.93	22.05	576.88	-	-	-	-	21.34	577.59	-	-	22.21	576.72	21.98	576.95	-	-	22.51	576.42	22.63	576.30	22.61	576.32	22.74	576.19	22.88	576.05
East "B"	596.23	19.12	577.11	-	-	-	-	19.35	576.88	-	-	19.23	577.00	19.30	576.93	-	-	20.50	575.73	19.44	576.79	19.22	577.01	19.36	576.87	19.44	576.79
East "C"	598.69	17.46	581.23	-	-	-	-	17.86	580.83	-	-	18.37	580.32	18.38	580.31	-	-	18.65	580.04	18.64	580.05	18.20	580.49	18.80	579.89	18.75	579.94
East "D"	593.20	11.10	582.10	-	-	-	-	12.45	580.75	-	-	12.86	580.34	12.79	580.41	-	-	13.00	580.20	12.8	580.40	12.24	580.96	12.74	580.46	12.94	580.26
WW A	-	2.50	-	2.67	-	2.33	-	1.13	-	2.29	-	1.83	-	2.17	-	1.58	-	1.83	-	-	-	1.83	-	2.33	-	2.08	-
WW B	-	2.20	-	2.42	-	1.96	-	1.09	-	1.79	-	2.17	-	1.92	-	1.50	-	2.00	-	1.92	-	1.58	-	1.50	-	2.08	-
WW C	-	1.50	-	2.42	-	1.70	-	0.92	-	2.04	-	2.00	-	1.67	-	1.33	-	2.08	-	2.33	-	1.25	-	2.00	-	1.58	-
WW D	-	1.70	-	-	-	1.50	-	0.99	-	1.08	-	1.50	-	1.33	-	2.0	-	1.25	-	2.25	-	2.00	-	2.08	-	1.33	-
NCR-3S	579.60	-	-	-	-	-	-	-	-	-	-	-	-	3.71	575.89	-	-	dry	-	dry	-	dry	-	5.10	574.50	4.64	574.96
NCR-4S	577.88	-	-	-	-	-	-	-	-	-	-	-	-	4.28	573.60	-	-	dry	-	dry	-	dry	-	4.51	573.37	3.92	573.96
NCR-5S	579.34	-	-	-	-	-	-	-	-	-	-	-	-	9.10	570.24	-	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	-	-	-	-	-	-	-	-	-	-	-	-	7.05	570.10	-	-	7.85	569.30	7.80	569.35	7.70	569.45	6.65	570.50	6.11	571.04

Observation Point	Elevation Top of Casing (ft. msl)	1/2/2002 Depth to Water (ft)	1/2/2002 Elevation (ft. msl)	2/4/2002 Depth to Water (ft)	2/4/2002 Elevation (ft. msl)	3/4/2002 Depth to Water (ft)	3/4/2002 Elevation (ft. msl)	4/1/2002 Depth to Water (ft)	4/1/2002 Elevation (ft. msl)	5/3/2002 Depth to Water (ft)	5/3/2002 Elevation (ft. msl)	6/4/2002 Depth to Water (ft)	6/4/2002 Elevation (ft. msl)	7/2/2002 Depth to Water (ft)	7/2/2002 Elevation (ft. msl)	8/7/2002 Depth to Water (ft)	8/7/2002 Elevation (ft. msl)	9/6/2002 Depth to Water (ft)	9/6/2002 Elevation (ft. msl)	10/3/2002 Depth to Water (ft)	10/3/2002 Elevation (ft. msl)	11/7/2002 Depth to Water (ft)	11/7/2002 Elevation (ft. msl)	12/3/2002 Depth to Water (ft)	12/3/2002 Elevation (ft. msl)
East "A"	598.93	22.90	576.03	22.81	576.12	22.03	576.90	22.25	576.68	20.06	578.87	19.84	579.09	22.00	576.93	22.65	576.28	22.78	576.15	28.48	570.45	23.25	575.68	23.36	575.57
East "B"	596.23	19.63	576.60	19.39	576.84	19.46	576.77	19.49	576.74	19.44	576.79	20.59	575.64	19.56	576.67	19.40	576.83	19.40	576.83	19.46	576.77	19.35	576.88	-	-
East "C"	598.69	18.70	579.99	18.51	580.18	18.70	579.99	18.63	580.06	18.80	579.89	18.74	579.95	18.78	579.91	18.95	579.74	18.92	579.77	18.99	579.70	19.30	579.39	19.35	579.34
East "D"	593.20	13.16	580.04	12.95	580.25	13.3	579.90	13.35	579.85	13.50	579.70	13.73	579.47	13.74	579.46	13.81	579.39	13.58	579.62	14.01	579.19	13.2	580.00	13.54	579.66
WW A	-	1.17	-	2.17	-	1.67	-	2.00	-	2.00	-	2.17	-	1.50	-	2.50	-	1.83	-	1.50	-	1.42	-	2.00	-
WW B	-	1.00	-	2.00	-	1.25	-	1.33	-	1.67	-	2.00	-	1.58	-	1.67	-	1.42	-	1.33	-	1.17	-	1.25	-
WW C	-	1.50	-	1.42	-	1.58	-	1.50	-	1.83	-	1.25	-	1.67	-	2.17	-	1.50	-	1.33	-	1.25	-	1.50	-
WW D	-	1.50	-	1.00	-	1.42	-	1.17	-	1.58	-	1.50	-	1.92	-	2.00	-	1.67	-	2.00	-	1.33	-	1.50	-
NCR-3S	579.60	4.54	575.06	4.52	575.08	3.90	575.70	4.10	575.50	4.43	575.17	5.20	574.40	5.71	573.89	5.90	573.70	dry	-	5.91	573.69	dry	-	4.46	575.14
NCR-4S	577.88	3.71	574.17	3.70	574.18	3.80	574.08	3.66	574.22	3.75	574.13	4.02	573.86	4.45	573.43	dry	-	dry	-	dry	-	dry	-	3.95	573.93
NCR-5S	579.34	8.42	570.92	7.69	571.65	7.68	571.66	7.61	571.73	8.28	571.06	9.10	570.24	9.52	569.82	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	5.85	571.30	5.76	571.39	5.74	571.41	5.81	571.34	6.07	571.08	6.27	570.88	7.25	569.90	7.57	569.58	dry	-	7.78	569.37	dry	-	6.40	570.75

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/6/2003		2/5/2003		3/6/2003		4/2/2003		5/5/2003		6/5/2003		7/1/2003		8/11/2003		9/2/2003		10/8/2003		11/12/2003		12/6/2003	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	23.48	575.45	23.51	575.42	23.65	575.28	23.75	575.18	23.81	575.12	23.25	575.68	23.11	575.82	23.25	575.68	23.41	575.52	23.35	575.58	23.71	575.22	23.85	575.08
East "B"	596.23	19.53	576.70	19.40	576.83	19.59	576.64	19.61	576.62	19.70	576.53	19.66	576.57	19.77	576.46	19.58	576.65	19.64	576.59	19.59	576.64	19.65	576.58	NA	-
East "C"	598.69	18.82	579.87	19.11	579.58	18.99	579.70	19.07	579.62	18.98	579.71	19.00	579.69	19.39	579.30	19.19	579.50	19.25	579.44	19.24	579.45	18.81	579.88	19.27	579.42
East "D"	593.20	13.24	579.96	13.52	579.68	13.7	579.50	13.88	579.32	14.15	579.05	14.07	579.13	14.31	578.89	14.04	579.16	14.04	579.16	13.97	579.23	13.64	579.56	14.02	579.18
WW A	-	1.42	-	1.25	-	1.50	-	1.42	-	1.58	-	1.33	-	1.33	-	1.17	-	1.42	-	1.33	-	2.00	-	1.33	-
WW B	-	1.08	-	1.17	-	1.67	-	1.17	-	0.75	-	1.25	-	1.42	-	1.50	-	1.50	-	1.17	-	1.42	-	1.67	-
WW C	-	1.33	-	1.50	-	1.25	-	1.33	-	1.50	-	1.42	-	1.00	-	1.08	-	1.08	-	1.08	-	1.00	-	1.67	-
WW D	-	1.42	-	1.67	-	1.08	-	1.25	-	1.50	-	1.50	-	1.25	-	1.58	-	1.33	-	1.50	-	1.58	-	1.50	-
NCR-3S	579.60	3.84	575.76	4.06	575.54	4.55	575.05	4.39	575.21	4.39	575.21	4.41	575.19	5.80	573.80	5.92	573.68	dry	-	dry	-	4.45	575.15	4.24	575.36
NCR-4S	577.88	2.91	574.97	-	-	-	-	3.65	574.23	3.60	574.28	2.65	575.23	4.05	573.83	3.98	573.90	dry	-	4.37	573.51	2.93	574.95	2.88	575.00
NCR-5S	579.34	7.95	571.39	8.69	570.65	8.11	571.23	7.66	571.68	8.58	570.76	8.08	571.26	9.26	570.08	10.12	569.22	10.95	568.39	dry	-	10.40	568.94	8.11	571.23
NCR-13S	577.15	5.89	571.26	5.54	571.61	6.16	570.99	6.05	571.10	6.13	571.02	6.11	571.04	7.21	569.94	7.48	569.67	7.59	569.56	7.77	569.38	6.35	570.80	6.07	571.08

Observation Point	Elevation Top of Casing (ft. msl)	1/2/2004		2/5/2004		3/1/2004		4/5/2004		5/4/2004		6/11/2004		7/10/2004		8/9/2004		9/8/2004		10/2/2004		11/4/2004		12/3/2004	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	23.90	575.03	23.93	575.00	24.00	574.93	23.26	575.67	22.14	576.79	19.44	579.49	19.19	579.74	20.70	578.23	23.31	575.62	23.34	575.59	22.44	576.49	22.48	576.45
East "B"	596.23	19.83	576.40	NA	-	NA	-	19.60	576.63	19.65	576.58	19.81	576.42	19.75	576.48	19.85	576.38	19.68	576.55	19.53	576.70	17.51	578.72	17.49	578.74
East "C"	598.69	19.12	579.57	19.79	578.90	19.22	579.47	19.36	579.33	19.24	579.45	19.42	579.27	19.28	579.41	19.56	579.13	19.48	579.21	19.36	579.33	18.95	579.74	18.94	579.75
East "D"	593.20	13.9	579.30	14.52	578.68	14.11	579.09	14.05	579.15	14.25	578.95	14.5	578.70	14.4	578.80	14.64	578.56	14.3	578.90	14.18	579.02	14.05	579.15	14.01	579.19
WW A	-	1.58	-	1.17	-	2.17	-	0.75	-	1.25	-	1.50	-	1.25	-	1.25	-	1.33	-	1.25	-	1.42	-	1.67	-
WW B	-	1.33	-	NA	-	1.50	-	1.30	-	1.17	-	1.17	-	1.17	-	1.25	-	1.00	-	1.00	-	1.17	-	0.42	-
WW C	-	1.08	-	1.00	-	1.17	-	1.17	-	1.00	-	1.08	-	1.17	-	1.08	-	1.17	-	1.17	-	1.58	-	0.25	-
WW D	-	1.17	-	1.08	-	1.67	-	0.65	-	1.50	-	1.33	-	1.00	-	1.00	-	1.25	-	1.00	-	1.17	-	0.25	-
NCR-3S	579.60	4.11	575.49	4.21	575.39	3.19	576.41	4.09	575.51	3.37	576.23	4.92	574.68	dry	-	4.36	575.24	5.44	574.16	dry	-	2.42	577.18	3.06	576.54
NCR-4S	577.88	2.65	575.23	2.72	575.16	2.42	575.46	2.53	575.35	2.76	575.12	2.99	574.89	3.74	574.14	3.50	574.38	3.32	574.56	3.65	574.23	2.74	575.14	2.75	575.13
NCR-5S	579.34	7.53	571.81	8.34	571.00	7.01	572.33	7.10	572.24	7.99	571.35	8.80	570.54	9.20	570.14	9.40	569.94	9.20	570.14	9.28	570.06	9.90	569.44	7.27	572.07
NCR-13S	577.15	5.72	571.43	5.95	571.20	5.88	571.27	5.49	571.66	6.08	571.07	6.22	570.93	7.08	570.07	7.09	570.06	6.75	570.40	7.16	569.99	5.95	571.20	4.28	572.87

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/5/2005		2/3/2005		3/9/2005		4/2/2005		6/4/2005		7/6/2005		8/4/2005		9/3/2005		10/7/2005		12/10/2005	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.20	574.73	21.21	577.72	19.45	579.48	22.21	576.72	22.19	576.74	23.24	575.69	23.49	575.44	23.57	575.36	24.07	574.86	24.47	574.46
East "B"	596.23	19.68	576.55	19.52	576.71	19.79	576.44	19.66	576.57	19.97	576.26	19.89	576.34	19.96	576.27	19.70	576.53	19.51	576.72	19.50	576.73
East "C"	598.69	19.60	579.09	19.42	579.27	19.33	579.36	19.15	579.54	19.71	578.98	19.76	578.93	19.57	579.12	19.51	579.18	19.65	579.04	19.39	579.30
East "D"	593.20	14.2	579.00	14.35	578.85	13.89	579.31	14.29	578.91	14.68	578.52	14.64	578.56	14.62	578.58	14.47	578.73	14.4	578.80	14.24	578.96
WW A	-	0.58	-	1.08	-	0.50	-	1.00	-	1.00	-	1.00	-	1.25	-	1.17	-	1.33	-	1.50	-
WW B	-	1.50	-	1.17	-	0.83	-	1.25	-	1.17	-	1.50	-	1.42	-	0.92	-	1.17	-	1.17	-
WW C	-	0.67	-	1.00	-	1.00	-	1.00	-	1.25	-	0.92	-	1.25	-	1.00	-	1.00	-	0.83	-
WW D	-	1.25	-	1.25	-	1.00	-	1.17	-	1.33	-	0.92	-	1.50	-	1.00	-	1.08	-	1.08	-
NCR-3S	579.60	1.82	577.78	3.39	576.21	3.11	576.49	1.50	578.10	5.93	573.67	dry	-	5.96	573.64	dry	-	5.63	573.97	4.21	575.39
NCR-4S	577.88	2.60	575.28	3.08	574.80	frozen	-	2.51	575.37	3.87	574.01	dry	-	dry	-	dry	-	3.69	574.19	2.99	574.89
NCR-5S	579.34	5.46	573.88	6.57	572.77	6.14	573.20	6.36	572.98	8.10	571.24	10.60	568.74	dry	-	dry	-	dry	-	8.17	571.17
NCR-13S	577.15	3.60	573.55	5.14	572.01	4.34	572.81	3.19	573.96	6.59	570.56	7.52	569.63	7.79	569.36	dry	-	7.21	569.94	6.06	571.09

Observation Point	Elevation Top of Casing (ft. msl)	1/13/2006		2/10/2006		3/3/2006		4/8/2006		5/1/2006		6/7/2006		7/14/2006		8/8/2006		9/18/2006		10/7/2006		11/3/2006		12/1/2006	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.55	574.38	24.68	574.25	24.72	574.21	24.22	574.71	24.81	574.12	23.53	575.40	24.77	574.16	24.23	574.70	24.68	574.25	24.78	574.15	24.74	574.19	24.53	574.40
East "B"	596.23	19.45	576.78	19.85	576.38	19.87	576.36	19.86	576.37	21.10	575.13	19.80	576.43	19.79	576.44	19.84	576.39	19.51	576.72	19.80	576.43	19.86	576.37	18.80	577.43
East "C"	598.69	19.28	579.41	19.75	578.94	19.84	578.85	19.77	578.92	20.09	578.60	19.69	579.00	19.71	578.98	19.66	579.03	19.37	579.32	20.78	577.91	20.03	578.66	19.26	579.43
East "D"	593.20	14.15	579.05	14.48	578.72	14.44	578.76	14.46	578.74	14.74	578.46	14.87	578.33	14.83	578.37	14.71	578.49	14.45	578.75	14.95	578.25	14.67	578.53	14.45	578.75
WW A	-	1.17	-	1.17	-	1.17	-	1.00	-	1.25	-	1.25	-	1.00	-	1.17	-	1.17	-	1.17	-	1.08	-	1.33	-
WW B	-	0.83	-	1.17	-	0.92	-	1.08	-	1.08	-	1.08	-	1.25	-	1.00	-	0.83	-	0.92	-	1.00	-	0.83	-
WW C	-	0.92	-	1.00	-	1.00	-	1.08	-	1.08	-	1.00	-	1.25	-	1.00	-	0.83	-	1.00	-	0.92	-	0.67	-
WW D	-	1.08	-	1.00	-	0.92	-	0.92	-	1.00	-	1.17	-	0.92	-	0.92	-	0.92	-	1.00	-	1.00	-	1.00	-
NCR-3S	579.60	2.77	576.83	3.02	576.58	3.48	576.12	2.45	577.15	3.44	576.16	dry	-	dry	-	5.85	573.75	3.67	575.93	3.06	576.54	3.51	576.09	1.35	578.25
NCR-4S	577.88	2.83	575.05	2.91	574.97	3.30	574.58	2.72	575.16	3.26	574.62	4.31	573.57	4.59	573.29	dry	-	3.51	574.37	2.97	574.91	3.15	574.73	2.44	575.44
NCR-5S	579.34	7.43	571.91	7.96	571.38	8.58	570.76	7.91	571.43	8.79	570.55	8.97	570.37	dry	-	dry	-	dry	-	7.37	571.97	6.22	573.12	4.21	575.13
NCR-13S	577.15	5.78	571.37	5.99	571.16	6.08	571.07	5.84	571.31	6.15	571.00	7.33	569.82	7.57	569.58	7.69	569.46	6.36	570.79	5.72	571.43	4.33	572.82	2.77	574.38

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/19/2007		2/9/2007		3/10/2007		4/2/2007		5/4/2007		6/1/2007		7/2/2007		8/2/2007		9/17/2007		10/12/2007		11/1/2007		12/1/2007	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	24.98	573.95	24.65	574.28	24.84	574.09	24.88	574.05	25.02	573.91	25.50	573.43	24.98	573.95	24.96	573.97	25.03	573.90	24.98	573.95	25.11	573.82	25.13	573.80
East "B"	596.23	19.38	576.85	19.56	576.67	-	-	19.98	576.25	20.07	576.16	19.78	576.45	19.86	576.37	19.85	576.38	19.81	576.42	19.50	576.73	19.52	576.71	19.59	576.64
East "C"	598.69	19.51	579.18	19.81	578.88	19.71	578.98	20.10	578.59	20.17	578.52	19.87	578.82	19.99	578.70	19.97	578.72	20.19	578.50	19.78	578.91	19.93	578.76	19.97	578.72
East "D"	593.20	14.38	578.82	14.68	578.52	14.82	578.38	15.24	577.96	15.09	578.11	15.1	578.10	15.19	578.01	15.11	578.09	15.16	578.04	14.64	578.56	14.8	578.40	14.86	578.34
WW A	-	1.17	-	1.08	-	1.25	-	1.08	-	1.25	-	1.17	-	1.00	-	0.83	-	0.67	-	1.00	-	0.92	-	1.00	-
WW B	-	1.00	-	1.00	-	0.67	-	1.17	-	0.75	-	0.92	-	0.83	-	0.83	-	0.83	-	0.92	-	1.08	-	1.17	-
WW C	-	0.83	-	0.83	-	0.67	-	0.83	-	0.83	-	0.83	-	0.67	-	0.50	-	0.67	-	0.50	-	1.00	-	1.08	-
WW D	-	1.00	-	0.83	-	1.00	-	0.83	-	0.83	-	1.00	-	0.83	-	1.00	-	0.75	-	0.83	-	1.00	-	1.00	-
NCR-3S	579.60	3.04	576.56	3.75	575.85	2.70	576.90	3.26	576.34	3.50	576.10	5.89	573.71	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-4S	577.88	2.94	574.94	3.42	574.46	2.80	575.08	2.93	574.95	3.19	574.69	3.90	573.98	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-5S	579.34	5.77	573.57	6.83	572.51	6.28	573.06	6.08	573.26	6.75	572.59	8.87	570.47	10.99	568.35	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	3.85	573.30	4.51	572.64	4.39	572.76	4.25	572.90	4.81	572.34	7.01	570.14	7.44	569.71	7.70	569.45	dry	-	7.72	569.43	7.75	569.40	dry	-

Observation Point	Elevation Top of Casing (ft. msl)	1/4/2008		2/8/2008		3/7/2008		4/4/2008		5/8/2008		6/5/2008		7/1/2008		8/7/2008		9/11/2008		10/9/2008		11/3/2008		12/5/2008	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	25.31	573.62	25.22	573.71	25.27	573.66	25.37	573.56	25.39	573.54	25.46	573.47	25.49	573.44	25.44	573.49	25.50	573.43	25.41	573.52	25.39	573.54	25.41	573.52
East "B"	596.23	19.95	576.28	19.65	576.58	19.90	576.33	19.70	576.53	19.71	576.52	19.96	576.27	19.91	576.32	19.87	576.36	20.04	576.19	19.60	576.63	19.83	576.40	19.99	576.24
East "C"	598.69	20.30	578.39	19.97	578.72	20.26	578.43	19.85	578.84	19.99	578.70	20.18	578.51	20.20	578.49	20.13	578.56	20.44	578.25	20.03	578.66	20.20	578.49	20.20	578.49
East "D"	593.20	15.15	578.05	14.66	578.54	14.89	578.31	15.11	578.09	15.02	578.18	15.2	578.00	15.4	577.80	15.34	577.86	15.51	577.69	15.16	578.04	15.4	577.80	15.13	578.07
WW A	-	1.00	-	0.83	-	1.08	-	0.92	-	1.08	-	1.00	-	0.83	-	0.83	-	0.83	-	0.83	-	1.00	-	1.00	-
WW B	-	0.83	-	0.92	-	1.00	-	1.00	-	0.83	-	0.83	-	0.83	-	0.83	-	0.67	-	0.75	-	0.67	-	0.92	-
WW C	-	1.00	-	0.83	-	0.75	-	0.50	-	0.75	-	0.83	-	0.67	-	0.83	-	0.42	-	0.50	-	0.58	-	0.83	-
WW D	-	1.08	-	1.00	-	0.83	-	0.33	-	0.50	-	0.50	-	0.59	-	0.67	-	0.50	-	0.50	-	0.50	-	0.50	-
NCR-3S	579.60	3.46	576.14	3.29	576.31	3.56	576.04	3.21	576.39	4.17	575.43	dry	-	dry	-	3.81	575.79	dry	-	5.44	574.16	3.81	-	3.22	576.38
NCR-4S	577.88	3.06	574.82	2.82	575.06	2.89	574.99	2.59	575.29	2.91	574.97	3.61	574.27	4.53	573.35	3.43	574.45	4.27	573.61	3.90	573.98	3.17	574.71	3.52	574.36
NCR-5S	579.34	10.80	568.54	6.26	573.08	7.11	572.23	5.84	573.50	7.45	571.89	9.00	570.34	10.24	569.10	dry	-	dry	-	dry	-	7.75	571.59	6.24	573.10
NCR-13S	577.15	4.64	572.51	4.30	572.85	4.74	572.41	4.16	572.99	5.31	571.84	6.92	570.23	7.47	569.68	7.26	569.89	7.54	569.61	7.48	569.67	5.75	571.40	4.53	572.62

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/9/2009 Depth to Water (ft)	1/9/2009 Elevation (ft. msl)	2/5/2009 Depth to Water (ft)	2/5/2009 Elevation (ft. msl)	3/5/2009 Depth to Water (ft)	3/5/2009 Elevation (ft. msl)	4/3/2009 Depth to Water (ft)	4/3/2009 Elevation (ft. msl)	5/1/2009 Depth to Water (ft)	5/1/2009 Elevation (ft. msl)	6/4/2009 Depth to Water (ft)	6/4/2009 Elevation (ft. msl)	7/10/2009 Depth to Water (ft)	7/10/2009 Elevation (ft. msl)	8/12/2009 Depth to Water (ft)	8/12/2009 Elevation (ft. msl)	9/5/2009 Depth to Water (ft)	9/5/2009 Elevation (ft. msl)	10/9/2009 Depth to Water (ft)	10/9/2009 Elevation (ft. msl)	11/8/2009 Depth to Water (ft)	11/8/2009 Elevation (ft. msl)	12/4/2009 Depth to Water (ft)	12/4/2009 Elevation (ft. msl)
East "A"	598.93	25.34	573.59	25.54	573.39	25.60	573.33	25.42	573.51	25.64	573.29	25.66	573.27	25.62	573.31	25.51	573.42	25.52	573.41	25.45	573.48	25.63	573.30	25.53	573.40
East "B"	596.23	19.85	576.38	20.05	576.18	19.94	576.29	19.44	576.79	19.99	576.24	20.00	576.23	20.15	576.08	19.77	576.46	19.83	576.40	19.78	576.45	19.85	576.38	19.66	576.57
East "C"	598.69	20.22	578.47	20.56	578.13	20.20	578.49	19.36	579.33	20.35	578.34	20.55	578.14	20.51	578.18	20.33	578.36	20.30	578.39	20.04	578.65	20.45	578.24	20.30	578.39
East "D"	593.20	14.85	578.35	15.25	577.95	15.54	577.66	14.81	578.39	15.65	577.55	15.75	577.45	15.62	577.58	15.51	577.69	15.69	577.51	15.22	577.98	15.45	577.75	18.98	574.22
WW A	-	1.33	-	0.83	-	0.83	-	1.00	-	0.83	-	0.83	-	0.67	-	0.50	-	0.75	-	1.00	-	0.75	-	0.75	-
WW B	-	1.00	-	0.67	-	1.00	-	0.92	-	1.00	-	0.67	-	0.83	-	0.83	-	0.67	-	1.00	-	1.00	-	0.42	-
WW C	-	0.75	-	0.67	-	0.50	-	0.50	-	0.50	-	0.58	-	0.50	-	0.58	-	0.50	-	0.42	-	0.33	-	0.83	-
WW D	-	0.67	-	1.00	-	0.50	-	0.58	-	0.50	-	0.50	-	0.42	-	0.67	-	0.50	-	0.67	-	0.58	-	0.75	-
NCR-3S	579.60	2.97	576.63	4.11	575.49	3.55	576.05	2.20	577.40	3.48	576.12	dry	-	dry	-	3.66	575.94	dry	-	4.52	575.08	3.74	575.86	2.57	577.03
NCR-4S	577.88	2.90	574.98	3.19	574.69	3.36	574.52	2.39	575.49	2.90	574.98	dry	-	4.65	573.23	2.98	574.90	dry	-	3.49	574.39	3.15	574.73	2.78	575.10
NCR-5S	579.34	6.33	573.01	7.42	571.92	6.78	572.56	8.00	571.34	6.46	572.88	6.87	572.47	10.10	569.24	7.47	571.87	9.88	569.46	dry	-	9.78	569.56	5.92	573.42
NCR-13S	577.15	4.40	572.75	5.09	572.06	5.01	572.14	4.04	573.11	4.77	572.38	5.95	571.20	7.47	569.68	5.92	571.23	7.45	569.70	dry	-	6.16	570.99	4.27	572.88

Observation Point	Elevation Top of Casing (ft. msl)	1/7/2010 Depth to Water (ft)	1/7/2010 Elevation (ft. msl)	2/1/2010 Depth to Water (ft)	2/1/2010 Elevation (ft. msl)	3/11/2010 Depth to Water (ft)	3/11/2010 Elevation (ft. msl)	4/1/2010 Depth to Water (ft)	4/1/2010 Elevation (ft. msl)	5/6/2010 Depth to Water (ft)	5/6/2010 Elevation (ft. msl)	6/1/2010 Depth to Water (ft)	6/1/2010 Elevation (ft. msl)	7/2/2010 Depth to Water (ft)	7/2/2010 Elevation (ft. msl)	8/12/2010 Depth to Water (ft)	8/12/2010 Elevation (ft. msl)	9/16/2010 Depth to Water (ft)	9/16/2010 Elevation (ft. msl)	10/8/2010 Depth to Water (ft)	10/8/2010 Elevation (ft. msl)	11/5/2010 Depth to Water (ft)	11/5/2010 Elevation (ft. msl)	12/2/2010 Depth to Water (ft)	12/2/2010 Elevation (ft. msl)
East "A"	598.93	25.62	573.31	25.72	573.21	25.77	573.16	25.81	573.12	25.79	573.14	25.73	573.20	25.78	573.15	25.74	573.19	25.78	573.15	25.77	573.16	25.82	573.11	25.88	573.05
East "B"	596.23	19.78	576.45	19.97	576.26	19.83	576.40	19.83	576.40	19.79	576.44	19.83	576.40	19.99	576.24	19.84	576.39	19.87	576.36	19.70	576.53	19.52	576.71	19.52	576.71
East "C"	598.69	20.24	578.45	20.46	578.23	20.25	578.44	20.31	578.38	20.21	578.48	20.24	578.45	20.65	578.04	20.22	578.47	20.19	578.50	20.32	578.37	19.98	578.71	20.40	578.29
East "D"	593.20	15.25	577.95	15.42	577.78	15.38	577.82	15.48	577.72	15.49	577.71	15.59	577.61	15.7	577.50	15.65	577.55	15.65	577.55	15.43	577.77	15.53	577.67	15.22	577.98
WW A	-	0.83	-	0.83	-	0.83	-	0.67	-	0.58	-	0.83	-	0.67	-	0.75	-	0.67	-	0.67	-	0.83	-	0.67	-
WW B	-	0.58	-	0.58	-	0.75	-	0.50	-	0.50	-	0.50	-	0.42	-	0.50	-	0.50	-	0.50	-	0.42	-	0.42	-
WW C	-	0.33	-	0.50	-	0.50	-	0.50	-	0.50	-	0.58	-	0.67	-	0.58	-	0.58	-	0.42	-	0.58	-	0.67	-
WW D	-	0.67	-	0.58	-	0.92	-	0.58	-	0.67	-	0.50	-	0.50	-	0.50	-	0.50	-	0.58	-	0.50	-	0.50	-
NCR-3S	579.60	3.19	576.41	3.48	576.12	2.06	577.54	3.30	576.30	4.61	574.99	3.98	575.62	dry	-	dry	-	dry	-	dry	-	dry	-	2.78	576.82
NCR-4S	577.88	2.85	575.03	frozen	frozen	2.60	575.28	2.94	574.94	2.84	575.04	2.86	575.02	dry	-	dry	-	dry	-	dry	-	dry	-	2.91	574.97
NCR-5S	579.34	6.45	572.89	6.33	573.01	5.81	573.53	6.18	573.16	7.93	571.41	7.75	571.59	9.11	570.23	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	4.64	572.51	4.65	572.50	3.68	573.47	4.71	572.44	5.10	572.05	4.97	572.18	7.40	569.75	dry	-	dry	-	dry	-	dry	-	5.82	571.33

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/7/2011		2/9/2011		3/3/2011		4/9/2011		5/6/2011		6/3/2011		7/15/2011		8/5/2011		9/5/2011		10/7/2011		11/3/2011		12//2011	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	25.88	573.05	26.05	572.88	26.12	572.81	26.13	572.80	26.15	572.78	26.22	572.71	25.78	573.15	26.44	573.42	26.54	573.41	26.10	572.83	26.05	572.88	26.04	572.89
East "B"	596.23	19.43	576.80	19.95	576.28	20.17	576.06	20.12	576.11	20.31	575.92	19.98	576.25	20.00	576.23	19.99	576.46	20.05	576.40	19.10	577.13	19.11	577.12	15.70	580.53
East "C"	598.69	19.83	578.86	20.45	578.24	21.01	577.68	20.65	578.04	20.37	578.32	20.82	577.87	20.65	578.04	20.75	578.36	20.95	578.39	20.86	577.83	20.45	578.24	20.74	577.95
East "D"	593.20	14.99	578.21	15.21	577.99	15.8	577.40	15.65	577.55	15.75	577.45	15.92	577.28	15.71	577.49	15.88	577.69	15.96	577.51	15.9	577.30	15.73	577.47	15.44	577.76
WW A	-	0.67	-	0.50	-	0.67	-	1.00	-	0.83	-	0.67	-	0.58	-	0.58	-	0.83	-	0.67	-	0.83	-	0.83	-
WW B	-	0.33	-	0.42	-	0.50	-	0.50	-	0.50	-	0.42	-	0.50	-	0.50	-	0.50	-	0.50	-	0.50	-	0.42	-
WW C	-	0.33	-	0.33	-	1..67	-	1.00	-	0.67	-	0.75	-	0.83	-	0.83	-	0.92	-	0.83	-	0.83	-	0.75	-
WW D	-	0.83	-	0.58	-	0.58	-	0.58	-	0.50	-	0.50	-	0.50	-	0.50	-	0.83	-	0.58	-	0.50	-	0.42	-
NCR-3S	579.60	3.56	576.04	3.90	575.70	3.39	576.21	3.48	576.12	3.31	576.29	3.61	575.99	dry	-	dry	-	dry	-	5.37	574.23	3.76	575.84	3.20	576.40
NCR-4S	577.88	3.04	574.84	2.90	574.98	2.65	575.23	2.91	574.97	2.90	574.98	3.37	574.51	dry	-	dry	-	dry	-	dry	-	3.47	574.41	2.79	575.09
NCR-5S	579.34	7.68	571.66	7.33	572.01	5.95	573.39	6.23	573.11	6.21	573.13	7.16	572.18	dry	-	dry	-	dry	-	dry	-	dry	-	9.90	569.44
NCR-13S	577.15	4.60	572.55	4.77	572.38	4.40	572.75	4.51	572.64	4.52	572.63	5.20	571.95	dry	-	dry	-	dry	-	dry	-	5.67	571.48	4.23	572.92

Observation Point	Elevation Top of Casing (ft. msl)	1/5/2012		2/6/2012		3/1/2012		4/12/2012		5/1/2012		6/4/2012		7/13/2012		8/2/2012		9/4/2012		10/8/2012		11/12/2012		12/10/2012	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	26.12	572.81	26.25	572.68	26.22	572.71	26.31	572.62	26.33	572.60	26.24	572.69	26.40	572.53	26.34	572.59	26.35	572.58	26.41	572.52	26.45	572.48	26.42	572.51
East "B"	596.23	15.56	580.67	15.80	580.43	15.82	580.41	16.01	580.22	15.99	580.24	18.53	577.70	19.90	576.33	16.54	579.69	19.99	576.24	20.11	576.12	19.12	577.11	16.03	580.20
East "C"	598.69	20.45	578.24	20.55	578.14	20.28	578.41	20.85	577.84	20.64	578.05	20.54	578.15	20.82	577.87	20.63	578.06	20.60	578.09	20.85	577.84	20.70	577.99	20.20	578.49
East "D"	593.20	15.51	577.69	16.61	576.59	15.4	577.80	15.71	577.49	17.77	575.43	15.73	577.47	16.15	577.05	15.97	577.23	16	577.20	15.9	577.30	15.94	577.26	15.46	577.74
WW A	-	0.50	-	0.75	-	0.67	-	0.75	-	1.25	-	0.67	-	0.58	-	0.50	-	0.67	-	0.92	-	0.50	-	1.25	-
WW B	-	0.42	-	0.42	-	0.42	-	0.42	-	0.42	-	0.50	-	0.42	-	0.83	-	0.83	-	0.42	-	0.42	-	0.50	-
WW C	-	0.83	-	0.83	-	0.67	-	0.75	-	0.83	-	1.00	-	0.75	-	0.83	-	0.83	-	0.50	-	0.50	-	0.67	-
WW D	-	0.42	-	0.58	-	0.50	-	0.50	-	0.58	-	0.58	-	0.50	-	0.42	-	0.58	-	0.50	-	0.50	-	0.42	-
NCR-3S	579.60	3.50	576.10	3.60	576.00	3.50	576.10	4.48	575.12	3.75	575.85	dry	-	dry	-	dry	-	dry	-	dry	-	4.27	575.33	2.56	577.04
NCR-4S	577.88	2.96	574.92	2.85	575.03	2.59	575.29	3.20	574.68	2.58	575.30	3.17	574.71	dry	-	dry	-	dry	-	dry	-	3.40	574.48	3.55	574.33
NCR-5S	579.34	6.51	572.83	6.44	572.90	6.41	572.93	7.41	571.93	6.80	572.54	9.45	569.89	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	4.63	572.52	4.62	572.53	4.63	572.52	5.11	572.04	4.60	572.55	7.42	569.73	dry	-	dry	-	dry	-	dry	-	6.32	570.83	4.36	572.79

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/14/2013		2/4/2013		3/5/2013		4/5/2013		5/7/2013		6/5/2013		7/5/2013		8/1/2013		9/3/2013		10/4/2013		11/15/2013		12/9/2013	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	26.47	572.46	26.51	572.42	26.61	572.32	26.64	572.29	26.65	572.28	26.65	572.28	26.61	572.32	26.42	572.51	26.32	572.61	26.36	572.57	26.37	572.56	26.54	572.39
East "B"	596.23	16.05	580.18	20.05	578.88	15.83	583.10	15.82	583.11	16.06	582.87	18.09	580.84	15.85	583.08	15.85	583.08	18.99	579.94	15.93	583.00	15.88	583.05	16.10	582.83
East "C"	598.69	20.91	577.78	20.69	578.24	20.84	578.09	20.79	578.14	20.84	578.09	20.98	577.95	20.92	578.01	20.51	578.42	20.59	578.34	20.68	578.25	20.65	578.28	21.21	577.72
East "D"	593.20	15.50	577.70	15.66	583.27	15.61	583.32	15.85	583.08	16.09	582.84	16.11	582.82	16.19	582.74	16.10	582.83	15.90	583.03	16.01	582.92	15.98	582.95	16.11	582.82
WW A	-	0.58	-	0.50	-	0.83	-	1.00	-	0.50	-	0.83	-	1.00	-	1.08	-	1.00	-	0.75	-	1.00	-	0.92	-
WW B	-	0.50	-	0.42	-	0.42	-	0.50	-	0.42	-	0.33	-	0.42	-	0.42	-	0.33	-	0.50	-	0.50	-	0.50	-
WW C	-	0.33	-	0.67	-	0.75	-	0.67	-	0.42	-	0.50	-	0.42	-	0.58	-	0.33	-	0.42	-	0.50	-	0.67	-
WW D	-	0.83	-	0.42	-	0.58	-	0.50	-	0.42	-	0.33	-	0.5	-	0.4	-	0.33	-	0.42	-	1.00	-	0.50	-
NCR-3S	579.60	3.06	576.54	3.80	595.13	3.75	595.18	4.25	594.68	5.10	593.83	4.21	594.72	5.18	593.75	dry	-	dry	-	dry	-	3.69	595.24	3.80	595.13
NCR-4S	577.88	2.51	575.37	2.95	595.98	dry	-	3.16	595.77	3.75	595.18	3.14	595.79	3.40	595.53	3.31	595.62	4.20	594.73	dry	-	3.00	595.93	3.05	595.88
NCR-5S	579.34	5.56	573.78	6.65	592.28	6.58	592.35	7.25	591.68	7.65	591.28	7.63	591.30	8.58	590.35	9.42	589.51	10.37	588.56	dry	-	6.46	592.47	6.58	592.35
NCR-13S	577.15	4.01	573.14	4.94	593.99	5.06	593.87	5.81	593.12	6.78	592.15	5.33	593.60	7.34	591.59	7.20	591.73	dry	-	dry	-	4.76	594.17	4.81	594.12

Observation Point	Elevation Top of Casing (ft. msl)	1/7/2014		2/20/2014		3/11/2014		4/10/2014		5/6/2014		6/2/2014		7/2/2014		8/7/2014		9/8/2014		10/4/2014		11/13/2014		12/10/2014	
		Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)	Depth to Water (ft)	Elevation (ft. msl)
East "A"	598.93	26.12	572.81	26.60	572.33	26.20	572.73	26.48	572.45	26.60	572.33	26.66	572.27	26.56	572.37	26.54	572.39	26.52	572.41	26.55	572.38	26.71	572.22	26.77	572.16
East "B"	596.23	15.56	580.67	15.48	580.75	20.05	576.18	15.80	580.43	20.05	576.18	15.80	580.43	15.94	580.29	15.90	580.33	19.21	577.02	20.13	576.10	15.95	580.28	16.13	580.10
East "C"	598.69	20.69	578.00	20.80	577.89	20.40	578.29	20.64	578.05	20.90	577.79	20.81	577.88	20.72	577.97	20.98	577.71	21.05	577.64	20.42	578.27	20.93	577.76	20.87	577.82
East "D"	593.20	15.41	577.79	15.8	577.40	15.7	577.50	15.71	577.49	16.02	577.18	15.83	577.37	15.7	577.50	15.78	577.42	15.95	577.25	15.25	577.95	15.69	577.51	15.42	577.78
WW A	-	0.83	-	0.42	-	0.50	-	1.00	-	1.25	-	1.08	-	0.83	-	1.00	-	0.83	-	0.75	-	0.75	-	1.00	-
WW B	-	0.42	-	0.50	-	0.50	-	0.42	-	0.33	-	0.42	-	0.58	-	0.42	-	0.42	-	0.42	-	0.33	-	0.33	-
WW C	-	0.42	-	0.50	-	0.50	-	0.50	-	0.50	-	0.50	-	0.58	-	0.50	-	0.50	-	0.58	-	0.42	-	0.50	-
WW D	-	0.42	-	0.58	-	0.58	-	0.33	-	0.42	-	0.33	-	0.50	-	0.50	-	0.58	-	0.50	-	0.50	-	0.42	-
NCR-3S	579.60	3.55	576.05	4.40	575.20	3.50	576.10	3.55	576.05	4.14	575.46	4.91	574.69	dry	-	dry	-	dry	-	dry	-	dry	-	4.80	574.80
NCR-4S	577.88	2.96	574.92	2.90	574.98	3.10	574.78	2.82	575.06	3.25	574.63	3.30	574.58	3.80	574.08	dry	-	dry	-	dry	-	dry	-	4.70	573.18
NCR-5S	579.34	6.48	572.86	7.70	571.64	7.50	571.84	5.90	573.44	6.94	572.40	7.90	571.44	10.02	569.32	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	4.10	573.05	6.30	570.85	4.20	572.95	4.22	572.93	5.34	571.81	6.78	570.37	7.46	569.69	dry	-	dry	-	dry	-	dry	-	dry	-

Notes:

- = measurment not collected.

dry = no water in well.

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/3/2015 Depth to Water (ft)	1/3/2015 Elevation (ft. msl)	2/28/2015 Depth to Water (ft)	2/28/2015 Elevation (ft. msl)	3/22/2015 Depth to Water (ft)	3/22/2015 Elevation (ft. msl)	4/10/2015 Depth to Water (ft)	4/10/2015 Elevation (ft. msl)	5/13/2015 Depth to Water (ft)	5/13/2015 Elevation (ft. msl)	6/2/2015 Depth to Water (ft)	6/2/2015 Elevation (ft. msl)	7/3/2015 Depth to Water (ft)	7/3/2015 Elevation (ft. msl)	8/13/2015 Depth to Water (ft)	8/13/2015 Elevation (ft. msl)	9/8/2015 Depth to Water (ft)	9/8/2015 Elevation (ft. msl)	10/8/2015 Depth to Water (ft)	10/8/2015 Elevation (ft. msl)	11/14/2015 Depth to Water (ft)	11/14/2015 Elevation (ft. msl)	12/1/2015 Depth to Water (ft)	12/1/2015 Elevation (ft. msl)
East "A"	598.93	26.80	572.13	26.12	572.81	26.00	572.93	26.89	572.04	26.97	571.96	23.93	575.00	29.05	569.88	26.85	572.08	26.75	572.18	26.80	572.13	26.79	572.14	26.91	572.02
East "B"	596.23	16.01	580.22	15.56	580.67	20.05	576.18	15.80	580.43	20.05	576.18	Collapsed		Collapsed		Collapsed		Collapsed		Collapsed		Collapsed		Collapsed	
East "C"	598.69	21.06	577.63	20.45	578.24	20.50	578.19	20.45	578.24	21.27	577.42	21.16	577.53	21.02	577.67	21.13	577.56	20.98	577.71	21.00	577.69	21.05	577.64	20.81	577.88
East "D"	593.20	15.8	577.40	15.51	577.69	15.65	577.55	15.82	577.38	17.4	575.80	19.51	573.69	Oil-like noted		Oil-like noted		37.65	555.55	17.32	575.88	16.08	577.12	16.25	576.95
WW A	-	0.92	-	0.50	-	0.58	-	1.08	-	0.67	-	0.50	-	1.00	-	0.83	-	0.83	-	0.83	-	0.83	-	0.67	-
WW B	-	0.33	-	0.42	-	0.50	-	0.50	-	4.50	-	0.58	-	0.42	-	0.33	-	0.42	-	1.00	-	0.42	-	0.33	-
WW C	-	0.50	-	0.83	-	0.50	-	0.42	-	0.42	-	0.42	-	0.50	-	0.50	-	0.42	-	0.33	-	0.50	-	0.50	-
WW D	-	0.33	-	0.42	-	0.58	-	2.08	-	0.42	-	0.33	-	0.42	-	0.42	-	0.33	-	0.50	-	0.42	-	0.33	-
NCR-3S	579.60	4.10	575.50	3.50	576.10	3.90	575.70	2.91	576.69	4.71	574.89	dry	-	dry	-	dry	-	dry	-	dry	-	4.15	575.45	5.09	574.51
NCR-4S	577.88	3.80	574.08	2.96	574.92	2.10	575.78	1.60	576.28	3.40	574.48	3.10	574.78	dry	-	dry	-	dry	-	dry	-	3.48	574.40	3.72	574.16
NCR-5S	579.34	dry	-	6.51	572.83	7.40	571.94	5.46	573.88	8.43	570.91	9.51	569.83	9.52	569.82	dry	-	dry	-	dry	-	dry	-	dry	-
NCR-13S	577.15	6.48	570.67	4.63	572.52	4.10	573.05	3.50	573.65	7.00	570.15	7.54	569.61	dry	-	dry	-	dry	-	dry	-	dry	-	dry	-

Notes:

- = measurment not collected.

dry = no water in well.

SECTION 3
SUMMARY AND CONCLUSIONS

The following summary and conclusions were developed based on the data collected during this reporting period (January through December 2015):

- Volatile organic, semivolatile organic, and metals groundwater samples were collected in 2015. The analytical results were consistent with historical results. The annual groundwater samples scheduled for collection in April 2016 will be analyzed for metals only.
- One semivolatile 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, which is consistent with previous sampling events. In general, detected values appeared to be consistent with ranges observed in previous sampling events. Dissolved metals concentrations were typically lower than the respective total metals results.
- Two effluent samples were collected in 2015. The analytical results were found to be compliant with the discharge permit. During 2015, compliance with the discharge permit was maintained.
- The landfill was inspected monthly and was appropriately maintained. Needed repairs were addressed in a timely manner. Cover vegetation continues to be in good condition.
- Post-construction monitoring of the wetland replacement was performed annually between 2001 and 2005. Monitoring results indicated that the wetland creation was successful. Although the formal annual inspections are no longer required, monthly visual inspection of the wetlands has continued, to document general conditions. In 2015, the wetlands were documented to be in good condition.
- Water levels were collected from the wet wells, monitoring wells, and the locations on top of the landfill on a monthly basis in 2015. Water levels generally varied between 1.3 and 4.1 feet over the course of the year.
- The objectives of the groundwater monitoring program (to monitor the effectiveness of the perimeter collection system and the perimeter barrier system) have been met. The groundwater monitoring program provides data for demonstration of the effectiveness of the hydraulic containment, collection, and extraction of Site-related groundwater.

SECTION 4
REFERENCES

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

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

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

Parsons, 2014 Annual Monitoring Report, Niagara County Refuse District Site; Parsons, January 2015.

APPENDIX A

CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER DISCHARGE PERMIT AND COMPLIANCE SAMPLING RESULTS

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

David A. Scott, Water Works Superintendent
Signed this 4th day of March, 2013

PERMIT NUMBER: 2628011

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. 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

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) Fequency 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 Becker
DATE OF SAMPLE COLLECTION: (M M D D Y Y)	04/15/15
Sample Time	0730
Sample ID Number	041515 RCB EFF
pH	6.41
Temperature	48.6
Conductivity	1.10
Turbidity	2.1
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	

6.35 6.01

49.3

1.19

1.37 2.25

Additional Comments:

flow finished 55554000

flow start 55354000

209,000 total

FP-7C

CRA 5723 (17)

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

Kelley J. Williams
Maintenance Supervisor

Don Alesse
Chief Operator

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 RCB EFF	4/15/15 - 4/16/15	0730 - 0730	Wet Well A	wet chemistry	1
02	041515 RCB EFF	4/15/15 - 4/16/15	0730-0730	Wet Well A	volitiles	3

FLOWS:

FINAL METER READING 55563000

NITIAL METER READING 55354000

DAILY FLOW 209,000

RELINQUISHED BY: Richard C Becker

RECEIVED BY:

DATE: 4/16/15

TIME: 7:45 AM

EFFLUENT SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME:	*NIAGARA COUNTY REFUSE SITE*		
SAMPLE LOCATION:	*WET WELL A*		
SAMPLING CREW MEMBERS:	RC Bachman		
DATE OF SAMPLE COLLECTION: (M M D D Y Y)	10/08/15		
Sample Time	0950	1545	0700
Sample ID Number	100815 RCBEff		
pH	6.75	7.01	6.86
Temperature	58.1	60.3	57.7
Conductivity	5.29	4.89	5.10
Turbidity	82.0	61.0	56
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
Flow started
total flow

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: October 7 & 8, 2015

SITE NAME: **NIAGARA COUNTY REFUSE SITE**

NAME (*Signature*) Richard C Baker

NAME (Print) Richard C Baker

SPL #	SAMPLE NAME	DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	#OF BTLS
01	NDS15 RIBEFF	10/7/15-10/8/15	0730-0730	Wet Well A	wet chemistry	1
02	NDS15 RIBEFF	10/7/15-10/8/15	0730-0730	Wet Well A	volatiles	3

FLOWS:

FINAL METER READING 61078000

NITIAL METER READING 61077000

DAILY FLOW 1000

RELINQUISHED BY: Richard C Baker

RECEIVED BY: William M. Davignon

DATE: 10/8/15

TIME: 7:30 Am

Analytical Results: NIAGARA COUNTY REFUSE SITE 2015

PARAMETER	RESULT mg/l	RESULT mg/l	COMPLIANCE
pH (COMP.)	7.37	7.49	YES
COD	< 50	197	YES
SUSPENDED SOLIDS	17	21	YES
BOD	10.30	9.45	YES
PO4	0.14	1.39	YES
PHENOLS	< 0.085	< 0.110	YES
METALS			
ALUMINUM	0.100	0.071	YES
CHROMIUM	< 0.026	< 0.026	YES
LEAD	< 0.025	< 0.027	YES
NICKEL	< 0.026	< 0.026	YES
ZINC	0.033	0.050	YES
IRON	0.310	7.333	YES
MAGNESIUM	81.3	187.0	YES
MANGANESE	0.50	0.16	YES
SODIUM	23.4	615.0	YES
PURGEABLES			
Benzene	< 0.005	< 0.050	YES
Toluene	< 0.005	< 0.050	YES
Chlorobenzene	< 0.005	< 0.050	YES
Ethylbenzene	< 0.005	< 0.050	YES
Total Xylenes	< 0.015	< 0.150	YES
1,3 - Dichlorobenzene	< 0.005	< 0.050	YES
1,4-Dichlorobenzene	< 0.005	< 0.050	YES
1,2 - Dichlorobenzene	< 0.005	< 0.050	YES
Vinyl Chloride	< 0.005	< 0.050	YES
1,1-Dichloroethene	< 0.005	< 0.050	YES
Methylene chloride	< 0.005	< 0.050	YES
trans-1,2 Dichloroethene	< 0.005	< 0.050	YES
1,1-Dichloroethane	< 0.005	< 0.050	YES
Chloroform	< 0.005	< 0.050	YES
1,1,1-Trichloroethane	< 0.005	< 0.050	YES
Trichloroethene	0.006	< 0.050	YES
TOTAL FLOW (gallons)	**209,000**	**1,000**	
SAMPLE DATE	**4/15/15 & 4/16/15**	**10/7/15 & 10/8/15**	

Report prepared by: Willaim M. Davignon, Lab Director / Chemist

APPENDIX B

CORRESPONDENCE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

NOV 21 2005

BY FEDEX

Mr. Eric Felter
Project Manager
Parsons
180 Lawrence Bell Drive, Suite 104
Williamsville, New York 14221

Re: Niagara County Refuse Site, Wheatfield, New York; Request for the Reduction of Analytical Parameters in Groundwater Samples

Dear Mr. Felter:

The U.S. Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (NYSDEC) have reviewed your letter dated October 3, 2005 prepared by Parsons on behalf of the Niagara County Refuse (NCR) Site PRP Group requesting a reduction in the analytical parameters in groundwater samples taken at the NCR site as part of the operation and maintenance program. The current analytical parameter list includes 2 volatiles, 4 semi-volatiles, and 16 metals which were determined to be constituents of interest at the site. Your proposal requests reducing the parameters to 5 metals, representing those constituents which have been measured above standards with some regularity in past sampling rounds. The sampling program, involving four monitoring wells, has been in effect since 2001 and your proposal reflects trends evident since the program was initiated. Sampling frequency is currently semi-annual (twice a year).

After discussing this matter with NYSDEC with input from the New York State Department of Health, our preference is that the sampling parameters remain the same for the time being. This is due to the significant residential growth around the site in recent years. After the current sampling round, samples are scheduled to be taken annually. EPA approves changing the current monitoring program only to the extent that the volatiles and semi-volatiles analysis can be conducted every two years while the metals analysis be conducted annually. EPA will, however, consider a further frequency reduction in the future as more data are collected.

Please call me at (212) 637-4278 if you have any questions on this matter.

Sincerely yours,

Michael J. Negrelli
Remedial Project Manager
New York Remediation Branch

cc: J. Konsella - NYSDEC/Region 9
B. Sadowski - NYSDEC/Region 9

APPENDIX C
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

Joseph V. Giacomazza

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

Table of Contents

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)

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 3.5º C and 3.8º 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.

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.

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.

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

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
1,1,2,2-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

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

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

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

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*
2,4,6-Tribromophenol	*77*		*52 - 132*	*04/28/15 08:23*	*05/01/15 00:36*	*1*
2-Fluorobiphenyl	*91*		*48 - 120*	*04/28/15 08:23*	*05/01/15 00:36*	*1*
2-Fluorophenol	*59*		*20 - 120*	*04/28/15 08:23*	*05/01/15 00:36*	*1*
Nitrobenzene-d5	*82*		*46 - 120*	*04/28/15 08:23*	*05/01/15 00:36*	*1*
p-Terphenyl-d14	*72*		*67 - 150*	*04/28/15 08:23*	*05/01/15 00:36*	*1*
Phenol-d5	*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

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

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

TestAmerica Job ID: 480-79130-1

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

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*

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

TestAmerica Job ID: 480-79130-1

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

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

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

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

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

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

TestAmerica Job ID: 480-79130-1

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

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

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

TestAmerica Job ID: 480-79130-1

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

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

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

TestAmerica Job ID: 480-79130-1

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

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

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

Client Sample ID: NCR-13S
Date Collected: 04/24/15 11:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-4
Matrix: Water

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

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

TestAmerica Job ID: 480-79130-1

Client Sample ID: NCR-13S
Date Collected: 04/24/15 11:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-4
Matrix: Water

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

Client Sample ID: NCR-13S
Date Collected: 04/24/15 11:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-4
Matrix: Water

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

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
1,1,2,2-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

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

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1
Date Collected: 04/24/15 00:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-5
Matrix: Water

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

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

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1
Date Collected: 04/24/15 00:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-5
Matrix: Water

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

Client Sample ID: Field Dup 1

Date Collected: 04/24/15 00:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-5

Matrix: Water

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

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

TestAmerica Job ID: 480-79130-1

Client Sample ID: Field Dup 1
Date Collected: 04/24/15 00:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-5
Matrix: Water

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**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(66-137)	(71-126)	(73-120)	(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**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	TPH	PHL
Lab Sample ID	Client Sample ID	(52-132)	(48-120)	(20-120)	(46-120)	(67-150)	(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

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

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 %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
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-Dichloroethane	25.0	24.2		ug/L		97	71 - 129
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 %Recovery	LCS Qualifier	Limits
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-Dichloroethane	ND		25.0	26.3		ug/L		105	71 - 129
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

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

Surrogate	MS %Recovery	MS Qualifier	Limits
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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
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

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
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

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

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 Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
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 Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	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*

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

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

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

Lab Sample ID: 480-79130-3 MSD — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 239576 — **Prep Batch: 239216**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240971 — **Prep Batch: 240612**

Analyte	MB Result	MB 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 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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240971 — **Prep Batch: 240612**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
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

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

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

Lab Sample ID: 480-79130-3 MSD — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240971 — **Prep Batch: 240612**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
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 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 240038 — **Prep Batch: 239895**

Analyte	MB Result	MB 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 12:19	1

Lab Sample ID: LCS 480-239895/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 240038 — **Prep Batch: 239895**

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

Lab Sample ID: 480-79130-3 MS — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 240038 — **Prep Batch: 239895**

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

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

Lab Sample ID: 480-79130-3 MSD — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 240038 — **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 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240832 — **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 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240832 — **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 — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240832 — **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 — **Client Sample ID: NCR-5S**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 240832 — **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

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	

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	

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

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

Lab Sample ID: 480-79130-1

Date Collected: 04/24/15 09:30

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
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

Lab Sample ID: 480-79130-2

Date Collected: 04/24/15 09:00

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 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

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
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

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

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
Date Collected: 04/24/15 00:00
Date Received: 04/24/15 12:10

Lab Sample ID: 480-79130-5
Matrix: Water

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

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

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

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

TestAmerica
TESTING

480-79130 Chain of Custody

Client Information	Sampler: Richard C Becker	Lab PM: Stone, Judy L	Carrier Ti
Client Contact: William Davignon	Phone: (716) 435-8500	E-Mail: judy.stone@testamericainc.com	
Company: N Tonawanda Water Works		Analysis Requeste	
Address: 830 River Road	Due Date Requested:		
City: North Tonawanda	TAT Requested (days): Normal		
State, Zip: NY, 14120	PO #: Purchase Order not required		
Phone: (716) 695-8560	WO #:		
Email: wmd_ntwwtp@live.com	Project #: 48002901		
Project Name: City of North Tonawanda - NCRS	SSOW#:		
Site: New York			

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 - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, 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=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform 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:
			Preservation Code:				D	A	N	N	N										
NCR-3S	4/24/15		0930	Water	N	N	1	3	2	1	1									8	
NCR-4S	4/24/15		0900	Water	N	N	1	3	2	1	1									8	
NCR-5S	4/24/15		1030	Water	N	Y	1	3	2	1	1									8	MS/MSD
NCR-13S	4/24/15		1100	Water	N	N	1	3	2	1	1									8	
Field Dup #1	4/24/15		—	Water	N	N	1	3	2	1	1									8	
				Water																	
				Water																	
				Water																	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: hand deliver				
Relinquished by: Richard C Becker	Date/Time: 4/24/15 1210	Company OrthEst.	Received by:	Date/Time: 4/24/15 1210	Company TA Buff
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 3.5, 3.8

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 I.D. 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	~~0930~~	ground water sample	6235 7470B 8260B 8270C 3500	480-66457-1(922.1	
NCR 4S	NCR 4S	0.33	~0.5 ~~1.5 gal~~	0980				
NCR 5S	NCR 5S	0.775	~1.75 gal	1030				
NCR 13S	NCR 13S	0.495	~1.1 gal	1100				
NCR 5S	(MS/MSD) *			1030				
NCR 13S	(Duplicate) *							
	(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

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: William Davignon	Phone:	Stone, Judy L		480-66637-16922.1
Company: N Tonawanda Water Works		E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Address: 830 River Road	Due Date Requested:			Job #:
City: North Tonawanda	TAT Requested (days): Normal			
State, Zip: NY, 14120	PO #: Purchase Order not required			Preservation Codes:
Phone:	WO #:			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 - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Email: wmd_ntwwtp@live.com				
Project Name: City of North Tonawanda - NCRS	Project #: 48002901			Other:
Site: New York	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform 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:
			Preservation Code:				D	A	N	N	N		
NCR-3S	4/24/15		0730	Water	N	N	1	3	2	1	1	8	
NCR-4S	4/24/15		0920	Water	N	N	1	3	2	1	1	8	
NCR-5S	4/24/15		1030	Water	N	Y	1	3	2	1	1	8	
NCR-1BS	4/24/15		1100	Water	N	N	1	3	2	1	1	8	24
Field Dup #1	4/24/15		—	Water	N	N	1	3	2	1	1	8	
				Water									
				Water									
				Water									

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: hand deliver		
Relinquished by:	Date/Time: 4/24/15 1210	Company: CNWWTP	Received by:	Date/Time: 4/24/15 1210	Company: TA OKC
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

NIAGARA COUNTY REFUSE SITE

GROUNDWATER PURGING AND SAMPLING • COMPLETION CHECKLIST

BEFORE GOING TO SITE:

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

AT SITE:

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

AFTER SAMPLING:

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

Completed by: Richard C. Bricka *Date:* 4/24/15

FP-4B

9723 (17)

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 Bailer

WELL NUMBER: NCR 3s

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	0.3				
pH	7.2	7.2				
TEMPERATURE	48.7	49.3				
CONDUCTIVITY	1.40	1.49				
TURBIDITY	[illegible]	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 C Becker — PRINT NAME

Richard C Becker — 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 Bailer

WELL NUMBER: NUB 13S

ONE WELL VOLUME: 6.78 gallons

FIVE WELL VOLUMES: 32.4 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	~5	~5			
pH	6.9	7.0	6.9			
TEMPERATURE	51.1	49.8	49.6			
CONDUCTIVITY	1.45	1.51	1.50			
TURBIDITY	52.6	24.1	9.32			
COLOR	clear	clear	clear			
ODOR	none	none	none			
COMMENTS		welding	welding			

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15 Richard C Becker

DATE PRINT NAME SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

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

CREW MEMBERS: RC Bracken

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

WELL NUMBER: NCR 55

ONE WELL VOLUME: 0.775 gallons

FIVE WELL VOLUMES: 3.88 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)	~0.75	~0.55	~0.50			
pH	7.5	[illegible]	7.27			
TEMPERATURE	49.1	48.8	47.5			
CONDUCTIVITY	0.65	0.7	0.71			
TURBIDITY	349	244	261			
COLOR	[illegible]	[illegible]	Slightly cloudy			
ODOR	[illegible]	[illegible]	[illegible]			
COMMENTS		[illegible]	[illegible]			

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

4/23/15 Richard C Bracken Richard C Bracken

DATE PRINT NAME SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

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

CREW MEMBERS: RC Backer

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

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	6.58	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 Richard C Backer Richard C Backer

DATE PRINT NAME SIGNATURE

FP-4C

APPENDIX D
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 ATTACHMMENTS

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

SAMPLE ID	MATRIX	SAMPLE DATE	VOCs	SVOCs	METALS
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

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	Dup of NCR-13S 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	TRICHLOROFLUOROMETHANE	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

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	Dup of NCR-13S 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

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	Dup of NCR-13S 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 E
MONTHLY INSPECTION LOGS AND PHOTOGRAPHS

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 1/3/2015
(MM DD YY)

INSPECTOR(S): RC Becken

	Item	*Inspect For*	*Action Required*	*Comments*
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	good
	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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 1/3/2015 (MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 1/3/2015 (MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- erosion	none	none
	- condition of erosion protection	none	good
	- flow obstructions	none	none
	- dead/dying vegetation	none	typical for winter
	- 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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 2/28/2015
(MM DD YY)

INSPECTOR(S): Matt Shumate

Item	*Inspect For*	*Action Required*	*Comments*
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	snow covered good
	- condition of inside of wet well	none	good
2	Landfill Cap		
	Vegetated Soil Cover - erosion	none	snow covered
	- bare areas	none	none
	- washouts	none	none
	- leachate seeps	none	none
	- length of vegetation	none	snow covered
	- dead/dying vegetation	none	snow covered

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 2/28/2015 (MM DD YY)

INSPECTOR(S): Matt Shumate

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 2/28/2015
(MM DD YY)

INSPECTOR(S): Matt Shumate

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 3/22/2015
(MM DD YY)

INSPECTOR(S): M Shumate

Item	*Inspect For*	*Action Required*	*Comments*
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	snow covered
	- dead/dying vegetation	none	snow covered

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 3/22/2015
(MM DD YY)

INSPECTOR(S): M Shumate

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 3/22/2015 (MM DD YY)

INSPECTOR(S): M Shumate

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
☐ Drainage Ditches/	- sediment buildup	none	snow
☐ Swale Outlets	- erosion	none	none
☐	- condition of erosion protection	none	good
☐	- flow obstructions	none	snow
☐	- dead/dying vegetation	none	snow covered
☐	- 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	snow
☐ Gas Vents	- intact/damage	none	intact
☐ Wells	- locks secure	none	yes

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

	Item	*Inspect For*	*Action Required*	*Comments*
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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

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

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	conditions typical for spring
☐	- 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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

	Item	*Inspect For*	*Action Required*	*Comments*
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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

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

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- 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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 7/3/2015
(MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	none
	- bare areas	none	none
	- washouts	none	none
	- leachate seeps	none	none
	- length of vegetation	none	tall
	- dead/dying vegetation	none	none

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 7/3/2015 (MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 7/3/2015 (MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- 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 condition
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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 8/13/2015
(MM DD YY)

INSPECTOR(S): M Shumate

	Item	*Inspect For*	*Action Required*	*Comments*
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 / thick
		- dead/dying vegetation	none	none

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 8/13/2015
(MM DD YY)

INSPECTOR(S): M Shumate

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 8/13/2015 (MM DD YY)

INSPECTOR(S): M Shumate

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- 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	none
	- flow obstructions	none	none
Gas Vents	- intact/damage	none	intact
Wells	- locks secure	none	yes

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 9/8/2015
(MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	just mowed
☐	- dead/dying vegetation	none	extremely dry

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 9/8/2015 (MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 9/8/2015 (MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	extremely dry
☐	- 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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 10/8/2015
(MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	none
	- dead/dying vegetation	none	extremely dry

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 10/8/2015 (MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 10/8/2015
(MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	extremely dry
	- 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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 11/14/15
(MM DD YY)

INSPECTOR(S): RC Becken

	Item	*Inspect For*	*Action Required*	*Comments*
1	Perimeter collection System/Off-Site Forcemain			
	Manholes	- cover on securely	none	good
		- 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	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: 11/14/15
(MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 11/14/15 (MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- 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 condition
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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 12/1/2015
(MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
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	none
	- bare areas	none	none
	- washouts	none	none
	- leachate seeps	none	none
	- length of vegetation	none	short
	- dead/dying vegetation	none	none

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 12/1/2015
(MM DD YY)

INSPECTOR(S): RC Becken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, NY

DATE: 12/1/2015 (MM DD YY)

INSPECTOR(S): RC Becken

Item	*Inspect For*	*Action Required*	*Comments*
4 Other Site Systems (continued)			
Drainage Ditches/ Swale Outlets	- sediment buildup	none	none
	- 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 condition
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

FORM 1

View of wetland area from Wet Well D (March 26, 2015).

View of the wetland area from north end of landfill (March 26, 2015).

Photo of the north end of the landfill (March 26, 2015).

Drainage ditch at south end of landfill outside of gate (March 26, 2015).

Drainage ditch at south end of landfill outside of gate (March 26, 2015).

View from top of landfill, facing east, looking into backyards of homes along Witmer Road. (March 26, 2015).

APPENDIX F
MAINTENANCE RECORD LOGS

MAINTENANCE RECORD LOG

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

CREW MEMBERS: Matt Schumate

1. Date 2/28/2015
   Time
   Scheduled/Unscheduled:
   Type of Maintenance Performed: scheduled
2. Company Performing Maintenance
   Name: O&M Enterprises, Inc.
   Address: 7134 Marigold Dr
   North Tonawanda, NY
   Contact Name: Rick Becken
3. Methods Used:

walked to wells and shoveled snow off

Description of Material Removed:

snow

Problems/Comments:

walking

DATE	INSPECTOR	INSPECTOR'S SIGNATURE
FORM 2	Richard C. Becken	Richard C. Becken

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	INSPECTOR	INSPECTOR'S SIGNATURE
4/10/2015	RC Becken	

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	RC Becken	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date May 13,2015
   Time 12:50
   Scheduled/Unscheduled: unscheduled
   Type of Maintenance Performed: change float control for WW-B
2. Company Performing Maintenance
   Name: O&M Enterprises, Inc.
   Address: 7134 Marigold Dr
   North Tonawanda, NY
   Contact Name: Rick Becken
3. Methods Used:

found high level in wet well B

trouble shot and found on float not operating

removed faulty float and install new one

Description of Material Removed:

old float

Problems/Comments:

none

RC Becken

DATE	INSPECTOR	INSPECTOR'S SIGNATURE
5/13/2015		Richard Becken

FORM 2

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

FORM 2

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

FORM 2

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	RC Becken	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date 8/14/2015
   Time 0:00
   Scheduled/Unscheduled:
   Type of Maintenance Performed: repair WW A discharge hose
2. Company Performing Maintenance
   Name: O&M Enterprises, Inc.
   Address: 7134 Marigold Dr
   North Tonawanda, NY
   Contact Name: Rick Becken
3. Methods Used:

pulled pump, cleaned pump, repaired split in discharge hose

Description of Material Removed:

none

Problems/Comments:

none

DATE	INSPECTOR	INSPECTOR'S SIGNATURE
8/14/2015	RC Becken	

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date 9/2,3,4/2015
   Time 0:00
   Scheduled/Unschedule scheduled
   Type of Maintenance Performed: mowed grass annual
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

9/4/2015	RC Becken	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date 9/13/2015
   Time 11:00
   Scheduled/Unscheduled:
   Type of Maintenance Performed: repair discharge hose on Wet Well B
2. Company Performing Maintenance
   Name: O&M Enterprises, Inc.
   Address: 7134 Marigold Dr.
   North Tonawanda, NY
   Contact Name: Rick Becken
3. Methods Used:

pull pump and install new quick connect on hose

Description of Material Removed:

none

Problems/Comments:

none

9/13/2015	RC Becken	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date 12/1/2015
   Time 8:00
   Scheduled/Unscheduled:
   Type of Maintenance Performed: remove blowndown tree from driveway
2. Company Performing Maintenance
   Name: O&M Enterprises, Inc.
   Address: 7134 Marigold Dr
   North Tonawanda, NY
   Contact Name: Rick Becken
3. Methods Used:

saw/ hand work

Description of Material Removed:

none

Problems/Comments:

none

12/1/2015	RC Becken	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

APPENDIX G
WATER LEVEL RECORDS

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 1/3/2015 (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"	1:00	598.93	26.8	572.13
EAST "B"	12:50	596.23	16.01	580.22
EAST "C"	12:40	598.69	21.06	577.63
EAST "D"	12:25	593.20	15.8	577.4
NCR-3S	12:10	579.60	4.1	575.50
NCR-4S	11:40	577.88	3.8	574.08
NCR-5S	11:25	579.34	dry	
NCR-13S	10:50	577.15	6.48	570.67

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	10:45		~11"
WW B	11:35		~4"
WW C	12:05		~6"
WW D	10:55		~4"

Total System Flow	Time of Measurement
40829000	10:45

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 2/28/2015 (MM DD YY)

CREW MEMBERS: Matt Shumate

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	11:10	598.93	26.12	572.81
EAST "B"	11:25	596.23	15.56	580.67
EAST "C"	11:50	598.69	20.45	578.24
EAST "D"	12:10	593.20	15.51	577.69
NCR-3S	9:50	579.60	3.5	576.10
NCR-4S	10:10	577.88	2.96	574.92
NCR-5S	10:50	579.34	6.51	572.83
NCR-13S	8:55	577.13	4.63	572.50

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	8:45		~6"
WW B	10:25		~5"
WW C	9:35		~10"
WW D	9:10		~5"

Total System Flow	Time of Measurement
44675000	8:45

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 3/22/2015 (MM DD YY)

CREW MEMBERS: M Shumate

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	572.93
EAST "B"	12:10	596.23	20.05	576.18
EAST "C"	12:25	598.69	20.5	578.19
EAST "D"	12:45	593.20	15.65	577.55
NCR-3S	10:25	579.60	3.9	575.70
NCR-4S	11:00	577.88	2.1	575.78
NCR-5S	11:30	579.34	7.4	571.94
NCR-13S	9:40	577.15	4.1	573.05

WET WELLS

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

Total System Flow	Time of Measurement
47725000	9:30

FP-3D

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

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 7/3/2015 (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"	12:00	598.93	29.05	569.88
EAST "B"	11:45	596.23	Well	Damaged
EAST "C"	11:25	598.69	21.02	577.67
EAST "D"	11:05	593.20	Oil floating	in well
NCR-3S	10:25	579.60	dry	
NCR-4S	9:45	577.88	dry	
NCR-5S	10:50	579.34	9.52	587.82
NCR-13S	8:35	577.15	dry	

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	8:45		~12"
WW B	9:55		~5"
WW C	10:15		~6"
WW D	9:15		~5"

Total System Flow	Time of Measurement
602100	8:45

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 8/13/2015 (MM DD YY)

CREW MEMBERS: M Shumate

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	26.85	572.08
EAST "B"	12:10	596.23	collapsed	
EAST "C"	12:25	598.69	21.13	577.56
EAST "D"	12:45	593.20	oil	
NCR-3S	10:25	579.60	dry	
NCR-4S	11:00	577.88	dry	
NCR-5S	11:30	579.34	dry	
NCR-13S	9:40	577.15	dry	

WET WELLS

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

Total System Flow	Time of Measurement
607645	9:30

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 9/8/2015 (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"	11:50	598.93	26.75	572.18
EAST "B"	11:40	596.23		?
EAST "C"	12:20	598.69	20.98	578.09
EAST "D"	12:40	593.20	37.65	555.55
NCR-3S	10:15	579.60	dry	
NCR-4S	10:50	577.88	dry	
NCR-5S	11:00	579.34	dry	
NCR-13S	9:20	577.15	dry	

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:20		~10"
WW B	10:55		~5"
WW C	10:10		~5"
WW D	9:45		~4"

Total System Flow	Time of Measurement
6091500	9:20

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 10/8/2015 (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"	12:50	598.93	26.8	572.13
EAST "B"	12:40	596.23	Well Collapsed	
EAST "C"	13:20	598.69	21	577.69
EAST "D"	13:40	593.20	17.32*	575.88
NCR-3S	11:15	579.60	dry	
NCR-4S	11:50	577.88	dry	
NCR-5S	12:00	579.34	dry	
NCR-13S	10:20	577.15	dry	

* Note: Oil like material floating in East B above water.

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	10:20		~10"
WW B	11:55		~12"
WW C	11:10		~4"
WW D	10:45		~6"

Total System Flow	Time of Measurement
16082000	10:20

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 11/14/2015 (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"	11:30	598.93	26.79	572.14
EAST "B"	11:45	596.23	Well Collapsed	
EAST "C"	12:00	598.69	21.05	577.64
EAST "D"	12:15	593.20	16.08*	577.12
NCR-3S	10:30	579.60	4.15	575.45
NCR-4S	10:45	577.88	3.48	588.4
NCR-5S	11:15	579.34	dry	-
NCR-13S	9:40	577.15	dry	-

* Note: Oil like material floating in East B above water.

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	9:30		~10"
WW B	11:00		~5"
WW C	10:25		~6"
WW D	10:05		~5"

Total System Flow	Time of Measurement
6227200	9:30

FP-3D

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 12/1/2015 (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"	12:00	598.93	26.91	572.02
EAST "B"	11:45	596.23	Well Collapsed	
EAST "C"	11:25	598.69	20.81	577.88
EAST "D"	11:05	593.20	16.25*	576.95
NCR-3S	10:25	579.60	5.09	574.51
NCR-4S	9:45	577.88	3.72	574.16
NCR-5S	10:50	579.34	dry	-
NCR-13S	8:35	577.15	dry	-

* Note: Oil like material floating in East B above water.

WET WELLS

Wet Well	Time of Measurement	Total Flow	Depth of Water
WW A	8:45		~8"
WW B	9:55		~4"
WW C	10:15		~6"
WW D	9:15		~4"

Total System Flow	Time of Measurement
62689000	8:45

FP-3D

APPENDIX H
COMPACT DISK CONTAINING REPORT