2008 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 2009

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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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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 PRP Group performed a remedial action at the Niagara County Refuse Site (Site), Wheatfield, New York. The PRP Group is currently providing operations, maintenance, and monitoring (OM&M). This eighth Annual Monitoring Report summarizes monitoring activities from January through December 2008.

The Site is a former municipal landfill comprised of approximately 60 acres, 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 (PCS) and a perimeter barrier system are used to prevent offsite contaminant migration. These systems began operation in November of 2000.

1.2 PROCEDURES

1.2.1 Groundwater Sampling Procedure

Based on the OM&M Manual (CRA, 2000), groundwater sample collection was completed quarterly from the four monitoring wells at the Site for the first two years after PCS startup (2001 to 2002). The four wells are screened in the shallow overburden materials. In accordance with the OM&M Manual, three years of semi-annual groundwater sampling were completed from 2003 to 2005. The first year of groundwater sampling on an annual schedule was begun in 2006. Samples were collected from wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S in December 2008. Annual groundwater sampling is scheduled to continue for an undetermined time period, assuming that water level conditions permit collection of groundwater samples.

Each groundwater monitoring well was purged prior to sample collection by pumping five volumes of groundwater from the well using a dedicated bladder pump. Physical parameters including pH, temperature, conductivity, and turbidity of the purge water were periodically measured and recorded. In the event that a well could not supply enough water to complete the purging of five well volumes, the well was pumped dry on three consecutive days prior to sampling. All purge water was placed in an onsite wet-well.

Groundwater sampling was begun immediately at the completion of purging. A dedicated bladder pump was used to collect the groundwater samples. The discharge rate was first adjusted to approximately 100 milliliters per minute. The sample was then collected directly into the sample containers.

Groundwater samples were collected and analyzed for:

- Mercury using EPA method 245.1 and method SW-7470; and
- Inorganics using 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.

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 December 2008 sampling event, no issues were encountered due to low groundwater volume, and all samples were able to be collected.

A request was submitted to the USEPA and NYSDEC in 2005 to reduce the analytical parameters in each of the groundwater samples collected. The request proposed reducing groundwater laboratory analysis to five metals that have historically been identified as exceeding NYSDEC and USEPA groundwater standards in the shallow groundwater at the Site. The elimination of analysis for VOCs and SVOCs was also proposed. The USEPA agreed, after discussions with the NYSDEC and input from NYSDOH, to reduce the collection of VOCs and SVOCs to every two years beginning in 2006 (every other groundwater sampling event). The USEPA requested that metals continue to be analyzed for each groundwater sampling round. The basis for this decision was stated to be the significant residential growth around the Site in recent years.

1.2.2 Effluent Sampling Procedure

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 Industrial Wastewater Discharge Permit (Appendix A) was issued by the City of North Tonawanda. This permit became effective on February 28, 2007 and expires on April 1, 2010. The revised permit has a reduced analytical parameter list compared to the original permit, and a semi-annual sampling frequency. Semi-annual samples were collected in March and September 2008. The effluent samples are collected in compliance with the OM&M Manual (CRA, 2000) and are analyzed by the City of North Tonawanda. The sole purpose of these analyses is for compliance with the Industrial Wastewater Discharge Permit.

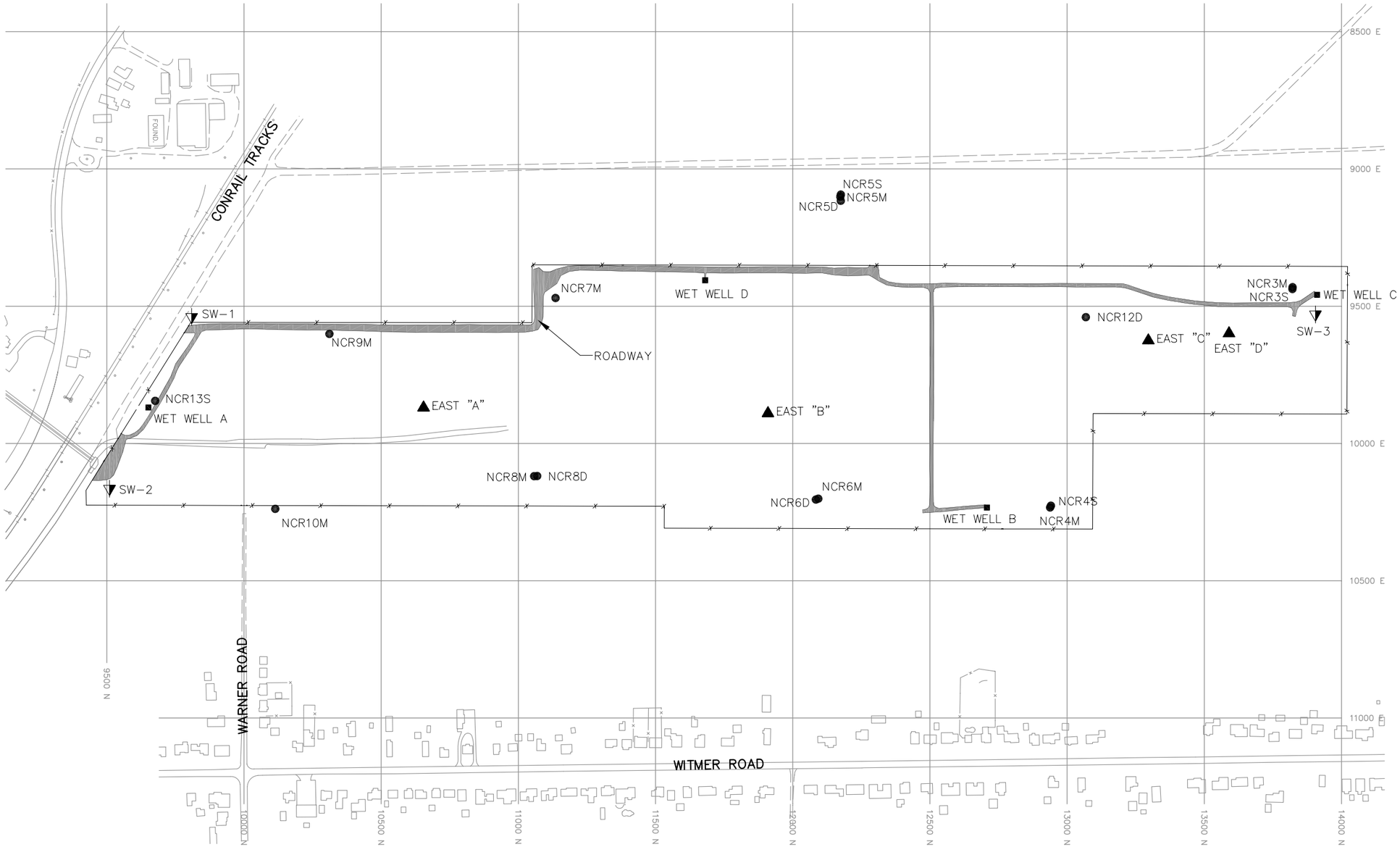
1.2.3 Water Levels

Water levels were measured in four monitoring well locations inside the limits of the landfill, and four effluent monitoring locations. Water level measurements were collected monthly during 2008. 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

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No XREFs

SECTION 2
RESULTS

2.1 ANALYTICAL RESULTS

2.1.1 Effluent Samples

Effluent samples were collected in March and September 2008 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 discharge permit. A revised Industrial Wastewater Discharge Permit was issued by the City of North Tonawanda and is effective from February 28, 2007 through April 1, 2010. As seen in the revised permit, the analytical parameters and the sampling frequency have been reduced from the original permit. Effluent analytical results and the revised 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 87 to 98, 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 (CRA, 2000). Annual collection of groundwater samples began in 2006. Groundwater sample analytes are currently scheduled to include metals annually, and volatile organic and semivolatile organic parameters every two years, as approved by the USEPA (see Appendix B). The groundwater samples collected during this reporting period were analyzed for metals only.

The analytical results received from the laboratory are presented in Appendix C, along with the chain-of-custody (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). A sheet of well purging information, including pH, conductivity, turbidity, odor, comments, and well volumes, is also provided in Appendix C. The data validation package is presented in Appendix D.

December 2008 Event

Monitoring wells NCR-3S, NCR-4S, NCR-5S, and NCR-13S were sampled on December 5, 2008. The locations of the monitoring wells are provided in Figure 1.1. The data validation report is presented in Appendix D.

Thirteen metals were identified in one or more of the groundwater samples. Typically, an average of approximately thirteen metals are detected. Detected values appeared to be consistent with ranges observed in previous sampling events. Aluminum was detected and exceeded the NYSDEC AWQS in each of the four samples. This is consistent with historical results. Copper was identified in one sample above the analytical detection limits and exceeded the AWQS. Typically, copper has been found exceeding NYSDEC AWQS in between two and four of the four groundwater samples. Iron was identified in each of the samples exceeding both the AWQS and the NYSDOH MCL. The Record of Decision (ROD) (USEPA, 1993) identifies iron as typically exceeding MCLs in the regional groundwater. Magnesium was identified in each of the four samples and exceeded the AWQS guidance value (not a standard) in each of the samples. Sodium was found above the NYSDEC AWQS, the NYSDOH MCL, and USEPA MCL in three of the four samples. The Record of Decision (ROD) (USEPA, 1993) identifies sodium as typically exceeding MCLs in the regional groundwater.

Groundwater analytical results were validated and reviewed by Parsons for usability (see Appendix D for the complete report). The laboratory data packages were found to be of good overall quality. Groundwater samples were collected, properly preserved, shipped under a COC record, and received at the laboratory within one day of sampling. Certain metals results were considered estimated, and flagged with a "J", due to noncompliant field duplicate precision. Metals sample results were considered usable following data validation. The metals results were 100% complete. Eight detected and three nondetected metals results were considered estimated due to noncompliant field duplicate precision.

2.2 SITE INSPECTIONS

Monthly Site inspections were conducted between January and December 2008. 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 and site photographs 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. 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 was noted to be covered with snow during the January, February, and March site inspections and the cover vegetation was noted to be low, typical for the early part of the year. In April the vegetation was also low. In May the vegataion was normal. June through September the vegation was tall. The landfill cap was mowed in September, and the cover vegetative length was low from October through December.

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 will continue, to document general conditions.

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 slightly high in February, May, and August and slightly low in January, June, September, and October. Typical winter vegetative conditions were observed from January through March, and again in December, and conditions were noted as good during the April through November inspections.

A single hole cut in the perimeter fence was noted in July. The Niagara County Sheriff's Department was notified, a police report was completed, and the hole was repaired. In July, a lock and chain was found cut from the gate on the east side of the landfill at the end of Werner Avenue. The lock and chain were replaced.

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

2.3 MAINTENANCE

Scheduled maintenance during this reporting period included:

- Each of the groundwater monitoring wells was painted.
- Replacement of pump in Wet Well D.
- Periodic pulling, cleaning, and reinstalling the pumps in the wet wells.
- Cutting tall grass, brush, and weeds along the inside of the perimeter fence line.
- Cutting paths through tall grass to wells.
- Replacement of the security light on the exterior of the control building.
- Mowing the landfill cap.
- Repairs to the perimeter fence posts that had been bent.
- Clean up of tree damage caused by high winds.

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

- On March 10 and June 8, a float control switch that had stuck on wet well D was repaired.
- On June 21, a float control switch that had stuck on wet well A was repaired.
- On July 10, a hole cut in the perimeter fence was identified and repaired and a cut lock and chain on a gate on the east side of the landfill was replaced. A

police report (Niagara County Sheriff's Department number 32185) was filed. Additional fence repair was completed on September 18.

- On August 25, a small leak was identified on a section of the force main pipe at wet well C. This section of pipe was replaced.
- On October 19, a stuck float switch was replaced at wet well A.

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 2008, water levels were collected from the monitoring wells on a monthly basis. Water levels generally varied between 2 and 5 feet over the course of the year.

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

City of North Tonawanda WWTP 830 River Road North Tonawanda, NY C/O Niagara County Refuse Site Validated Groundwater Sampling Results December 2008		Sample ID: Lab Id: Source: SDG: Matrix: Sampled: Validated:	NYS DEC AWQS*	NYS DOH MCL	US EPA MCL	NCR-3S A8F50102 TAL-Buffalo A08-F501 WATER 12/5/2008 1/12/2009	NCR-4S A8F50103 TAL-Buffalo A08-F501 WATER 12/5/2008 1/12/2009	NCR-5S A8F50104 TAL-Buffalo A08-F501 WATER 12/5/2008 1/12/2009	NCR-13S A8F50101 TAL-Buffalo A08-F501 WATER 12/5/2008 1/12/2009	NCR-13S FIELD DUP #1 A8F50105 TAL-Buffalo A08-F501 WATER 12/5/2008 1/12/2009
CAS NO.	COMPOUND	UNITS:								
	METALS									
7429-90-5	Aluminum	ug/L	100	-	-	543	782	2430	902	1280
7440-39-3	Barium	ug/L	1000	2000	2000	59.9	76.8	113	84.9	88.1
7440-43-9	Cadmium	ug/L	5	5	5	ND	ND	ND	ND UJ	1.6 J
7440-70-2	Calcium	ug/L	-	-	-	184000	154000	74700	207000	210000
7440-47-3	Chromium	ug/L	50	100	100	16.8	ND	15.8	5.8 J	15.4 J
7440-50-8	Copper	ug/L	5	-	-	ND	ND	ND	10 J	10 UJ
7439-89-6	Iron	ug/L	300>	300>	-	**1920**	**3190**	**1540**	**1660 J**	**2860 J**
7439-95-4	Magnesium	ug/L	35000+	-	-	114000	49200	53700	77900	78000
7439-96-5	Manganese	ug/L	300>	300>	-	64.5	215	23.8	76.6	84.3
7440-02-0	Nickel	ug/L	100	-	-	14.2	ND	13	10 UJ	14 J
7440-09-7	Potassium	ug/L	-	-	-	2720	9210	1270	3010	3130
7440-23-5	Sodium	ug/L	20000	20000	20000	15900	**31500**	**49300**	**22900**	**22800**
7440-66-6	Zinc	ug/L	2000+	5000	-	37.9	58.5	23.6	35.2 J	81.5 J

* = NYSDEC Ambient Water Quality Standards.

+=Guidance value. ND = Not detected.

> = Sum of iron and manganese should not exceed
500 ug/L NYDEC or 300 ug/L NYSDOH.

J = Estimated value. - = No standard identified.

Boxed values exceed NYSDEC AWQS.

Bold values exceed NYSDOH maximum contaminant levels.

Shaded values exceed USEPA maximum contaminant level.

Table 2.2 Monthly Site Inspection Results

Inspection Item	Acceptable	Not Acceptable	Comments
Manholes	X		
Wet Wells	X		Water levels were measured monthly.
Wetlands	X		Continued growth of target vegetation. A slightly higher than normal water level was noted during the February, April, and August inspections. A slightly lower water level was noted during the January, June, September, and October inspections. Normal winter conditions, expected for the time of year, were observed during the January, February, March, and December inspections.
Perimeter Fence	X		
Condition of Roads	X		No erosion or other problems. Covered in snow during the January, February, and March inspections.
Integrity of the Cap	X		No problems were noted in 2008.
Drainage Ditches/Swales	X		
Gas Venting System	X		
Wells	X		Water levels were measured monthly.
Culverts	X		
Vegetative Cover	X		The vegetative cover was covered in snow during the January through March inspections. Height of vegetation on the cap was noted as low during the April and October, through December inspections and noted as tall during the June through September inspections. The cap was mowed after the September 2008 inspection.

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

Table 2.3
Niagara County Refuse Site
Water Level Measurements

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

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

Table 2.3
Niagara County Refuse Site
Water Level Measurements

Observation Point	Elevation Top of Casing (ft. msl)	1/2/2004 Depth to Water (ft)	1/2/2004 Elevation (ft. msl)	2/5/2004 Depth to Water (ft)	2/5/2004 Elevation (ft. msl)	3/1/2004 Depth to Water (ft)	3/1/2004 Elevation (ft. msl)	4/5/2004 Depth to Water (ft)	4/5/2004 Elevation (ft. msl)	5/4/2004 Depth to Water (ft)	5/4/2004 Elevation (ft. msl)	6/11/2004 Depth to Water (ft)	6/11/2004 Elevation (ft. msl)	7/10/2004 Depth to Water (ft)	7/10/2004 Elevation (ft. msl)	8/9/2004 Depth to Water (ft)	8/9/2004 Elevation (ft. msl)	9/8/2004 Depth to Water (ft)	9/8/2004 Elevation (ft. msl)	10/2/2004 Depth to Water (ft)	10/2/2004 Elevation (ft. msl)	11/4/2004 Depth to Water (ft)	11/4/2004 Elevation (ft. msl)	12/3/2004 Depth to Water (ft)	12/3/2004 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

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

Table 2.3
Niagara County Refuse Site
Water Level Measurements

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

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	-

Table 2.3
Niagara County Refuse Site
Water Level Measurements

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

SECTION 3
SUMMARY AND CONCLUSIONS

The following summary and conclusions were developed based on the data collected during this reporting period (January through December 2008):

- 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.

- Semi-annual groundwater sample collection was completed in 2005 and annual groundwater sampling was begun in 2006. Future groundwater sampling will be conducted on an annual basis, as indicated in the OM&M Manual (CRA, 2000) for the Site. As indicated in the November 21, 2005 letter from USEPA, groundwater sample analytical parameters were reduced to metals on an annual basis, and volatile and semivolatile analytical parameters every two years. Metals only were collected in 2008. The annual groundwater samples scheduled for collection in November 2009 will be analyzed for volatile and semivolatile parameters, in addition to metals.

- Groundwater analytical results were compared to NYSDEC ambient water quality standards (AWQS), NYSDOH maximum contaminant levels (MCLs), and USEPA MCLs. Thirteen metals were identified in one or more of the groundwater samples, typical of previous results. Detected values appeared to be consistent with ranges observed in previous sampling events. Aluminum, copper, iron, magnesium, and sodium were found above one or more of the standards or guidance values. The Record of Decision (ROD) (USEPA, 1993) identifies iron and sodium as typically exceeding MCLs in the regional groundwater.

- Two effluent samples were collected in 2008 and analyzed by the City of North Tonawanda. All analytical results were found to be compliant with the discharge permit. During 2008, compliance with the discharge permit was maintained.

- The landfill was inspected monthly and was appropriately maintained. Any 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 will continue, to document general conditions. In 2008, 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 2008. Water levels generally varied between 2 and 5 feet over the course of the year.

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.

APPENDIX A
CITY OF NORTH TONAWANDA INDUSTRIAL WASTEWATER DISCHARGE PERMIT

CITY OF NORTH TONAWANDA
4/5/95
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, New York 14094

Classified by S.I.C. Number(s): _N/A_
for the discharge of: groundwater 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 Treatment Plant 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 February, 2007

To expire the 1st day of April, 2010

Paul Joseph Prof

Treatment Plant Superintendent
Signed this 31st day of January, 2007

PERMIT NUMBER: 2628010

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
2/	Aluminum	2.0	1 Sample 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.
2/	Magnesium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
2/	Sodium	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
	pH	Monitor Only	1 Sampling Day semi-annual	grab
2/	BOD	Monitor Only	1 Sampling Day semi-annual	24 hr comp.
2/	Total Suspended Solids	Monitor Only	1 Sampling Day semi-annual	24 hr comp.

PERMIT NUMBER: 2628010

PART I. SPECIFIC CONDITIONS

B. DISCHARGE 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 on the 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	January 31, 2007	semi-annual

PART I. SPECIFIC CONDITIONS

C. SPECIAL REQUIREMENTS

1) This permit is written for a duration of three years. Upon renewal of this permit, all parameters will be re-evaluated to develop a parameter list based on chemical concentrations present in the extracted groundwater.

2) Frequency of monitoring is to be re-evaluated yearly..

3) All monitoring reports (initial and subsequent), are to be received by the Superintendent, no later than thirty (30) days after receipt of validated data.

4) It is required that the Permittee have a Site Operations Manual available at all times. All emergency phone numbers must be listed in an appropriate place for easy access by operations personnel. The permittee shall not discharge to the City of North Tonawanda sewerage treatment works during overflow conditions. The permittee is required to cease all pumping operations upon verbal request of the North Tonawanda Wastewater Treatment Plant Superintendent or his assigns. Pumping operations shall not recommence until approved by the North Tonawanda Wastewater Treatment Plant Superintendent or his assigns.

5) Analysts are required to use GC/MS method detection limits for most organics (if GC/MS is appropriate); GC/ECD for PCBS/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.

ANALYTICAL RESULTS : NIAGARA COUNTY REFUSE SITE 2008

PARAMETER	RESULT mg/l	RESULT mg/l	COMP.
pH (COMP.)	7.62	6.91	YES
COD	80	264	YES
SUSPENDED SOLIDS	8	42	YES
BOD	17	23	YES
PO4	0.06	0.29	YES
PHENOLS	< 0.014	< 0.007	YES
METALS			
ALUMINUM	0.055	0.085	YES
CHROMIUM	< 0.024	< 0.026	YES
LEAD	< 0.024	< 0.026	YES
NICKEL	< 0.023	< 0.025	YES
ZINC	0.179	0.528	YES
IRON	1.015	9.150	YES
MAGNESIUM	114.0	184.0	YES
MANGANESE	0.16	1.20	YES
SODIUM	175.0	491.0	YES
PURGEABLES			
Benzene	< 0.005	< 0.005	YES
Toluene	< 0.004	< 0.005	YES
Chlorobenzene	< 0.005	0.005	YES
Ethylbenzene	< 0.005	< 0.005	YES
Total Xylenes	< 0.010	< 0.010	YES
1,3 - Dichlorobenzene	< 0.005	< 0.005	YES
1,4-Dichlorobenzene	< 0.005	< 0.005	YES
1,2 - Dichlorobenzene	< 0.005	< 0.005	YES
Vinyl Chloride	**U**	< 0.006	YES
1,1-Dichloroethene	< 0.006	< 0.005	YES
Methylene chloride	< 0.006	< 0.005	YES
trans-1,2 Dichloroethene	< 0.006	< 0.005	YES
1,1-Dichloroethane	< 0.006	< 0.005	YES
Chloroform	< 0.006	< 0.006	YES
1,1,1-Trichloroethane	< 0.006	< 0.005	YES
3 Cl - ethylene	< 0.006	< 0.005	YES
TOTAL FLOW (gallons)	5,084	1,469	
SAMPLE DATE	3/7/2008	9/5/2008	

U = unable to report due to failed QC.

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

From: Negrelli.Mike@epamail.epa.gov
To: Felter, Eric;
cc: barberwb@bp.com; Raybuck, Mark; richard.pope@Niagaracounty.com; jakonsel@gw.dec.state.ny.us; bpsadows@gw.dec.state.ny.us;
Subject: Re: NCR Annual GW Sampling
Date: Tuesday, December 11, 2007 9:25:21 AM

Thanks Eric. I will place this email in the file for the record. I agree that we need to wait for there to be enough water in the wells to collect a sample. Keep me posted.

"Felter, Eric" <Eric.Felter@parsons.com>
12/10/2007 09:43 AM

To: Mike Negrelli/R2/USEPA/US@EPA
cc: "Raybuck, Mark" <Mark.Raybuck@parsons.com>, <richard.pope@Niagaracounty.com>, <barberwb@bp.com>
Subject: NCR Annual GW Sampling

Mike,
I wanted to provide you with an update on the status of the annual groundwater sampling at the Niagara County Refuse site. The 2007 annual groundwater sampling has yet to be completed due to a lack of water in the monitoring wells. As of two weeks ago, two of the wells had a few inches of water and two wells had approximately one inch of water. While this is better than previous months, this would have limited sample collection to two wells or less. O&M Enterprises, Inc. plans to check the water levels weekly and evaluate the possibility of sampling during the next few weeks. The annual groundwater sampling may need to be

delayed to the spring of 2008.

Please feel free to call or email if you have any questions or comments.

Regards,
Eric

Eric A. Felter, P.G.
Principal Geologist
Parsons
40 La Riviere Drive, Ste 350
Buffalo, NY 14202
Phone direct: (716) 809-9140
Phone office: (716) 541-0730
Fax: (716) 541-0760
Email: Eric.Felter@parsons.com

SAFETY - MAKE IT PERSONAL

APPENDIX C

ANALYTICAL DATA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Job#: A08-F501

Project#: NY1A8791
Site Name: City of North Tonawanda
Task: Niagara County Refuse Site

Paul Drof
City of North Tonawanda
830 River Road
North Tonawanda, NY 14120

CC: Eric Felzer

TestAmerica Laboratories Inc.

Amy Lynn Haag
Project Manager

12/18/2008

The results presented in this report relate only to the analytical testing and condition of the sample at receipt. This report pertains to only those samples actually tested. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Buffalo
Current Certifications

As of 11/3/2008

STATE	Program	Cert # / Lab ID
Arkansas	CWA, RCRA, SOIL	88-0686
California*	NELAP CWA, RCRA	01169CA
Connecticut	SDWA, CWA, RCRA, SOIL	PH-0568
Florida*	NELAP CWA, RCRA	E87672
Georgia*	SDWA,NELAP CWA, RCRA	956
Illinois*	NELAP SDWA, CWA, RCRA	200003
Iowa	SW/CS	374
Kansas*	NELAP SDWA, CWA, RCRA	E-10187
Kentucky	SDWA	90029
Kentucky UST	UST	30
Louisiana*	NELAP CWA, RCRA	2031
Maine	SDWA, CWA	NY0044
Maryland	SDWA	294
Massachusetts	SDWA, CWA	M-NY044
Michigan	SDWA	9937
Minnesota	SDWA,CWA, RCRA	036-999-337
New Hampshire*	NELAP SDWA, CWA	233701
New Jersey*	NELAP,SDWA, CWA, RCRA,	NY455
New York*	NELAP, AIR, SDWA, CWA, RCRA,CLP	10026
Oklahoma	CWA, RCRA	9421
Pennsylvania*	NELAP CWA,RCRA	68-00281
Tennessee	SDWA	02970
Texas*	NELAP CWA, RCRA	T104704412-08-TX
USDA	FOREIGN SOIL PERMIT	S-41579
USDOE	Department of Energy	DOECAP-STB
Virginia	SDWA	278
Washington*	NELAP CWA,RCRA	C1677
Wisconsin	CWA, RCRA	998310390
West Virginia	CWA,RCRA	252

*As required under the indicated accreditation, the test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report.

Sample Data Summary Package

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8F50105	FIELD DUP#1	GW	12/05/2008	00:00	12/05/2008	12:46
A8F50101	NCR 13S	GW	12/05/2008	10:35	12/05/2008	12:46
A8F50102	NCR 3S	GW	12/05/2008	09:50	12/05/2008	12:46
A8F50103	NCR 4S	GW	12/05/2008	09:15	12/05/2008	12:46
A8F50104	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46
A8F50104MS	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46
A8F50104SD	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46

METHODS SUMMARY

Job#: A08-F501

Project#: NY1A8791
Site Name: City of North Tonawanda

PARAMETER	ANALYTICAL METHOD
Aluminum - Total	SW8463 6010
Antimony - Total	SW8463 6010
Barium - Total	SW8463 6010
Beryllium - Total	SW8463 6010
Cadmium - Total	SW8463 6010
Calcium - Total	SW8463 6010
Chromium - Total	SW8463 6010
Cobalt - Total	SW8463 6010
Copper - Total	SW8463 6010
Iron - Total	SW8463 6010
Lead - Total	SW8463 6010
Magnesium - Total	SW8463 6010
Manganese - Total	SW8463 6010
Mercury - Total	SW8463 7470
Nickel - Total	SW8463 6010
Potassium - Total	SW8463 6010
Selenium - Total	SW8463 6010
Silver - Total	SW8463 6010
Sodium - Total	SW8463 6010
Thallium - Total	SW8463 6010
Vanadium - Total	SW8463 6010
Zinc - Total	SW8463 6010

References:

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

SDG NARRATIVE

Job#: A08-F501

Project#: NY1A8791
Site Name: City of North Tonawanda

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-F501
Sample Cooler(s) were received at the following temperature(s); 6.0 °C
All samples were received in good condition.

Metals Data

The CCV, analyzed at 17:44, exhibited a result above the quality control limits for Thallium. However, the samples were bracketed by compliant CCV's, therefore, no corrective action was necessary.

The CCB, analyzed at 17:49, exhibited a result above the detection limit for Thallium. However, the samples were bracketed by compliant CCB's, therefore, no corrective action was necessary.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this Sample Data package and in the electronic data deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature."

Amy Lynn Haag
Project Manager

12/19/08
Date

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION
AND
ANALYTICAL REQUEST SUMMARY

LAB NAME: TESTAMERICA LABORATORIES, INC.

CUSTOMER SAMPLE ID	LABORATORY SAMPLE ID	ANALYTICAL REQUIREMENTS						
		VOA GC/MS	BNA GC/MS	VOA GC	PEST PCB	METALS	TCLP HERB	WATER QUALITY
FIELD DUP#1	A8F50105	-	-	-	-	SW8463	-	-
NCR 13S	A8F50101	-	-	-	-	SW8463	-	-
NCR 3S	A8F50102	-	-	-	-	SW8463	-	-
NCR 4S	A8F50103	-	-	-	-	SW8463	-	-
NCR 5S	A8F50104	-	-	-	-	SW8463	-	-

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYTICAL SUMMARY
INORGANIC ANALYSIS

LAB NAME: TESTAMERICA LABORATORIES, INC.

SAMPLE IDENTIFICATION	MATRIX	METALS REQUESTED	DATE RECEIVED AT LAB	DATE DIGESTED	DATE ANALYZED
FIELD DUP#1	GW	t-metals	12/05/2008	12/08-09/2008	12/08-12/10/2008
NCR 13S	GW	t-metals	12/05/2008	12/08-09/2008	12/08-09/2008
NCR 3S	GW	t-metals	12/05/2008	12/08-09/2008	12/08-09/2008
NCR 4S	GW	t-metals	12/05/2008	12/08-09/2008	12/08-09/2008
NCR 5S	GW	t-metals	12/05/2008	12/08-09/2008	12/08-10/2008

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

LAB NAME: TESTAMERICA LABORATORIES, INC.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
FIELD DUP#1	GW	SW8463	SW8463	AS REQUIRED	AS REQUIRED
NCR 13S	GW	SW8463	SW8463	AS REQUIRED	AS REQUIRED
NCR 3S	GW	SW8463	SW8463	AS REQUIRED	AS REQUIRED
NCR 4S	GW	SW8463	SW8463	AS REQUIRED	AS REQUIRED
NCR 5S	GW	SW8463	SW8463	AS REQUIRED	AS REQUIRED

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

DATA QUALIFIER PAGE

These definitions are provided in the event the data in this report requires the use of one or more of the qualifiers. Not all qualifiers defined below are necessarily used in the accompanying data package.

ORGANIC DATA QUALIFIERS

ND or U	Indicates compound was analyzed for, but not detected.
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank, as well as in the sample.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at the secondary dilution factor.
N	Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds, where the identification is based on the Mass Spectral library search. It is applied to all TIC results.
P	This flag is used for CLP methodology only. For Pesticide/Aroclor target analytes, when a difference for detected concentrations between the two GC columns is greater than 25%, the lower of the two values is reported on the data page and flagged with a "P".
A	This flag indicates that a TIC is a suspected aldol-condensation product.
1	Indicates coelution.
*	Indicates analysis is not within the quality control limits.

INORGANIC DATA QUALIFIERS

ND or U	Indicates element was analyzed for, but not detected. Report with the detection limit value.
J or B	Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
N	Indicates spike sample recovery is not within the quality control limits.
S	Indicates value determined by the Method of Standard Addition.
E	Indicates a value estimated or not reported due to the presence of interferences.
H	Indicates analytical holding time exceedance. The value obtained should be considered an estimate.
G	Indicates a value greater than or equal to the project reporting limit but less than the laboratory quantitation limit
*	Indicates the spike or duplicate analysis is not within the quality control limits.
+	Indicates the correlation coefficient for the Method of Standard Addition is less than 0.995.

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: North Tonawanda Water Works **SDG No.:** A08-F501 **Method Type:**

Sample ID: A8F50105 **Client ID:** FIELD DUP#1

Matrix: WATER **Date Received:** 12/5/2008 **Date Collected:** 12/5/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B27275 **Prep Date:** 12/9/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Aluminum		**1280**	**ug/L**			**200**	200	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Antimony	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Barium		**88.1**	**ug/L**			**2.0**	2.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Beryllium	<	2.0	ug/L	U		2.0	2.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Cadmium		**1.6**	**ug/L**			**1.0**	1.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Calcium		**210000**	**ug/L**			**500**	500	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Chromium		**15.4**	**ug/L**			**4.0**	4.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Cobalt	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Copper	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Iron		**2860**	**ug/L**			**50.0**	50.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Magnesium		**78000**	**ug/L**			**200**	200	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Manganese		**84.3**	**ug/L**			**3.0**	3.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Nickel		**14.0**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Potassium		**3130**	**ug/L**			**500**	500	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	12/8/2008	14:30:12	LEEMAN PS2	G12088W1	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Sodium		**22800**	**ug/L**			**1000**	1000	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P
Thallium	<	20.0	ug/L	U		20.0	20.0	1	12/10/2008	15:51	SUPERTRACE	1121008	P
Vanadium	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	17:17	SUPERTRACE2	A12090W	P
Zinc		**81.5**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**17:17**	SUPERTRACE2	A12090W	P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: North Tonawanda Water Works **SDG No.:** A08-F501 **Method Type:**

Sample ID: A8F50101 **Client ID:** NCR 13S

Matrix: WATER **Date Received:** 12/5/2008 **Date Collected:** 12/5/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B27275 **Prep Date:** 12/9/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Aluminum		**902**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Antimony	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Barium		**84.9**	**ug/L**			**2.0**	2.0	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Beryllium	<	2.0	ug/L	U		2.0	2.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Cadmium	<	1.0	ug/L	U		1.0	1.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Calcium		**207000**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Chromium		**5.8**	**ug/L**			**4.0**	4.0	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Cobalt	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Copper	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Iron		**1660**	**ug/L**			**50.0**	50.0	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Magnesium		**77900**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Manganese		**76.6**	**ug/L**			**3.0**	3.0	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Nickel	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Potassium		**3010**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	12/8/2008	14:11:16	LEEMAN PS2	G12088W1	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Sodium		**22900**	**ug/L**			**1000**	1000	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P
Thallium	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Vanadium	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:26	SUPERTRACE2	A12090W	P
Zinc		**35.2**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:26**	SUPERTRACE2	A12090W	P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: North Tonawanda Water Works **SDG No.:** A08-F501 **Method Type:**

Sample ID: A8F50102 **Client ID:** NCR 3S

Matrix: WATER **Date Received:** 12/5/2008 **Date Collected:** 12/5/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B27275 **Prep Date:** 12/9/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Aluminum		**543**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Antimony	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Barium		**59.9**	**ug/L**			**2.0**	2.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Beryllium	<	2.0	ug/L	U		2.0	2.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Cadmium	<	1.0	ug/L	U		1.0	1.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Calcium		**184000**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Chromium		**16.8**	**ug/L**			**4.0**	4.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Cobalt	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Copper	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Iron		**1920**	**ug/L**			**50.0**	50.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Magnesium		**114000**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Manganese		**64.5**	**ug/L**			**3.0**	3.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Nickel		**14.2**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Potassium		**2720**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	12/8/2008	14:12:38	LEEMAN PS2	G12088W1	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Sodium		**15900**	**ug/L**			**1000**	1000	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P
Thallium	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Vanadium	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:31	SUPERTRACE2	A12090W	P
Zinc		**37.9**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:31**	SUPERTRACE2	A12090W	P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: North Tonawanda Water Works **SDG No.:** A08-F501 **Method Type:**

Sample ID: A8F50103 **Client ID:** NCR 4S

Matrix: WATER **Date Received:** 12/5/2008 **Date Collected:** 12/5/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B27275 **Prep Date:** 12/9/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Aluminum		**782**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Antimony	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Barium		**76.8**	**ug/L**			**2.0**	2.0	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Beryllium	<	2.0	ug/L	U		2.0	2.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Cadmium	<	1.0	ug/L	U		1.0	1.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Calcium		**154000**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Chromium	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Cobalt	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Copper	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Iron		**3190**	**ug/L**			**50.0**	50.0	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Magnesium		**49200**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Manganese		**215**	**ug/L**			**3.0**	3.0	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Nickel	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Potassium		**9210**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	12/8/2008	14:14:09	LEEMAN PS2	G12088W1	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Sodium		**31500**	**ug/L**			**1000**	1000	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P
Thallium	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Vanadium	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:36	SUPERTRACE2	A12090W	P
Zinc		**58.5**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:36**	SUPERTRACE2	A12090W	P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: North Tonawanda Water Works **SDG No.:** A08-F501 **Method Type:**

Sample ID: A8F50104 **Client ID:** NCR 5S

Matrix: WATER **Date Received:** 12/5/2008 **Date Collected:** 12/5/2008 **Level:** LOW

% Solids: **Sample Wt/Vol:** 50.0 **Final Vol:** 50.0

Prep Batch ID: A8B27275 **Prep Date:** 12/9/2008

Analyte		Concentration	Units	C	Qual	RL	RL	Dil	Analytical Date	Time	Instrument	Run	M
Aluminum		**2430**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Antimony	<	20.0	ug/L	U		20.0	20.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Barium		**113**	**ug/L**			**2.0**	2.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Beryllium	<	2.0	ug/L	U		2.0	2.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Cadmium	<	1.0	ug/L	U		1.0	1.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Calcium		**74700**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Chromium		**15.8**	**ug/L**			**4.0**	4.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Cobalt	<	4.0	ug/L	U		4.0	4.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Copper	<	10.0	ug/L	U		10.0	10.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Iron		**1540**	**ug/L**			**50.0**	50.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Lead	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Magnesium		**53700**	**ug/L**			**200**	200	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Manganese		**23.8**	**ug/L**			**3.0**	3.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Nickel		**13.0**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Potassium		**1270**	**ug/L**			**500**	500	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Selenium	<	15.0	ug/L	U		15.0	15.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Mercury	<	0.200	ug/L	U		0.200	0.200	1	12/8/2008	14:15:53	LEEMAN PS2	G12088W1	CV
Silver	<	3.0	ug/L	U		3.0	3.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Sodium		**49300**	**ug/L**			**1000**	1000	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P
Thallium	<	20.0	ug/L	U		20.0	20.0	1	12/10/2008	15:04	SUPERTRACE	1121008	P
Vanadium	<	5.0	ug/L	U		5.0	5.0	1	12/9/2008	16:53	SUPERTRACE2	A12090W	P
Zinc		**23.6**	**ug/L**			**10.0**	10.0	**1**	**12/9/2008**	**16:53**	SUPERTRACE2	A12090W	P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

NCR 5S/MS

Contract: NY01-078

Lab Code: TALBFLO Case No.: _____ SAS No.: _____ SDG NO.: A08-F501

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	10994.6400		2434.8602		10000.00	86		P
Antimony	75 - 125	221.4100		20.0000	U	200.00	111		P
Barium	75 - 125	294.4700		112.8400		200.00	91		P
Beryllium	75 - 125	211.4700		2.0000	U	200.00	106		P
Cadmium	75 - 125	210.6500		1.0000	U	200.00	105		P
Calcium		85551.4000		74741.1000		10000.00	108		P
Chromium	75 - 125	216.3800		15.7500		200.00	100		P
Cobalt	75 - 125	209.4300		4.0000	U	200.00	105		P
Copper	75 - 125	214.1900		10.0000	U	200.00	107		P
Iron	75 - 125	11217.2700		1537.4400		10000.00	97		P
Lead	75 - 125	213.0200		5.0000	U	200.00	107		P
Magnesium		64883.3600		53682.2800		10000.00	112		P
Manganese	75 - 125	223.1600		23.8300		200.00	100		P
Nickel	75 - 125	215.8200		12.9800		200.00	101		P
Potassium	75 - 125	11667.7900		1273.4800		10000.00	104		P
Selenium	75 - 125	219.5300		15.0000	U	200.00	110		P
Mercury	75 - 125	6.6667		0.2000	U	6.67	100		CV
Silver	75 - 125	50.1100		3.0000	U	50.00	100		P
Sodium		59767.4900		49326.0800		10000.00	104		P
Thallium	75 - 125	214.5300		20.0000	U	200.00	107		P
Vanadium	75 - 125	221.6800		5.0000	U	200.00	111		P
Zinc	75 - 125	225.3100		23.6500		200.00	101		P

Comments: _____

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

NCR 5S/SD

Contract: NY01-078

Lab Code: TALBFLO Case No.: SAS No.: SDG NO.: A08-F501

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	12626.0800		2434.8602		10000.00	102		P
Antimony	75 - 125	215.7500		20.0000	U	200.00	108		P
Barium	75 - 125	316.1000		112.8400		200.00	102		P
Beryllium	75 - 125	208.9200		2.0000	U	200.00	104		P
Cadmium	75 - 125	209.1900		1.0000	U	200.00	105		P
Calcium		86126.3400		74741.1000		10000.00	114		P
Chromium	75 - 125	226.5900		15.7500		200.00	105		P
Cobalt	75 - 125	207.7700		4.0000	U	200.00	104		P
Copper	75 - 125	213.2500		10.0000	U	200.00	107		P
Iron	75 - 125	11972.0000		1537.4400		10000.00	104		P
Lead	75 - 125	214.4600		5.0000	U	200.00	107		P
Magnesium		65370.6900		53682.2800		10000.00	117		P
Manganese	75 - 125	233.0100		23.8300		200.00	105		P
Nickel	75 - 125	218.5500		12.9800		200.00	103		P
Potassium	75 - 125	11965.7800		1273.4800		10000.00	107		P
Selenium	75 - 125	217.1900		15.0000	U	200.00	109		P
Mercury	75 - 125	6.2667		0.2000	U	6.67	94		CV
Silver	75 - 125	49.7800		3.0000	U	50.00	100		P
Sodium		60177.7100		49326.0800		10000.00	109		P
Thallium	75 - 125	210.0500		20.0000	U	200.00	105		P
Vanadium	75 - 125	220.1500		5.0000	U	200.00	110		P
Zinc	75 - 125	230.2300		23.6500		200.00	103		P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

NCR 5SA

Contract: NY01-078

Lab Code: TALBFLO Case No.: SAS No.: SDG NO.: A08-F501

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added(SA)	%R	Q	M
Aluminum	75 - 125	12986.71		2434.86		10000.0	106		P
Antimony	75 - 125	199.89		20.00	U	200.0	100		P
Barium	75 - 125	310.95		112.84		200.0	99		P
Beryllium	75 - 125	193.00		2.00	U	200.0	96		P
Cadmium	75 - 125	193.31		1.00	U	200.0	97		P
Calcium	75 - 125	82960.15		74741.10		10000.0	82		P
Chromium	75 - 125	210.72		15.75		200.0	97		P
Cobalt	75 - 125	192.23		4.00	U	200.0	96		P
Copper	75 - 125	198.82		10.00	U	200.0	99		P
Iron	75 - 125	11381.96		1537.44		10000.0	98		P
Lead	75 - 125	198.76		5.00	U	200.0	99		P
Magnesium	75 - 125	62549.13		53682.28		10000.0	89		P
Manganese	75 - 125	218.25		23.83		200.0	97		P
Nickel	75 - 125	203.17		12.98		200.0	95		P
Potassium	75 - 125	11635.39		1273.48		10000.0	104		P
Selenium	75 - 125	197.96		15.00	U	200.0	99		P
Silver	75 - 125	49.88		3.00	U	50.0	100		P
Sodium	75 - 125	58188.00		49326.08		10000.0	89		P
Thallium	75 - 125	195.21		20.00	U	200.0	98		P
Vanadium	75 - 125	204.21		5.00	U	200.0	102		P
Zinc	75 - 125	216.06		23.65		200.0	96		P

Comments:

TESTAMERICA LABORATORIES INC.

North Tonawanda Water Works
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DUPLICATES

SAMPLE NO.

NCR 5S/SD

Contract: NY01-078

Lab Code: TALBFLO Case No.: SAS No.: SDG NO.: A08-F501

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		10994.6400		12626.0800		14		P
Antimony		221.4100		215.7500		3		P
Barium		294.4700		316.1000		7		P
Beryllium		211.4700		208.9200		1		P
Cadmium		210.6500		209.1900		1		P
Calcium		85551.4000		86126.3400		1		P
Chromium		216.3800		226.5900		5		P
Cobalt		209.4300		207.7700		1		P
Copper		214.1900		213.2500		0		P
Iron		11217.2700		11972.0000		7		P
Lead		213.0200		214.4600		1		P
Magnesium		64883.3600		65370.6900		1		P
Manganese		223.1600		233.0100		4		P
Nickel		215.8200		218.5500		1		P
Potassium		11667.7900		11965.7800		3		P
Selenium		219.5300		217.1900		1		P
Mercury		6.6667		6.2667		6		CV
Silver		50.1100		49.7800		1		P
Sodium		59767.4900		60177.7100		1		P
Thallium		214.5300		210.0500		2		P
Vanadium		221.6800		220.1500		1		P
Zinc		225.3100		230.2300		2		P

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
ICB	Thallium	20.000	U	20.000	20.000	P	12/10/2008	12:33	SUPERTRACE	1121008
CCB	Thallium	20.000	U	20.000	20.000	P	12/10/2008	13:11	SUPERTRACE	1121008
CCB	Thallium	20.000	U	20.000	20.000	P	12/10/2008	14:19	SUPERTRACE	1121008
CCB	Thallium	20.000	U	20.000	20.000	P	12/10/2008	15:27	SUPERTRACE	1121008
CCB	Thallium	20.000	U	20.000	20.000	P	12/10/2008	16:44	SUPERTRACE	1121008

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
ICB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Thallium	20.000	U	20.000	20.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	12:59	SUPERTRACE2	A12090W

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Thallium	20.000	U	20.000	20.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	13:25	SUPERTRACE2	A12090W

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Thallium	20.000	U	20.000	20.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	14:26	SUPERTRACE2	A12090W

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Thallium	20.000	U	20.000	20.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	15:42	SUPERTRACE2	A12090W

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Thallium	20.000	U	20.000	20.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	16:48	SUPERTRACE2	A12090W

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB										
	Aluminum	200.000	U	200.000	200.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Antimony	20.000	U	20.000	20.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Barium	2.000	U	2.000	2.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Beryllium	2.000	U	2.000	2.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Cadmium	1.000	U	1.000	1.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Calcium	500.000	U	500.000	500.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Chromium	4.000	U	4.000	4.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Cobalt	4.000	U	4.000	4.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Copper	10.000	U	10.000	10.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Iron	50.000	U	50.000	50.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Lead	5.000	U	5.000	5.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Magnesium	200.000	U	200.000	200.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Manganese	3.000	U	3.000	3.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Nickel	10.000	U	10.000	10.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Potassium	500.000	U	500.000	500.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Selenium	15.000	U	15.000	15.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Silver	3.000	U	3.000	3.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Sodium	1000.000	U	1000.000	1000.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Thallium	20.960		20.000	20.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Vanadium	5.000	U	5.000	5.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
	Zinc	10.000	U	10.000	10.000	P	12/9/2008	17:49	SUPERTRACE2	A12090W
ICB										
	Mercury	0.120	U	0.120	0.120	CV	12/8/2008	13:36	LEEMAN PS20	G12088W1
CCB										
	Mercury	0.120	U	0.120	0.120	CV	12/8/2008	13:41	LEEMAN PS20	G12088W1
CCB										
	Mercury	0.120	U	0.120	0.120	CV	12/8/2008	14:02	LEEMAN PS20	G12088W1
CCB										
	Mercury	0.120	U	0.120	0.120	CV	12/8/2008	14:28	LEEMAN PS20	G12088W1

North Tonawanda Water Works

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: North Tonawanda Water Works SDG No.: A08-F501

Contract: NY01-078 Lab Code: TALBFLO Case No.: SAS No.:

Sample ID	Analyte	Result ug/L	Conc Qual	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
CCB	Mercury	0.120	U	0.120	0.120	CV	12/8/2008	14:42	LEEMAN PS20	G12088W1

North Tonawanda Water Works
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PREPARATION BLANK SUMMARY

Client: North Tonawanda Water Works **SDG No.:** A08-F501

Contract: NY01-078 **Lab Code:** TALBFLO **Case No.:** **SAS No.:**

Sample ID	Analyte	Result (ug/L)	Conc Qual	Q	RL	RL	M	Analysis Date	Analysis Time	Instrument	Run
AD871979-12/08/08			**WATER**								
	Mercury	0.200	U		0.200	0.200	CV	12/8/2008	14:35	LEEMAN PS20	G12088W1
AD872135-12/09/08			**WATER**								
	Aluminum	200.000	U		200.000	200.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Antimony	20.000	U		20.000	20.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Barium	2.000	U		2.000	2.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Beryllium	2.000	U		2.000	2.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Cadmium	1.000	U		1.000	1.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Calcium	500.000	U		500.000	500.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Chromium	4.000	U		4.000	4.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Cobalt	4.000	U		4.000	4.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Copper	10.000	U		10.000	10.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Iron	50.000	U		50.000	50.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Lead	5.000	U		5.000	5.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Magnesium	200.000	U		200.000	200.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Manganese	3.000	U		3.000	3.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Nickel	10.000	U		10.000	10.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Potassium	500.000	U		500.000	500.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Selenium	15.000	U		15.000	15.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Silver	3.000	U		3.000	3.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Sodium	1000.000	U		1000.000	1000.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Thallium	20.000	U		20.000	20.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Vanadium	5.000	U		5.000	5.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W
	Zinc	10.000	U		10.000	10.000	P	12/9/2008	15:11	SUPERTRACE2	A12090W

Sample Data Package

SDG Narrative

SAMPLE SUMMARY

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	SAMPLED DATE	SAMPLED TIME	RECEIVED DATE	RECEIVED TIME
A8F50105	FIELD DUP#1	GW	12/05/2008	00:00	12/05/2008	12:46
A8F50101	NCR 13S	GW	12/05/2008	10:35	12/05/2008	12:46
A8F50102	NCR 3S	GW	12/05/2008	09:50	12/05/2008	12:46
A8F50103	NCR 4S	GW	12/05/2008	09:15	12/05/2008	12:46
A8F50104	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46
A8F50104MS	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46
A8F50104SD	NCR 5S	GW	12/05/2008	11:30	12/05/2008	12:46

METHODS SUMMARY

Job#: A08-F501

Project#: NY1A8791
Site Name: City of North Tonawanda

PARAMETER	ANALYTICAL METHOD
Aluminum - Total	SW8463 6010
Antimony - Total	SW8463 6010
Barium - Total	SW8463 6010
Beryllium - Total	SW8463 6010
Cadmium - Total	SW8463 6010
Calcium - Total	SW8463 6010
Chromium - Total	SW8463 6010
Cobalt - Total	SW8463 6010
Copper - Total	SW8463 6010
Iron - Total	SW8463 6010
Lead - Total	SW8463 6010
Magnesium - Total	SW8463 6010
Manganese - Total	SW8463 6010
Mercury - Total	SW8463 7470
Nickel - Total	SW8463 6010
Potassium - Total	SW8463 6010
Selenium - Total	SW8463 6010
Silver - Total	SW8463 6010
Sodium - Total	SW8463 6010
Thallium - Total	SW8463 6010
Vanadium - Total	SW8463 6010
Zinc - Total	SW8463 6010

References:

SW8463 "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846), Third Edition, 9/86; Update I, 7/92; Update IIA, 8/93; Update II, 9/94; Update IIB, 1/95; Update III, 12/96.

SDG NARRATIVE

Job#: A08-F501

Project#: NY1A8791
Site Name: City of North Tonawanda

General Comments

The enclosed data may or may not have been reported utilizing data qualifiers (Q) as defined on the Data Comment Page.

Soil, sediment and sludge sample results are reported on "dry weight" basis unless otherwise noted in this data package.

According to 40CFR Part 136.3, pH, Chlorine Residual, Dissolved Oxygen, Sulfite, and Temperature analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH-Field), they were not analyzed immediately, but as soon as possible after laboratory receipt.

Sample dilutions were performed as indicated on the attached Dilution Log. The rationale for dilution is specified by the 3-digit code and definition.

Sample Receipt Comments

A08-F501
Sample Cooler(s) were received at the following temperature(s); 6.0 °C
All samples were received in good condition.

Metals Data

The CCV, analyzed at 17:44, exhibited a result above the quality control limits for Thallium. However, the samples were bracketed by compliant CCV's, therefore, no corrective action was necessary.

The CCB, analyzed at 17:49, exhibited a result above the detection limit for Thallium. However, the samples were bracketed by compliant CCB's, therefore, no corrective action was necessary.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this Sample Data package and in the electronic data deliverables has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature."

Amy Lynn Haag
Project Manager

12/19/08
Date

Chain of Custody Documentation

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☑

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
North Tonawanda Waste Water	Bill Davignon		121941
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
River Rd	(716) 695-8560		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
North Tonawanda / NY / 14120	Rick Becken	Amy Haag	
Project Name and Location (State)	**Carrier/Waybill Number**		
Niagara County Refuse Site	O+M Enterprises Inc.		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: T. Metals	Special Instructions/ Conditions of Receipt
NCR-3S	12/5/08	0950		X					X				X	
NCR-4S		0915		X					X				X	
NCR-5S		1130		X					X				X	
NCR-13S		1035		X					X				X	
NCR-5S MS		1130		X					X				X	
NCR-5S MSD		1130		X					X				X	
Field Dup #1		—		X					X				X	

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

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

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☑ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Richard C Becken			1. Received By	12/5/08	1246
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 6.0°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

37/491

NIAGARA COUNTY REFUSE SITE

GROUNDWATER PURGING AND SAMPLING EQUIPMENT AND SUPPLY CHECKLIST

EQUIPMENT:

- [x] Generator
- [x] Tubing (air and water discharge)
- [x] Clamps
- [x] Container(s) for purge water
- [x] Air compressor and air hose with connectors
- [x] Pump control box
- [x] Compression fittings for tubing
- [x] Small pipe clamps

SUPPLIES:

- [x] Gasoline can/gas
- [x] Polypropylene rope
- [x] Aluminum foil
- [x] Paper towels
- [x] Meter calibration solution(s)
- [x] Decontamination fluids:
  - [ ] Deionized water, non-phosphate soap, tap water
  - [ ] 10% Nitric acid (ultrapure)
  - [ ] Methanol and hexane (pesticide grade or better)
- [x] Sample jars (extra)
- [x] Sample jar labels
- [x] Cooler(s)/ice packs/packing materials
- [x] Trash bags
- [x] Plastic spray bottles
- [x] Plastic basin or pan
- [x] Polyethylene sheeting
- [x] Scrub brush
- [x] Abrasive pads (sponge type pads)
- [x] Shallow tubs/buckets
- [x] Calibrated container
- [x] Watch

INSTRUMENTS:

- [x] Water level indicator
- [x] Thermometer *
- [x] pH meter *
- [x] Conductivity probe*
- [x] Turbidity meter (Nephlometer)

* - or combination pH/cond/temp meter

PERSONAL PROTECTIVE EQUIPMENT:

- [x] Tyveks (assorted sizes and types)
- [x] Nitrile gloves
- [x] Work boots
- [x] Work gloves (cotton and chemical resistant)
- [x] Safety glasses/or side shields on OSHA-approved prescription lenses
- [x] First-aid kit

DOCUMENTATION

- [x] Chain-of-Custody forms
- [x] Well logs
- [x] FP-3C, FP-4, and FP-5
- [ ] Courier manifests
- [x] Previous well logs/ previous historical well data
- [ ] Site map
- [ ] OM&M Manual

MISCELLANEOUS:

- [ ] Well cap keys and Site access keys
- [ ] Bolt cutters
- [ ] Knife
- [ ] Spare batteries for instruments
- [ ] Lock de-icer (winter)
- [x] Reinforced packing tape
- [x] Custody seal tape
- [x] Pen/pencil/indelible marking pen
- [x] Tool box
- [x] Spare locks/keys

Completed by: Richard C. Baker *Date:* 12/4/08

GROUNDWATER SAMPLING • SAMPLE COLLECTION DATA SHEET

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

SAMPLING CREW MEMBERS: Richard C. Becken

DATE OF SAMPLE COLLECTION: 1 2 0 5 0 3
(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	0.4437	~.45	0950	annual monitoring well	T. Metals	121941	NA
NCR 4S	NCR 4S	0.345	~.35	0915	annual monitoring well	T. Metals		NA
NCR 5S	NCR 5S	0.836	~2.0	1130	annual monitoring well	T. Metals		NA
NCR 13S	NCR 13S	0.539	~1.2	1035	annual monitoring well	T. Metals		NA
NCR 5S	(MS/MSD) *			1130	annual monitoring well	T Metals		NA
Field Dup #1	(Duplicate) * NCR 13S			1035	annual monitoring well	T. Metals		NA
	(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

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 12/04/08 (MM DD YY)

CREW MEMBERS: RC Becker

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR 55

ONE WELL VOLUME: 0.836 gallons

FIVE WELL VOLUMES: 4.18 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)	~1 gal	~2 gal				
pH	7.85	7.65				
TEMPERATURE	44.9	45				
CONDUCTIVITY	0.93	0.88				
TURBIDITY	750	1000+				
COLOR	cloudy	cloudy				
ODOR	none	none				
COMMENTS		well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/08 — DATE

Richard C Becker — PRINT NAME

Richard C Becker — SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 12/04/08 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-45

ONE WELL VOLUME: .345 gallons

FIVE WELL VOLUMES: 1.725 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)	~.35					
pH	7.74					
TEMPERATURE	40.9					
CONDUCTIVITY	1.09					
TURBIDITY	1000+					
COLOR	dark					
ODOR	none					
COMMENTS	well dry					

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/08 Richard C Becken

DATE PRINT NAME SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 12/04/08 (MM DD YY)

CREW MEMBERS: RC Backer

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR-35

ONE WELL VOLUME: 0.4437 gallons

FIVE WELL VOLUMES: 2.219 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)	~ 0.45					
pH	7.39					
TEMPERATURE	42.9					
CONDUCTIVITY	1.55					
TURBIDITY	180					
COLOR	cloudy					
ODOR	none					
COMMENTS	well dry					

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/08 — DATE

Richard C Backer — PRINT NAME

Richard C Backer — SIGNATURE

FP-4C

WELL PURGING INFORMATION

SITE/PROJECT NAME: Niagara County Refuse Site

DATE: 12/04/08 (MM DD YY)

CREW MEMBERS: RC Becken

PURGING METHOD: Dedicated Bladder Pump

WELL NUMBER: NCR 13S

ONE WELL VOLUME: 0.539 gallons

FIVE WELL VOLUMES: 2.7 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)	~.6	~1.2				
pH	7.12	7.12				
TEMPERATURE	41.3	42.3				
CONDUCTIVITY	1.38	1.48				
TURBIDITY	210	380				
COLOR	cloudy	cloudy				
ODOR	none	none				
COMMENTS		well dry				

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE PROTOCOLS

12/4/08 — DATE

Richard C Becken — PRINT NAME

Richard C Becken — SIGNATURE

FP-4C

APPENDIX D

DATA VALIDATION REPORT

DATA USABILITY SUMMARY REPORT
FOR
NIAGARA COUNTY REFUSE SITE

Prepared By:

PARSONS

290 Elwood Davis Road, Suite 312
Liverpool, New York 13088
Phone: (315) 451-9560
Fax: (315) 451-9570

FEBRUARY 2009

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LIST OF TABLES

LIST OF ATTACHMENTS

SECTION 1

DATA USABILITY SUMMARY

Groundwater samples were collected from the Niagara County Refuse site in North Tonawanda, New York on December 5, 2008. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan, and
- USEPA Region II Standard Operating Procedures (SOPs).

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 New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

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 20 days on average 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 metals. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method 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,

"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 Metals Analysis

Groundwater samples collected from the site were analyzed for target analyte list metals using the USEPA SW-846 6010B/7470A analytical methods. Certain metals results were considered estimated due to noncompliant field duplicate precision. All of the metals data were considered usable and 100% complete for the groundwater data presented by TAL. PARCC 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 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 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)
- Matrix spike recoveries
- Laboratory duplicate precision
- Laboratory control sample
- 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 field duplicate precision.

Field Duplicate Precision

All field duplicate results were considered acceptable for sample NCR-13S and its field duplicate sample FIELD DUP #1 with the exception of the precision (relative

percent difference; RPD) measurement for chromium (91%RPD), iron (53%RPD), and zinc (79%RPD) as well as the results for cadmium (nondetect and 1.6 µg/L), nickel (nondetect and 14 µg/L), and copper (10 µg/L and nondetect). These analytes were considered estimated for this field duplicate pair with positive results qualified "J" and nondetected results qualified "UJ".

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, and comparability. 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	METALS
NCR-3S	Water	1/11/08	OK
NCR-4S	Water	1/11/08	OK
NCR-5S	Water	1/11/08	OK
NCR-13S	Water	1/11/08	OK
FIELD DUP #1	Water	1/11/08	OK
	TOTAL SAMPLES:		5

NOTES: OK - Sample analysis considered valid and usable.

ATTACHMENT A

VALIDATED LABORATORY DATA

							Dup of NCR-13S
City of North Tonawanda WWTP		Sample ID:	NCR-3S	NCR-4S	NCR-5S	NCR-13S	FIELD DUP #1
830 River Road		Lab Sample Id:	A8F50102	A8F50103	A8F50104	A8F50101	A8F50105
North Tonawanda, NY		Source:	TAL-Buffalo	TAL-Buffalo	TAL-Buffalo	TAL-Buffalo	TAL-Buffalo
C/O Niagara County Refuse Site		SDG:	A08-F501	A08-F501	A08-F501	A08-F501	A08-F501
Validated Groundwater Sampling Event		Matrix:	WATER	WATER	WATER	WATER	WATER
December 2008		Sampled:	12/5/2008	12/5/2008	12/5/2008	12/5/2008	12/5/2008
		Validated:	1/12/2009	1/12/2009	1/12/2009	1/12/2009	1/12/2009
CAS NO.	COMPOUND	UNITS:					
	METALS						
7429-90-5	Aluminum	ug/L	543	782	2430	902	1280
7440-36-0	Antimony	ug/L	20 U	20 U	20 U	20 U	20 U
7440-39-3	Barium	ug/L	59.9	76.8	113	84.9	88.1
7440-41-7	Beryllium	ug/L	2 U	2 U	2 U	2 U	2 U
7440-43-9	Cadmium	ug/L	1 U	1 U	1 U	1 UJ	1.6 J
7440-70-2	Calcium	ug/L	184000	154000	74700	207000	210000
7440-47-3	Chromium	ug/L	16.8	4 U	15.8	5.8 J	15.4 J
7440-48-4	Cobalt	ug/L	4 U	4 U	4 U	4 U	4 U
7440-50-8	Copper	ug/L	10 U	10 U	10 U	10 J	10 UJ
7439-89-6	Iron	ug/L	1920	3190	1540	1660 J	2860 J
7439-92-1	Lead	ug/L	5 U	5 U	5 U	5 U	5 U
7439-95-4	Magnesium	ug/L	114000	49200	53700	77900	78000
7439-96-5	Manganese	ug/L	64.5	215	23.8	76.6	84.3
7440-02-0	Nickel	ug/L	14.2	10 U	13	10 UJ	14 J
7440-09-7	Potassium	ug/L	2720	9210	1270	3010	3130
7782-49-2	Selenium	ug/L	15 U	15 U	15 U	15 U	15 U
7440-22-4	Silver	ug/L	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
7439-97-6	Mercury	ug/L	3 U	3 U	3 U	3 U	3 U
7440-23-5	Sodium	ug/L	15900	31500	49300	22900	22800
7440-28-0	Thallium	ug/L	20 U	20 U	20 U	20 U	20 U
7440-62-2	Vanadium	ug/L	5 U	5 U	5 U	5 U	5 U
7440-66-6	Zinc	ug/L	37.9	58.5	23.6	35.2 J	81.5 J

APPENDIX E
MONTHLY INSPECTION LOGS

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 10|10|4|0|8 (MM DD YY)

INSPECTOR(S): RC Belker

	Item	*Inspect For*	*Action Required*	*Comments*
1.	**Perimeter Collection System/Off-Site Forcemain**			
☐	Manholes	- cover on securely	OK	
☐		- condition of cover	good	
☐		- condition of inside of manhole	good	
☐		- flow conditions	no apparent flow	
☐	Wet Wells	- cover on securely	OK	
☐		- condition of cover	good	
☐		- condition of inside of wet well	good	
2.	**Landfill Cap**			
☐	Vegetated Soil Cover	- erosion	none	
☐		- bare areas	none	
☐		- washouts	none	
☐		- leachate seeps	none	
☐		- length of vegetation	short snow covered	
☐		- dead/dying vegetation	winter kill	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 01/04/18 (MM DD YY)

INSPECTOR(S): RC Baker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 10|11|6|4|0|1|8| (MM DD YY)

INSPECTOR(S): RC Baker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 02/08/08 (MM DD YY)

INSPECTOR(S): RC Becker

	Item	Inspect For	Action Required	Comments
1.	**Perimeter Collection System/Off-Site Forcemain**			
☐	Manholes	- cover on securely	yes	
☐		- condition of cover	good	
☐		- condition of inside of manhole	good	
☐		- flow conditions	OK	
☐	Wet Wells	- cover on securely	yes	
☐		- condition of cover	good	
☐		- condition of inside of wet well	good	
2.	**Landfill Cap**			
☐	Vegetated Soil Cover	- erosion	none snow covered	
☐		- bare areas	none " "	
☐		- washouts	none	
☐		- leachate seeps	none	
☐		- length of vegetation	short snow covered	
☐		- dead/dying vegetation	winter kill	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 02/08/08 (MM DD YY)

INSPECTOR(S): RC Bolton

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

FORM 1

CRA 5723 (17)

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 01/08/18 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 03/07/08 (MM DD YY)

INSPECTOR(S): RC Bocken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 03/07/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 10/30/98 (MM DD YY)

INSPECTOR(S): R C Bolton

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 04/04/08 (MM DD YY)

INSPECTOR(S): RC Bolan

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 04/04/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 01/01/18 (MM DD YY)

INSPECTOR(S): RC Barker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 05/09/08 (MM DD YY)

INSPECTOR(S): RC Becker

Item	Inspect For	Action Required	Comments
1.	**Perimeter Collection System/Off-Site Forcemain**		
☐	Manholes - cover on securely	OK	
	- condition of cover	OK	
	- condition of inside of manhole	OK	
	- flow conditions	OK	
☐	Wet Wells - cover on securely	OK	
	- condition of cover	OK	
	- condition of inside of wet well	OK	
2.	**Landfill Cap**		
☐	Vegetated Soil Cover - erosion	none	
	- bare areas	none	
	- washouts	none	
	- leachate seeps	none	
	- length of vegetation	growing	
	- dead/dying vegetation	none	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 05/31/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 05/15/08 (MM DD YY)

INSPECTOR(S): RC Rocker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 6/6/05/08 (MM DD YY)

INSPECTOR(S): Richard C Bork

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 06/05/08 (MM DD YY)

INSPECTOR(S): Richard C Rocker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 6 | 6 | 9 | 5 | 0 | 1 | 8 | (MM DD YY)

INSPECTOR(S): Richard C Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 07/16/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 07/10/08 (MM DD YY)

INSPECTOR(S): RC Becker

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
☐ Access Roads	- bare areas, dead/dying veg.	none	
☐	- erosion	none	
☐	- potholes or puddles	none	
☐	- obstruction	none	
3. Wetlands (Area "F")	- dead/dying vegetation	NO	
	- change in water budget	normal	
	- general condition of wetlands	good	
4. Other Site Systems			
☐ Perimeter Fence	- integrity of fence	fence cut west side of landfill	repaired
☐	- integrity of gates	lock + chain cut off of gate on east side	replaced
☐	- integrity of locks	see above	
☐	- placement and condition of signs	good	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 07/16/08 (MM DD YY)

INSPECTOR(S): RC Beck

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 08/07/08 (MM DD YY)

INSPECTOR(S): R.C Bolken

	Item	*Inspect For*	*Action Required*	*Comments*
1.	**Perimeter Collection System/Off-Site Forcemain**			
☐	Manholes	- cover on securely	yes	
☐		- condition of cover	good	
☐		- condition of inside of manhole	good	
☐		- flow conditions	no apparent flow	
☐	Wet Wells	- cover on securely	yes	
☐		- condition of cover	Good	
☐		- condition of inside of wet well	good	
2.	**Landfill Cap**			
☐	Vegetated Soil Cover	- erosion	none	
☐		- bare areas	none	
☐		- washouts	none	
☐		- leachate seeps	none	
☐		- length of vegetation	high (extremely)	
☐		- dead/dying vegetation	none	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 08/07/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 08/07/18 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 09/11/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 09/1/08 (MM DD YY)

INSPECTOR(S): RC Backen

Item	Inspect For	Action Required	Comments
2. Landfill Cap (continued)			
☐ Access Roads	- bare areas, dead/dying veg.	no	
☐	- erosion	none	
☐	- potholes or puddles	none	
☐	- obstruction	none	
3. Wetlands (Area "F")	- dead/dying vegetation	none	
	- change in water budget	low water	
	- general condition of wetlands	good	
4. Other Site Systems			
☐ Perimeter Fence	- integrity of fence	found cut in fence	will repair
☐	- integrity of gates	good	
☐	- integrity of locks	good	
☐	- placement and condition of signs	good	

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MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 09/11/08 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 11/09/08 (MM DD YY)

INSPECTOR(S): RC Bocken

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

INSPECTOR(S): R C Baker

DATE: 1/6/99/6/8 (MM DD YY)

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 10/07/08 (MM DD YY)

INSPECTOR(S): RC Baker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 11/03/08

INSPECTOR(S): Richard C. Becken

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

Location: Wheatfield, New York

DATE: 11/03/08

INSPECTOR(S): Richard C. Becken

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

Date: 11/03/08

INSPECTOR(S): Richard C. Becken

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

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 12/05/98 (MM DD YY)

INSPECTOR(S): RC Becker

	Item	*Inspect For*	*Action Required*	*Comments*
1.	**Perimeter Collection System/Off-Site Forcemain**			
☐	Manholes	- cover on securely	yes	
☐		- condition of cover	good	
☐		- condition of inside of manhole	good	
☐		- flow conditions	good	
☐	Wet Wells	- cover on securely	yes	
☐		- condition of cover	good	
☐		- condition of inside of wet well	good	
2.	**Landfill Cap**			
☐	Vegetated Soil Cover	- erosion	no	
☐		- bare areas	no	
☐		- washouts	no	
☐		- leachate seeps	no	
☐		- length of vegetation	short	
☐		- dead/dying vegetation	winter kill	

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 12/05/98 (MM DD YY)

INSPECTOR(S): RC Becker

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

FORM 1

MONTHLY INSPECTION LOG

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 12/5/08 (MM DD YY)

INSPECTOR(S): RC Baker

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

FORM 1

Wetland area with wetwell C in foreground, facing northwest.

Wetland area with wetwell C in foreground, facing northeast.

APPENDIX F
MAINTENANCE RECORD LOGS

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 03/10/08 (MM DD YY)

Time: 1600 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: freed stuck float switch in LWD

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

float switch stuck in well

Description of Material Removed:

none

Problems/Comments:

none

3/10/08 RC Becker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 03/31/08 (MM DD YY)

Time: 1100 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: replace pump in WWD

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr
North Tonawanda, NY 14120

Contact Name: RC Becker

3. Methods Used:

removed Grundfos pump from WWA cleaned and installed same pump in WWD. Install new Grundfos pump in WWA

Description of Material Removed:

none

Problems/Comments:

none

3/31/08 RC Becker RC Becker

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Barker

1. Date: 06 05 08 (MM DD YY)

Time: 1200 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: paint monitoring wells

2. Company Performing Maintenance

Name: O+M Enterprises, Inc.

Address: 7134 Marigold Dr.

North Tonawanda, NY

Contact Name: Rick Barker

3. Methods Used:

painted wells

Description of Material Removed:

none

Problems/Comments:

~~none~~ none

6/05/08 Richard C Barker Richard C Barker

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Barker

1. Date: 0|6|0|6|0|8 (MM DD YY)

Time: 1|0|3|0 (HH mm)

Scheduled/Unscheduled: Scheduled

Type of Maintenance Performed: mow grass around gates + fence line

2. Company Performing Maintenance

Name: O+M Enterprises Inc

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: RC Barker

3. Methods Used:

Tractor mounted mower

Description of Material Removed:

none

Problems/Comments:

none

6/06/08 Richard C Barker Richard C Barker

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 06 08 08 (MM DD YY)

Time: 2010 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: pump float switch tangled Wet Well D

2. Company Performing Maintenance

Name: O+M Enterprises Inc

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Richard Becker

3. Methods Used:

untangle float switch

Description of Material Removed:

none

Problems/Comments:

none

6/8/08 Richard C Becker [signature]
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Backen

1. Date: 06/21/08 (MM DD YY)

Time: 1630 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: tangled float switch Wet Well A

2. Company Performing Maintenance

Name: O+M Enterprises Inc

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Backen

3. Methods Used:

untangle float switch

Description of Material Removed:

none

Problems/Comments:

none

6/21/08 Richard C Backen Richard C Backen

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Beckan

1 Date: 07/11/08 (MM DD YY)

Time: 0930 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: remove clean + inspect pumps

2 Company Performing Maintenance

Name: O+M Enterprises Inc

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Beckan

3 Methods Used:

pulled pumps cleaned, checked and reinstalled in wells
Wet Well B + Wet Well D

Description of Material Removed:

none

Problems/Comments:

none

7/11/08 DATE

Richard Beckan INSPECTOR

INSPECTOR'S SIGNATURE

FORM 2

PAGE 1 OF

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date: 0 7 1 0 0 8 (MM DD YY)

Time: 1 1 0 0 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: repair fence + gate

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Becken

3. Methods Used:

Repaired section of fence which had been cut on the west side of the landfill, replaced lock + chain on the gate on the east side of the landfill at the end of Warner Ave.

Description of Material Removed:

none

Problems/Comments:

called Niagara County Sheriff's Dept., Deputy Melleville on site to make out report. Complaint # 32185

7/10/08 Richard C Becken
DATE INSPECTOR

INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Beken

1. Date: 07/31/08 (MM DD YY)

Time: 1160 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: mow grass

2. Company Performing Maintenance

Name: O+M Enterprises Inc

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Rick Beken

3. Methods Used:

mowed grass around fence perimeter for security reasons.
mowed pathway to each well to help prevent tick problems.

Description of Material Removed:

none

Problems/Comments:

heavy grass / heavy rainfall

7/31/08 Richard Beken Richard C Beken
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becken

1. Date: 0 8 2 5 0 8 (MM DD YY)

Time: 1 5 3 0 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: repair section of force main pipe in WWC

2. Company Performing Maintenance

Name: O+M Enterprises

Address: 7134 Marigold Dr.
North Tonawanda, NY

Contact Name: Rick Becken

3. Methods Used:

turn off well pump lockout/tagout, remove short section of pipe that was corroded, replace with new section of pipe

Description of Material Removed:

short section of 2" steel pipe

Problems/Comments:

none

8/25/08 RC Becken Rick C Becken

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 09/06/08 (MM DD YY)

Time: 0930 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: Mowing grass

2. Company Performing Maintenance

Name: O+M

Address: 7134 Municipal Dr.
North Tonawanda, NY

Contact Name: Rick Becker

3. Methods Used:

tractor with mower

Description of Material Removed:

none

Problems/Comments:

none

9/06/08 RC Becker RC Becker

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 0|9|1|0|0|8 (MM DD YY)

Time: 0|9|3|0 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: Mowing grass

2. Company Performing Maintenance

Name: O+M

Address: 7134 Meridian Dr.
North Tonawanda, NY

Contact Name: Rick Becker

3. Methods Used:

tractor with mower

Description of Material Removed:

none

Problems/Comments:

none

9/10/08 RC Becker RC Becker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 09/11/08 (MM DD YY)

Time: 0930 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: Mowing grass

2. Company Performing Maintenance

Name: O+M

Address: 7134 Meridian Dr.
North Tonawanda, NY

Contact Name: Rick Becker

3. Methods Used:

tractor with mower

Description of Material Removed:

none

Problems/Comments:

none

9/11/08 RC Becker RC Becker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 0|9|1|3|0|8 (MM DD YY)

Time: 0|9|3|0 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: Mowing grass

2. Company Performing Maintenance

Name: O+M

Address: 7134 Municipal Dr.
North Tonawanda, NY

Contact Name: Rick Becker

3. Methods Used:

tractor with mower

Description of Material Removed:

none

Problems/Comments:

none

9/13/08	RC Becker	RC Becker
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 09 | 18 | 08 (MM DD YY)

Time: 0900 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: repair fence east side of landfill

2. Company Performing Maintenance

Name: O+M Enterprises

Address: 7134 Marigold Dr.
North Tonawanda, NY

Contact Name: Rick Becker

3. Methods Used:

added new section of fence

Description of Material Removed:

none

Problems/Comments:

none

9/18/08 RC Becker Richard C Becker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Backer

1. Date: 09/18/08 (MM DD YY)

Time: 0900 (HH mm)

Scheduled/Unscheduled:

Type of Maintenance Performed: replace security light on south side of control shed

2. Company Performing Maintenance

Name: D+W Enterprises

Address: 7134 Marigold Dr.
North Tonawanda, NY

Contact Name: Rick Backer

3. Methods Used:

removed broken light replaced with new security light

Description of Material Removed:

old light

Problems/Comments:

None

9/18/08	RC Backer	
DATE	INSPECTOR	INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Bolton

1. Date: 10/09/08 (MM DD YY)

Time: 1300 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: repair fence

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr.
North Tonawanda, NY

Contact Name: Rick Bolton

3. Methods Used:

used tractor to straighten two fence post that someone backed into and bent

Description of Material Removed:

none

Problems/Comments:

none

10/9/08 RC Bolton
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 10/9/08 (MM DD YY)

Time: 1200 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: clean up tree damage

2. Company Performing Maintenance

Name: O+M Ent.

Address: 7134 Marigold Dr.
N. Tonawanda, NY 14120

Contact Name: Rick Becker

3. Methods Used:

cleaned up tree blown over by wind

Description of Material Removed:

none

Problems/Comments:

none

10/9/08 Richard C Becker Richard C Becker

DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Barker

1. Date: 1 6 1 9 0 8 (MM DD YY)

Time: 0 9 4 5 (HH mm)

Scheduled/Unscheduled: unscheduled

Type of Maintenance Performed: High level LWA

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Richard Barker

3. Methods Used:

Pump float switch for the on set point was stuck, lifted plastic conduit with floats attached out of well and the replaced

Description of Material Removed:

none

Problems/Comments:

none

10/20/08 Richard C Barker Richard C Barker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

MAINTENANCE RECORD LOG

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

CREW MEMBERS: RC Becker

1. Date: 11/21/08 (MM DD YY)

Time: 1000 (HH mm)

Scheduled/Unscheduled: scheduled

Type of Maintenance Performed: replace pump + motor in WLSD

2. Company Performing Maintenance

Name: O+M Enterprises Inc.

Address: 7134 Marigold Dr.
North Tonawanda, NY 14120

Contact Name: Richard C Baker

3. Methods Used:

pulled old pump + motor, replaced with new pump + motor

Description of Material Removed:

old pump + motor

Problems/Comments:

none

11/21/08 Richard C Baker
DATE INSPECTOR INSPECTOR'S SIGNATURE

FORM 2

CRA 5723 (17)

APPENDIX G
WATER LEVEL RECORDS

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 10/04/98 (M M D D Y Y)

CREW MEMBERS: R C B. L

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1440	598.93	25.31	573.62
EAST "B"	1425	596.23	19.95	576.28
EAST "C"	1410	598.69	20.3	578.39
EAST "D"	1400	593.20	15.15	578.05
NCR-3S	1340	579.60	3.46	576.14
NCR-4S	1300	591.88	3.06	588.82
NCR-5S	1200	597.34	10.8	586.54
NCR-13S	1225	593.13	4.64	588.49

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	1215		~12"
WW B	1310		~10"
WW C	1370		~12"
WW D	1245		~13"

Total System Flow	Time of Measurement
3944830	1215

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 10|2|0|8|0|8| (M M D D Y Y)

CREW MEMBERS: RC Bocko

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	25.22	573.71
EAST "B"	12:40	596.23	19.65	576.58
EAST "C"	12:25	598.69	19.97	578.72
EAST "D"	12:10	593.20	14.66	578.54
NCR-3S	11:35	579.60	3.29	576.31
NCR-4S	11:50	591.88	2.82	589.06
NCR-5S	11:10	597.34	6.26	591.08
NCR-13S	10:30	593.13	4.3	588.83

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	10:20		~10"
WW B	11:58		~11"
WW C	11:25		~10"
WW D	10:50		~12"

Total System Flow	Time of Measurement
40170550	10:20

FORM 16

WATER LEVEL RECORD

PROJECT NAME: Niagara County Refuse Site

LOCATION: Wheatfield, New York

DATE: 03 / 17 / 08 (MM DD YY)

CREW MEMBERS: Richard C. 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"	13:10	598.93	25.27	573.66
East "B"	13:00	596.23	19.9	576.33
East "C"	12:45	598.69	20.26	578.43
East "D"	12:40	593.20	14.89	578.31
NCR-3S	12:00	579.60	3.56	576.04
NCR-4S	11:25	591.88	2.89	588.99
NCR-5S	12:25	597.34	7.11	590.23
NCR-13S	10:58	593.13	4.74	588.39

Wet Wells

		depth of water		
WWA	10:45	~13"		
WWB	11:40	~12"		
WWC	12:10	~9"		
WWD	11:20	~10"		

Total System Flow	Time of Measurement
4407790	1045

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 10/4/04/0/8 (M M D D Y Y)

CREW MEMBERS: R C Backus

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1300	598.93	25.37	573.56
EAST "B"	1225	596.23	19.7	576.53
EAST "C"	1210	598.69	19.85	578.84
EAST "D"	1200	593.20	15.11	578.09
NCR-3S	1050	579.60	3.21	576.39
NCR-4S	1000	591.88	2.59	589.29
NCR-5S	1110	597.34	5.84	591.50
NCR-13S	0930	593.13	4.16	588.97

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	0915		11"
WW B	1010		12"
WW C	1040		6"
WW D	0940		4"

Total System Flow	Time of Measurement
40919025	0915

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 05/08/08 (M M D D Y Y)

CREW MEMBERS: RC Berton

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1230	598.93	25.39	573.54
EAST "B"	1210	596.23	19.71	576.52
EAST "C"	1150	598.69	19.99	578.70
EAST "D"	1130	593.20	15.02	578.18
NCR-3S	1050	579.60	4.17	575.43
NCR-4S	1100	591.88	2.91	588.97
NCR-5S	0945	597.34	7.45	589.89
NCR-13S	1005	593.13	5.31	587.82

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	1000		13 ¼
WW B	1110		10 ½
WW C	1035		9 ¼
WW D	1020		6 ¼

Total System Flow	Time of Measurement
41408620	1000

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 06/05/68 (M M D D Y Y)

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"	1130	598.93	25.46	573.47
EAST "B"	1110	596.23	19.96	576.27
EAST "C"	1055	598.69	20.18	578.51
EAST "D"	1045	593.20	15.2	578.00
NCR-3S	1015	579.60	dry	
NCR-4S	0955	591.88	3.61	588.27
NCR-5S	1030	597.34	9.0	588.34
NCR-13S	0910	593.13	6.92	586.21

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	0900		~12"
WW B	1020		~10"
WW C	0945		~10"
WW D	0930		~6"

Total System Flow	Time of Measurement
41473925	0900

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 07/10/08 (M M D D Y Y)

CREW MEMBERS: R C Becker

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"		598.93	25.49	573.44
EAST "B"		596.23	19.91	576.32
EAST "C"		598.69	20.2	578.49
EAST "D"		593.20	15.4	577.80
NCR-3S		579.60	dry	dry
NCR-4S		591.88	4.53	587.35
NCR-5S		597.34	10.24	587.10
NCR-13S		593.13	7.47	585.66

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	1030		~10"
WW B	1115		~10"
WW C	1100		~8"
WW D	1025		~7'

Total System Flow	Time of Measurement
4152800	1030

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 08/07/98 (M M D D Y Y)

CREW MEMBERS: RC Becker

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1130	598.93	25.44	573.49
EAST "B"	1115	596.23	19.87	576.36
EAST "C"	1105	598.69	20.13	578.56
EAST "D"	1055	593.20	15.34	577.86
NCR-3S	1005	579.60	3.81	575.79
NCR-4S	1020	591.88	3.43	588.45
NCR-5S	1040	597.34	dry	
NCR-13S	0930	593.13	7.26	585.87

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	0915		~10"
WW B	1025		~10"
WW C	1000		~10"
WW D	0945		~8"

Total System Flow	Time of Measurement
41571090	0915

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 09/11/18 (M M D D Y Y)

CREW MEMBERS: RL Becker

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1400	598.93	25.5	573.43
EAST "B"	1340	596.23	20.04	576.19
EAST "C"	1330	598.69	20.44	578.25
EAST "D"	1315	593.20	15.51	577.69
NCR-3S	1225	579.60	dry	
NCR-4S	1235	591.88	4.27	587.61
NCR-5S	1300	597.34	dry	
NCR-13S	1150	593.13	7.54	585.59

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	1140		~10"
WW B	1245		~8"
WW C	1215		~5"
WW D	1200		~6"

Total System Flow	Time of Measurement
41642265	1140

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 1 0 0 9 9 8 (M M D D Y Y)

CREW MEMBERS: RC Becker

Observation Well	Time of Measurement	Top of Casing Elevation A	Depth to Water B	Water Level Elevation A-B
		feet	feet	feet
EAST "A"	1000	598.93	25.41	573.52
EAST "B"	1010	596.23	19.6	576.63
EAST "C"	1025	598.69	20.03	578.66
EAST "D"	1040	593.20	15.16	578.04
NCR-3S	0900	579.60	5.44	574.16
NCR-4S	0930	591.88	3.9	587.98
NCR-5S	0750	597.34	dry	
NCR-13S	0820	593.13	7.48	585.65

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	0800		~10"
WW B	0945		~9"
WW C	0910		~6"
WW D	0835		~6"

Total System Flow	Time of Measurement
4170326O	0800

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 110308 (MMDDYY)

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"	2:10	598.93	25.39	573.54
EAST "B"	1:55	596.23	19.83	576.4
EAST "C"	1:40	598.69	20.2	578.49
EAST "D"	1:25	593.20	15.4	577.8
NCR-3S	12:20	579.60	3.81	575.79
NCR-4S	12:45	591.88	3.17	588.71
NCR-5S	1:15	597.34	7.75	589.59
NCR-13S	11:30	593.13	5.75	587.38

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	11:15		12"
WW B	12:50		8"
WW C	12:05		7"
WW D	11:50		6"

Total System Flow	Time of Measurement
418651500	11:15

FORM 16

WATER LEVEL RECORD

PROJECT NAME: *NIAGARA COUNTY REFUSE SITE*

LOCATION: Wheatfield, New York

DATE: 12/5/2008 (MMDDYY)

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	25.41	573.54
EAST "B"	12:15	596.23	19.99	576.4
EAST "C"	12:25	598.69	20.2	578.49
EAST "D"	12:40	593.20	15.13	577.8
NCR-3S	9:50	579.60	3.22	575.79
NCR-4S	9:15	591.88	3.52	588.71
NCR-5S	11:30	597.34	6.24	589.59
NCR-13S	10:35	593.13	4.53	587.38

WET WELLS

Wet Well	Time of Measurement		Depth of Water
WW A	10:45		12"
WW B	9:55		11"
WW C	9:25		10"
WW D	10:15		6"

Total System Flow	Time of Measurement
42596940	10:45

FORM 16

APPENDIX H

COMPACT DISC CONTAINING REPORT