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NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Joyce Engineering

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Larry Hineline Phone: (336) 323-0092

E-mail: lhineline@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Coastal Regional Solid Waste Management Authority Tuscarora Landfills	7400 Old Hwy 70 West New Bern, NC 28562	25-04 & 25-09	.1600	October 16, 2012

Environmental Status: (Check all that apply)

☐ Initial/Background Monitoring ☒ Detection Monitoring ☐ Assessment Monitoring ☐ Corrective Action

Type of data submitted: (Check all that apply)

☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☒ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify)
☐ Other(specify)

Notification attached?

☐ No. No groundwater or surface water standards were exceeded.
☒ Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

T. Lawrence Hineline, P.G. Technical Consultant (336) 323-0092

Facility Representative Name (Print) Title (Area Code) Telephone Number

Signature 1/16/2013 Date

Affix NC Licensed Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 2357 GEOLOGIST T. LAWRENCE HINELINE

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NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

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COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY
TUSCARORA LANDFILL
PERMIT NUMBERS 25-04 & 25-09

SECOND SEMIANNUAL WATER QUALITY MONITORING REPORT OF 2012

JANUARY 2013

***PREPARED BY*:**

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Second Semiannual Water Quality Monitoring Report of 2012
Coastal Regional Solid Waste Management Authority Tuscarora Landfill
Craven County, North Carolina

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Craven County, North Carolina

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1.0 INTRODUCTION

1.1 Site Information

The Tuscarora Landfill is owned and operated by the Coastal Regional Solid Waste Management Authority (CRSWMA) and is currently operating under North Carolina Solid Waste Permit Nos. 25-04 and 25-09. The landfill is located off of Old Highway 70, near the town of New Bern in northwestern Craven County, North Carolina. The property boundary is indicated on an excerpt from the 7.5 minute USGS topographic map for Jasper, North Carolina (Figure No. 1).

The Tuscarora Landfill is identified by three waste cells; the closed Tuscarora Interim Regional Landfill (Permit 25-04) and Phases 1 & 2 of the Tuscarora Long-Term Regional Landfill (Permit 25-09). The Interim Regional Landfill and the current Phases of the Long-Term Regional Landfill were constructed with composite liners and a leachate collection system. The current waste footprint comprises approximately 58 acres of the 101 acres proposed in the permit. The Closed Tuscarora Interim Regional Landfill was permitted and constructed in accordance with Subtitle D regulations in 1993 and stopped receiving waste in November 1999. Phase I of the Long-Term Regional Landfill was constructed in accordance with Subtitle D regulations beginning in 1999 and started receiving waste after November, 1999. The Phase 2 expansion was constructed in 2005 and is currently the active cell receiving waste. Phase 3 was constructed in 2011, but has not started receiving waste.

1.2 Site Geology

The Tuscarora Landfill is located in the Coastal Plain physiographic province. The Coastal Plain consists of a wedge of continental and marine sediments that are Cretaceous, Tertiary, and Quaternary in age. These sediments are approximately 1,500 feet thick in the area of the Tuscarora Landfill according to the North Carolina State Geologic Map (Brown, 1985). Surface water is directed through a network of constructed drainage ditches to the north-northeast towards Jumping Run, a tributary of Bachelor Creek. Shallow groundwater flow is to the east-southeast towards Beaverdam Branch, which is another tributary of Bachelor Creek located approximately 2.25 miles away. Bachelor Creek flows to the east to its confluence with the Neuse River.

The uppermost (shallow) aquifer at the site consists of Miocene to Pleistocene age silty sands, clayey sands, and sandy clays. The uppermost aquifer is separated from a lower aquifer by a lean to fat clay associated with the Pungo River Formation. The Pungo River Formation is Miocene in age and consists mainly of marine fat clay to silty clay, which represents a regressive marine sequence that grades from sandy clay to silty sand at the bottom of the formation (Harris, 1991). The lower aquifer is middle to upper Eocene in age and is part of the Castle Hayne Formation. It consists of a combination of coquina and a weakly cemented calcarenite.

1.3 Regulatory Status

The Tuscarora Landfill groundwater monitoring is completed in accordance with North Carolina Solid Waste Management Regulations (NCSWMR) § 1633 (Detection Monitoring Program).

Statistical analyses of the laboratory data has been prepared in accordance with the required compliance demonstration Rule .1632(g), (h), and (i) of the NCSWMR.

Dissolved zinc for well IRL-5S was routinely analyzed, as requested by Larry Rose of the Solid Waste Section (SWS) in September 2004, due to a possible statistically significant increase. Dissolved samples may be used as an Alternate Source Demonstration (ASD). However, after a review of the historical data and current conditions, it was determined that the analysis of dissolved zinc for well IRL-5S is no longer necessary.

2.0 FACILITY MONITORING PROGRAMS

Groundwater programs for the landfill, surface water, and the leachate storage system are discussed in the following sections and locations of monitoring points are shown on Drawing Nos. 1 & 2.

2.1 Tuscarora Interim Regional Landfill Monitoring Program

Groundwater monitoring at the closed Tuscarora Interim Regional Landfill is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and are analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Closed Interim Regional Landfill consists of two upgradient/background groundwater monitoring wells (IRL-1S & IRL-1D) and six downgradient groundwater monitoring wells (IRL-3S, IRL-3D, IRL-4S, IRL-4D, IRL-5S, and MW-A). Wells IRL-2SA, IRL-2DA, IRL-5D, MW-B, and PZ-Z are measured for water levels only.

Monitoring Well	Date Installed	Classification	Monitoring Program	Total Depth from TOC (ft)	Lithology of Screened Interval
IRL-1S	6/29/93	Background	Detection	18.34	Shallow Aquifer / Sediment
IRL-1D	6/29/93	Background	Detection	45.91	Deep Aquifer / Sediment
IRL-2S	6/30/93	Abandoned	-	-	-
IRL-2SA	1/13/01	Observation	Water Level	17.63	Shallow Aquifer / Sediment
IRL-2D	6/30/93	Abandoned	-	-	-
IRL-2SD	1/13/01	Observation	Water Level	41.76	Deep Aquifer / Sediment
IRL-3S	7/02/93	Compliance	Detection	16.59	Shallow Aquifer / Sediment
IRL-3D	7/02/93	Compliance	Detection	40.91	Deep Aquifer / Sediment
IRL-4S	7/02/93	Compliance	Detection	15.23	Shallow Aquifer / Sediment
IRL-4D	7/02/93	Compliance	Detection	25.87	Deep Aquifer / Sediment
IRL-5S	7/01/93	Compliance	Detection	14.69	Shallow Aquifer / Sediment
IRL-5D	7/01/93	Observation	Water Level	26.10	Deep Aquifer / Sediment
IRL-6S	7/02/93	Abandoned	-	-	-
IRL-6D	7/02/93	Abandoned	-	-	-
MW-A	12/13/00	Compliance	Detection	22.00	Shallow Aquifer / Sediment
MW-B	1/12/01	Observation	Water Level	22.06	Shallow Aquifer / Sediment
PZ-Z	12/15/00	Observation	Water Level	32.35	Shallow Aquifer / Sediment

2.2 Tuscarora Long-Term Regional Landfill Monitoring Program

Groundwater monitoring at the Tuscarora Long-Term Regional Landfill is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and are analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Tuscarora Long-Term Regional Landfill area consists of two upgradient/background wells (MW-12S and MW-12D) and eight downgradient wells (MW-7, MW-8, MW-10, MW-11S, MW-11D, MW-13S, MW-13D, and MW-14). Well MW-9, which was previously monitored, was abandoned on July 15, 2004 to accommodate construction of Phase 2 of the Long-Term Regional Landfill. Well MW-14 was damaged by equipment in 2006 and was replaced by MW-14R prior to the October 2007 sampling event.

Monitoring Well	Date Installed	Classification	Monitoring Program	Total Depth from TOC (ft)	Lithology of Screened Interval
MW-7	7/15/99	Compliance	Detection	17.89	Shallow Aquifer / Sediment
MW-8	7/15/99	Compliance	Detection	15.14	Shallow Aquifer / Sediment
MW-9	7/15/99	Abandoned	-	-	-
MW-10	7/15/99	Compliance	Detection	16.92	Shallow Aquifer / Sediment
MW-11S	7/15/99	Compliance	Detection	12.07	Shallow Aquifer / Sediment
MW-11D	7/15/99	Compliance	Detection	36.85	Deep Aquifer / Sediment
MW-12S	4/09/02	Background	Detection	18.02	Shallow Aquifer / Sediment
MW-12D	4/09/02	Background	Detection	38.00	Deep Aquifer / Sediment
MW-13S	4/21/03	Compliance	Detection	17.48	Shallow Aquifer/ Sediment
MW-13D	4/23/03	Compliance	Detection	42.29	Deep Aquifer / Sediment
MW-14	4/18/03	Abandoned	-	-	-
MW-14R	10/04/07	Compliance	Detection	16.85	Shallow Aquifer / Sediment

2.3 Leachate Storage Lagoon Area Monitoring Program

Groundwater monitoring at the Leachate Storage Lagoons is completed in accordance with NCSWMR § 1633 (Detection Monitoring Program) and the approved Groundwater Monitoring Plan for the facility. Groundwater samples are collected semiannually and analyzed for the constituents listed in NCSWMR Appendix I.

The groundwater monitoring network at the Leachate Storage Lagoons consists of one up gradient/background well (LST-5S) and seven down-gradient wells (LST-1S, LST-1D, LST-2S, LST-3S, LST-4S, LST-5D, and LST-6S). Well LST-5S replaced LST-6S as the background well due to drawdown effects from the borrow area north of the Leachate Storage Lagoons. Wells LST-2D, LST-3D, LST-4D, and LST-6D are measured for water levels only.

Monitoring Well	Date Installed	Classification	Monitoring Program	Total Depth from TOC (ft)	Lithology of Screened Interval
LST-1S	6/24/93	Compliance	Detection	15.83	Shallow Aquifer / Sediment
LST-1D	6/24/93	Compliance	Detection	36.01	Deep Aquifer / Sediment
LST-2S	6/24/93	Compliance	Detection	14.74	Shallow Aquifer / Sediment
LST-2D	6/24/93	Observation	Water Level	33.96	Deep Aquifer / Sediment
LST-3S	6/25/93	Compliance	Detection	18.34	Shallow Aquifer / Sediment
LST-3D	6/24/93	Observation	Water Level	35.57	Deep Aquifer / Sediment
LST-4S	6/25/93	Compliance	Detection	18.18	Shallow Aquifer / Sediment
LST-4D	6/24/93	Observation	Water Level	36.39	Deep Aquifer / Sediment
LST-5S	6/28/93	Background	Detection	16.75	Shallow Aquifer / Sediment
LST-5D	6/28/93	Compliance	Detection	39.04	Deep Aquifer / Sediment
LST-6S	6/28/93	Compliance	Detection	17.25	Shallow Aquifer / Sediment
LST-6D	9/28/93	Observation	Water Level	35.17	Deep Aquifer / Sediment

2.4 Surface Water Monitoring Program

Surface water monitoring at the Tuscarora Landfill is completed in accordance with NCSWMR and the approved Groundwater Monitoring Plan for the facility. Surface water samples are collected semiannually and analyzed for the constituents listed in NCSWMR Appendix I. The surface water monitoring network includes one upstream surface water sampling point (SWPT-1) and three downstream surface water monitoring points (SWPT-2, UD-1, and UD-2).

Surface Point	Classification	Monitoring Program
SWPT-1	Upstream	Surface Water
SWPT-2	Compliance	Surface Water
UD-1	Compliance	Surface Water
UD-2	Compliance	Surface Water

2.5 Leachate Monitoring Program

One leachate monitoring point (Leachate Manhole) is sampled at the Tuscarora Landfill on a semiannual basis and the laboratory results are included in this report. The following constituents are required for laboratory leachate analysis:

- North Carolina Appendix I Metals
- North Carolina Appendix I 8260 Volatiles

3.0 SECOND SEMIANNUAL SAMPLING EVENT OF 2012

3.1 Field Work

On October 16, 2012, personnel from Environment 1, Incorporated visited the facility to obtain depth-to-water measurements to the nearest 0.01 foot, purge, and sample monitoring wells at the closed Tuscarora Interim Regional Landfill, Tuscarora Long-Term Regional Landfill, and Leachate Storage Lagoon areas. Four surface water monitoring points and one leachate monitoring point were also sampled during the October 2012 event. In addition, for monitoring

wells not part of the compliance network, depth-to-water measurements were obtained to the nearest 0.01 foot using an electronic water level indicator on October 16, 2012.

Monitoring wells were purged and sampled using decontaminated re-usable Teflon bailers during the October 2012 sampling event. Measurements of temperature, pH, specific conductivity, and turbidity were recorded prior to purging, after each purge volume, and during sampling. Prior to sampling, laboratory-supplied containers were prepared with the following information:

- Monitoring well number (completed by field personnel),
- Date and time of sample collection (completed by field personnel),
- Initials of sampling personnel (completed by field personnel),
- Project name and number (completed by the laboratory),
- Chemical preservative (completed by the laboratory); and
- Requested chemical analysis (completed by the laboratory).

During the October 2012 sampling event, groundwater samples from each monitoring well were collected directly from the bailers in the provided laboratory containers either immediately after purging or within 24 hours of the final purge volume. Immediately after collection, the samples were placed in a laboratory provided cooler and chilled on ice.

Surface water samples were collected directly from stream flow, by lowering the prepared sample containers into the stream with the opening facing into the current flow. Care was taken not the overflow the sample containers (which could lead to preservative loss) and avoid sample-induced turbidity. At the time of sampling, surface water was also measured for temperature, pH, specific conductivity, and turbidity. After sample collection, the samples were placed in a laboratory provided cooler and chilled on ice.

Leachate samples were collected from a vented manhole with a peristaltic pump and disposable Teflon tubing. Prepared sampling containers were filled, placed in a cooler, and chilled on ice. At the time of sampling, leachate was measured for temperature, pH, specific conductivity, and turbidity.

3.2 Laboratory Analysis and JOYCE Quality Control

Groundwater, surface water, and leachate samples were submitted to Environment 1, Incorporated of Greenville, North Carolina under chain-of-custody control for analysis. As discussed earlier, the groundwater, surface water, and leachate samples were analyzed for North Carolina Appendix I constituents. Joyce Engineering (JOYCE) requested a Level II data report. The samples were received by the laboratory on October 16, 2012 in good condition, properly preserved, and within analysis hold times.

In addition to samples collected for compliance monitoring at the CRSWMA Landfills, an Equipment Blank was collected by Environment 1, Incorporated personnel as part of the October 2012 sampling event. Also, a Trip Blank was prepared by the laboratory to accompany the volatile sampling containers during shipment. The Equipment Blank was analyzed for North

Carolina Appendix I constituents while the Trip Blank was analyzed for North Carolina Appendix I volatile organics only.

Upon receipt of laboratory data packages, the data were reviewed by JOYCE personnel for the following:

- General typographical errors;
- Correct analyses performed and within method specified hold times;
- Biased data results based on Surrogate Recoveries, Matrix Spike, Matrix Spike Duplicate, and Laboratory Control Samples;
- Blank qualified data (B-flags);
- Detections above the North Carolina SWSLs, groundwater and surface water standards; and
- Detections that are above historical levels.

After review of the October 2012 data package and statistical analysis, it was determined that no resampling was required. The laboratory data packages for the October 16, 2012 event are included in Appendix 1 of this report, and the results are summarized in the detection and historical tables for the Interim Regional Landfill.

4.0 HYDROGEOLOGICAL CONDITIONS

Depth to groundwater was measured in the compliance monitoring wells prior to sampling. The groundwater elevation at each well was calculated relative to the surveyed measuring point (top of casing) for each monitoring well. Tables 1-3 summarize the groundwater elevations. In general, groundwater elevations for the shallow aquifer are similar to previous events. Groundwater elevations for the deep aquifer have been influenced by borrow area pumping.

Both the upper and lower aquifers at the site are primarily made up of coarse sand and silty sand. The aquifers are separated by a confining layer consisting of marine clays, silty clays, and very fine silty sands.

Groundwater elevation contours for the shallow and deep aquifers are shown on Drawing Nos. 1 and 2, and were interpreted from the October 2012 water level measurements. Groundwater at the site flows predominantly to the southeast for the shallow aquifer. Due to the borrow area pumping, groundwater in the deep aquifer flows primarily to the northwest, except for beneath the southeastern corner of the Interim Regional Landfill. The borrow area is situated in the northwestern area of the property.

Horizontal groundwater gradients were estimated based on October 2012 groundwater levels. The groundwater contours and the groundwater flow lines were used to calculate hydraulic gradients for the site. The horizontal gradients were estimated to range from 0.0034 to 0.0048 ft/ft (Table 4) for the shallow aquifer and 0.0027 to 0.0036 ft/ft (Table 5) for the deep aquifer. The low gradients reported for this event likely reflect the shallow depth to the uppermost aquifer underlying the site, the flat topography of the site, and wet stormwater drainage ditches and basins located within the site.

Linear groundwater flow velocities were computed using the following modified Darcy equation:

$$V = Ki/n$$

where V = average linear velocity (feet per day – ft/day), K = hydraulic conductivity (ft/day), i = horizontal hydraulic gradient, and n = effective porosity. The hydraulic conductivity used to calculate flow velocities was based on the geometric mean of hydraulic conductivities derived from slug tests for the shallow and deep aquifers.

The calculated linear groundwater flow velocities range from 0.011 to 0.018 ft/day (Table 4) for the shallow aquifer range and 0.049 to 0.068 ft/day (Table 5) for the deep aquifer. The linear velocity equation is based on the simplified assumption of a homogeneous and isotropic aquifer. This equation can overestimate velocity when applied to heterogeneous and/or anisotropic conditions. The gradient and flow velocity calculations are included in Tables 4 and 5.

5.0 DATA ANALYSIS AND STATISTICAL RESULTS

The data from the laboratory analysis of the October 16, 2012 sampling events were received on November 12, 2012, from Environment 1, Inc. and are found in Appendix 1. Statistical Analysis worksheets are found in Appendix 2.

5.1 Analytical Results and Comparisons to Standards

5.1.1 Tuscarora Interim Regional Landfill

The following inorganic constituents were detected at quantified concentrations during the October 2012 sampling event for the Tuscarora Interim Regional Landfill in one or more compliance monitoring wells.

Constituent	NC2L/ (GWPS)	Background		Downgradient						Blanks
		IRL-1S	IRL-1D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	MW-A	
Barium	700	139	42.5J	48.1 J	53.5 J	78.0 J	34.5 J	95.9 J	35.6 J	0.12 J
Zinc	1000	5.9 J	7.2 J	12	4.0 J	7.6 J	3.1 J	107	5.0 J	ND

All concentrations are reported in micrograms per liter (µg/L). NS = Not sampled.
J = Estimated concentration below SWSL. ND = Not detected.
B = Blank-qualified detection.

The inorganic and organic analytical results from the October 2012 groundwater sampling event at the closed Tuscarora Interim Regional Landfill are summarized in Table 6 and field parameters are summarized on Table 7 of this report. The results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in Appendix 1. No quantified detections of inorganic or organic constituents were reported above the Groundwater Standard (NC 2L) or Groundwater Protection Standards (GWPS) for the Interim Regional Landfill.

5.1.2 Tuscarora Long-Term Regional Landfill

The following inorganic constituents were detected during the October 2012, sampling event for the Tuscarora Long-Term Regional Landfill in one or more compliance monitoring wells

Constituent	NC2L/ (GWPS)	Background		Downgradient								Blanks
		MW-12S	MW-12D	MW-7	MW-8	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14R	
Barium	700	40.5 J	25.5 J	40.7 J	104	53.0 J	25.1 J	39.8 J	64.1 J	43.5 J	106	0.28 J
Beryllium	(4)	0.22 J	ND	0.09 J	0.66 J	0.34 J	3	ND	0.30 J	ND	0.10 J	ND

All concentrations are reported in micrograms per liter (µg/L). NS = Not sampled.
J = Estimated concentration below SWSL. ND = Not detected.
B = Blank-qualified detection.

The inorganic and organic analytical results from the October 2012 groundwater sampling event at the Tuscarora Long-Term Regional Landfill are summarized in Table 8 and field parameters are summarized on Table 9 of this report. The results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chain of custody records are included in the Appendix 1. No quantified detections of inorganic or organic constituents were reported above the NC 2L or GWPS for the Long-Term Regional Landfill.

5.1.3 Leachate Storage Lagoon Area

The following inorganic constituents were detected during the October 2012 sampling event for the Leachate Storage Lagoon Area in one or more compliance monitoring wells.

Constituent	NC2L/ (GWPS)	Background	Downgradient							Blanks
		LST-5S	LST-1S	LST-1D	LST-2S	LST-3S	LST-4S	LST-5D	LST-6S	
Chromium	10	3.1 J	3.9 J	1.0 J	2.8 J	2.4 J	19	2.7 J	3.4 J	ND
Zinc	1,000	15	10	7.9 J	7.5 J	34	22	12	25	ND

All concentrations are reported in micrograms per liter (µg/L). NS = Not sampled.
J = Estimated concentration below SWSL. ND = Not detected.
B = Blank-qualified detection. 19 Shaded value(s) = above the NC 2L/GWPS

The inorganic and organic analytical results from the October 2012 sampling event at the Leachate Storage Lagoon Area are summarized in the Table 10 and field parameters are summarized on the Table 11 of this report. The results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chain of custody records are included in the Appendix 1 of this report. One quantified detection of chromium was reported above the NC 2L for the Leachate Storage Lagoon Area. There were no other quantified detections of inorganic or organic constituents above NC 2L or GWPS standards during the October 2012 sampling event.

5.1.4 Surface Water

There was one constituent detected at a quantified concentration in surface waters during the October 2012 sampling event, zinc in SW-1 and UD-1. There were no quantified detections above the NC 2B standards during the October 2012 sampling event.

The inorganic and organic surface water analytical results from the October 2012 sampling event at the CRSWMA landfills are summarized in Table 12 and field parameters are summarized on Table 13. The results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody are included in the Appendix 1 of this report.

5.1.5 Leachate

The following constituents were detected in leachate during the October 2012 sampling event.

Constituent	Leachate	Blanks
Antimony	44	ND
Arsenic	147	0.4 J
Barium	826	0.28 J
Cadmium	5	ND
Chromium	51	ND
Cobalt	17	ND
Copper	25	0.25 J
Nickel	81	0.23 J
Zinc	28	ND
Acetone	708	ND
Benzene	3.80	ND
2-Butanone	276	ND
2-Hexanone	4.00	ND
Styrene	2.0	ND
1,4-Dichlorobenzene	13.2	ND
Ethylbenzene	25.00	ND
Toluene	8.20	ND
Xylenes	36.50	ND

All concentrations are reported in micrograms per liter (µg/L). NS = Not sampled.
J = Estimated concentration below SWSL. ND = Not detected.
B = Blank-qualified detection.

The leachate analytical results from the October 2012 sampling event at the CRSWMA landfills are summarized in Table 14 of this report. The complete results, as reported by the laboratory, the laboratory quality assurance/quality control information, and the chains-of-custody, are included in Appendix 1 of this report.

5.2 Statistical Methods

The data were evaluated through the use of the Shapiro-Wilk Test, Parametric Prediction Limits, Parametric Tolerance Intervals, Aitchison's Adjustment, Non-parametric Prediction Limits, and Poisson Prediction Limits, as appropriate. Background data, tests for normality, outliers, Aitchison's adjustment, tolerance interval, or prediction limits are used, as appropriate, based on the background data.

The statistical test by which down-gradient data are compared to facility background data is based upon the nature of the data and the number of data values that are less than the laboratory limit of detection. All statistical tests are evaluated at the 0.05 level of significance, 95% confidence level, and are conducted as one-tailed tests. Statistical background values were calculated using a data pool of historical results from pre-waste background monitoring events and from up-gradient wells during successive semiannual monitoring events.

5.3 Statistical Results

Background concentrations for inorganic constituents are determined using statistical procedures as discussed in Section 5.2. Chromium was detected in monitoring well LST-4S above its respective GWPS during the October 2012 event. The chromium concentration was statistically evaluated in accordance with the procedures outlined in 15A NCAC 13B.1632 (g) and (h) to determine if the quantified concentration exceeded the facility background concentration. The statistical worksheets and summary table for chromium are presented in Appendix 2. Based on the statistical evaluation, the chromium detection in LST-4S is representative of historical background concentrations and not a statistically significant increase.

6.0 CONCLUSION

Based on the results summarized herein, the CRSWMA Tuscarora Landfill shall remain in the Detection Monitoring Program as outlined in Title 15A NCAC 13B .1633. The relevant ground water protection standard (GPS) for chromium will be based on the calculated background concentration; therefore, there were no exceedences of the GPS during the second semiannual sampling event of 2012. The next semiannual monitoring event is tentatively scheduled for May 2012.

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TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
TUSCARORA INTERIM REGIONAL LANDFILL

Well No.	Background		Downgradient										
	IRL-1S	IRL-1D	IRL-2SA	IRL-2DA	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	MW-A	MW-B	PZ-Z
Well TOC Elev.	50.56	50.19	51.37	51.58	49.02	48.93	48.34	48.35	48.78	48.66	46.04	48.90	49.52
Well Depth	17.73	45.20	17.68	30.95	16.40	39.22	14.99	34.64	14.62	35.42	20.40	14.90	32.35
Jul-93	46.57	36.02	NI	NI	38.68	34.26	43.13	34.24	40.19	34.73	NI	NI	NI
Aug-93	44.94	35.46	NI	NI	38.57	33.68	42.02	33.54	39.58	34.13	NI	NI	NI
Sep-93	44.29	34.70	NI	NI	38.42	32.97	41.77	33.01	39.50	33.39	NI	NI	NI
Sep-93	45.07	34.42	NI	NI	38.85	32.58	41.33	32.69	39.51	33.07	NI	NI	NI
Apr-94	45.55	38.93	NI	NI	37.74	37.27	39.48	37.33	37.95	37.79	NI	NI	NI
Oct-94	44.90	35.97	NI	NI	37.84	34.38	38.54	34.39	37.52	34.86	NI	NI	NI
Apr-95	45.50	38.73	NI	NI	38.02	37.15	38.82	37.16	37.56	37.60	NI	NI	NI
Oct-95	45.12	35.41	NI	NI	37.11	34.06	38.79	34.05	37.41	34.44	NI	NI	NI
Apr-96	46.60	40.25	NI	NI	38.98	38.82	38.58	38.83	37.51	39.28	NI	NI	NI
Oct-96	46.12	NS	NI	NI	37.88	39.01	38.52	39.06	37.29	NS	NI	NI	NI
Dec-96	47.26	40.19	NI	NI	38.12	38.73	37.94	38.85	37.28	39.26	NI	NI	NI
Apr-97	45.35	NS	NI	NI	37.71	37.50	38.82	37.54	37.30	NS	NI	NI	NI
Mar-97	46.65	40.46	NI	NI	37.67	39.00	38.70	39.03	37.40	39.48	NI	NI	NI
Oct-97	43.40	NS	NI	NI	37.68	NS	38.18	32.92	37.04	NS	NI	NI	NI
Apr-98	46.18	NS	NI	NI	38.05	38.57	38.51	38.62	37.52	NS	NI	NI	NI
Oct-98	44.11	36.69	NI	NI	37.52	35.32	37.78	35.38	37.23	35.79	NI	NI	NI
Mar-99	46.10	NS	NI	NI	38.35	37.95	38.35	37.99	38.18	38.39	NI	NI	NI
Jul-99	43.89	36.25	NI	NI	38.31	35.06	39.37	35.10	38.92	35.47	NI	NI	NI
Aug-99	43.27	34.79	NI	NI	38.18	33.34	39.37	33.41	38.96	33.75	NI	NI	NI
Oct-99	47.38	40.16	NI	NI	41.56	38.75	40.85	38.80	40.21	39.20	NI	NI	NI
Nov-99	45.52	39.56	NI	NI	38.70	38.16	39.21	38.23	39.29	38.65	NI	NI	NI
Apr-00	45.71	39.77	NI	NI	39.54	38.35	39.61	38.45	39.34	38.84	NI	NI	NI
Oct-00	44.52	38.90	NI	NI	39.76	37.43	39.46	37.52	39.45	37.94	NI	NI	NI
Apr-01	46.00	39.96	43.70	40.19	40.15	38.62	40.11	38.69	39.59	39.06	40.98	39.55	40.93
Oct-01	43.36	36.31	39.92	37.28	38.61	35.03	38.97	35.08	39.89	35.46	38.76	38.65	38.56
Apr-02	44.88	38.85	41.38	39.20	39.02	37.53	39.66	37.60	39.42	37.99	39.69	40.16	41.43
Oct-02	44.93	34.93	40.97	35.38	39.22	33.76	40.23	33.87	39.79	34.21	39.78	39.35	37.70
Apr-03	46.28	40.03	44.11	40.35	39.75	38.65	42.03	38.73	40.62	39.16	40.41	40.94	40.63
Oct-03	46.72	40.36	44.43	40.67	40.21	38.97	41.68	39.03	40.83	39.46	40.93	40.80	41.70
15-Apr-04	47.23	39.69	44.93	40.05	40.72	38.33	41.40	38.44	40.54	38.83	40.94	40.80	41.25
14-Oct-04	44.14	39.23	42.05	38.60	40.21	37.88	40.27	37.96	40.10	38.41	39.98	39.50	40.74
05-Apr-05	44.81	NS	NS	40.33	40.21	38.56	40.13	38.66	39.92	39.12	37.79	NS	41.27
27-Oct-05	46.74	NS	NS	41.01	40.88	39.18	41.16	39.31	40.44	39.70	40.67	NS	42.03
21-Apr-06	44.90	39.71	NS	39.89	40.41	38.23	40.31	38.35	40.07	38.77	40.15	NS	41.10
12-Oct-06	45.45	39.71	NS	40.00	39.80	38.28	40.86	38.37	40.18	38.79	40.58	NS	41.01
26-Apr-07	45.01	39.44	NS	39.85	39.85	38.13	40.32	38.22	40.08	38.66	40.29	NS	40.80
10-Oct-07	40.44	33.90	NS	34.20	39.19	32.54	39.06	32.65	39.05	33.02	38.21	NS	36.30
02-Apr-08	45.39	38.21	NS	38.64	40.08	37.08	39.79	37.17	39.54	37.49	40.03	NS	38.67
28-Oct-08	42.22	35.12	NS	36.03	40.24	34.70	39.69	34.76	39.27	34.93	39.88	NS	38.53
08-Apr-09	45.28	35.45	43.56	36.66	40.40	35.60	42.62	35.63	40.29	35.65	40.46	40.70	39.67
27-Oct-09	42.34	31.89	39.37	33.38	40.19	32.41	39.09	32.40	38.96	32.30	39.24	39.12	37.48
08-Apr-10	45.27	34.66	44.07	36.19	40.32	35.28	40.83	35.31	40.48	35.16	40.65	39.46	39.64
13-Oct-10	45.69	33.64	43.89	35.23	40.03	34.56	39.80	34.53	39.73	34.30	40.39	40.72	38.42
27-Apr-11	44.45	32.47	42.66	34.28	39.34	33.53	40.22	33.51	39.98	33.24	40.07	40.48	38.40
20-Oct-11	44.95	32.49	42.13	34.23	39.37	33.44	39.64	34.16	39.55	33.21	40.15	39.71	38.19
16-Oct-12	44.55	32.59	42.63	34.44	39.69	33.93	39.72	33.91	39.70	33.52	39.94	40.10	39.30

NOTES:

1. All elevations are in feet above mean sea level.
2. NS = Not sampled and/or groundwater depths not measured.
3. NI = Well/Piezometer not installed.

TABLE 2

SUMMARY OF GROUNDWATER ELEVATIONS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Well No.	Background		Downgradient									Additional Facility Piezometers										
	MW-12S	MW-12D	MW-21D	MW-7	MW-8	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14R	MW-15S	MW-15D	MW-16SR	MW-16D	MW-17S	MW-17D	MW-18S	MW-18D	MW-19S	MW-19D	MW-20D
Well TOC Elev.	52.12	51.90	47.21	50.69	50.94	47.32	47.67	47.55	46.21	45.93	46.98	47.20	47.22	47.25	47.17	45.66	45.93	46.34	46.14	46.80	46.75	46.33
Well Depth	35.95	17.96	35.00	16.22	15.61	15.95	14.03	34.73	15.00	33.00	14.00	15.00	38.00	12.00	35.00	13.00	38.00	11.00	35.00	10.00	25.00	11.00
Jul-99	NI	NI	NI	46.76	46.16	44.60	38.94	36.60	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Aug-99	NI	NI	NI	45.10	44.41	43.13	39.19	34.87	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Oct-99	NI	NI	NI	46.94	46.08	43.34	40.79	40.34	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Nov-99	NI	NI	NI	46.19	44.13	42.34	38.85	39.71	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Apr-00	NI	NI	NI	46.96	45.66	42.96	39.04	39.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Oct-00	NI	NI	NI	45.79	43.94	42.30	38.74	39.05	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Apr-01	NI	NI	NI	47.33	45.62	43.60	39.37	40.16	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Oct-01	NI	NI	NI	44.81	42.99	41.57	38.92	35.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Apr-02	43.69	40.78	NI	43.86	44.74	43.10	39.39	39.09	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Oct-02	45.15	36.77	NI	45.18	44.19	41.28	39.49	35.26	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Apr-03	45.77	42.00	NI	47.26	45.74	43.27	40.40	40.24	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
Oct-03	46.32	42.32	NI	47.98	46.34	42.64	41.67	40.44	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
15-Apr-04	46.79	41.70	NI	47.78	46.47	43.40	41.57	38.78	43.27	38.93	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
14-Oct-04	45.16	41.09	NI	46.69	45.04	43.09	40.29	39.53	41.28	38.41	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
05-Apr-05	44.54	41.89	NI	47.05	44.88	43.29	40.28	40.18	43.29	39.19	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
27-Oct-05	45.51	42.62	NI	47.16	46.12	42.63	41.93	40.81	44.51	39.82	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
21-Apr-06	45.43	41.59	NI	47.12	46.02	43.53	40.37	39.89	43.17	38.82	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
12-Oct-06	45.70	41.72	NI	47.20	46.27	43.05	40.85	39.87	44.03	38.79	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
26-Apr-07	45.52	41.49	NI	47.06	45.66	43.34	41.06	39.74	43.01	38.59	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
11-Oct-07	42.18	35.60	NI	43.67	43.94	41.35	39.98	34.08	41.19	33.02	39.25	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
03-Apr-08	44.74	39.14	NI	45.99	45.68	42.42	38.85	38.47	44.00	37.32	42.10	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
28-Oct-08	44.67	35.23	NI	44.56	45.67	41.58	38.95	35.90	44.07	34.59	42.13	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
08-Apr-09	45.31	33.90	NI	46.77	45.98	42.67	39.69	36.40	43.17	34.92	41.94	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
27-Oct-09	43.96	29.37	NM	43.45	44.89	40.72	38.59	33.16	42.66	31.48	41.32	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
08-Apr-10	45.17	31.48	NM	46.57	45.94	42.74	40.28	36.00	43.01	34.27	41.67	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
13-Oct-10	45.16	29.72	NM	45.69	45.76	41.11	39.74	35.02	43.33	33.29	41.54	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
27-Apr-11	44.73	29.09	NM	45.77	45.63	42.17	39.76	34.01	42.99	32.18	41.30	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
20-Oct-11	44.86	29.42	27.21	44.98	45.99	41.12	39.94	33.96	43.31	32.13	43.65	41.20	30.31	40.04	31.76	39.33	32.70	40.99	32.80	39.61	32.78	26.07
26-Apr-12	44.18	29.11	19.89	45.46	45.49	41.80	40.17	34.05	43.32	31.68	42.33	40.86	30.53	39.64	32.00	39.27	33.04	39.62	33.08	37.08	33.08	26.15
16-Oct-12	43.81	29.59	27.61	45.18	45.39	41.51	39.87	34.21	42.77	32.26	42.17	41.02	31.22	39.58	32.88	39.34	34.02	39.91	33.93	38.22	33.82	26.46

NOTES:

1. All elevations are in feet above mean sea level.
2. NI = Well/Piezometer not installed.
3. NM = Not Measured.

TABLE 3

SUMMARY OF GROUNDWATER ELEVATIONS
LEACHATE STORAGE LAGOON AREA

Well No.	Background	Downgradient										
	LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D
Well TOC Elev.	52.37	50.92	50.92	51.00	50.94	52.17	51.87	51.38	51.56	52.27	51.23	51.17
Well Depth	16.12	15.32	34.99	14.59	33.25	17.93	34.69	17.85	36.16	39.11	16.61	34.31
Jul-93	47.21	47.48	36.53	46.95	36.79	47.01	36.85	47.12	37.02	36.68	47.11	37.42
Aug-93	46.38	45.92	35.80	45.71	35.98	45.79	35.98	45.89	36.19	35.86	45.82	36.74
Sep-93	45.91	45.54	35.03	45.63	35.48	45.04	35.27	44.25	34.96	34.37	44.94	35.87
Sep-93	45.93	45.74	34.47	45.35	34.66	45.23	35.08	45.49	34.94	33.67	45.29	35.28
Apr-94	46.71	46.78	37.59	46.29	34.59	45.72	38.01	46.18	39.81	37.16	46.41	40.16
Oct-94	46.14	45.99	36.41	46.00	36.64	45.65	36.63	45.41	36.76	36.47	44.52	37.17
Apr-95	46.92	46.43	39.16	46.39	39.40	46.06	39.42	45.91	39.57	39.26	45.94	39.95
Oct-95	45.86	46.89	35.72	46.06	35.95	45.90	35.95	45.77	36.11	35.83	43.70	36.32
Apr-96	47.56	47.25	40.74	47.23	41.00	46.88	40.91	46.87	41.05	40.84	47.41	41.51
Oct-96	46.88	46.42	40.93	46.81	NS	46.38	NS	46.48	NS	41.05	48.06	NS
Dec-96	46.87	47.62	40.62	47.10	40.94	47.07	40.87	46.08	41.06	40.77	47.73	41.37
Apr-97	46.97	46.40	39.40	46.37	NS	46.05	NS	45.97	NS	39.51	45.89	NS
Mar-97	47.99	47.92	40.88	47.49	41.11	47.12	41.13	47.01	41.28	40.98	47.56	41.63
Oct-97	45.21	45.43	34.80	44.19	NS	45.03	NS	45.06	NS	34.83	44.09	NS
Apr-98	47.20	46.67	40.47	46.47	NS	46.54	NS	46.56	NS	40.54	46.30	41.63
Oct-98	44.65	43.89	37.00	44.10	37.19	44.44	37.22	44.42	37.35	37.06	42.24	37.57
Mar-99	46.50	45.92	39.73	46.00	39.95	46.54	40.00	46.73	40.11	39.81	45.88	40.45
Jul-99	45.86	45.34	37.48	45.37	36.64	45.53	36.75	45.33	36.80	36.55	41.58	36.96
Aug-99	44.90	45.07	34.78	45.30	34.95	45.29	35.05	45.12	35.11	34.84	40.70	35.26
Oct-99	46.97	46.37	40.52	46.86	40.76	47.97	40.85	47.96	40.94	40.62	46.35	41.24
Nov-99	45.85	45.44	39.94	45.51	40.18	46.35	40.20	45.22	40.38	40.06	44.58	40.62
Apr-00	46.87	45.97	40.09	46.04	40.35	46.50	40.42	46.39	40.56	40.27	45.59	40.82
Oct-00	45.34	44.92	39.27	45.10	39.50	45.38	39.54	45.28	39.71	40.37	43.57	39.98
Apr-01	46.85	46.11	40.30	46.14	40.49	46.37	40.56	46.27	40.65	40.39	44.93	40.95
Oct-01	45.22	44.58	36.62	44.79	36.76	44.92	36.87	44.82	36.90	36.72	42.23	37.22
Apr-02	46.47	45.97	39.22	45.98	39.43	46.07	39.51	45.93	39.64	39.29	44.25	39.93
Oct-02	45.97	45.61	35.22	45.57	35.39	45.72	35.44	45.39	35.56	35.27	42.22	35.85
Apr-03	47.04	46.33	40.39	46.37	40.61	46.61	40.68	46.66	40.80	40.51	45.38	41.11
Oct-03	47.21	46.52	40.71	46.76	40.95	46.99	41.02	47.18	41.15	40.83	45.78	41.42
15-Apr-04	47.38	46.62	40.08	46.82	40.30	47.38	40.35	47.75	40.52	40.17	45.91	40.78
14-Oct-04	46.37	45.72	39.58	44.82	39.76	45.76	39.87	45.68	39.95	39.67	44.48	40.22
05-Apr-05	46.35	46.02	40.37	46.03	40.56	46.17	40.60	46.00	40.73	40.45	44.99	40.99
27-Oct-05	46.86	42.38	41.01	46.39	41.23	46.99	41.18	47.50	41.05	41.10	45.55	41.75
21-Apr-06	46.41	46.05	40.07	45.98	40.27	46.05	40.33	45.93	40.41	40.24	44.56	40.75
12-Oct-06	46.92	46.51	40.11	46.38	40.36	46.49	40.43	46.40	40.58	40.24	44.95	40.88
26-Apr-07	46.52	46.05	39.67	45.99	39.78	46.17	40.07	46.03	40.29	39.76	44.93	40.59
10-Oct-07	43.46	43.34	34.12	42.53	34.24	41.99	34.31	41.81	34.44	34.15	41.90	34.70
03-Apr-08	46.54	46.17	38.12	46.00	38.20	46.42	38.31	46.28	38.42	38.23	44.77	38.48
28-Oct-08	45.96	45.99	34.75	45.66	34.71	45.28	34.85	45.13	34.87	34.83	43.99	34.58
08-Apr-09	45.47	46.27	34.56	46.07	34.43	46.40	34.87	46.26	34.66	34.84	44.75	33.79
27-Oct-09	45.15	45.05	30.72	44.55	30.42	44.66	30.85	44.54	30.51	30.94	43.37	29.33
08-Apr-10	46.69	46.00	33.15	45.95	32.79	46.16	33.35	46.09	32.99	33.47	44.77	31.42
13-Oct-10	46.63	45.99	31.83	45.99	31.43	46.41	32.01	46.41	31.58	32.26	44.42	29.69
27-Apr-11	46.27	45.75	30.80	45.72	30.48	45.63	30.99	45.53	30.62	31.17	44.28	28.87
20-Oct-11	46.25	46.25	30.89	46.07	30.59	46.07	31.14	46.18	30.76	31.70	44.89	29.23
26-Apr-12	46.03	45.76	30.36	45.65	30.10	45.72	30.55	45.69	30.31	30.76	44.51	28.72
16-Oct-12	46.05	45.65	30.73	45.53	30.40	45.71	31.02	45.66	30.56	31.15	44.90	28.87

NOTES:

1. All elevations are in feet above mean sea level.
2. NS = Not sampled and/or groundwater depths not measured.

TABLE 4

ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE SHALLOW AQUIFER

			October 2012				
GRADIENT CALCULATION SEGMENT	FLOW LINE LENGTH (feet)	FLOW DIRECTION	GROUND-WATER ELEV. (feet)	HORIZ. GRADIENT, i (ft/ft)	HYDRAULIC CONDUCTIVITY, K (ft/day)	EFFECTIVE POROSITY n	LINEAR VELOCITY, V (ft/day)
i_1	1493	SE	45 40	0.0033	5.67E-01	0.17	0.011
i_2	1036	SE	45 40	0.0048	5.67E-01	0.17	0.016
i_3	1132	E-SE	45 39	0.0053	5.67E-01	0.17	0.018
			Average	0.0045		Average	0.015

Notes:

1. The hydraulic conductivity value used to calculate flow velocity was determined by using the geometric mean of hydraulic conductivities of all shallow aquifer monitoring wells listed in Table 6 of the *CRSWMA Tuscarora Long-Term Regional Landfill Phase 2 Expansion, Application for a Permit to Construct* by Joyce Engineering, Inc. (Revised January 2004).
2. Velocity = Ki/n; assume homogeneous isotropic porous aquifer.
3. An effective porosity (n) of 0.17 was assumed in the velocity calculations based on site-specific soil laboratory data.

TABLE 5

ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE DEEP AQUIFER

			October 2012				
GRADIENT CALCULATION SEGMENT	FLOW LINE LENGTH (feet)	FLOW DIRECTION	GROUND-WATER ELEV. (feet)	HORIZ. GRADIENT, i (ft/ft)	HYDRAULIC CONDUCTIVITY, K (ft/day)	EFFECTIVE POROSITY n	LINEAR VELOCITY, V (ft/day)
i_4	1954	NW	34.0 28.5	0.0028	5.39E+00	0.25	0.061
i_5	222	E	34.5 34.0	0.0023	5.39E+00	0.25	0.049
i_6	1427	NW	33.0 28.5	0.0032	5.39E+00	0.25	0.068
			Average	0.0027		Average	0.059

Notes:

1. The hydraulic conductivity value used to calculate flow velocity was determined by using the geometric mean of hydraulic conductivities of all deep aquifer monitoring wells listed in Table 7 of the *CRSWMA Tuscarora Long-Term Regional Landfill Phase 2 Expansion, Application for a Permit to Construct* by Joyce Engineering, Inc. (Revised January 2004).
2. Velocity = Ki/n; assume homogeneous isotropic porous aquifer.
3. An effective porosity (n) of 0.25 was assumed in the velocity calculations based on site-specific soil laboratory data.

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	Concentrations (ug/L)																		Blanks
		DL	RL	Background		Downgradient														
				IRL-1S	IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-2DA	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	
Antimony	10-Oct-07	0.05	6.0	0.1 B	0.1 B	AB	WL	AB	WL	0.1 B	0.5 B	0.1 B	0.1 B	0.1 B	WL	AB	AB	0.1 B	WL	0.1 J
GWPS = 1.4 µg/L (10/23/07)	02-Apr-08	0.08	6.0	0.5 B	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	0.1 J
	28-Oct-08	0.08	6.0	0.1 J	0.1 J	AB	WL	AB	WL	0.5 J	0.1 J	ND	0.1 J	0.1 J	WL	AB	AB	ND	WL	ND
	08-Apr-09	0.06	6.0	ND	ND	AB	WL	AB	WL	0.1 J	0.1 J	ND	ND	0.9 J	WL	AB	AB	0.1 J	WL	ND
	27-Oct-09	0.06	6.0	ND	0.7 J	AB	WL	AB	WL	0.2 J	0.1 J	ND	ND	ND	WL	AB	AB	ND	WL	ND
	08-Apr-10	0.22	6.0	1.0 B	0.9 B	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	0.7 J
GWPS = 1 µg/L (8/1/10)	13-Oct-10	0.22	6.0	ND	ND	AB	WL	AB	WL	0.5 J	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	27-Apr-11	0.14	6.0	ND	ND	AB	WL	AB	WL	1.6 J	0.28 J	ND	ND	ND	WL	AB	AB	ND	WL	ND
	20-Oct-11	0.14	6.0	0.15 J	0.24 J	AB	WL	AB	WL	0.22 J	ND	ND	ND	ND	WL	AB	AB	0.5 J	WL	ND
	26-Apr-12	0.14	6.0	ND	ND	AB	WL	AB	WL	0.19 J	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	16-Oct-12	0.02	6.0	ND	0.15 J	AB	WL	AB	WL	0.16 J	0.39 J	0.23 J	0.19 J	0.12 J	WL	AB	AB	0.07 J	WL	ND
Arsenic	Jul-93	NR	5	11	8	ND	NI	ND	NI	ND	ND	ND	22	ND	34	11	ND	NI	NI	ND
	Aug-93	NR	5	6	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	6	ND	NI	NI	ND
	Sep-93	NR	5	ND	ND	ND	NI	ND	NI	ND	ND	ND	6	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	5	6	10	ND	NI	ND	NI	ND	ND	ND	168	ND	ND	ND	ND	NI	NI	ND
	Apr-94	NR	5	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	10	WL	14	AB	NI	NI	ND
	Oct-98	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	10	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	10	ND	52	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.47	10.0	3.0 J	ND	AB	WL	AB	WL	2.3 J	ND	1.6 J	0.7 J	1.2 J	WL	AB	AB	2.0 J	WL	ND
NC 2L = 50 µg/L (10/23/07)	02-Apr-08	0.07	10.0	0.8 J	0.8 J	AB	WL	AB	WL	0.4 J	0.4 J	1.7 J	0.4 J	2.2 J	WL	AB	AB	1.2 J	WL	ND
	28-Oct-08	0.07	10.0	1 B	1.6 B	AB	WL	AB	WL	1.7 B	1 B	2 B	0.5 B	4.3 J	WL	AB	AB	5 J	WL	0.5 J
	08-Apr-09	0.17	10.0	1.2 J	1.4 J	AB	WL	AB	WL	1.2 J	1.4 J	2.7 J	0.5 B	4.2 J	WL	AB	AB	3.8 J	WL	0.2 J
	27-Oct-09	0.17	10.0	2.1 J	1.8 J	AB	WL	AB	WL	1.3 J	0.5 J	1.3 J	0.6 J	5.2 J	WL	AB	AB	3.6 J	WL	ND
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.04	10.0	1.0 J	0.9 J	AB	WL	AB	WL	1.5 J	ND	1.2 J	ND	2.8 J	WL	AB	AB	2.5 J	WL	ND
	13-Oct-10	0.04	10.0	ND	2.7 J	AB	WL	AB	WL	3.2 J	0.5 J	2.4 J	0.8 J	4.8 J	WL	AB	AB	4.3 J	WL	ND
	27-Apr-11	0.10	10.0	0.18 J	0.82 J	AB	WL	AB	WL	0.71 J	0.22 J	0.79 J	0.34 J	2.2 J	WL	AB	AB	2.2 J	WL	ND
	20-Oct-11	0.10	10.0	ND	1.4 J	AB	WL	AB	WL	1.5 J	ND	1.3 J	0.38 J	0.25 J	WL	AB	AB	3.9 J	WL	ND
	26-Apr-12	0.10	10.0	0.42 J	1.3 J	AB	WL	AB	WL	0.96 J	ND	1.3 J	0.30 J	2.7 J	WL	AB	AB	2.0 J	WL	ND
	16-Oct-12	0.13	10.0	0.45 J	1.6 J	AB	WL	AB	WL	1.8 J	0.29 J	1.5 J	0.41 J	2.5 J	WL	AB	AB	2.7 J	WL	ND
Barium	Jul-93	NR	50	268	343	302	NI	188	NI	296	189	202	580	280	365	785	182	NI	NI	ND
	Aug-93	NR	50	122	252	109	NI	210	NI	248	110	110	125	294	116	96	54	NI	NI	ND
	Sep-93	NR	50	113	105	107	NI	125	NI	159	166	91	215	181	80	70	ND	NI	NI	ND
	Sep-93	NR	50	109	212	152	NI	204	NI	200	145	143	-	250	137	75	87	NI	NI	ND
	Apr-94	NR	50	73	131	97	NI	113	NI	83	86	103	65	309	73	ND	ND	NI	NI	ND
	Oct-94	NR	500	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	500	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	500	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	500	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	500	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	500	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	986	WL	ND	AB	NI	NI	ND
	Oct-97	NR	500	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	1084	WL	ND	AB	NI	NI	ND
	Apr-98	NR	500	ND	NS	ND	NI	AB	NI	ND	657	ND	515	971	WL	ND	AB	NI	NI	ND
	Oct-98	NR	500	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	898	WL	AB	AB	NI	NI	ND
	Mar-99	NR	500	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	500	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	500	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	500	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	500	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	500	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	500	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	500	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	500	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	100	ND	ND	AB	WL	AB	WL	ND	ND	113	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.04	100.0	44.8 J	56.4 J	AB	WL	AB	WL	69.9 J	67.2 J	133	39 J	96.9 J	WL	AB	AB	28.8 J	WL	0.2 J
NC 2L = 2,000 µg/L (10/23/07)	02-Apr-08	0.11	100.0	72.9 J	33.4 J	AB	WL	AB	WL	74.7 J	64.2 J	140	40.2 J	69.5 J	WL	AB	AB	33.8 J	WL	ND
	28-Oct-08	0.11	100.0	94.9 J	39.6 J	AB	WL	AB	WL	91.7 J	95.9 J	149	39 J	116	WL	AB	AB	44.2 J	WL	0.7 J
	08-Apr-09	0.04	100.0	118	41.1 J	AB	WL	AB	WL	72.6 J	107	176	43.8 J	92.8 J	WL	AB	AB	42.0 J	WL	0.2 J
	27-Oct-09	0.04	100.0	113	42.9 J	AB	WL	AB	WL	58.4 J	92.0 J	176	46.9 J	120	WL	AB	AB	29.6 J	WL	0.1 J
NC 2L = 700 µg/L (1/1/10)	08-Apr-10	0.03	100.0	109	47.0 J	AB	WL	AB	WL	53.9 J	81.2 J	180	47.2 J	107	WL	AB	AB	35.0 J	WL	0.1 J
	13-Oct-10	0.03	100.0	131	53.4 J	AB	WL	AB	WL	59.9 J	68.8 J	140	44.9 J	114	WL	AB	AB	37.7 J	WL	0.2 J
	27-Apr-11	0.02	100.0	170	45.8 J	AB	WL	AB	WL	48.3 J	66.5 J	150	51.6 J	107	WL	AB	AB	37.3 J	WL	0.10 J
	20-Oct-11	0.02	100.0	112	37.2 J	AB	WL	AB	WL	46.5 J	54.7 J	117	39.4 J	103	WL	AB	AB	30.2 J	WL	0.10 J
	26-Apr-12	0.02	100.0	133	49.3 J	AB	WL	AB	WL	54.0 J	50.6 J	115	46.3 J	91.5 J	WL	AB	AB	35.1 J	WL	0.12 J
	16-Oct-12	0.07	100.0	139	42.5 J	AB	WL	AB	WL	48.1 J	53.5 J	78.0 J	34.5 J	95.9 J	WL	AB	AB	35.6 J	WL	0.28 J
Beryllium	Jul-93	NR	1	3	1	ND	NI	ND	NI	ND	ND	2	ND	ND	8	4	ND	NI	NI	ND
	Aug-93	NR	1	1	1	ND	NI	1	NI	ND	1	ND	1	ND	1	ND	ND	NI	NI	ND
	Sep-93	NR	1	1	ND	ND	NI	ND	NI	ND	ND	ND	3	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	1	2	3	ND	NI	ND	NI	ND	2	ND	ND	ND	1	ND	ND	NI	NI	ND
	Apr-94	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	2	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	2	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	2	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	2	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	2	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	2	3	NS	ND	NI	AB	NI	ND	ND	ND	ND	3	WL	ND	AB	NI	NI	ND
	Oct-97	NR	2	3	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	2	ND	NS	ND	NI	AB	NI	ND	ND	ND	2.5	ND	WL	2	AB	NI	NI	ND
	Oct-98	NR	2	2	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	2	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	2	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	2	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	2	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	2	ND	NS	AB	6	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	2	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	2	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	2	ND	6	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	2	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	2	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	1.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.08	1.0	0.1 J	ND	AB	WL	AB	WL	ND	0.3 J	0.1 J	0.1 J	ND	WL	AB	AB	ND	WL	ND
GWPS = 4 µg/L (10/23/07)	02-Apr-08	0.06	1.0	0.4 J	0.1 J	AB	WL	AB	WL	0.1 J	0.1 J	0.2 J	0.1 J	ND	WL	AB	AB	0.2 J	WL	ND
	28-Oct-08	0.06	1.0	0.5 J	0.1 J	AB	WL	AB	WL	0.1 J	0.2 J	0.2 J	0.1 J	ND	WL	AB	AB	0.2 J	WL	ND
	08-Apr-09	0.06	1.0	0.6 J	0.1 J	AB	WL	AB	WL	0.2 J	0.5 J	0.2 J	0.1 J	ND	WL	AB	AB	0.2 J	WL	ND
	27-Oct-09	0.06	1.0	0.7 J	0.2 J	AB	WL	AB	WL	0.2 J	0.2 J	0.2 J	0.2 J	ND	WL	AB	AB	0.2 J	WL	ND
	08-Apr-10	0.02	1.0	0.6 J	0.1 B	AB	WL	AB	WL	0.3 B	0.1 B	0.2 B	0.1 B	0.1 B	WL	AB	AB	0.2 B	WL	0.1 J
GWPS = 4 µg/L (10/1/10)	13-Oct-10	0.02	1.0	0.6 J	0.3 J	AB	WL	AB	WL	0.1 J	0.2 J	0.2 J	0.2 J	0.1 J	WL	AB	AB	0.2 J	WL	ND
	27-Apr-11	0.02	1.0	0.59 J	0.06 J	AB	WL	AB	WL	0.14 J	0.13 J	0.26 J	0.13 J	ND	WL	AB	AB	0.16 J	WL	ND
	20-Oct-11	0.02	1.0	0.49 J	0.15 J	AB	WL	AB	WL	0.14 J	0.11 J	0.19 J	0.14 J	ND	WL	AB	AB	0.19 J	WL	ND
	26-Apr-12	0.02	1.0	0.58 J	0.09 J	AB	WL	AB	WL	0.14 J	0.17 J	0.34 J	0.15 J	ND	WL	AB	AB	0.15 J	WL	ND
	16-Oct-12	0.07	1.0	0.54 J	0.08 J	AB	WL	AB	WL	0.11 J	0.13 J	0.25 J	0.15 J	ND	WL	AB	AB	0.10 J	WL	ND
Cadmium	Jul-93	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Aug-93	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	10	ND	ND	ND	ND	NI	NI	ND
	Apr-94	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	1	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-98	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	1	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	1	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	1	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	1	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	1	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	1	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	1	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	1	1	NS	AB	ND	AB	WL	ND	ND	1	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	1	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	1	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	1	ND	NS	AB	3	AB	WL	1	ND	ND	ND	ND	WL	AB	AB	1	ND	ND
	14-Oct-04	NR	1	ND	NS	AB	2	AB	WL	ND	ND	ND	ND	1	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	1	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	1	ND	4	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	1	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	1	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	1.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.06	1.0	0.3 B	0.4 B	AB	WL	AB	WL	0.6 J	0.1 B	0.4 B	0.1 B	0.4 B	WL	AB	AB	0.1 B	WL	0.1 J
NC 2L = 1.75 µg/L (10/23/07)	02-Apr-08	0.04	1.0	0.2 J	0.4 J	AB	WL	AB	WL	0.2 J	0.7 J	0.5 J	0.1 J	0.1 J	WL	AB	AB	0.1 J	WL	ND
	28-Oct-08	0.04	1.0	0.3 J	0.8 J	AB	WL	AB	WL	0.1 J	0.1 J	0.2 J	0.2 J	0.3 J	WL	AB	AB	0.2 J	WL	ND
	08-Apr-09	0.04	1.0	0.2 J	0.1 J	AB	WL	AB	WL	0.6 J	0.4 J	0.6 J	0.1 J	0.7 J	WL	AB	AB	0.1 J	WL	ND
	27-Oct-09	0.04	1.0	0.4 J	0.3 J	AB	WL	AB	WL	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	WL	AB	AB	0.2 J	WL	ND
NC 2L = 2 µg/L (1/1/10)	08-Apr-10	0.02	1.0	0.4 B	0.2 B	AB	WL	AB	WL	0.9 J	0.1 B	0.2 B	0.1 B	0.1 B	WL	AB	AB	0.1 B	WL	0.1 J
	13-Oct-10	0.02	1.0	0.7 J	0.3 J	AB	WL	AB	WL	0.3 J	0.2 J	1.1	0.2 J	0.1 J	WL	AB	AB	0.5 J	WL	ND
	27-Apr-11	0.02	1.0	0.11 J	0.10 J	AB	WL	AB	WL	0.06 J	0.19 J	0.24 J	0.08 J	0.11 J	WL	AB	AB	0.06 J	WL	ND
	20-Oct-11	0.02	1.0	0.07 J	0.15 J	AB	WL	AB	WL	0.09 J	ND	0.16 J	0.26 J	0.08 J	WL	AB	AB	0.09 J	WL	ND
	26-Apr-12	0.02	1.0	0.18 J	0.08 J	AB	WL	AB	WL	0.54 J	0.30 J	2	0.12 J	0.11 J	WL	AB	AB	0.07 J	WL	ND
	16-Oct-12	0.03	1.0	0.20 J	0.25 J	AB	WL	AB	WL	0.24 J	0.21 J	0.39 J	0.11 J	0.15 J	WL	AB	AB	0.10 J	WL	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	Concentrations (ug/L)																		
		DL	RL	Background		Downgradient														Blanks
				IRL-1S	IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-2DA	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	
Chromium	Jul-93	NR	5	36	18	ND	NI	ND	NI	ND	16	ND	49	ND	90	44	6	NI	NI	ND
	Aug-93	NR	5	14	8	ND	NI	7	NI	ND	6	ND	6	ND	18	ND	ND	NI	NI	ND
	Sep-93	NR	5	11	11	ND	NI	ND	NI	ND	10	ND	15	ND	11	7	ND	NI	NI	ND
	Sep-93	NR	5	19	43	ND	NI	6	NI	ND	22	ND	20	ND	21	6	ND	NI	NI	ND
	Apr-94	NR	5	10	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	10	13	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	10	39	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	10	23	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	10	50	NS	ND	NI	AB	NI	ND	ND	18	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	10	18	NS	ND	NI	AB	NI	22	ND	14	ND	ND	WL	25	AB	NI	NI	ND
	Oct-98	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	10	58	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	10	21	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	5	87	NS	AB	NI	AB	NI	19	ND	18	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	10	21	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	10	11	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	12	ND	ND
	Oct-02	NR	10	15	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	10	12	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	10	13	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	10	ND	ND
	14-Oct-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	10	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	10	ND	29	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.24	10.0	1.6 B	1.2 B	AB	WL	AB	WL	2.0 B	2.3 B	1.3 B	2.1 B	1.4 B	WL	AB	AB	1.3 B	WL	1.2 J
NC 2L = 50 µg/L (10/23/07)	02-Apr-08	0.11	10.0	1.6 J	ND	AB	WL	AB	WL	0.7 J	0.5 J	ND	0.5 J	ND	WL	AB	AB	0.3 J	WL	ND
	28-Oct-08	0.11	10.0	3 J	1.6 J	AB	WL	AB	WL	1.5 J	1.1 J	0.4 J	1.1 J	0.4 J	WL	AB	AB	1.8 J	WL	ND
	08-Apr-09	0.10	10.0	6.1 J	1.1 J	AB	WL	AB	WL	2.7 J	5.9 J	1.6 J	1.2 J	0.6 J	WL	AB	AB	2.1 J	WL	ND
	27-Oct-09	0.10	10.0	7.8 J	2.2 J	AB	WL	AB	WL	3.1 J	2.0 J	1.0 J	1.6 J	0.9 J	WL	AB	AB	1.1 J	WL	ND
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.03	10.0	5.9 J	0.9 J	AB	WL	AB	WL	3.7 J	1.1 J	1.0 J	0.6 J	0.3 J	WL	AB	AB	1.1 J	WL	ND
	13-Oct-10	0.03	10.0	0.7 J	3.4 J	AB	WL	AB	WL	1.5 J	1.6 J	0.8 J	1.5 J	0.6 J	WL	AB	AB	1.7 J	WL	ND
	27-Apr-11	0.04	10.0	0.81 B	0.56 B	AB	WL	AB	WL	1.6 J	1.8 J	0.90 B	1.4 J	0.37 B	WL	AB	AB	0.98 J	WL	0.18 J
	20-Oct-11	0.04	10.0	1.6 J	2.3 J	AB	WL	AB	WL	3.2 J	1.7 J	1.5 J	1.9 J	1.1 J	WL	AB	AB	2.7 J	WL	0.18 J
	26-Apr-12	0.04	10.0	3.9 J	1.5 J	AB	WL	AB	WL	3.0 J	2.7 J	2.8 J	2 J	0.79 J	WL	AB	AB	2.0 J	WL	0.09 J
	16-Oct-12	0.18	10.0	1.6 J	1.6 J	AB	WL	AB	WL	2.0 J	2.1 J	0.80 J	1.5 J	0.4 J	WL	AB	AB	0.74 J	WL	ND
Cobalt	Jul-93	NR	20	32	41	27	NI	20	NI	21	31	ND	93	29	118	45	23	NI	NI	ND
	Aug-93	NR	20	26	27	23	NI	40	NI	37	32	27	33	50	30	22	25	NI	NI	ND
	Sep-93	NR	20	22	21	ND	NI	21	NI	23	25	ND	38	36	32	ND	ND	NI	NI	ND
	Sep-93	NR	20	ND	ND	ND	NI	22	NI	ND	ND	31	53	26	21	ND	ND	NI	NI	ND
	Apr-94	NR	10	27 B	22 B	27 B	NI	41 B	NI	35 B	39 B	27 B	41 B	53 B	34 B	20 B	ND	NI	NI	18
	Oct-94	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	37	NI	NI	ND
	Oct-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	10	20	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-98	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	10	16	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	10	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.41	10.0	0.6 J	ND	AB	WL	AB	WL	ND	ND	1.3 J	ND	ND	WL	AB	AB	ND	WL	ND
GWPS = 70 µg/L (10/23/07)	02-Apr-08	0.03	10.0	0.9 J	0.1 J	AB	WL	AB	WL	0.3 J	0.3 J	1.3 J	0.1 J	0.4 J	WL	AB	AB	1.6 J	WL	ND
	28-Oct-08	0.03	10.0	1.1 J	0.5 J	AB	WL	AB	WL	0.4 J	0.4 J	1.2 J	0.4 J	1.1 J	WL	AB	AB	0.5 J	WL	ND
	08-Apr-09	0.02	10.0	1.3 J	0.8 J	AB	WL	AB	WL	0.6 J	1.2 J	1.4 J	0.5 J	1.5 J	WL	AB	AB	0.7 J	WL	ND
	27-Oct-09	0.02	10.0	1.2 J	0.5 J	AB	WL	AB	WL	0.5 J	0.4 J	1.4 J	0.6 J	2.1 J	WL	AB	AB	0.4 J	WL	ND
	08-Apr-10	0.10	10.0	1.3 J	0.9 J	AB	WL	AB	WL	1.6 J	0.3 J	1.8 J	0.4 J	1.5 J	WL	AB	AB	0.6 J	WL	ND
GWPS = 1 µg/L (10/1/10)	13-Oct-10	0.10	10.0	1 J	0.7 J	AB	WL	AB	WL	0.7 J	0.4 J	1.4 J	0.6 J	2.1 J	WL	AB	AB	0.4 J	WL	ND
	27-Apr-11	0.03	10.0	1.3 J	0.24 J	AB	WL	AB	WL	0.69 J	0.26 J	2.3 J	0.33 J	0.71 J	WL	AB	AB	0.50 J	WL	ND
	20-Oct-11	0.03	10.0	0.86 J	0.46 J	AB	WL	AB	WL	0.80 J	0.14 J	2.0 J	0.36 J	1.1 J	WL	AB	AB	0.42 J	WL	ND
	26-Apr-12	0.03	10.0	1.0 J	0.41 J	AB	WL	AB	WL	0.72 J	0.39 J	2.6 J	0.52 J	1.1 J	WL	AB	AB	0.45 J	WL	ND
	16-Oct-12	0.02	10.0	0.93 J	0.46 J	AB	WL	AB	WL	0.66 J	0.33 J	2.6 J	0.40 J	1.0 J	WL	AB	AB	0.30 J	WL	ND
Copper	Jul-93	NR	10	38 B	25 B	22 B	NI	29 B	NI	30 B	29 B	24 B	63 B	23 B	54 B	55 B	22 B	NI	NI	17
	Aug-93	NR	10	32 B	26 B	27 B	NI	24 B	NI	24 B	26 B	24 B	20 B	19 B	23 B	25 B	17 B	NI	NI	19
	Sep-93	NR	10	22 B	24 B	27 B	NI	22 B	NI	19 B	24 B	22 B	29 B	34 B	26 B	25 B	27 B	NI	NI	11
	Sep-93	NR	10	89 B	101 B	58 B	NI	79 B	NI	39 B	69 B	65 B	ND	53 B	62 B	53 B	54 B	NI	NI	39
	Apr-94	NR	10	26 B	22 B	26 B	NI	29 B	NI	28 B	29 B	28 B	28 B	33 B	24 B	24 B	ND	NI	NI	21
	Oct-94	NR	200	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	200	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	24	NI	NI	ND
	Oct-95	NR	200	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	200	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	200	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	200	55	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	200	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	200	ND	NS	11	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-98	NR	200	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	200	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	200	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	200	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	200	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	200	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	200	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	200	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	200	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	200	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.20	10.0	0.6 B	1.0 B	AB	WL	AB	WL	0.4 B	0.7 B	0.9 B	0.5 B	0.7 B	WL	AB	AB	1.0 B	WL	0.4 J
NC 2L = 1,000 µg/L (10/23/07)	02-Apr-08	0.05	10.0	0.8 B	0.4 B	AB	WL	AB	WL	0.6 B	0.5 B	0.8 B	0.2 B	0.4 B	WL	AB	AB	0.4 B	WL	0.2 J
	28-Oct-08	0.05	10.0	1.4 B	1.5 B	AB	WL	AB	WL	0.7 B	0.5 B	1.0 B	0.5 B	1.0 B	WL	AB	AB	1.2 B	WL	1.1 J
	08-Apr-09	0.04	10.0	2.2 J	0.9 J	AB	WL	AB	WL	1.7 J	1.6 J	1.9 J	0.4 B	2.3 J	WL	AB	AB	1.1 J	WL	0.1 J
	27-Oct-09	0.04	10.0	3.2 J	2.1 J	AB	WL	AB	WL	1.9 J	3.0 J	2.5 J	1.9 J	1.3 J	WL	AB	AB	5.4 J	WL	0.1 J
	08-Apr-10	0.03	10.0	2.9 J	2.7 J	AB	WL	AB	WL	2.8 J	1.0 B	1.6 J	0.8 B	1.2 J	WL	AB	AB	1.6 J	WL	0.2 J
	13-Oct-10	0.03	10.0	1.6 J	2.6 J	AB	WL	AB	WL	0.5 B	0.7 B	1.7 J	0.6 B	1.0 B	WL	AB	AB	1.5 J	WL	0.2 J
	27-Apr-11	0.02	10.0	0.96 B	1.1 B	AB	WL	AB	WL	0.62 B	0.68 B	0.83 B	0.57 B	0.64 B	WL	AB	AB	1.2 B	WL	0.66 J
	20-Oct-11	0.02	10.0	1.1 J	1.3 J	AB	WL	AB	WL	1.1 J	0.97 B	0.86 B	1.3 J	0.97 B	WL	AB	AB	1.3 J	WL	0.2 J
	26-Apr-12	0.02	10.0	1.6 B	1.1 B	AB	WL	AB	WL	1.7 B	1.7 B	1.10 B	0.84 B	1.0 B	WL	AB	AB	1.1 B	WL	0.94 J
	16-Oct-12	0.06	10.0	0.93 B	1.4 J	AB	WL	AB	WL	0.73 B	0.59 B	0.82 B	0.69 B	1.1 B	WL	AB	AB	0.61 B	WL	0.25 J
Lead	Jul-93	NR	5	32	6	ND	NI	ND	NI	12	7	ND	30	ND	30	65	ND	NI	NI	ND
	Aug-93	NR	5	7	5	6	NI	10	NI	ND	ND	7	ND	ND	12	8	5	NI	NI	ND
	Sep-93	NR	5	14	9	ND	NI	ND	NI	ND	7	5	12	ND	ND	9	ND	NI	NI	ND
	Sep-93	NR	5	13	22	ND	NI	ND	NI	ND	8	ND	21	ND	ND	7	ND	NI	NI	ND
	Apr-94	NR	5	11	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	10	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	10	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	10	22	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	10	ND	NS	11	NI	AB	NI	ND	ND	22	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	10	12	NS	ND	NI	AB	NI	16	ND	ND	ND	ND	WL	20	AB	NI	NI	ND
	Oct-98	NR	10	14	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	10	21	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	10	12	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	10	38	NS	AB	NI	AB	NI	ND	ND	14	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	10	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	10	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	10	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	10	ND	31	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.07	10.0	0.4 B	0.1 B	AB	WL	AB	WL	0.1 B	0.1 B	0.2 B	0.1 B	0.1 B	WL	AB	AB	0.3 B	WL	0.1 J
NC 2L = 15 µg/L (10/23/07)	02-Apr-08	0.04	10.0	1.4 J	0.1 J	AB	WL	AB	WL	0.1 J	0.3 J	0.1 J	ND	0.1 J	WL	AB	AB	0.3 J	WL	ND
	28-Oct-08	0.04	10.0	3.5 J	1.5 J	AB	WL	AB	WL	0.9 J	0.4 B	0.7 J	0.4 B	0.5 B	WL	AB	AB	1.4 J	WL	0.1 J
	08-Apr-09	0.04	10.0	4.8 J	0.9 J	AB	WL	AB	WL	1.9 J	8.9 J	1.4 J	0.4 B	0.6 J	WL	AB	AB	1.7 J	WL	0.1 J
	27-Oct-09	0.04	10.0	8.7 J	1.5 J	AB	WL	AB	WL	2.0 J	1.9 J	0.6 J	0.7 J	0.9 J	WL	AB	AB	0.9 J	WL	ND
	08-Apr-10	0.01	10.0	5.0 J	0.8 J	AB	WL	AB	WL	3.0 J	0.4 B	0.8 J	0.3 B	0.3 B	WL	AB	AB	1.3 J	WL	0.1 J
	13-Oct-10	0.01	10.0	1.2 J	2.7 J	AB	WL	AB	WL	1.1 J	1 J	0.5 B	0.7 J	0.7 J	WL	AB	AB	1.7 J	WL	0.1 J
	27-Apr-11	0.02	10.0	1.3 J	0.63 J	AB	WL	AB	WL	1.0 J	0.51 J	0.52 J	0.44 J	0.26 J	WL	AB	AB	0.76 J	WL	ND
	20-Oct-11	0.02	10.0	1.6 J	1.2 J	AB	WL	AB	WL	2.1 J	0.55 J	0.65 J	0.58 J	0.53 J	WL	AB	AB	1.4 J	WL	ND
	26-Apr-12	0.02	10.0	3.0 J	1.0 J	AB	WL	AB	WL	2.2 J	1.2 J	1.7 J	0.6 J	0.36 J	WL	AB	AB	1.1 J	WL	0.02 J
	16-Oct-12	0.08	10.0	1.9 J	1.4 J	AB	WL	AB	WL	1.6 J	0.83 J	0.29 J	0.43 J	0.45 J	WL	AB	AB	0.6 J	WL	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	Concentrations (ug/L)																		Blanks
		DL	RL	Background		Downgradient														
				IRL-1S	IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-2DA	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	
Nickel	Jul-93	NR	10	45	30	15	NI	21	NI	23	53	26	133	51	144	54	35	NI	NI	ND
	Aug-93	NR	10	25 B	16 B	16 B	NI	36 B	NI	31 B	28 B	99	62	60	42 B	213	35 B	NI	NI	11
	Sep-93	NR	10	25 B	28 B	33 B	NI	22 B	NI	20 B	28 B	27 B	53 B	48 B	42 B	36 B	24 B	NI	NI	17
	Sep-93	NR	10	24	32	16	NI	22	NI	17	22	11	ND	20	21	ND	ND	NI	NI	ND
	Apr-94	NR	10	34 B	38 B	36 B	NI	54 B	NI	53 B	57 B	45 B	40 B	50 B	27 B	ND	ND	NI	NI	20
	Oct-94	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	64	ND	ND	ND	NI	NI	ND
	Apr-95	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	17	NI	NI	ND
	Oct-95	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-98	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	50	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	50	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	50	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	50	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.66	50.0	1.5 J	0.9 J	AB	WL	AB	WL	3.3 J	2.7 J	2.3 J	2.1 J	6.1 J	WL	AB	AB	1.0 J	WL	ND
NC 2L = 100 μg/L (10/23/07)	02-Apr-08	0.06	50.0	1.6 J	1.4 B	AB	WL	AB	WL	5.4 J	3.9 J	2.0 J	2.5 J	5.3 J	WL	AB	AB	2.1 J	WL	0.3 J
	28-Oct-08	0.06	50.0	2 J	1.6 J	AB	WL	AB	WL	5 J	4.8 J	1.9 J	2.9 J	8.4 J	WL	AB	AB	1.1 J	WL	0.2 J
	08-Apr-09	0.04	50.0	3.1 J	1.0 J	AB	WL	AB	WL	4.6 J	6.4 J	1.9 J	1.7 J	6.3 J	WL	AB	AB	0.8 J	WL	ND
	27-Oct-09	0.04	50.0	2.5 J	1.4 J	AB	WL	AB	WL	2.8 J	2.3 J	1.9 J	1.8 J	4.9 J	WL	AB	AB	0.8 B	WL	0.2 J
	08-Apr-10	0.05	50.0	1.9 J	0.5 J	AB	WL	AB	WL	4.6 J	1.9 J	2.0 J	1.1 J	4.9 J	WL	AB	AB	1.1 J	WL	ND
	13-Oct-10	0.05	50.0	2.1 J	4 J	AB	WL	AB	WL	8.2 J	4.5 J	2.8 J	3.5 J	10.7 J	WL	AB	AB	1.1 J	WL	0.1 J
	27-Apr-11	0.04	50.0	2.7 J	0.88 B	AB	WL	AB	WL	3.1 J	1.9 J	3.3 J	1.6 J	4.4 J	WL	AB	AB	1.2 B	WL	0.30 J
	20-Oct-11	0.04	50.0	2.0 B	1.3 B	AB	WL	AB	WL	3.0 J	1.7 B	2.8 J	1.6 B	4.1 J	WL	AB	AB	1.2 B	WL	0.56 J
	26-Apr-12	0.04	50.0	2.2 J	1.2 J	AB	WL	AB	WL	3.4 J	2.1 J	3.5 J	1.9 J	4.6 J	WL	AB	AB	1.1 J	WL	ND
	16-Oct-12	0.06	50.0	2.2 J	1.6 J	AB	WL	AB	WL	3.8 J	2.6 J	3.7 J	2.0 J	5.1 J	WL	AB	AB	1.0 B	WL	0.23 J
Selenium	10-Oct-07	0.35	10.0	1.2 B	1.0 B	AB	WL	AB	WL	8.0 J	1.7 B	3.5 B	1.2 B	4.5 B	WL	AB	AB	1.6 B	WL	0.9 J
NC 2L = 50 μg/L (10/23/07)	02-Apr-08	0.14	10.0	ND	ND	AB	WL	AB	WL	1.0 J	0.9 J	5.2 J	ND	6.2 J	WL	AB	AB	0.7 J	WL	ND
	28-Oct-08	0.14	10.0	0.2 B	ND	AB	WL	AB	WL	2.8 B	2.4 B	5 B	ND	4.5 B	WL	AB	AB	1.2 B	WL	1.9 J
	08-Apr-09	0.12	10.0	ND	ND	AB	WL	AB	WL	0.8 J	2.0 J	3.0 J	ND	3.1 J	WL	AB	AB	0.9 J	WL	ND
	27-Oct-09	0.12	10.0	0.3 J	0.3 J	AB	WL	AB	WL	2.0 J	1.5 J	2.3 J	ND	3.4 J	WL	AB	AB	0.7 J	WL	ND
NC 2L = 20 μg/L (1/1/10)	08-Apr-10	0.32	10.0	ND	ND	AB	WL	AB	WL	0.5 J	0.8 J	3.6 J	ND	5.1 J	WL	AB	AB	0.6 J	WL	ND
	13-Oct-10	0.32	10.0	ND	ND	AB	WL	AB	WL	1.6 J	1.2 J	5.1 J	ND	6.6 J	WL	AB	AB	1.6 J	WL	ND
	27-Apr-11	0.20	10.0	ND	0.31 J	AB	WL	AB	WL	1.5 J	0.76 J	2.3 J	0.34 J	3.8 J	WL	AB	AB	0.81 J	WL	ND
	20-Oct-11	0.20	10.0	0.31 J	0.26 J	AB	WL	AB	WL	1.5 J	1.3 J	1.9 J	0.22 J	2.6 J	WL	AB	AB	0.75 J	WL	ND
	26-Apr-12	0.20	10.0	0.21 J	ND	AB	WL	AB	WL	1.0 J	0.32 J	1.9 J	0.21 J	3.5 J	WL	AB	AB	0.58 J	WL	ND
	16-Oct-12	0.17	10.0	0.19 J	0.33 J	AB	WL	AB	WL	3.0 J	0.22 J	2.1 J	ND	2.9 J	WL	AB	AB	0.66 J	WL	ND
Silver	02-Apr-08	0.04	10.0	0.1 B	0.1 B	AB	WL	AB	WL	0.1 B	ND	0.1 B	ND	ND	WL	AB	AB	0.1 B	WL	0.1 J
NC 2L = 17.5 μg/L (10/23/07)	28-Oct-08	0.04	10.0	0.1 B	0.1 B	AB	WL	AB	WL	0.1 B	ND	ND	ND	0.1 B	WL	AB	AB	ND	WL	0.1 J
	08-Apr-09	0.04	10.0	ND	ND	AB	WL	AB	WL	ND	ND	0.1 J	ND	ND	WL	AB	AB	ND	WL	ND
	27-Oct-09	0.04	10.0	ND	0.1 J	AB	WL	AB	WL	0.1 J	0.1 J	0.1 J	ND	ND	WL	AB	AB	0.1 J	WL	ND
NC 2L = 20 μg/L (1/1/10)	08-Apr-10	0.03	10.0	ND	ND	AB	WL	AB	WL	0.1 B	0.1 B	0.1 B	ND	0.1 B	WL	AB	AB	ND	WL	0.1 J
	13-Oct-10	0.03	10.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	0.1 J	0.1 J	WL	AB	AB	ND	WL	ND
	27-Apr-11	0.02	10.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	20-Oct-11	0.02	10.0	ND	0.07 J	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	0.06 J	WL	ND
	26-Apr-12	0.02	10.0	ND	ND	AB	WL	AB	WL	0.04 J	0.06 J	0.04 J	0.02 J	ND	WL	AB	AB	ND	WL	ND
	16-Oct-12	0.1	10.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
Thallium	02-Apr-08	0.04	5.0	0.1 J	0.2 J	AB	WL	AB	WL	0.1 J	ND	0.1 J	ND	ND	WL	AB	AB	0.1 J	WL	ND
GWPS = 0.28 μg/L (10/23/07)	28-Oct-08	0.04	5.0	0.2 J	ND	AB	WL	AB	WL	0.1 J	ND	0.1 J	ND	ND	WL	AB	AB	ND	WL	ND
	08-Apr-09	0.03	5.0	0.1 J	ND	AB	WL	AB	WL	0.1 J	0.1 J	0.1 J	ND	ND	WL	AB	AB	ND	WL	ND
	27-Oct-09	0.03	5.0	0.1 J	0.1 J	AB	WL	AB	WL	0.1 J	0.1 J	ND	ND	ND	WL	AB	AB	ND	WL	ND
	08-Apr-10	0.05	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
GWPS = 0.2 μg/L (10/1/10)	13-Oct-10	0.05	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	0.2 J	0.1 J	WL	AB	AB	ND	WL	ND
	27-Apr-11	0.02	5.5	0.03 B	ND	AB	WL	AB	WL	0.05 B	ND	0.04 B	ND	ND	WL	AB	AB	ND	WL	0.03 J
	20-Oct-11	0.02	5.5	0.03 J	0.09 J	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	0.03 J	WL	ND
	26-Apr-12	0.02	5.5	0.06 J	ND	AB	WL	AB	WL	0.18 J	0.05 J	0.07 J	0.02 J	ND	WL	AB	AB	0.02 J	WL	ND
	16-Oct-12	0.07	5.5	ND	ND	AB	WL	AB	WL	ND	ND	0.08 J	0.07 J	ND	WL	AB	AB	ND	WL	ND
Vanadium	Jul-93	NR	2000	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Aug-93	NR	2000	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	2000	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-93	NR	2000	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-94	NR	25	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-94	NR	40	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-95	NR	40	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-95	NR	40	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	40	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	40	ND	NS	ND	NI	AB	NI	48	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	40	48	NS	ND	NI	AB	NI	48	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-97	NR	40	56	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-98	NR	40	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Oct-98	NR	40	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Mar-99	NR	40	63	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-99	NR	40	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-00	NR	40	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Oct-00	NR	40	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	ND	WL	AB	AB	NI	NI	ND
	Apr-01	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Oct-01	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	NS	NS	ND
	Apr-02	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-02	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Apr-03	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	Oct-03	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	40	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	40	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	40	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	40	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	40	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	25	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.42	25.0	0.6 J	ND	AB	WL	AB	WL	2.5 J	1.2 J	ND	0.8 J	1.2 J	WL	AB	AB	ND	WL	ND
GWPS = 3.5 μg/L (10/23/07)	02-Apr-08	0.07	25.0	2.0 J	0.3 J	AB	WL	AB	WL	1.6 J	1.1 J	0.3 J	1.0 J	1.2 J	WL	AB	AB	1.1 J	WL	ND
	28-Oct-08	0.07	25.0	4.2 J	2.1 J	AB	WL	AB	WL	3.3 J	1.9 J	1 B	1.7 J	2 J	WL	AB	AB	2.7 J	WL	0.2 J
	08-Apr-09	0.28	25.0	7.8 J	1.9 J	AB	WL	AB	WL	6.2 J	8.2 J	3.1 J	2.1 J	3.0 J	WL	AB	AB	3.7 J	WL	ND
	27-Oct-09	0.28	25.0	10.3 J	2.7 J	AB	WL	AB	WL	5.9 J	2.5 J	1.5 B	2.3 J	2.4 J	WL	AB	AB	2.4 J	WL	0.4 J
	08-Apr-10	0.03	25.0	7.5 J	1.2 B	AB	WL	AB	WL	6.0 J	1.1 B	1.2 B	1.2 B	2.0 B	WL	AB	AB	3.1 J	WL	0.4 J
GWPS = 0.3 μg/L (10/1/10)	13-Oct-10	0.03	25.0	1.7 B	5.1 J	AB	WL	AB	WL	2.9 B	2.6 B	1.5 B	2.7 B	2.2 B	WL	AB	AB	3 B	WL	0.6 J
	27-Apr-11	0.14	25.0	1.2 J	0.79 J	AB	WL	AB	WL	2.0 J	1.6 J	0.49 J	1.4 J	1.5 J	WL	AB	AB	1.3 J	WL	ND
	20-Oct-11	0.14	25.0	1.4 J	2.1 J	AB	WL	AB	WL	4.4 J	0.92 J	0.79 J	1.3 J	0.84 J	WL	AB	AB	2.8 J	WL	ND
	26-Apr-12	0.14	25.0	4.6 J	1.1 J	AB	WL	AB	WL	4.4 J	2.2 J	2.9 J	1.5 J	0.99 J	WL	AB	AB	1.9 J	WL	ND
	16-Oct-12	0.1	25.0	2.2 J	2.3 J	AB	WL	AB	WL	2.7 J	2.0 J	0.29 J	1.6 J	1.1 J	WL	AB	AB	1.0 J	WL	ND
Zinc	Jul-93	NR	10	42 B	41 B	10 B	NI	15 B	NI	11 B	43 B	14 B	293	ND	301	ND	25 B	NI	NI	10
	Aug-93	NR	10	37	18	11	NI	14	NI	ND	ND	16	25	ND	64	12	22	NI	NI	ND
	Sep-93	NR	10	31	20	ND	NI	ND	NI	ND	13	ND	57	ND	12	ND	ND	NI	NI	ND
	Sep-93	NR	10	73	88	17	NI	27	NI	22	26	14	41	11	29	12	24	NI	NI	ND
	Apr-94	NR	10	36 B	19 B	42 B	NI	21 B	NI	155	24 B	25 B	30 B	48 B	22 B	34 B	ND	NI	NI	20
	Oct-94	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	97	ND	ND	ND	NI	NI	ND
	Apr-95	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	803	ND	ND	25	NI	NI	ND
	Oct-95	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Apr-96	NR	50	ND	ND	ND	NI	ND	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Oct-96	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	ND	WL	ND	AB	NI	NI	ND
	Apr-97	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	1425	WL	ND	AB	NI	NI	ND
	Oct-97	NR	50	110	NS	ND	NI	AB	NI	ND	ND	ND	ND	1240	WL	ND	AB	NI	NI	ND
	Apr-98	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	6340	WL	ND	AB	NI	NI	ND
	Oct-98	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	54	WL	AB	AB	NI	NI	ND
	Mar-99	NR	50	ND	NS	ND	NI	AB	NI	ND	ND	ND	ND	1608	WL	AB	AB	NI	NI	ND
	Oct-99	NR	50	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	65	WL	AB	AB	NI	NI	ND
	Apr-00	NR	50	90	NS	AB	NI	AB	NI	ND	ND	ND	ND	596	WL	AB	AB	NI	NI	ND
	Oct-00	NR	50	ND	NS	AB	NI	AB	NI	ND	ND	ND	ND	74	WL	AB	AB	NI	NI	ND
	Apr-01	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	1204	WL	AB	AB	NS	NS	ND
	Oct-01	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	362	WL	AB	AB	NS	NS	ND
	Apr-02	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	124	WL	AB	AB	ND	ND	ND
	Oct-02	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	131	WL	AB	AB	ND	ND	ND
	Apr-03	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	112	WL	AB	AB	ND	ND	ND
	Oct-03	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	277	WL	AB	AB	ND	ND	ND
	15-Apr-04	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	364	WL	AB	AB	ND	ND	ND
	14-Oct-04	NR	50	ND	NS	AB	ND	AB	WL	ND	ND	ND	ND	63	WL	AB	AB	ND	ND	ND
	05-Apr-05	NR	50	ND	NS	AB	WL	AB	WL	ND	ND	ND	ND	132	WL	AB	AB	ND	WL	ND
	05-Oct-05	NR	50	ND	192	AB	WL	AB	WL	ND	ND	ND	ND	280	WL	AB	AB	ND	WL	ND
	21-Apr-06	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	76	WL	AB	AB	ND	WL	ND
	12-Oct-06	NR	50	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	172	WL	AB	AB	ND	WL	ND
	26-Apr-07	NR	10	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	30	WL	AB	AB	ND	WL	ND
	10-Oct-07	0.20	10.0	7.5 B	5.3 B	AB	WL	AB	WL	3.8 B	3.0 B	7.4 B	6.8 B	55	WL	AB	AB	5.2 B	WL	6.6
NC 2L = 1,050 μg/L (10/23/07)	02-Apr-08	0.04	10.0	5.5 B	14 B	AB	WL	AB	WL	3.3 B	2.1 B	4.4 B	1.6 B	37	WL	AB	AB	11 B	WL	6.3 J
	28-Oct-08	0.04	10.0	6.8 J	6.6 J	AB	WL	AB	WL	7.8 J	3.8 J	8.7 J	3.0 J	415	WL	AB	AB	6.8 J	WL	0.4 J
Resample	23-Dec-08	4.46	10.0	NS	NS	AB	NS	AB	NS	NS	NS	NS	NS	86	NS	AB	AB	NS	NS	NA
	08-Apr-09	0.14	10.0	9.5 J	13	AB	NS	AB	WL	18	18	11	2.1 B	380	WL	AB	AB	6.4 J	WL	0.8 J
Resample	01-Jun-09	0.14	10.0	NS	NS	AB	NS	AB	NS	NS	NS	NS	NS	26	NS	AB	AB	NS	NS	NS
	27-Oct-09	0.14	10.0	11	6.7 B	AB	NS	AB	WL	9.0 J	5.0 B	6.6 B	4.2 B	640	WL	AB	AB	7.0 B	WL	1.4 J
NC 2L = 1,000 μg/L (01/01/10) Resample	12-Feb-10	0.14	10.0	NS	NS	AB	NS	AB	NS	NS	NS	NS	NS	158	NS	AB	AB	NS	NS	NS
	08-Apr-10	0.08	10.0	12	9.7 J	AB	WL	AB	WL	32	2.6 B	8.0 J	5.1 J	177	WL	AB	AB	7.3 J	WL	0.7 J
	13-Oct-10	0.08	10.0	7 B	14 B	AB	WL	AB	WL	10 B	4.4 B	9.5 B	13 B	362	WL	AB	AB	9.9 B	WL	4.1 J
Resample	01-Dec-10	0.08	10.0	NS	NS	AB	NS	AB	NS	NS	NS	NS	NS	106	NS	AB	AB	NS	NS	NS
	27-Apr-11	0.24	10.0	4.4 B	3.2 B	AB	WL	AB	WL	8.7 J	1.8 B	8.1 J	3.1 B	118	WL	AB	AB	5.3 B	WL	1.1 J
	20-Oct-11	0.24	10.0	3.6 J	5.4 J	AB	WL	AB	WL	11	2.1 J	6 J	3.9 J	152	WL	AB	AB	5.9 J	WL	0.28 J
	26-Apr-12	0.24	10.0	6.5 B	4.3 B	AB	WL	AB	WL	11	4.8 B	8.9 B	6.4 B	150	WL	AB	AB	5.7 B	WL	1.9 J
	16-Oct-12	0.48	10.0	5.9 J	7.2 J	AB	WL	AB	WL	12	4.0 J	7.6 J	3.1 J	107	WL	AB	AB	5.0 J	WL	ND
1,1-Dichloroethylene	10-Oct-07	0.14	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	2.80 J	WL	AB	AB	3.10 J	WL	ND
NC 2L = 7 μg/L (10/23/07) Resample	04-Dec-07	0.56	1.0	NS	NS	AB	NS	AB	WL	NS	NS	NS	NS	ND	NS	AB	AB	ND	NS	ND
	02-Apr-08	0.14	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	28-Oct-08	0.14	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	08-Apr-09	0.14	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	27-Oct-09	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	08-Apr-10	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	13-Oct-10	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	27-Apr-11	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	20-Oct-11	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	26-Apr-12	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND
	16-Oct-12	0.17	5.0	ND	ND	AB	WL	AB	WL	ND	ND	ND	ND	ND	WL	AB	AB	ND	WL	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	Concentrations (ug/L)																												
		DL	RL	Background				Downgradient																						Blanks
				IRL-1S		IRL-1D		IRL-2S	IRL-2SA	IRL-2D	IRL-2DA	IRL-3S		IRL-3D		IRL-4S		IRL-4D		IRL-5S		IRL-5D	IRL-6S	IRL-6D	MW-A		MW-B	
2-Butanone	10-Oct-07	0.85	100.0	2.70	J	3.30	J	AB	WL	AB	WL	4.00	J	4.10	J	3.00	J	4.40	J	2.70	J	WL	AB	AB	3.90	J	WL		ND	
NC 2L = 4,200 µg/L (10/23/07) Resample	04-Dec-07	0.96	5.0	ND		ND		AB	NS	AB	WL	ND		ND		ND		ND		ND		NS	AB	AB	ND		NS		ND	
	02-Apr-08	0.85	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	28-Oct-08	0.85	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	08-Apr-09	0.85	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	27-Oct-09	2.21	100.0	ND		ND		AB	WL	AB	WL	2.60	J	2.80	J	5.20	J	2.90	J	2.90	J	WL	AB	AB	3.00	J	WL		ND	
NC 2L = 4,000 µg/L (1/1/10)	08-Apr-10	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	13-Oct-10	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		2.50	J	WL	AB	AB	ND		WL		ND	
	27-Apr-11	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	20-Oct-11	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	26-Apr-12	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	16-Oct-12	2.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
Acetone	10-Oct-07	1.21	100.0	2.20	J	2.70	J	AB	WL	AB	WL	7.40	J	3.40	J	2.60	J	4.90	J	ND		WL	AB	AB	ND		WL		ND	
NC 2L = 700 µg/L (10/23/07) Resample	04-Dec-07	2.2	25.0	ND		ND		AB	NS	AB	WL	ND		ND		ND		ND		NS		NS	AB	AB	NS		NS		ND	
	02-Apr-08	1.21	100.0	3.50	B	6.60	B	AB	WL	AB	WL	4.90	B	4.90	B	4.00	B	3.60	B	3.90	B	WL	AB	AB	4.20	B	WL		1.50	J
	28-Oct-08	1.21	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		1.90	J	WL	AB	AB	ND		WL		ND	
	08-Apr-09	1.21	100.0	ND		ND		AB	WL	AB	WL	ND		1.40	J	ND		ND		1.40	J	WL	AB	AB	ND		WL		ND	
	27-Oct-09	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
NC 2L = 6,000 µg/L (1/1/10)	08-Apr-10	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	13-Oct-10	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	27-Apr-11	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	20-Oct-11	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	26-Apr-12	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	16-Oct-12	9.06	100.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
Chloromethane	10-Oct-07	0.18	1.0	0.50	J	0.60	J	AB	WL	AB	WL	0.80	J	0.70	J	0.50	J	0.90	J	0.50	J	WL	AB	AB	0.80	J	WL		ND	
NC 2L = 2.6 µg/L (10/23/07) Resample	04-Dec-07	0.11	1.0	ND		ND		AB	NS	AB	WL	ND		ND		ND		ND		ND		NS	AB	AB	ND		NS		ND	
	02-Apr-08	0.18	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	28-Oct-08	0.18	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	08-Apr-09	0.18	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	27-Oct-09	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		0.90	J	ND		ND		WL	AB	AB	ND		WL		ND	
NC 2L = 3 µg/L (1/1/10)	08-Apr-10	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	13-Oct-10	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	27-Apr-11	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	20-Oct-11	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	26-Apr-12	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	
	16-Oct-12	0.77	1.0	ND		ND		AB	WL	AB	WL	ND		ND		ND		ND		ND		WL	AB	AB	ND		WL		ND	

Notes:
1. All concentrations are in micrograms per liter (µg/L)
2. IRL = Interim Regional Landfill monitoring well
3. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
4. ND = Not detected above laboratory reporting limit.
5. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks.
6. NC 2L = North Carolina 2L Groundwater Standards.
7. GWPS = Groundwater Protection Standards.
8. When the NC 2L has not been established, the GWPS will be used.
9. Shaded values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
10. NA = Data not available.
11. DL = Laboratory detection limit.
12. J = Estimated value between the DL and the RL
13. NI = Well/Piezometer not installed.
14. AB = Abandoned.
15. NS = Not sampled and/or no water level measurements taken.
16. NR = Not Reported.
17. WL = May be monitored for water levels only.

TABLE 7

SUMMARY OF FIELD PARAMETERS
TUSCARORA INTERIM REGIONAL LANDFILL

Field Parameters	Date	Background		Downgradient													
		IRL-1S	IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-2DA	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B
Conductivity	Jun-93	1,000	480	30	NI	580	NI	430	520	370	600	800	590	310	460	NI	NI
[uMhos]	Aug-93	59	240	110	NI	360	NI	370	300	240	330	600	290	110	260	NI	NI
	Sep-93	75	300	150	NI	530	NI	420	450	250	460	880	400	150	400	NI	NI
	Sep-93	74	280	150	NI	520	NI	360	440	270	460	860	360	130	390	NI	NI
	Apr-94	76	350	140	NI	570	NI	360	620	290	560	990	460	77	460	NI	NI
	Oct-94	130	280	130	NI	820	NI	570	820	270	730	1,000	82	82	420	NI	NI
	Apr-95	67	360	160	NI	560	NI	240	670	290	520	1,900	490	69	450	NI	NI
	Oct-95	65	270	260	NI	660	NI	260	700	330	520	1,300	480	75	450	NI	NI
	Apr-96	79	360	340	NI	580	NI	700	320	290	520	1,500	450	77	440	NI	NI
	Oct-96	63	NS	NA	NI	AB	NI	410	530	250	400	1,000	WL	87	AB	NI	NI
	Apr-97	80	NS	640	NI	AB	NI	330	690	270	530	1,800	WL	NA	AB	NI	NI
	Oct-97	84	NS	630	NI	AB	NI	720	270	270	490	1,200	WL	NA	AB	NI	NI
	Apr-98	73	NS	700	NI	AB	NI	360	770	240	520	1,400	WL	110	AB	NI	NI
	Oct-98	74	NS	600	NI	AB	NI	480	750	230	490	1,200	WL	AB	AB	NI	NI
	Mar-99	77	NS	810	NI	AB	NI	880	760	760	520	1,200	WL	AB	AB	NI	NI
	Oct-99	74	NS	AB	NI	AB	NI	960	710	490	490	800	WL	AB	AB	NI	NI
	Apr-00	74	NS	AB	NI	AB	NI	1,100	1,400	170	500	900	WL	AB	AB	NI	NI
	Oct-00	76	NS	AB	NI	AB	NI	1,100	720	230	500	900	WL	AB	AB	NI	NI
	Apr-01	67	NS	AB	64	AB	WL	1,100	710	190	470	840	WL	AB	AB	NS	NS
	Oct-01	74	NS	AB	170	AB	WL	1,000	710	200	500	1,700	WL	AB	AB	NS	NS
	Apr-02	68	NS	AB	120	AB	WL	950	710	200	450	1,700	WL	AB	AB	90	120
	Oct-02	19	NS	AB	448	AB	WL	970	830	192	550	1,848	WL	AB	AB	98	132
	Apr-03	100	NS	AB	329	AB	WL	1,082	804	215	486	1,024	WL	AB	AB	86	157
	Oct-03	96	NS	AB	182	AB	WL	1,110	849	205	506	1,393	WL	AB	AB	81	180
	15-Apr-04	64	NS	AB	120	AB	WL	700	600	170	360	990	WL	AB	AB	56	100
	14-Oct-04	99	NS	AB	183	AB	WL	775	712	239	482	1,188	WL	AB	AB	86	123
	05-Apr-05	96	NS	AB	WL	AB	WL	1,033	942	287	601	1,491	WL	AB	AB	89	WL
	27-Oct-05	105	195	AB	WL	AB	WL	876	775	250	502	1,323	WL	AB	AB	91	WL
	21-Apr-06	104	231	AB	WL	AB	WL	927	736	271	553	1,424	WL	AB	AB	79	WL
	12-Oct-06	101	164	AB	WL	AB	WL	784	672	278	515	126	WL	AB	AB	87	WL
	26-Apr-07	103	155	AB	WL	AB	WL	850	721	287	536	1,287	WL	AB	AB	75	WL
	10-Oct-07	105	192	AB	WL	AB	WL	850	702	354	550	1,570	WL	AB	AB	98	WL
Resample	04-Dec-07	109.2	357	AB	WL	AB	WL	963	1,052	379	610	1,829	WL	AB	AB	108.7	WL
	02-Apr-08	109	169	AB	WL	AB	WL	1,096	713	253	540	1,272	WL	AB	AB	86	WL
	28-Oct-08	109	217	AB	WL	AB	WL	935	931	266	533	1,468	WL	AB	AB	103	WL
	08-Apr-09	106	215	AB	WL	AB	WL	1,092	894	283	541	1,265	WL	AB	AB	95	WL
	27-Oct-09	93	170	AB	WL	AB	WL	898	824	372	522	1,144	WL	AB	AB	91	WL
	08-Apr-10	103	220	AB	WL	AB	WL	1,030	860	338	576	1,538	WL	AB	AB	94	WL
	13-Oct-10	119	187	AB	WL	AB	WL	889	753	464	557	1,303	WL	AB	AB	93	WL
	27-Apr-11	156	252	AB	WL	AB	WL	982	734	505	605	1,472	WL	AB	AB	104	WL
	20-Oct-11	124	178	AB	WL	AB	WL	839	667	467	576	1,310	WL	AB	AB	102	WL
	26-Apr-12	132	219	AB	WL	AB	WL	931	653	514	585	1,553	WL	AB	AB	107	WL
	16-Oct-12	139	193	AB	WL	AB	WL	886	628	532	574	1,502	WL	AB	AB	102	WL
pH	Jun-93	5.3	6.3	6.1	NI	6.2	NI	5.4	6.3	5.7	6.1	6	6.4	5.8	6.2	NI	NI
[standard units]	Aug-93	5.5	6.5	6.3	NI	6.8	NI	6	6.8	6.4	6.9	6.2	6.8	6.3	7	NI	NI
	Sep-93	5.9	6.6	5.7	NI	6.5	NI	5.9	6.5	6.7	7	6.1	6.6	6.5	6.7	NI	NI
	Sep-93	6.1	6.5	5.8	NI	6.1	NI	5.9	6.5	5.7	6.3	6.4	6.9	6.6	6.6	NI	NI
	Apr-94	5.9	6.1	5.4	NI	6.4	NI	5.7	6.5	6.2	6.7	6.4	6.8	6.4	6.7	NI	NI
	Oct-94	5.2	6.4	5.2	NI	6.7	NI	5.7	6.7	6	6.8	6.2	7	5.5	6.8	NI	NI
	Apr-95	5.7	6.1	5.5	NI	6.4	NI	6	6.2	6.2	6.6	6.2	3.8	6.2	6.6	NI	NI
	Oct-95	5	6.4	5.6	NI	6.7	NI	5.4	6.6	5.9	6.8	6.2	6.9	5.3	7	NI	NI
	Apr-96	5	6.3	5.8	NI	6.6	NI	6.7	6	6.1	6.7	6.4	7	5.5	6.6	NI	NI
	Oct-96	5.2	NS	NA	NI	AB	NI	6	6	6.4	6.4	5.8	WL	6	AB	NI	NI
	Apr-97	6.1	NS	6.3	NI	AB	NI	6.2	6.5	6.1	6.6	6.2	WL	NA	AB	NI	NI
	Oct-97	5.3	NS	5.8	NI	AB	NI	5.9	5.6	5.6	6.1	5.8	WL	NA	AB	NI	NI
	Apr-98	5.8	NS	6.5	NI	AB	NI	5.4	6.4	5.6	6.8	6.1	WL	5.2	AB	NI	NI
	Oct-98	5.5	NS	6.1	NI	AB	NI	5.6	6.3	5.7	6.7	6	WL	AB	AB	NI	NI
	Mar-99	5.2	NS	6.3	NI	AB	NI	5.7	6.5	6.0	6.7	6	WL	AB	AB	NI	NI
	Oct-99	4.9	NS	AB	NI	AB	NI	5.9	6.4	6.8	6.8	5.7	WL	AB	AB	NI	NI
	Apr-00	5.2	NS	AB	NI	AB	NI	5.8	6.4	5.7	6.9	5.8	WL	AB	AB	NI	NI
	Oct-00	4.8	NS	AB	NI	AB	NI	5.7	6.4	5.5	6.6	5.2	WL	AB	AB	NI	NI
	Apr-01	4.9	NS	AB	4.8	AB	WL	5.6	6.5	5.4	6.6	5.5	WL	AB	AB	NS	NS
	Oct-01	5	NS	AB	4.9	AB	WL	5.8	6.6	5.6	6.9	6.1	WL	AB	AB	NS	NS
	Apr-02	4.7	NS	AB	4.3	AB	WL	5.7	6.3	5.3	6.4	6.0	WL	AB	AB	5.2	4.5
	Oct-02	5.1	NS	AB	4.1	AB	WL	6.0	6.4	5.3	7.0	6.1	WL	AB	AB	5.2	4.7
	Apr-03	5.1	NS	AB	4.3	AB	WL	6.1	6.5	5.3	6.8	5.8	WL	AB	AB	5.2	4.7
	Oct-03	4.8	NS	AB	4.3	AB	WL	5.8	6.3	5.1	6.7	5.9	WL	AB	AB	5.0	4.8
	15-Apr-04	5.3	NS	AB	4.4	AB	WL	6.4	5.6	5.8	6.8	6.4	WL	AB	AB	5.4	5.8
	14-Oct-04	4.9	NS	AB	4.4	AB	WL	6.1	6.5	5.3	6.9	6.1	WL	AB	AB	4.9	4.8
	05-Apr-05	5.1	NS	AB	WL	AB	WL	6.3	6.7	5.2	7.0	6.1	WL	AB	AB	5.1	WL
	27-Oct-05	4.9	6.6	AB	WL	AB	WL	6	6.5	5.1	6.9	6.2	WL	AB	AB	5.1	WL
	21-Apr-06	5.0	6.3	AB	WL	AB	WL	6.2	7.0	5.4	7.9	6.0	WL	AB	AB	5.0	WL
	12-Oct-06	5.0	6.1	AB	WL	AB	WL	6.2	6.6	5.1	6.8	6.1	WL	AB	AB	5.2	WL
	26-Apr-07	4.9	6.1	AB	WL	AB	WL	6.2	6.7	5.4	6.9	6.1	WL	AB	AB	5.0	WL
	10-Oct-07	5.2	6.2	AB	WL	AB	WL	6.2	6.8	5.8	7.0	6.4	WL	AB	AB	5.3	WL
Resample	04-Dec-07	6.60	6.29	AB	WL	AB	WL	7.08	6.60	6.64	7.39	6.26	WL	AB	AB	6.61	WL
	08-Apr-08	4.9	6.7	AB	WL	AB	WL	5.6	6.8	5.2	6.8	6.0	WL	AB	AB	5.0	WL
	28-Oct-08	4.7	6.3	AB	WL	AB	WL	6.0	6.5	5.3	6.9	6.3	WL	AB	AB	5.2	WL
	08-Apr-09	4.9	6.0	AB	WL	AB	WL	5.5	6.4	4.9	6.7	8.5	WL	AB	AB	5.1	WL
	27-Oct-09	4.8	6.2	AB	WL	AB	WL	5.8	6.3	5.3	6.8	6.0	WL	AB	AB	4.9	WL
	08-Apr-10	4.7	6.3	AB	WL	AB	WL	5.6	6.5	4.8	6.9	6.1	WL	AB	AB	5.0	WL
	13-Oct-10	5.2	6.3	AB	WL	AB	WL	5.8	6.5	5.3	6.7	6.1	WL	AB	AB	5.1	WL
	27-Apr-11	4.9	6.3	AB	WL	AB	WL	5.6	6.6	5.0	6.7	6.0	WL	AB	AB	4.9	WL
	20-Oct-11	4.6	6.3	AB	WL	AB	WL	5.9	6.7	6.1	6.9	4.7	WL	AB	AB	4.9	WL
	26-Apr-12	4.6	6.2	AB	WL	AB	WL	5.7	6.7	4.9	6.8	6.0	WL	AB	AB	5.0	WL
	16-Oct-12	4.5	6.2	AB	WL	AB	WL	5.9	6.8	4.9	6.9	6.2	WL	AB	AB	5.2	WL
Temperature	Jun-93	22	20	23	NI	20	NI	23	22	23	21	23	21	22	21	NI	NI
[°C]	Aug-93	23	20	22	NI	21	NI	22	22	23	20	24	21	23	20	NI	NI
	Sep-93	23	20	24	NI	20	NI	25	20	24	20	25	20	24	21	NI	NI
	Sep-93	23	21	24	NI	21	NI	24	21	23	20	24	22	24	21	NI	NI
	Apr-94	18	18	17	NI	17	NI	16	16	15	16	16	16	15	15	NI	NI
	Oct-94	21	18	21	NI	20	NI	21	19	21	19	21	20	21	20	NI	NI
	Apr-95	15	15	15	NI	17	NI	16	16	16	16	16	16	15	16	NI	NI
	Oct-95	22	20	22	NI	20	NI	22	20	22	22	22	21	22	20	NI	NI
	Apr-96	12	13	13	NI	14	NI	13	13	13	13	13	14	12	12	NI	NI
	Oct-96	20	NS	NA	NI	AB	NI	22	22	22	22	22	WL	22	AB	NI	NI
	Apr-97	13	NS	14	NI	AB	NI	15	14	15	15	14	WL	NA	AB	NI	NI
	Oct-97	18	NS	21	NI	AB	NI	17	19	19	18	20	WL	NA	AB	NI	NI
	Apr-98	15	NS	16	NI	AB	NI	15	16	15	17	15	WL	15	AB	NI	NI
	Oct-98	19	NS	21	NI	AB	NI	21	19	21	20	21	WL	AB	AB	NI	NI
	Mar-99	12	NS	16	NI	AB	NI	17	17	17	18	17	WL	AB	AB	NI	NI
	Oct-99	21	NS	AB	NI	AB	NI	20	20	21	21	21	WL	AB	AB	NI	NI
	Apr-00	15	NS	AB	NI	AB	NI	15	17	19	18	15	WL	AB	AB	NI	NI
	Oct-00	18	NS	AB	NI	AB	NI	18	20	21	20	16	WL	AB	AB	NI	NI
	Apr-01	15	NS	AB	15	AB	WL	18	17	16	15	15	WL	AB	AB	NS	NS
	Oct-01	19	NS	AB	20	AB	WL	20	20	21	21	21	WL	AB	AB	NS	NS
	Apr-02	15	NS	AB	16	AB	WL	15	15	16	17	17	WL	AB	AB	17	16
	Oct-02	24	NS	AB	26	AB	WL	23	22	24	23	24	WL	AB	AB	25	25
	Apr-03	15	NS	AB	17	AB	WL	16	16	15	16	17	WL	AB	AB	16	16
	Oct-03	20	NS	AB	21	AB	WL	21	20	21	22	21	WL	AB	AB	21	21
	15-Apr-04	13	NS	AB	14	AB	WL	13	13	14	14	15	WL	AB	AB	13	13
	14-Oct-04	20	NS	AB	21	AB	WL	21	21	22	22	22	WL	AB	AB	21	21
	05-Apr-05	15	NS	AB	WL	AB	WL	15	15	15	15	15	WL	AB	AB	15	WL
	27-Oct-05	20	17	AB	WL	AB	WL	22	22	23	23	23	WL	AB	AB	21	WL
	21-Apr-06	20	18	AB	WL	AB	WL	14	16	15	15	18	WL	AB	AB	18	WL
	12-Oct-06	20	18	AB	WL	AB	WL	22	19	23	21	23	WL	AB	AB	21	WL
	26-Apr-07	16	17	AB	WL	AB	WL	17	18	16	18	17	WL	AB	AB	17	WL
	10-Oct-07	19	18	AB	WL	AB	WL	22	19	23	20	24	WL	AB	AB	20	WL
Resample	04-Dec-07	16.7	16.7	AB	WL	AB	WL	18.2	16.8	18.6	18.8	18.7	WL	AB	AB	16.9	WL
	02-Apr-08	15	17	AB	WL	AB	WL	17	17	16	19	16	WL	AB	AB	16	WL
	28-Oct-08	19	19	AB	WL	AB	WL	20	20	21	21	19	WL	AB	AB	19	WL
	08-Apr-09	14	16	AB	WL	AB	WL	14	16	15	16	15	WL	AB	AB	14	WL
	27-Oct-09	20	19	AB	WL	AB	WL	21	20	21	21	22	WL	AB	AB	21	WL
	08-Apr-10	17	17	AB	WL	AB	WL	15	16	15	17	16	WL	AB	AB	16	WL
	13-Oct-10	21	20	AB	WL	AB	WL	21	20	22	21	23	WL	AB	AB	22	WL
	27-Apr-11	17	16	AB	WL	AB	WL	16	17	17	18	17	WL	AB	AB	17	WL
	20-Oct-11	20	18	AB	WL	AB	WL	21	19	21	19	21	WL	AB	AB	20	WL
	26-Apr-12	17	17	AB	WL	AB	WL	17	17	16	18	17	WL	AB	AB	17	WL
	16-Oct-12	21	19	AB	WL	AB	WL	21	20	22	21	22	WL	AB	AB	22	WL
Turbidity	Jun-93	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
[NTU]	Aug-93	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Sep-93	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Sep-93	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Apr-94	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Oct-94	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Apr-95	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Oct-95	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Apr-96	NA	NA	NA	NI	NA	NI	NA	NA	NA	NA	NA	NA	NA	NA	NI	NI
	Oct-96	NA	NS	NA	NI	AB	NI	NA	NA	NA	NA	NA	WL	NA	AB	NI	NI
	Apr-97	NA	NS	NA	NI	AB	NI	NA	NA	NA	NA	NA	WL	NA	AB	NI	NI
	Oct-97	NA	NS	NA	NI	AB	NI	NA	NA	NA	NA	NA	WL	NA	AB	NI	NI
	Apr-98	NA	NS	NA	NI	AB	NI	NA	NA	NA	NA	NA	WL	NA	AB	NI	NI
	Oct-98	NA	NS	130	NI	AB	NI	60	180	220	190	650	WL	AB	AB	NI	NI
	Mar-99	650	NS	290	NI	AB	NI	85	180	180	270	95	WL	AB	AB	NI	NI
	Oct-99	600	NS	AB	NI	AB	NI	10	23	17	17	5.9	WL	AB	AB	NI	NI
	Apr-00	170	NS	AB	NI	AB	NI	18	40	33	40	13	WL	AB	AB	NI	NI
	Oct-00	700	NS	AB	NI	AB	NI	31	90	7.1	34	21	WL	AB	AB	NI	NI
	Apr-01	140	NS	AB	50	AB	WL	21	60	12	27	10	WL	AB	AB	NS	NS
	Oct-01	106	NS	AB	68	AB	WL	74	139	34	18	26	WL	AB	AB	NS	NS
	Apr-02	90	NS	AB	12	AB	WL	40	35	5.3	25	19	WL	AB	AB	140	5.9
	Oct-02	280	NS	AB	19	AB	WL	45	100	9.2	38	100	WL	AB	AB	75	4.0
	Apr-03	90	NS	AB	6.9	AB	WL	45	110	9.4	39	27	WL	AB	AB	110	8.8
	Oct-03	65	NS	AB	13	AB	WL	31	30	19	60	55	WL	AB	AB	160	40
	15-Apr-04	200	NS	AB	100	AB	WL	45	35	37	32	36	WL	AB	AB	110	13
	14-Oct-04	75	NS	AB	13	AB	WL	85	80	8.9	240	80	WL	AB	AB	95	5.9
	05-Apr-05	100	NS	AB	WL	AB	WL	40	18	13	25	32	WL	AB	AB	75	WL
	27-Oct-05	90	>1,000	AB	WL	AB	WL	22	29	14	36	19	WL	AB	AB	85	WL
	21-Apr-06	8.9	14	AB	WL	AB	WL	5.5	32	7.3	53	25	WL	AB	AB	4.1	WL
	12-Oct-06	5.1	40	AB	WL	AB	WL	21	140	1.6	37	170	WL	AB	AB	20	WL
	26-Apr-07	7.0	4.0	AB	WL	AB	WL	22	160	200	200	90	WL	AB	AB	25	WL
	10-Oct-07	11	10	AB	WL	AB	WL	58	65	12	45	110	WL	AB	AB	22	WL
Resample	04-Dec-07	79.4	14.97	AB	WL	AB	WL	15.00	525	47.5	64.6	9.42	WL	AB	AB	73.3	WL
	02-Apr-08	40	9.5	AB	WL	AB	WL	3.5	28	7.7	55	11	WL	AB	AB	20	WL
	28-Oct-08	80	50	AB	WL	AB	WL	36	37	36	40	38	WL	AB	AB	86	WL
	08-Apr-09	130	56	AB	WL	AB	WL	90	260	120	38	32	WL	AB	AB	90	WL
	27-Oct-09	270	55	AB	WL	AB	WL	85	85	23	70	62	WL	AB	AB	65	WL
	08-Apr-10	160	39	AB	WL	AB	WL	75	65	18	40	75	WL	AB	AB	65	WL
	13-Oct-10	10	85	AB	WL	AB	WL	34	75	35	50	170	WL	AB	AB	140	WL
	27-Apr-11	16	29	AB	WL	AB	WL	44	110	31	70	65	WL	AB	AB	50	WL
	20-Oct-11	12	55	AB	WL	AB	WL	45	130	34	85	90	WL	AB	AB	85	WL
	26-Apr-12	85	45	AB	WL	AB	WL	31	120	85	60	85	WL	AB	AB	65	WL
	16-Oct-12	18	55	AB	WL	AB	WL	75	110	18	50	140	WL	AB	AB	45	WL

Notes:
1. NA = Data not available.
2. NI = Well/Piezometer not installed.
3. AB = Abandoned.
4. NS = Not sampled and/or no water level measurements taken.
5. WL = May be monitored for water levels only.

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	Concentrations (µg/L)														
		DL	RL	Background		Downgradient										Blanks
				MW-12S	MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	
Antimony	Jul-99	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Aug-99	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-99	NR	30	NI	NI	ND	ND	40	ND	ND	ND	NI	NI	NI	NI	ND
	Nov-99	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-00	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-00	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-01	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-01	NR	30	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-02	NR	30	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-02	NR	30	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-03	NR	30	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-03	NR	30	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NI	ND
	15-Apr-04	NR	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	ND
	14-Oct-04	NR	30	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	05-Apr-05	NR	30	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	27-Oct-05	NR	30	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	21-Apr-06	NR	30	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	12-Oct-06	NR	30	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	26-Apr-07	NR	6.0	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	11-Oct-07	0.05	6.0	ND	ND	0.1 B	ND	AB	ND	ND	ND	ND	ND	AB	0.1 B	0.1 J
GWPS = 1.4 µg/L (10/23/07)	03-Apr-08	0.44	6.0	ND	0.5 J	0.1 J	ND	AB	ND	ND	0.5 J	0.1 J	ND	AB	ND	ND
	28-Oct-08	0.44	6.0	0.1 J	ND	0.9 J	0.2 J	AB	0.1 J	ND	ND	ND	ND	AB	ND	ND
	08-Apr-09	0.06	6.0	0.1 J	0.2 J	0.1 J	ND	AB	ND	ND	ND	0.9 J	0.2 J	AB	0.1 J	ND
	27-Oct-09	0.06	6.0	0.1 J	0.6 J	ND	ND	AB	ND	ND	ND	0.8 J	0.6 J	AB	0.1 J	ND
	08-Apr-10	0.22	6.0	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	0.8 B	0.7 J
GWPS = 1 µg/L (8/1/10)	13-Oct-10	0.22	6.0	ND	ND	ND	ND	AB	0.5 J	ND	ND	ND	ND	AB	ND	ND
	27-Apr-11	0.14	6.0	ND	ND	ND	0.37 J	AB	0.22 J	0.17 J	ND	ND	ND	AB	ND	ND
	20-Oct-11	0.14	6.0	ND	ND	0.19 J	ND	AB	ND	ND	ND	ND	ND	AB	0.34 J	ND
	26-Apr-12	0.14	6.0	ND	ND	ND	ND	AB	ND	ND	0.4 J	ND	ND	AB	ND	ND
	16-Oct-12	0.02	6.0	ND	0.76 J	0.15 J	0.17 J	AB	0.13 J	0.06 J	0.18 J	0.02 J	0.20 J	AB	0.04 J	ND
Arsenic	Jul-99	NR	10	NI	NI	37	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Aug-99	NR	10	NI	NI	13	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-99	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Nov-99	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-00	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-00	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-01	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-01	NR	10	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-02	NR	10	ND	ND	10	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-02	NR	10	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-03	NR	10	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-03	NR	10	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NI	ND
	15-Apr-04	NR	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	ND
	14-Oct-04	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	05-Apr-05	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	27-Oct-05	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	21-Apr-06	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	12-Oct-06	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	26-Apr-07	NR	10	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	11-Oct-07	0.47	10.0	6.6 J	ND	3.5 J	4.3 J	AB	1.8 J	0.5 J	ND	9.4 J	ND	AB	1.0 J	ND
NC 2L = 50 µg/L (10/23/07)	03-Apr-08	0.57	10.0	1.4 J	ND	1.0 B	1.3 J	AB	4.1 J	0.2 B	ND	1.3 J	ND	AB	0.2 B	0.2 J
	28-Oct-08	0.57	10.0	1 B	0.8 B	2.4 B	5.3 J	AB	3.1 J	0.4 B	0.2 B	1.3 B	0.5 B	AB	0.7 B	0.5 J
	08-Apr-09	0.17	10.0	1.2 J	0.8 B	1.2 J	3.9 J	AB	3.5 J	0.6 B	0.3 B	1.6 J	0.4 B	AB	0.4 B	0.2 J
	27-Oct-09	0.17	10.0	1 J	0.8 J	1.7 J	5.0 J	AB	2.3 J	0.4 J	0.2 J	1.2 J	0.7 J	AB	0.8 J	ND
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.04	10.0	0.4 J	ND	0.7 J	2.5 J	AB	2.9 J	ND	ND	1.9 J	ND	AB	0.2 J	ND
	13-Oct-10	0.04	10.0	0.9 J	1 J	1 J	2.3 J	AB	3.4 J	0.3 J	0.4 J	1.8 J	0.7 J	AB	1.2 J	ND
	27-Apr-11	0.10	10.0	0.28 J	ND	2.9 J	1.5 J	AB	2.4 J	0.26 J	ND	0.86 J	ND	AB	0.20 J	ND
	20-Oct-11	0.10	10.0	0.36 J	0.51 J	2.8 J	1.3 J	AB	2.7 J	0.43 J	ND	1.0 J	0.24 J	AB	1.4 J	ND
	26-Apr-12	0.10	10.0	0.24 J	0.56 J	1.9 J	1.6 J	AB	8.0 J	0.55 J	ND	1.0 J	0.39 J	AB	1.9 J	ND
	16-Oct-12	0.13	10.0	0.22 B	ND	1.3 B	1.2 B	AB	2.4 J	0.56 B	ND	0.93 B	0.21 B	AB	5.1 J	0.4 J
Barium	Jul-99	NR	500	NI	NI	869	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Aug-99	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-99	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Nov-99	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-00	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-00	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-01	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-01	NR	500	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-02	NR	500	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-02	NR	500	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-03	NR	500	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-03	NR	500	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NI	ND
	15-Apr-04	NR	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	ND
	14-Oct-04	NR	500	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	05-Apr-05	NR	500	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	27-Oct-05	NR	500	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	21-Apr-06	NR	500	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	12-Oct-06	NR	500	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	26-Apr-07	NR	100	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	11-Oct-07	0.04	100.0	81.8 J	47.4 J	63.3 J	32.7 J	AB	44.8 J	45.7 J	40.7 J	42.2 J	46.4 J	AB	42.8 J	0.2 J
NC 2L = 2,000 µg/L (10/23/07)	03-Apr-08	0.11	100.0	88.6 J	36.7 J	67.3 J	43.6 J	AB	40.1 J	45.8 J	44 J	43.0 J	35.0 J	AB	44.9 J	0.4 J
	28-Oct-08	0.11	100.0	85.2 J	30.9 J	115	80.3 J	AB	55.1 J	111	37.9 J	51.1 J	37.9 J	AB	50.7 J	0.7 J
	08-Apr-09	0.04	100.0	109	33.6 J	61.0 J	82.8 J	AB	66.5 J	52.4 J	42.8 J	59.4 J	50.4 J	AB	99.7 J	0.2 J
	27-Oct-09	0.04	100.0	66.5 J	27.3 J	93.0 J	94.1 J	AB	77.7 J	65.4 J	35.9 J	54.9 J	44.8 J	AB	112	0.1 J
NC 2L = 700 µg/L (1/1/10)	08-Apr-10	0.03	100.0	82.1 J	26.8 J	46.4 J	79.9 J	AB	53.9 J	35.2 J	39.2 J	45.5 J	45.4 J	AB	132	0.1 J
	13-Oct-10	0.03	100.0	54.4 J	26.7 J	42.2 J	94.1 J	AB	65.7 J	36.2 J	45.1 J	70.5 J	43.7 J	AB	197	0.2 J
	27-Apr-11	0.02	100.0	64.9 J	26.1 J	52.1 J	86.4 J	AB	55.5 J	33.7 J	38.6 J	56.9 J	44.4 J	AB	128	0.10 J
	20-Oct-11	0.02	100.0	57.4 J	26.7 J	56.0 J	98.2 J	AB	60 J	38.4 J	37.3 J	77.7 J	39.5 J	AB	140	0.10 J
	26-Apr-12	0.02	100.0	55.1 J	24.2 J	53.4 J	92.2 J	AB	78.1 J	28.2 J	43.2 J	71.2 J	50.5 J	AB	94 J	0.12 J
	16-Oct-12	0.07	100.0	40.5 J	25.5 J	40.7 J	104	AB	53.0 J	25.1 J	39.8 J	64.1 J	43.5 J	AB	106	0.28 J
Beryllium	Jul-99	NR	2	NI	NI	5	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Aug-99	NR	2	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-99	NR	2	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Nov-99	NR	2	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-00	NR	2	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-00	NR	2	NI	NI	ND	ND	6	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-01	NR	2	NI	NI	ND	ND	5	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-01	NR	2	NI	NI	ND	2	9	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-02	NR	2	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-02	NR	2	ND	ND	ND	ND	3	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-03	NR	2	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-03	NR	2	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NI	ND
	15-Apr-04	NR	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NI	ND
	14-Oct-04	NR	2	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	05-Apr-05	NR	2	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	27-Oct-05	NR	2	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	21-Apr-06	NR	2	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	12-Oct-06	NR	2	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	26-Apr-07	NR	1.0	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	11-Oct-07	0.08	1.0	0.1 J	ND	0.2 J	0.2 J	AB	0.2 J	0.1 J	0.1 J	0.1 J	ND	AB	0.1 J	ND
GWPS = 4 µg/L (10/23/07)	03-Apr-08	0.06	1.0	0.3 J	ND	ND	0.3 J	AB	0.2 J	1.5	0.1 J	0.3 J	ND	AB	0.2 J	ND
	28-Oct-08	0.06	1.0	0.9 J	0.1 J	0.4 J	0.8 J	AB	0.3 J	1.2 J	0.1 J	0.4 J	ND	AB	0.3 J	ND
	08-Apr-09	0.06	1.0	0.6 J	0.1 J	0.1 J	0.7 J	AB	0.3 J	2	0.1 J	0.4 J	0.1 J	AB	0.4 J	ND
	27-Oct-09	0.06	1.0	0.5 J	0.1 J	0.4 J	0.9 J	AB	0.4 J	3	0.1 J	0.4 J	0.1 J	AB	0.7 J	ND
	08-Apr-10	0.02	1.0	0.6 J	0.1 B	0.2 B	0.6 J	AB	0.3 B	2	0.1 B	0.3 B	0.1 B	AB	0.7 J	0.1 J
GWPS = 4 µg/L (10/1/10)	13-Oct-10	0.02	1.0	0.5 J	0.1 J	0.1 J	0.7 J	AB	0.4 J	3	0.1 J	0.3 J	0.1 J	AB	1.2	ND
	27-Apr-11	0.02	1.0	0.36 J	ND	0.11 J	0.47 J	AB	0.31 J	3	ND	0.25 J	ND	AB	1.0	ND
	20-Oct-11	0.02	1.0	0.40 J	0.08 J	0.20 J	0.54 J	AB	0.34 J	4	0.06 J	0.40 J	ND	AB	0.32 J	ND
	26-Apr-12	0.02	1.0	0.27 J	0.06 J	0.15 J	0.59 J	AB	0.62 J	4	0.05 J	0.29 J	0.04 J	AB	0.63 J	ND
	16-Oct-12	0.07	1.0	0.22 J	ND	0.09 J	0.66 J	AB	0.34 J	3	ND	0.30 J	ND	AB	0.10 J	ND
Cadmium	Jul-99	NR	1	NI	NI	1	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Aug-99	NR	1	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-99	NR	1	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Nov-99	NR	1	NI	NI	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-00	NR	1	NI	NI	ND	ND	ND	1	ND	ND	NI	NI	NI	NI	ND
	Oct-00	NR	1	NI	NI	ND	ND	2	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-01	NR	1	NI	NI	ND	ND	3	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-01	NR	1	NI	NI	ND	ND	2	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-02	NR	1	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-02	NR	1	ND	ND	1	ND	2	ND	ND	ND	NI	NI	NI	NI	ND
	Apr-03	NR	1	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	NI	NI	ND
	Oct-03	NR	1	ND	ND	ND	ND	ND	1	ND	ND	NS	NS	NS	NI	ND
	15-Apr-04	NR	1	ND	2	ND	ND	ND	3	3	ND	ND	ND	ND	NI	ND
	14-Oct-04	NR	1	ND	ND	ND	ND	AB	ND	ND	ND	ND	1	ND	NI	ND
	05-Apr-05	NR	1	ND	ND	1	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	27-Oct-05	NR	1	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	21-Apr-06	NR	1	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	ND	NI	ND
	12-Oct-06	NR	1	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	26-Apr-07	NR	1.0	ND	ND	ND	ND	AB	ND	ND	ND	ND	ND	AB	NI	ND
	11-Oct-07	0.06	1.0	0.2 B	0.1 B	0.6 J	0.1 B	AB	0.1 B	0.5 B	0.1 B	0.1 B	0.1 B	AB	0.9 J	0.1 J
NC 2L = 1.75 µg/L (10/23/07)	03-Apr-08	0.05	1.0	0.4 J	0.1 J	0.2 J	0.1 J	AB	0.2 J	0.2 J	0.3 J	0.1 J	ND	AB	0.1 J	ND
	28-Oct-08	0.05	1.0	0.2 J	0.2 J	0.3 J	0.2 J	AB	0.1 J	0.3 J	0.2 J	0.5 J	0.1 J	AB	0.2 J	ND
	08-Apr-09	0.04	1.0	0.2 J	0.2 J	0.3 J	0.3 J	AB	0.2 J	0.7 J	0.5 J	0.3 J	0.2 J	AB	0.2 J	ND
	27-Oct-09	0.04	1.0	0.4 J	0.2 J	0.2 J	0.1 J	AB	0.2 J	0.4 J	0.1 J	0.2 J	0.1 J	AB	1.5	ND
NC 2L = 2 µg/L (1/1/10)	08-Apr-10	0.02	1.0	0.9 J	0.1 B	0.3 B	2	AB	0.1 B	0.7 J	0.2 B	9	0.1 B	AB	0.7 J	0.1 J
Resample	01-Jun-10	0.02	1.0	NS	NS	NS	NS	AB	NS	NS	NS	1.6	NS	NS	NS	NS
	13-Oct-10	0.02	1.0	1	0.2 J	0.1 J	0.6 J	AB	0.8 J	1	0.2 J	1.6	0.1 J	AB	1	ND
	27-Apr-11	0.02	1.0	0.20 J	0.09 J	0.21 J	0.11 J	AB	0.31 J	0.52 J	0.06 J	0.14 J	0.08 J	AB	0.31 J	ND
	20-Oct-11	0.02	1.0	0.46 J	ND	0.11 J	ND	AB	0.22 J	1	0.05 J	0.09 J	0.30 J	AB	0.58 J	ND
	26-Apr-12	0.02	1.0	0.10 J	ND	0.26 J	0.12 J	AB	0.24 J	ND	0.05 J	0.64 J	0.10 J	AB	0.27 J	ND
	16-Oct-12	0.03	1.0	0.12 J	0.09 J	0.12 J	0.10 J	AB	0.12 J	0.31 J	0.12 J	0.45 J	0.12 J	AB	0.11 J	ND

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	Concentrations (µg/L)																									
		DL	RL	Background				Downgradient																		Blanks	
				MW-12S		MW-12D		MW-7		MW-8		MW-9	MW-10		MW-11S		MW-11D		MW-13S		MW-13D		MW-14	MW-14R			
Chromium	Jul-99	NR	10	NI		NI		112		35		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Aug-99	NR	10	NI		NI		29		38		10	ND		23		ND		NI		NI		NI	NI		ND	
	Oct-99	NR	1	NI		NI		14		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Nov-99	NR	10	NI		NI		22		36		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-00	NR	10	NI		NI		11		43		37	ND		24		ND		NI		NI		NI	NI		ND	
	Oct-00	NR	10	NI		NI		16		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-01	NR	10	NI		NI		11		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-01	NR	10	NI		NI		38		65		ND	ND		39		ND		NI		NI		NI	NI		ND	
	Apr-02	NR	10	ND		ND		43		12		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-02	NR	10	ND		ND		15		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NS		NS		NS	NI		ND	
	15-Apr-04	NR	10	ND		ND		18		ND		ND	ND		ND		ND		17		ND		ND	NI		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	11-Oct-07	0.24	10.0	ND		ND		4.8	B	1.1	B	AB	0.3	B	ND		ND		0.5	B	ND		AB	ND		1.2	J
NC 2L = 50 µg/L (10/23/07)	03-Apr-08	0.11	10.0	ND		ND		0.4	J	1.0	J	AB	0.4	J	0.5	J	ND		0.3	J	ND		AB	ND		ND	
	28-Oct-08	0.11	10.0	ND		0.7	J	7.9	J	9.5	J	AB	0.9	J	0.7	J	ND		0.9	J	0.4	J	AB	3.1	J	ND	
	08-Apr-09	0.10	10.0	0.5	J	0.9	J	3.3	J	8.3	J	AB	3.1	J	1.4	J	ND		1.2	J	0.6	J	AB	1.3	J	ND	
	27-Oct-09	0.10	10.0	ND		1.1	J	8.2	J	9.8	J	AB	2.5	J	1.9	J	ND		1.1	J	0.6	J	AB	1.8	J	ND	
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.03	10.0	ND		0.3	J	3.7	J	3.9	J	AB	1.9	J	0.6	J	ND		1.1	J	ND		AB	1.2	J	ND	
	13-Oct-10	0.03	10.0	0.2	J	0.7	J	2.3	J	3.8	J	AB	2.2	J	0.9	J	0.1	J	0.5	J	ND		AB	2.3	J	ND	
	27-Apr-11	0.04	10.0	0.43	B	0.78	B	3.3	J	3.2	J	AB	2.2	J	2.0	J	ND		1.1	J	0.51	B	AB	1.5	J	0.18	J
	20-Oct-11	0.04	10.0	0.6	B	1.6	J	5.1	J	1.9	J	AB	2.6	J	2.5	J	ND		1.8	J	0.87	B	AB	2.1	J	0.18	J
	26-Apr-12	0.04	10.0	0.43	B	1.2	J	4.9	J	12.0		AB	6.8	J	1.8	J	ND		0.99	J	0.44	B	AB	2.2	J	0.09	J
	16-Oct-12	0.18	10.0	ND		0.53	J	2.7	J	1.3	J	AB	1.3	J	1.0	J	ND		0.25	J	0.38	J	AB	1.3	J	ND	
Cobalt	Jul-99	NR	10	NI		NI		13		24		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Aug-99	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-99	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Nov-99	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-00	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-00	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-01	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-01	NR	10	NI		NI		ND		ND		12	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-02	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NS		NS		NS	NI		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		ND		ND		ND	NI		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	11-Oct-07	0.41	10.0	1.4	J	ND		0.7	J	ND		AB	ND		1.0	J	ND		ND		ND		AB	2.7	J	ND	
GWPS = 70 µg/L (10/23/07)	03-Apr-08	0.03	10.0	4.6	J	0.1	J	1.8	J	0.4	J	AB	0.7	J	3.1	J	0.1	J	0.3	J	0.1	J	AB	0.9	J	ND	
	28-Oct-08	0.03	10.0	2.8	J	0.2	J	0.8	J	1	J	AB	0.5	J	2.8	J	0.1	J	0.4	J	0.2	J	AB	0.7	J	ND	
	08-Apr-09	0.02	10.0	2.3	J	0.2	J	0.6	J	1.1	J	AB	1.1	J	6.1	J	0.1	J	0.5	J	0.2	J	AB	1.2	J	ND	
	27-Oct-09	0.02	10.0	1.6	J	0.2	J	0.7	J	1.0	J	AB	0.6	J	5.9	J	0.2	J	0.5	J	0.3	J	AB	1.2	J	ND	
	08-Apr-10	0.10	10.0	1.8	J	0.2	J	0.5	J	0.7	J	AB	1.2	J	4.4	J	ND		0.5	J	0.2	J	AB	1.5	J	ND	
GWPS = 1 µg/L (10/1/10)	13-Oct-10	0.10	10.0	1.5	J	0.2	J	0.3	J	0.9	J	AB	0.9	J	3.1	J	0.2	J	0.5	J	0.2	J	AB	1.5	J	ND	
	27-Apr-11	0.03	10.0	1.3	J	0.14	J	0.56	J	0.69	J	AB	0.93	J	4.7	J	0.08	J	0.45	J	0.14	J	AB	1.5	J	ND	
	20-Oct-11	0.03	10.0	1.1	J	0.19	J	0.45	J	0.58	J	AB	1.2	J	3.5	J	0.1	J	0.57	J	0.19	J	AB	2.2	J	ND	
	26-Apr-12	0.03	10.0	1.0	J	0.21	J	0.6	J	0.88	J	AB	4	J	3.3	J	0.09	J	0.55	J	0.21	J	AB	2.4	J	ND	
	16-Oct-12	0.02	10.0	1.1	J	0.19	J	0.38	J	0.71	J	AB	0.66	J	2.1	J	0.11	J	0.40	J	0.24	J	AB	1.4	J	ND	
Copper	Jul-99	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Aug-99	NR	10	NI		NI		10		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-99	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Nov-99	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-00	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-00	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-01	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-01	NR	200	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-02	NR	200	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-02	NR	200	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-03	NR	200	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-03	NR	200	ND		ND		ND		ND		ND	ND		ND		ND		NS		NS		NS	NI		ND	
	15-Apr-04	NR	200	ND		ND		ND		ND		ND	ND		ND		ND		ND		ND		ND	NI		ND	
	14-Oct-04	NR	200	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	05-Apr-05	NR	200	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	27-Oct-05	NR	200	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	21-Apr-06	NR	200	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	12-Oct-06	NR	200	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	11-Oct-07	0.20	10.0	0.9	B	ND		1.2	B	0.5	B	AB	0.3	B	0.4	B	0.2	B	0.6	B	0.2	B	AB	3.3	J	0.4	J
NC 2L = 1,000 µg/L (10/23/07)	03-Apr-08	0.05	10.0	0.7	B	0.3	B	0.8	B	0.6	B	AB	0.7	B	0.6	B	0.3	B	0.6	B	0.1	B	AB	1.2	J	0.2	J
	28-Oct-08	0.05	10.0	1.1	B	0.8	B	2.1	B	1.7	B	AB	0.9	B	0.8	B	0.3	B	1.5	B	0.9	B	AB	2.8	B	1.1	J
	08-Apr-09	0.04	10.0	2	J	0.9	J	1.5	J	1.5	J	AB	1.6	J	1.0	J	0.4	B	1.1	J	0.7	J	AB	1.9	J	0.1	J
	27-Oct-09	0.04	10.0	1.2	J	3.4	J	3.1	J	1.5	J	AB	1.4	J	0.9	J	0.6	J	1.4	J	0.8	J	AB	3.4	J	0.1	J
	08-Apr-10	0.03	10.0	1.2	J	0.7	B	1.2	J	1.5	J	AB	1.4	J	1.1	J	0.8	B	4.5	J	0.7	B	AB	1.3	J	0.2	J
	13-Oct-10	0.03	10.0	1.6	J	1	B	0.9	B	1	B	AB	1.7	J	0.8	B	0.4	B	2.1	J	0.7	B	AB	2.4	J	0.2	J
	27-Apr-11	0.02	10.0	1.2	B	0.77	B	1.5	B	1.0	B	AB	1.7	B	0.98	B	0.72	B	1.3	B	0.93	B	AB	1.4	B	0.66	J
	20-Oct-11	0.02	10.0	1.2	J	1.5	J	1.3	J	0.5	B	AB	1.4	J	1.2	J	0.54	B	1.7	J	1.0	B	AB	1.7	J	0.20	J
	26-Apr-12	0.02	10.0	0.73	B	5.9	J	1.6	B	0.9	B	AB	2.7	B	5.0	J	0.21	B	1.4	B	0.45	B	AB	1.2	B	0.94	J
	16-Oct-12	0.06	10.0	0.69	B	0.62	B	1.1	B	0.67	B	AB	0.96	B	0.6	B	0.23	B	0.42	B	0.37	B	AB	0.64	B	0.25	J
Lead	Jul-99	NR	10	NI		NI		129		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Aug-99	NR	10	NI		NI		18		14		ND	ND		17		ND		NI		NI		NI	NI		ND	
	Oct-99	NR	10	NI		NI		12		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Nov-99	NR	10	NI		NI		ND		14		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-00	NR	10	NI		NI		ND		17		14	ND		15		ND		NI		NI		NI	NI		ND	
	Oct-00	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-01	NR	10	NI		NI		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-01	NR	10	NI		NI		16		19		ND	ND		18		ND		NI		NI		NI	NI		ND	
	Apr-02	NR	10	ND		ND		21		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NI		NI		NI	NI		ND	
	Oct-03	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		NS		NS		NS	NI		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		ND	ND		ND		ND		10		ND		ND	NI		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		ND	NI		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	NI		ND	
	11-Oct-07	0.07	10.0	0.2	B	ND		3.0	J	1.6	J	AB	0.3	B	0.1	B	ND		1.1	J	0.1	B	AB	0.3	B	0.1	J
NC 2L = 15 µg/L (10/23/07)	03-Apr-08	0.32	10.0	0.1	B	0.1	B	0.5	B	1.4	J	AB	0.9	J	1.4	J	0.1	B	0.5	B	ND		AB	0.3	B	0.1	J
	28-Oct-08	0.32	10.0	0.3	B	0.4	B	7.2	J	8	J	AB	1.3	J	1.1	J	0.1	B	0.8	J	0.5	B	AB	2.5	J	0.1	J
	08-Apr-09	0.04	10.0	0.6	J	0.2	B	2.3	J	6.6	J	AB	2.7	J	1.9	J	0.1	B	0.9	J	0.4	B	AB	1	J	0.1	J
	27-Oct-09	0.04	10.0	0.1	J	0.3	J	6.7	J	7.8	J	AB	2.4	J	2.3	J	0.1	J	0.8	J	0.4	J	AB	1.9	J	ND	
	08-Apr-10	0.01	10.0	0.4	B	0.3	B	3.1	J	4.1	J	AB	2.6	J	2.2	J	0.1	B	1.6	J	0.3	B	AB	1.3	J	0.1	J
	13-Oct-10	0.01	10.0	0.4	B	0.3	B	1.4	J	3.8	J	AB	2.3	J	2.3	J	0.2	B	0.6	J	0.2	B	AB	2.6	J	0.1	J
	27-Apr-11	0.02	10.0	0.27	J	0.21	J	2.0	J	2.5	J	AB	2.0	J	2.8	J	0.12	J	0.57	J	0.31	J	AB	1.2	J	ND	
	20-Oct-11	0.02	10.0	0.12	J	0.24	J	3.0	J	1.8	J	AB	1.9	J	4.8	J	0.11	J	0.55	J	0.35	J	AB	0.80	J	ND	
	26-Apr-12	0.02	10.0	0.35	J	0.83	J	2.7	J	3.0	J	AB	6.3	J	2.8	J	0.06	B	0.62	J	0.39	J	AB	1.60	J	0.02	J
	16-Oct-12	0.08	10.0	0.11	J	0.21	J	1.9	J	1.8	J	AB	1.3	J	2.6	J	ND		0.22	J	0.38	J	AB	1.0	J	ND	
Nickel	11-Oct-07	0.66	50.0	2.0	J	1.6	J	2.3	J	ND		AB	0.7	J	1.8	J	1.8	J	0.8	J	1.2	J	AB	3.6	J	ND	
NC 2L = 100 µg/L (10/23/07)	03-Apr-08	0.06	50.0	4.3	J	2.0	J	4.0	J	0.8	B	AB	1.4	B	4.8	J	2.4	J	0.7	B	1.6	J	AB	1.4	B	0.3	J
	28-Oct-08	0.06	50.0	3.5	J	2.7	J	4	J	2.2	J	AB	1	B	4.9	J	2	J	1.1	J	2.0	J	AB	1.6	J	0.2	J
	08-Apr-09	0.04	50.0	2.9	J	2	J	2.5	J	1.6	J	AB	1.5	J	8.5	J	1.2	J	1.1	J	1.9	J	AB	2.2	J	ND	
	27-Oct-09	0.04	50.0	1.9	J	1.8	J	2.5	J	1.9	J	AB	1.3	J	8.7	J	1.1	J	0.5	B	1.3	J	AB	2.1	J	0.2	J
	08-Apr-10	0.05	50.0	2.8	J	1.4	J	2.1	J	1.4	J	AB	1.8	J	7	J	1	J	1	J	1.6	J	AB	2.4	J	ND	
	13-Oct-10	0.05	50.0	2	J	2.6	J	2.9	J	1.5	J	AB	2	J	6.1	J	2.5	J	1.3	J	2.1	J	AB	3.2	J	0.1	J
	27-Apr-11	0.04	50.0	1.9	J	1.2	B	2.2	J	1.3	B	AB	1.9	J	8.1	J	1.1	B	1.0	B	1.0	B	AB	3.1	J	0.30	J
	20-Oct-11	0.04	50.0	2.2	B	1.7	B	2.6	J	1.4	B	AB	2.0	B	6.7	J	0.94	B	1.5	B	1.6	B	AB	6.0	J	0.56	J
	26-Apr-12	0.04	50.0	1.6	J	1.1	J	2.4	J	4.3	J	AB	5.7	J	6.8	J	0.97	J	1.4	J	1.1	J	AB	4.7	J	ND	
	16-Oct-12	0.06	50.0	1.8	J	1.7	J	2.4	J	1.9	J	AB	1.6	J	5.4	J	1.3	J	0.98	B	1.5	J	AB	9.7	J	0.23	J
Selenium	11-Oct-07	0.35	10.0	2.6	B	ND		1.4	B	ND		AB	0.4	B	0.8	B	ND		ND		ND		AB	ND		0.9	J
NC 2L = 50 µg/L (10/23/07)	03-Apr-08	0.51	10.0	3.1	B	ND		0.7	B	0.2	B	AB	0.7	B	0.3	B	ND		0.3	B	ND		AB	0.2	B	1.5	J
	28-Oct-08	0.51	10.0	3.1	B	ND		0.9	B	0.3	B	AB	0.7	B	0.5	B	ND		0.6	B	ND		AB	0.6	B	1.9	J
	08-Apr-09	0.12	10.0	2.4	J	0.7	J	ND		0.2	J	AB	0.3	J	0.5	J	ND		0.5	J	ND		AB	0.9	J	ND	
	27-Oct-09	0.12	10.0	3	J	0.7	J	0.5	J	0.2	J	AB	0.3	J	0.4	J	ND		0.8	J	0.2	J	AB	1.6	J	ND	
NC 2L = 20 µg/L (1/1/10)	08-Apr-10	0.32	10.0	1.6	J	ND		ND		ND		AB	0.3	J	ND		ND		1.4	J	ND		AB	1.6	J	ND	
	13-Oct-10	0.32	10.0	2	J	2	J	0.7	J	ND		AB	1.2	J	0.5	J	ND		2.2	J	1.1	J	AB	2.9	J	ND	
	27-Apr-11	0.20	10.0	0.83	J	ND		0.28	J	ND		AB	0.43	J	0.92	J	ND		0.35	J	ND		AB	1.1	J	ND	
	20-Oct-11	0.20	10.0	0.53	J	ND		0.44	J	ND		AB	ND		0.87	J	ND		0.35	J	ND		AB	1.0	J	ND	
	26-Apr-12	0.20	10.0	0.56	J	ND		0.54	J	ND		AB	0.68	J	1.1	J	ND		0.45	J	ND		AB	1.4	J	ND	
	16-Oct-12	0.17	10.0	0.48	J	ND		0.76	J	ND		AB	0.88	J	0.86	J	ND		0.74	J	ND		AB	2.1	J	ND	
Silver	03-Apr-08	0.04	10.0	ND		0.1	J	ND		0.1	J	AB	ND		ND		0.1	J	ND		ND		AB	ND		ND	
NC 2L = 17.5 µg/L (10/23/07)	28-Oct-08	0.04	10.0	0.1	B	ND		0.1	B	0.1	B	AB	ND		ND		ND		0.1	B	0.1	B	AB	ND		0.1	J
	08-Apr-09	0.04	10.0	0.1	J	ND		0.1	J	ND		AB	ND		ND		ND		0.1	J	ND		AB	ND		ND	
	27-Oct-09	0.04	10.0	0.1	J	ND		ND		ND		AB	ND		0.1	J	ND		0.2	J	ND		AB	ND		ND	
NC 2L = 20 µg/L (1/1/10)	08-Apr-10	0.03	10.0	ND		ND		0.1	B	ND		AB	ND		0.2	B	ND		ND		0.1	B	AB	0.1	B	0.1	J
	13-Oct-10	0.03	10.0	0.1	J	ND		ND		ND		AB	0.1	J	0.1	J	0.1	J	ND		ND		AB	0.1	J	ND	
	27-Apr-11	0.02	10.0	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	ND		ND	
	20-Oct-11	0.02	10.0	0.10	J	ND		ND		ND		AB	ND		ND		0.12	J	0.09	J	ND		AB	0.17	J	ND	
	26-Apr-12	0.02	10.0	ND		0.03	J	ND		0.02	J	AB	0.02	J	0.04	J	0.02	J	0.05	J	ND		AB	0.03	J	ND	
	16-Oct-12	0.10	10.0	ND		ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	ND		ND	
Thallium	11-Oct-07	0.07	5.0	0.2	J	ND		0.1	J	ND		AB	0.1	J	ND		ND		0.1	J	0.1	J	AB	ND		ND	
GWPS = 0.28 µg/L (10/23/07)	03-Apr-08	0.63	5.0	ND		0.1	J	0.1	J	ND		AB	ND		ND		0.1	J	ND		ND		AB	ND		ND	
	28-Oct-08	0.63	5.0	0.1	J	0.1	J	0.2	J	0.1	J	AB	ND		ND		ND		0.1	J	ND		AB	0.1	J	ND	
	08-Apr-09	0.03	5.0	0.1	J	ND		0.1	J	0.1	J	AB	0.1	J	ND		ND		0.1	J	ND		AB	ND		ND	
	27-Oct-09	0.03	5.0	0.1	J	ND		0.1	J	0.1	J	AB	ND		ND		ND		0.1	J	ND		AB	ND		ND	
	08-Apr-10	0.05	5.0	ND		ND		0.1	J	ND		AB	ND		ND		ND		ND		0.1	J	AB	0.1	J	ND	
GWPS = 0.2 µg/L (10/1/10)	13-Oct-10	0.05	5.5	ND		ND		ND		ND		AB	0.1	J	ND		0.1	J	ND		ND		AB	0.1	J	ND	
	27-Apr-11	0.02	5.5	ND		ND		0.12	B	0.06	B	AB	0.05	B	0.04	B	0.11	B	ND		ND		AB	0.07	B	0.03	J
	20-Oct-11	0.02	5.5	0.03	J	ND		0.05	J	ND		AB	0.03	J	0.04	J	0.10	J	0.03	J	ND		AB	0.13	J	ND	
	26-Apr-12	0.02	5.5	0.02	J	ND		0.08	J	0.05	J	AB	0.13	J	0.12	J	0.03	J	0.02	J	ND		AB	0.1	J	ND	
	16-Oct-12	0.07	5.5	0.19	J	ND		ND		ND		AB	ND		ND		ND		ND		ND		AB	ND		ND	

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	Concentrations (µg/L)																											
		DL	RL	Background				Downgradient																				Blanks	
				MW-12S		MW-12D		MW-7		MW-8		MW-9		MW-10		MW-11S		MW-11D		MW-13S		MW-13D		MW-14		MW-14R			
Vanadium	Jul-99	NR	40	NI		NI		167		52		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Aug-99	NR	40	NI		NI		41		47		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-99	NR	40	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Nov-99	NR	40	NI		NI		ND		47		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-00	NR	40	NI		NI		ND		57		43		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-00	NR	40	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-01	NR	40	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-01	NR	40	NI		NI		55		83		ND		ND		64		ND		NI		NI		NI		NI		ND	
	Apr-02	NR	40	ND		ND		67		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-02	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-03	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-03	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		NS		NS		NS		NI		ND	
	15-Apr-04	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NI		ND	
	14-Oct-04	NR	40	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	05-Apr-05	NR	40	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	27-Oct-05	NR	40	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	21-Apr-06	NR	40	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	12-Oct-06	NR	40	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		NI		ND	
	26-Apr-07	NR	25	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		NI		ND	
	11-Oct-07	0.42	25.0	0.9	J	ND		8.6	J	3.8	J	AB		0.6	J	ND		ND		2.7	J	ND		AB		ND		ND	
GWPS = 3.5 µg/L (10/23/07)	03-Apr-08	0.07	25.0	0.3	B	0.3	B	1.7	J	3.6	J	AB		2.1	J	1.9	J	0.2	B	1.1	J	0.2	B	AB		0.3	B	0.1	J
	28-Oct-08	0.07	25.0	0.4	B	1.0	B	14.1	J	14	J	AB		3.1	J	1.9	J	0.4	B	1.5	J	0.9	B	AB		3.9	J	0.2	J
	08-Apr-09	0.28	25.0	1.5	J	1.7	J	6.9	J	13.5	J	AB		6.5	J	2.7	J	0.8	J	2.3	J	1.8	J	AB		2.1	J	ND	
	27-Oct-09	0.28	25.0	ND		1.4	B	13.3	J	15.2	J	AB		7.4	J	3.2	J	0.9	B	1.5	B	1.5	B	AB		2.1	J	0.4	J
	08-Apr-10	0.03	25.0	1.3	B	1.7	B	8.1	J	9.4	J	AB		4.9	J	2.1	J	0.7	B	3.1	J	1.3	B	AB		2.3	J	0.4	J
GWPS = 0.3 µg/L (10/1/10)	13-Oct-10	0.03	25.0	0.9	B	1.4	B	4.8	J	7.6	J	AB		5.4	J	1.4	B	0.8	B	1.5	B	1	B	AB		2.9	B	0.6	J
	27-Apr-11	0.14	25.0	ND		ND		4.7	J	6.8	J	AB		3.5	J	2.2	J	ND		0.97	J	0.48	J	AB		0.62	J	ND	
	20-Oct-11	0.14	25.0	ND		0.88	J	6.7	J	3.5	J	AB		4.8	J	3.2	J	ND		1.5	J	0.93	J	AB		1.9	J	ND	
	26-Apr-12	0.14	25.0	0.7	J	1.30	J	6.7	J	6.1	J	AB		11.7	J	2.2	J	ND		1.4	J	0.91	J	AB		3.2	J	ND	
	16-Oct-12	0.10	25.0	ND		0.62	J	4.0	J	3.8	J	AB		2.8	J	1.0	J	ND		0.18	J	0.87	J	AB		2.4	J	ND	
Zinc	Jul-99	NR	50	NI		NI		113		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Aug-99	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-99	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Nov-99	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-00	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-00	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-01	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-01	NR	50	NI		NI		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-02	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-02	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Apr-03	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		NI		NI		NI		NI		ND	
	Oct-03	NR	50	11		ND		ND		ND		ND		ND		ND		ND		NS		NS		NS		NI		ND	
	15-Apr-04	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NI		ND	
	14-Oct-04	NR	50	ND		ND		72		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	05-Apr-05	NR	50	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	27-Oct-05	NR	50	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	21-Apr-06	NR	50	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		ND		NI		ND	
	12-Oct-06	NR	50	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		NI		ND	
	26-Apr-07	NR	10	ND		ND		13		ND		AB		ND		ND		ND		ND		ND		AB		NI		ND	
	11-Oct-07	0.20	10.0	22	B	2.1	B	28	B	4.9	B	AB		4.7	B	5.4	B	2.5	B	6.1	B	3.4	B	AB		14	B	6.6	J
NC 2L = 1,050 µg/L (10/23/07)	03-Apr-08	0.04	10.0	26		1.9	B	15		3.7	B	AB		7.8	B	8.7	B	4.7	B	4.7	B	2.1	B	AB		5.7	B	2.2	J
	28-Oct-08	0.04	10.0	20		15		22		11		AB		5.8	J	7.6	J	3.8	J	13		8.3	J	AB		17		0.4	J
	08-Apr-09	0.14	10.0	23		1.3	B	16		9.4	J	AB		7.5	J	14		1.8	B	5.4	J	1.9	B	AB		8.7	J	0.8	J
	27-Oct-09	0.14	10.0	16		4.2	B	25		9.6	J	AB		9.3	J	13		10		4.9	B	2.3	B	AB		8.9	J	1.4	J
NC 2L = 1,000 µg/L (1/1/10)	08-Apr-10	0.08	10.0	19		2.2	B	20		9.1	J	AB		6.8	J	9.9	J	3.5	B	9.9	J	2	B	AB		7.7	J	0.7	J
	13-Oct-10	0.08	10.0	17	B	7.7	B	6.1	B	8	B	AB		10	B	8.8	B	5.2	B	9.3	B	3.3	B	AB		12	B	4.1	J
	27-Apr-11	0.24	10.0	12		2.0	B	14		4.9	B	AB		10		9.3	J	3.8	B	4.9	B	1.2	B	AB		7.5	J	1.1	J
	20-Oct-11	0.24	10.0	8.1	J	2.1	J	10		4.3	J	AB		7.2	J	9.9	J	1.0	B	4.7	J	1.7	J	AB		9.6	J	0.28	J
	26-Apr-12	0.24	10.0	9.7	J	8.0	B	15		7.7	B	AB		24		17		2.4	B	6.1	B	2.3	B	AB		10		1.9	J
	16-Oct-12	0.48	10.0	9.2	J	1.5	J	6.9	J	4.9	J	AB		4.8	J	4.6	J	1.4	J	2.8	J	2.0	J	AB		5.4	J	ND	
Acetone	11-Oct-07	1.21	100.0	ND		ND		1.40	J	ND		AB		1.40	J	ND		ND		ND		ND		AB		ND		ND	
Resample	04-Dec-07	2.2	25.0	NS		NS		ND		NS		AB		ND		NS		NS		NS		NS		AB		NS		4.3	J
NC 2L = 700 µg/L (10/23/07)	03-Apr-08	1.21	100.0	5.20	B	4.50	B	4.30	B	2.30	B	AB		2.30	B	2.20	B	2.00	B	5.00	B	3.80	B	AB		4.40	B	2.10	J
	28-Oct-08	1.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		1.30	J
	08-Apr-09	1.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Oct-09	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
NC 2L = 6,000 µg/L (1/1/10)	08-Apr-10	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	13-Oct-10	9.06	100.0	10.20	J	32.20	J	ND		ND		AB		ND		ND		ND		15.00	J	22.10	J	AB		ND		ND	
	27-Apr-11	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	20-Oct-11	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	26-Apr-12	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	16-Oct-12	9.06	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
2-Butanone	03-Apr-08	0.85	100.0	0.90	J	ND		ND		1.50	J	AB		1.40	J	ND		ND		ND		ND		AB		ND		ND	
Resample	15-May-08	0.96	100.0	ND		NS		NS		ND		AB		ND		NS		NS		NS		NS		AB		NS		ND	
NC 2L = 4,200 µg/L (10/23/07)	28-Oct-08	0.85	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	08-Apr-09	0.85	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Oct-09	2.21	100.0	2.30	J	2.50	J	3.60	J	2.80	J	AB		3.30	J	3.00	J	2.30	J	2.90	J	2.90	J	AB		4.60	J	ND	
NC 2L = 4,000 µg/L (1/1/10)	08-Apr-10	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	13-Oct-10	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Apr-11	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	20-Oct-11	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	26-Apr-12	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	16-Oct-12	2.21	100.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
Chloromethane	11-Oct-07	0.18	1.0	0.90	J	0.70	J	0.80	J	0.80	J	AB		0.90	J	0.80	J	0.90	J	0.90	J	0.70	J	AB		0.90	J	ND	
Resample	04-Dec-07	0.11	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
NC 2L = 2.6 µg/L (10/23/07)	03-Apr-08	0.18	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	28-Oct-08	0.18	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		0.20	J	ND	
	08-Apr-09	0.18	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Oct-09	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		0.90	J	ND	
NC 2L = 3 µg/L (1/1/10)	08-Apr-10	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	13-Oct-10	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Apr-11	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	20-Oct-11	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	26-Apr-12	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	16-Oct-12	0.77	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
Methylene Chloride	11-Oct-07	0.14	1.0	ND		ND		ND		ND		AB		ND		0.20	B	ND		ND		ND		AB		ND		0.20	J
NC 2L = 4.6 µg/L (10/23/07)	03-Apr-08	0.14	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	28-Oct-08	0.14	1.0	ND		ND		0.20	J	0.20	J	AB		0.20	J	0.20	J	0.20	J	ND		ND		AB		ND		ND	
	08-Apr-09	0.14	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Oct-09	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
NC 2L = 5 µg/L (1/1/10)	08-Apr-10	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	13-Oct-10	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	27-Apr-11	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	20-Oct-11	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	26-Apr-12	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	
	16-Oct-12	0.64	1.0	ND		ND		ND		ND		AB		ND		ND		ND		ND		ND		AB		ND		ND	

Notes:
1. All concentrations are in micrograms per liter (µg/L).
2. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
3. ND = Not detected above laboratory reporting limit.
4. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks
5. NC 2L = North Carolina 2L Groundwater Standards.
6. GWPS = Groundwater Protection Standards.
7. When the NC 2L has not been established, the GWPS will be used.
8. Shaded values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
9. DL = Laboratory detection limit.
10. J = Estimated value between the DL and the RL
11. NI = Well/Piezometer not installed.
12. AB = Abandoned.
13. NS = Not sampled and/or no water level measurements taken.
14. NR = Not Reported.

TABLE 9

SUMMARY OF FIELD PARAMETERS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Field Parameters	Date	Background		Downgradient									
		MW-12S	MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R
Conductivity	Jul-99	NI	NI	180	110	320	150	200	440	NI	NI	NI	NI
[uMhos]	Aug-99	NI	NI	210	100	580	200	170	450	NI	NI	NI	NI
	Oct-99	NI	NI	140	89	2,000	150	200	420	NI	NI	NI	NI
	Nov-99	NI	NI	140	91	1,600	150	270	430	NI	NI	NI	NI
	Apr-00	NI	NI	150	88	1,800	140	270	420	NI	NI	NI	NI
	Oct-00	NI	NI	140	92	1,200	130	30	410	NI	NI	NI	NI
	Apr-01	NI	NI	140	88	1,300	120	290	390	NI	NI	NI	NI
	Oct-01	NI	NI	140	98	1,200	120	250	410	NI	NI	NI	NI
	Apr-02	160	460	140	82	1,600	110	290	370	NI	NI	NI	NI
	Oct-02	153	478	356	93	1,650	132	288	500	NI	NI	NI	NI
	Apr-03	164	448	482	169	1,857	167	406	440	NI	NI	NI	NI
	Oct-03	146	434	373	76	1,497	144	411	426	NS	NS	NS	NI
	15-Apr-04	170	300	220	57	960	87	290	300	79	280	56	NI
	14-Oct-04	189	405	272	70	AB	121	344	406	127	391	79	NI
	05-Apr-05	146	489	299	67	AB	140	417	496	99	475	95	NI
	27-Oct-05	144	419	234	63	AB	125	353	430	114	396	138	NI
	21-Apr-06	184	465	216	64	AB	147	406	469	121	434	69	NI
	12-Oct-06	182	448	245	59	AB	130	358	448	109	416	AB	NI
	26-Apr-07	192	452	210	69	AB	143	310	448	103	415	AB	NI
	11-Oct-07	187	454	273	80	AB	128	229	439	119	409	AB	78
Resample	04-Dec-07	159.2	501	340	83.5	AB	128.9	232	497	146.4	482	AB	73.1
	03-Apr-08	155	481	453	64	AB	131	409	443	124	402	AB	71
Resample	15-May-08	164.2	NS	NS	67.4	AB	129.8	NS	NS	NS	NS	AB	NS
	28-Oct-08	140	437	528	63	AB	124.0	542	449	152	422	AB	75
	08-Apr-09	148	429	475	60	AB	131	1,200	460	149	435	AB	116
	27-Oct-09	114	430	439	60	AB	114	613	427	124	417	AB	119
	08-Apr-10	146	433	450	73	AB	134	771	460	142	433	AB	158
	13-Oct-10	124	450	455	75	AB	121	639	474	144	440	AB	275
	27-Apr-11	123	439	551	84	AB	139	1115	475	164	437	AB	284
	20-Oct-11	99	420	460	84	AB	125	956	464	159	444	AB	1082
	26-Apr-12	107	409	490	82	AB	150	1054	477	195	446	AB	670
	16-Oct-12	103	422	435	90	AB	141	945	487	163	455	AB	1910
pH	Jul-99	NI	NI	5.7	5.4	5.1	5.6	6.0	7.0	NI	NI	NI	NI
[standard units]	Aug-99	NI	NI	5.4	5.0	4.2	5.0	5.6	6.4	NI	NI	NI	NI
	Oct-99	NI	NI	5.3	4.8	5.8	5.4	5.1	6.8	NI	NI	NI	NI
	Nov-99	NI	NI	5.2	4.8	5.6	5.3	5.2	6.7	NI	NI	NI	NI
	Apr-00	NI	NI	5.0	5.0	6.0	5.3	5.4	7.2	NI	NI	NI	NI
	Oct-00	NI	NI	5.0	4.8	5.3	5.3	4.8	6.3	NI	NI	NI	NI
	Apr-01	NI	NI	4.7	4.8	4.7	4.9	4.4	6.3	NI	NI	NI	NI
	Oct-01	NI	NI	5.1	5.0	4.4	5.2	5.0	6.6	NI	NI	NI	NI
	Apr-02	5.4	6.3	4.7	4.7	5.2	5.2	4.9	6.4	NI	NI	NI	NI
	Oct-02	4.9	7.1	5.9	4.9	5.0	5.5	4.9	7.2	NI	NI	NI	NI
	Apr-03	5.1	7.1	5.9	4.6	6.2	5.5	4.5	7.0	NI	NI	NI	NI
	Oct-03	4.6	6.7	6.0	4.6	5.9	5.1	3.9	6.9	NS	NS	NS	NI
	Oct-03	6.6	7.3	7.0	6.7	6.7	6.4	5.2	7.2	6.8	7.2	8.0	NI
	14-Oct-04	5.4	7.0	10.0	5.0	AB	5.3	4.7	6.8	4.9	6.7	5.3	NI
	05-Apr-05	5.1	7.0	5.9	5.1	AB	5.3	4.5	6.8	5.2	7.1	4.8	NI
	27-Oct-05	5.1	6.9	5.8	5.1	AB	5.1	4.1	6.9	4.9	7.1	4.8	NI
	21-Apr-06	5.3	7.0	5.9	5.0	AB	5.2	4.0	7.1	5.1	7.2	4.9	NI
	12-Oct-06	5.3	7.0	6.0	4.8	AB	5.2	4.2	7.0	5.1	7.1	AB	NI
	26-Apr-07	5.4	7.1	6.1	5.0	AB	5.3	4.6	7.1	4.9	7.2	AB	NI
	11-Oct-07	5.3	7.0	5.8	5.3	AB	5.1	5.1	7.1	5.1	7.2	AB	5.3
Resample	04-Dec-07	5.46	6.01	6.20	6.55	AB	6.22	4.53	5.82	5.17	5.98	AB	5.95
	03-Apr-08	4.9	6.8	6.1	4.9	AB	5.3	3.7	6.7	4.9	7.1	AB	4.8
Resample	15-May-08	5.66	NS	NS	5.80	AB	5.69	NS	NS	NS	NS	AB	NS
	28-Oct-08	4.6	7.0	6.2	4.9	AB	5.0	3.9	6.9	4.7	7.0	AB	5.0
	08-Apr-09	4.9	6.8	6.2	4.9	AB	5.0	4.0	6.7	4.8	6.6	AB	4.6
	27-Oct-09	4.6	6.8	6.1	5.0	AB	5.1	3.8	6.9	4.8	6.9	AB	4.2
	08-Apr-10	4.4	6.9	6.4	4.8	AB	5.1	4.0	7.0	5.0	7.1	AB	4.3
	13-Oct-10	4.7	6.7	6.2	4.8	AB	5.5	4.2	7.0	5.1	6.9	AB	3.9
	27-Apr-11	4.8	6.8	6.3	4.8	AB	5.1	4.0	6.8	5.1	6.9	AB	4.0
	20-Oct-11	4.5	6.9	6.2	5.1	AB	4.9	3.8	6.8	5.0	6.9	AB	5.2
	26-Apr-12	4.6	6.9	6.2	4.9	AB	5.0	3.9	6.8	5.0	7.0	AB	4.9
	16-Oct-12	4.7	7.1	6.3	4.8	AB	5.0	4.1	7.1	4.7	7.1	AB	6.0
Temperature	Jul-99	NI	NI	20	23	21	23	20	24	NI	NI	NI	NI
[°C]	Aug-99	NI	NI	23	23	23	24	23	20	NI	NI	NI	NI
	Oct-99	NI	NI	20	21	20	21	20	21	NI	NI	NI	NI
	Nov-99	NI	NI	17	18	18	18	17	17	NI	NI	NI	NI
	Apr-00	NI	NI	15	15	15	14	14	17	NI	NI	NI	NI
	Oct-00	NI	NI	20	20	20	19	20	20	NI	NI	NI	NI
	Apr-01	NI	NI	17	15	14	14	14	14	NI	NI	NI	NI
	Oct-01	NI	NI	20	21	20	21	21	19	NI	NI	NI	NI
	Apr-02	17	17	17	18	17	17	17	16	NI	NI	NI	NI
	Oct-02	25	22	25	26	24	24	24	23	NI	NI	NI	NI
	Apr-03	16	18	15	15	16	16	15	15	NI	NI	NI	NI
	Oct-03	20	19	20	19	20	20	21	21	NS	NS	NS	NI
	15-Apr-04	15	17	15	16	14	14	14	12	15	14	15	NI
	14-Oct-04	21	20	21	21	AB	21	22	21	21	22	21	NI
	05-Apr-05	15	15	16	15	AB	14	15	15	14	14	13	NI
	27-Oct-05	21	21	21	21	AB	21	21	22	20	21	21	NI
	21-Apr-06	17	18	18	17	AB	16	15	17	16	17	17	NI
	12-Oct-06	22	19	22	23	AB	22	23	19	21	19	AB	NI
	26-Apr-07	17	18	17	17	AB	15	16	18	4.9	7.2	AB	NI
	11-Oct-07	21	19	22	22	AB	21	21	18	20	18	AB	22
Resample	04-Dec-07	18.2	18.9	17.4	18.5	AB	16.7	13.8	17.9	16.0	17.1	AB	16.9
	03-Apr-08	16	18	15	15	AB	14	15	17	16	17	AB	15
Resample	15-May-08	17.4	NS	NS	17.8	AB	17.1	NS	NS	NS	NS	AB	NS
	28-Oct-08	21	18	20	20	AB	19	20	20	18	19	AB	20
	08-Apr-09	14	17	14	14	AB	13	14	15	14	15	AB	13
	27-Oct-09	21	19	22	21	AB	21	22	20	20	20	AB	21
	08-Apr-10	16	19	16	15	AB	16	15	16	16	16	AB	16
	13-Oct-10	22	19	23	23	AB	22	22	21	22	21	AB	22
	27-Apr-11	17	18	18	18	AB	17	16	17	17	17	AB	18
	20-Oct-11	20	17	21	19	AB	19	20	19	20	18	AB	20
	26-Apr-12	17	18	18	18	AB	17	17	17	17	17	AB	17
	16-Oct-12	22	19	22	22	AB	21	21	21	21	20	AB	22
Turbidity	Jul-99	NI	NI	450	650	18	3	75	70	NI	NI	NI	NI
[NTU]	Aug-99	NI	NI	95	500	50	100	330	120	NI	NI	NI	NI
	Oct-99	NI	NI	250	110	100	31	15	26	NI	NI	NI	NI
	Nov-99	NI	NI	110	290	150	100	75	130	NI	NI	NI	NI
	Apr-00	NI	NI	50	500	140	37	22	25	NI	NI	NI	NI
	Oct-00	NI	NI	70	110	17	16	33	31	NI	NI	NI	NI
	Apr-01	NI	NI	80	70	14	12	32	34	NI	NI	NI	NI
	Oct-01	NI	NI	60	290	5	10	20	70	NI	NI	NI	NI
	Apr-02	14	24	35	32	25	11	24	8	NI	NI	NI	NI
	Oct-02	3.0	14	22	8.3	23	10	6.2	50	NI	NI	NI	NI
	Apr-03	60	120	33	120	24	22	12	21	NI	NI	NI	NI
	Oct-03	18	22	55	27	65	25	19	26	NS	NS	NS	NI
	15-Apr-04	70	29	65	400	40	32	37	21	220	65	75	NI
	14-Oct-04	39	26	38	40	AB	60	140	39	45	30	37	NI
	05-Apr-05	39	32	70	170	AB	65	27	12	190	38	100	NI
	27-Oct-05	19	39	200	110	AB	37	55	25	26	50	26	NI
	21-Apr-06	5.9	17	56	4.8	AB	4.2	1.6	37	3.7	132	1.5	NI
	12-Oct-06	19	160	50	24	AB	34	3.0	60	19	70	AB	NI
	26-Apr-07	200	130	95	12	AB	50	6.6	90	2.5	110	AB	NI
	11-Oct-07	80	90	90	45	AB	8.0	7.1	60	40	80	AB	4.4
Resample	04-Dec-07	53.1	50.4	90.3	811.0	AB	31.4	34.3	9.86	46.1	17.85	AB	28.8
	03-Apr-08	35	6.4	13	50	AB	75	7.2	65	26	33	AB	5.2
Resample	15-May-08	26.1	NS	NS	630	AB	31.6	NS	NS	NS	NS	AB	NS
	23-Oct-08	18	75	200	320	AB	70	60	40	28	60	AB	80
	08-Apr-09	38	70	75	250	AB	90	39	50	40	120	AB	27
	27-Oct-09	13	100	170	290	AB	70	33	45	29	65	AB	60
	08-Apr-10	19	33	130	190	AB	90	38	45	90	55	AB	26
	13-Oct-10	11	36	70	170	AB	90	31	50	280	70	AB	45
	27-Apr-11	16	60	85	60	AB	75	27	55	30	75	AB	17
	20-Oct-11	9.2	100	120	38	AB	110	68	59	34	70	AB	70
	26-Apr-12	29.0	100	85	140	AB	310	65	65	25	95	AB	110
	16-Oct-12	7.5	29	74	65	AB	40	31	40	25	70	AB	290

Notes:
1. NI = Well/Piezometer not installed.
2. AB = Abandoned.
3. NS = Not sampled and/or no water level measurements taken.

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																											
		DL	RL	Background		Downgradient																						Blanks	
				LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D			
Antimony	Jul-93	NR	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Aug-93	NR	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	5	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	2	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		2		ND	
	Oct-94	NR	30	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	30	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	30	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	30	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	30	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	30	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	30	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-98	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	30	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	6.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.05	6.0	0.2	B	0.1	B	0.1	B	0.1	B	WL		0.1	B	WL		0.5	B	WL		0.1	B	0.1	B	WL		0.1	J
GWPS = 1.4 µg/L (10/23/07)	03-Apr-08	0.08	6.0	0.1	B	ND		ND		ND		WL		ND		WL		ND		WL		ND		0.5	B	WL		0.1	J
	28-Oct-08	0.08	6.0	0.6	J	ND		0.2	J	ND		WL		0.4	J	WL		0.1	J	WL		0.2	J	0.1	J	WL		ND	
	08-Apr-09	0.06	6.0	0.2	J	0.2	J	0.1	J	ND		WL		ND		WL		ND		WL		0.1	J	ND		WL		ND	
	27-Oct-09	0.06	6.0	0.3	J	0.1	J	0.7	J	0.3	J	WL		0.2	J	WL		ND		WL		0.2	J	0.1	J	WL		ND	
	08-Apr-10	0.22	6.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		0.4	B	ND		WL		0.7	J
GWPS = 1 µg/L (8/1/10)	13-Oct-10	0.22	6.0	0.5	J	ND		ND		ND		WL		0.6	J	WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.14	6.0	0.36	J	ND		ND		1.5	J	WL		ND		WL		0.30	J	WL		ND		ND		WL		ND	
	20-Oct-11	0.14	6.0	0.31	J	ND		0.18	J	ND		WL		ND		WL		ND		WL		ND		0.34	J	WL		ND	
	26-Apr-12	0.14	6.0	0.29	J	ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.02	6.0	0.88	J	0.17	J	0.64	J	0.11	J	WL		0.08	J	WL		0.09	J	WL		0.785		0.04	J	WL		ND	
Arsenic	Jul-93	NR	5	ND		9		ND		ND		ND		ND		ND		16		ND		5		ND		27		ND	
	Aug-93	NR	5	ND		ND		ND		ND		ND		ND		ND		15		ND		ND		ND		6		ND	
	Sep-93	NR	5	ND		ND		ND		5		153		ND		ND		17		ND		ND		ND		ND		ND	
	Sep-93	NR	5	ND		ND		ND		ND		8		ND		ND		37		ND		ND		ND		ND		ND	
	Apr-94	NR	5	ND		ND		ND		ND		ND		ND		ND		9		ND		ND		ND		ND		ND	
	Oct-94	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	10	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	10	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	10	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	10	ND		ND		ND		ND		ND		ND		WL		18		WL		ND		ND		WL		ND	
	Apr-98	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.47	10.0	2.4	J	1.0	J	ND		3.0	J	WL		1.7	J	WL		13		WL		ND		1.0	J	WL		ND	
NC 2L = 50 µg/L (10/23/07) Resample	04-Dec-07	2.7	5.0	NS		NS		NS		NS		NS		NS		NS		9.5		NS		NS		NS		NS		ND	
	03-Apr-08	0.07	10.0	1.2	J	0.6	J	0.4	J	0.3	J	WL		1.7	J	WL		11		WL		0.4	J	0.5	J	WL		ND	
	28-Oct-08	0.07	10.0	0.9	J	0.7	J	1.0	J	1.8	J	WL		1.7	J	WL		3.1	J	WL		0.8	J	1.5	J	WL		ND	
	08-Apr-09	0.17	10.0	1.9	J	0.8	B	0.8	B	1.0	B	WL		1.0	B	WL		2.1	J	WL		0.9	B	1.5	J	WL		0.2	J
	27-Oct-09	0.17	10.0	1.7	J	0.8	J	0.7	J	0.6	J	WL		0.6	J	WL		4.7	J	WL		1	J	2.1	J	WL		ND	
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.04	10.0	1.9	J	0.5	J	0.3	J	0.8	J	WL		0.2	J	WL		0.9	J	WL		1.3	J	0.9	J	WL		ND	
	13-Oct-10	0.04	10.0	4.6	J	0.8	J	1.3	J	0.7	J	WL		0.6	J	WL		1.8	J	WL		1.9	J	1	J	WL		ND	
	27-Apr-11	0.10	10.0	1.7	J	0.41	J	0.44	J	0.72	J	WL		0.31	J	WL		1.7	J	WL		1.4	J	0.54	J	WL		ND	
	20-Oct-11	0.10	10.0	1.6	J	0.53	J	0.70	J	0.72	J	WL		0.54	J	WL		1.4	J	WL		0.77	J	0.39	J	WL		ND	
	26-Apr-12	0.10	10.0	1.5	J	0.29	J	0.58	J	0.73	J	WL		0.54	J	WL		1.4	J	WL		0.77	J	0.39	J	WL		ND	
	16-Oct-12	0.13	10.0	1.6	B	0.67	B	1.0	B	0.86	B	WL		0.52	B	WL		2.0	B	WL		2.6	J	0.47	B	WL		0.40	J
Barium	Jul-93	NR	50	272		424		260		151		152		128		160		208		204		351		126		NA		ND	
	Aug-93	NR	50	196		216		144		133		128		240		242		126		256		292		68		112		ND	
	Sep-93	NR	50	92		71		212		75		460		79		104		194		94		120		61		62		ND	
	Sep-93	NR	50	113		194		120		94		121		121		170		155		132		184		74		77		ND	
	Apr-94	NR	50	ND		84		69		ND		94		ND		52		80		ND		62		90		ND		ND	
	Oct-94	NR	500	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	500	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	500	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	500	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	500	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	500	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	500	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-98	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		WL		ND		WL		ND	
	Oct-99	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	500	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	100	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.04	100.0	30.9	J	63.7	J	37.3	J	42	J	WL		91.5	J	WL		184		WL		51.8	J	34	J	WL		0.2	J
NC 2L = 2,000 µg/L (10/23/07)	03-Apr-08	0.11	100.0	27.9	J	66.0	J	38.9	J	36.8	J	WL		119		WL		58.3	J	WL		58.4	J	43.8	J	WL		ND	
	28-Oct-08	0.11	100.0	34	J	53.5	J	47.6	J	64.8	J	WL		158		WL		66.2	J	WL		71.8	J	84.8	J	WL		0.2	J
	08-Apr-09	0.04	100.0	33.1	J	61.2	J	44.5	J	55.6	J	WL		77.3	J	WL		52.9	J	WL		85.0	J	79.7	J	WL		0.2	J
	27-Oct-09	0.04	100.0	37.9	J	48.8	J	35.3	J	43.3	J	WL		101		WL		68.2	J	WL		82.7	J	81.7	J	WL		0.1	J
NC 2L = 700 µg/L (1/1/10)	08-Apr-10	0.03	100.0	31.9	J	58.1	J	40.2	J	60.4	J	WL		45.7	J	WL		33.1	J	WL		96.7	J	78.6	J	WL		0.1	J
	13-Oct-10	0.03	100.0	161		38.3	J	36.2	J	32	J	WL		89.1	J	WL		53.2	J	WL		98.5	J	61	J	WL		0.2	J
	27-Apr-11	0.02	100.0	41.5	J	46.4	J	38.5	J	37.8	J	WL		59.4	J	WL		41.1	J	WL		95.4	J	51.6	J	WL		0.10	J
	20-Oct-11	0.02	100.0	37.6	J	33.8	J	41.0	J	29.4	J	WL		115		WL		58.6	J	WL		68.1	J	41.3	J	WL		0.10	J
	26-Apr-12	0.02	100.0	43.7	J	52.5	J	45.2	J	35.8	J	WL		68.9	J	WL		49.9	J	WL		92.7	J	55.6	J	WL		0.12	J
	16-Oct-12	0.07	100.0	37.8	J	57.7	J	49.3	J	52.9	J	WL		57.1	J	WL		58.4	J	WL		96.3	J	44.8	J	WL		0.28	J

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																											
		DL	RL	Background		Downgradient																						Blanks	
				LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D			
Beryllium	Jul-93	NR	1	3		4		ND		2		ND		2		ND		4		3		3		ND		4		ND	
	Aug-93	NR	1	2		2		ND		2		ND		4		ND		3		ND		ND		ND		2		ND	
	Sep-93	NR	1	1		ND		ND		2		25		2		ND		4		ND		ND		ND		ND		ND	
	Sep-93	NR	1	2		3		ND		ND		1		2		1		4		ND		ND		ND		ND		ND	
	Apr-94	NR	1	ND		ND		ND		ND		ND		2		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	2	ND		ND		ND		ND		ND		2		ND		2		ND		ND		ND		ND		ND	
	Apr-95	NR	2	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	2	ND		ND		ND		2		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	2	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	2	ND		ND		ND		ND		ND		ND		WL		3		WL		ND		ND		WL		ND	
	Apr-97	NR	2	ND		3		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	2	3		ND		ND		2		ND		ND		WL		3		WL		ND		ND		WL		ND	
	Apr-98	NR	2	ND		ND		ND		2.1		WL		ND		WL		3.2		WL		ND		ND		WL		ND	
	Oct-98	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	2	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.08	1.0	ND		0.5	J	0.1	J	0.3	J	WL		0.5	J	WL		1.6		WL		0.1	J	0.1	J	WL		ND	
GWPS = 4 µg/L (10/23/07)	03-Apr-08	0.06	1.0	ND		0.4	J	0.1	J	0.2	J	WL		1.2		WL		0.4	J	WL		0.2	J	0.2	J	WL		ND	
	28-Oct-08	0.06	1.0	0.1	J	0.5	J	0.1	J	0.6	J	WL		1.0		WL		0.6	J	WL		0.3	J	0.4	J	WL		ND	
	08-Apr-09	0.06	1.0	0.2	J	0.5	J	0.1	J	0.4	J	WL		0.5	J	WL		0.6	J	WL		0.2	J	0.4	J	WL		ND	
	27-Oct-09	0.06	1.0	0.2	J	0.3	J	0.2	J	0.4	J	WL		0.7	J	WL		0.8	J	WL		0.3	J	0.5	J	WL		ND	
	08-Apr-10	0.02	1.0	0.1	B	0.3	B	0.1	B	0.4	B	WL		0.3	B	WL		0.3	B	WL		0.3	B	0.3	B	WL		0.1	J
GWPS = 4 µg/L (10/1/10)	13-Oct-10	0.02	1.0	0.1	J	0.3	J	0.2	J	0.3	J	WL		0.6	J	WL		0.6	J	WL		0.2	J	0.3	J	WL		ND	
	27-Apr-11	0.02	1.0	0.15	J	0.29	J	0.07	J	0.28	J	WL		0.30	J	WL		0.33	J	WL		0.23	J	0.17	J	WL		ND	
	20-Oct-11	0.02	1.0	0.22	J	0.24	J	0.12	J	0.67	J	WL		0.67	J	WL		0.42	J	WL		0.20	J	0.22	J	WL		ND	
	26-Apr-12	0.02	1.0	0.17	J	0.33	J	0.11	J	0.34	J	WL		0.40	J	WL		0.34	J	WL		0.17	J	0.18	J	WL		ND	
	16-Oct-12	0.07	1.0	ND		0.42	J	0.13	J	0.40	J	WL		0.25	J	WL		0.40	J	WL		0.47	J	0.20	J	WL		ND	
Cadmium	Jul-93	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		1		ND		ND		ND	
	Aug-93	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	1	ND		ND		ND		ND		5		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	1	ND		ND		ND		ND		5		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	1	ND		ND		ND		ND		ND		1		ND		1		ND		ND		ND		ND		ND	
	Oct-95	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	1	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	1	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	1	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	1	1		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-98	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	1	2		ND		ND		ND		WL		ND		WL		ND		WL		1		ND		WL		ND	
	Apr-03	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		5		2		WL		ND	
	15-Apr-04	NR	1	ND		3		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	1	1		ND		2		ND		WL		ND		WL		ND		WL		1		1		WL		ND	
	05-Apr-05	NR	1	ND		1		1		ND		WL		1		WL		1		WL		ND		2		WL		ND	
	27-Oct-05	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	1	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.06	1.0	0.4	B	0.5	B	0.1	B	0.5	B	WL		0.5	B	WL		0.5	B	WL		0.2	B	1.1		WL		0.1	J
NC 2L = 1.75 µg/L (10/23/07)	03-Apr-08	0.04	1.0	0.1	J	0.1	J	ND		0.1	J	WL		0.3	J	WL		0.2	J	WL		0.1	J	0.4	J	WL		ND	
	28-Oct-08	0.04	1.0	0.1	J	0.3	J	0.3	J	0.1	J	WL		0.4	J	WL		0.2	J	WL		0.1	J	0.1	J	WL		ND	
	08-Apr-09	0.04	1.0	0.1	J	0.3	J	0.1	J	0.2	J	WL		0.5	J	WL		0.2	J	WL		0.2	J	0.3	J	WL		ND	
	27-Oct-09	0.04	1.0	0.7	J	0.1	J	ND		0.2	J	WL		0.1	J	WL		0.7	J	WL		0.1	J	1		WL		ND	
NC 2L = 2 µg/L (1/1/10)	08-Apr-10	0.02	1.0	0.1	B	0.3	B	0.1	B	0.3	B	WL		0.1	B	WL		0.4	B	WL		0.8	J	0.1	B	WL		0.1	J
	13-Oct-10	0.02	1.0	0.4	J	0.2	J	0.2	J	0.3	J	WL		0.1	J	WL		0.2	J	WL		0.1	J	0.1	J	WL		ND	
	27-Apr-11	0.02	1.0	0.12	J	0.18	J	0.05	J	0.18	J	WL		0.07	J	WL		0.21	J	WL		0.17	J	0.06	J	WL		ND	
	20-Oct-11	0.02	1.0	0.04	J	ND		0.20	J	0.07	J	WL		0.06	J	WL		0.15	J	WL		0.08	J	ND		WL		ND	
	26-Apr-12	0.02	1.0	0.12	J	0.16	J	0.16	J	0.08	J	WL		0.18	J	WL		0.10	J	WL		0.10	J	ND		WL		ND	
	16-Oct-12	0.03	1.0	0.17	J	0.28	J	0.13	J	0.44	J	WL		0.36	J	WL		0.39	J	WL		0.50	J	0.14	J	WL		ND	
Chromium	Jul-93	NR	5	36		72		14		32		8		7		ND		ND		26		8		ND		35		ND	
	Aug-93	NR	5	18		17		ND		16		ND		23		ND		ND		ND		ND		ND		11		ND	
	Sep-93	NR	5	19		12		ND		17		136		9		ND		ND		ND		ND		ND		6		ND	
	Sep-93	NR	5	19		29		ND		8		9		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	5	ND		9		34		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	10	ND		10		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	10	ND		ND		ND		22		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	10	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	10	ND		13		ND		ND		ND		ND		WL		27		WL		ND		10		WL		ND	
	Apr-97	NR	10	16		32		ND		ND		ND		ND		WL		20		WL		10		14		WL		ND	
	Oct-97	NR	10	15		ND		ND		16		ND		ND		WL		32		WL		21		33		WL		ND	
	Apr-98	NR	10	32		ND		ND		12		WL		ND		WL		26		WL		ND		23		WL		ND	
	Oct-98	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	10	17		11		ND		18		WL		ND		WL		34		WL		ND		10		WL		ND	
	Oct-99	NR	10	ND		10		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	5	28		170		ND		18		WL		ND		WL		51		WL		10		40		WL		ND	
	Oct-00	NR	10	ND		ND		ND		11		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	10	ND		ND		ND		18		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	10	20		ND		ND		19		WL		ND		WL		40		WL		ND		ND		WL		ND	
	Oct-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	10	14		ND		ND		ND		WL		ND		WL		ND		WL		ND		10		WL		ND	
	Oct-03	NR	10	14		ND		ND		17		WL		ND		WL		19		WL		ND		ND		WL		ND	
	15-Apr-04	NR	10	11		20		ND		22		WL		ND		WL		ND		WL		11		13		WL		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		WL		17		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.24	10.0	3.2	B	1.1	B	1.2	B	1.4	B	WL		1.6	B	WL		2	B	WL		1.4	B	2.2	B	WL		1.2	J
NC 2L = 50 µg/L (10/23/07)	03-Apr-08	0.11	10.0	0.5	J	ND		ND		1.2	J	WL		1.5	J	WL		2.1	J	WL		0.4	J	2.7	J	WL		ND	
	28-Oct-08	0.11	10.0	3.9	J	5.4	J	1.3	J	8.8	J	WL		3.1	J	WL		7.7	J	WL		1.7	J	9.2	J	WL		ND	
	08-Apr-09	0.10	10.0	6.4	J	1.9	J	0.2	J	2.8	J	WL		2.4	J	WL		6.2	J	WL		1.1	J	8.0	J	WL		ND	
	27-Oct-09	0.10	10.0	8.7	J	3.8	J	0.7	J	4.2	J	WL		1.6	J	WL		11		WL		1	J	11		WL		ND	
NC 2L = 10 µg/L (1/1/10)	08-Apr-10	0.03	10.0	6.1	J	2.1	J	0.6	J	4.3	J	WL		1.7	J	WL		5.5	J	WL		1.3	J	7.4	J	WL		ND	
	13-Oct-10	0.03	10.0	8.7	J	0.6	J	0.7	J	1.6	J	WL		1.3	J	WL		6.2	J	WL		0.7	J	6.6	J	WL		ND	
	27-Apr-11	0.04	10.0	6.7	J	1.5	J	0.40	B	3.9	J	WL		1.1	J	WL		6.1	J	WL		1.2	J	3.9	J	WL		0.18	J
	20-Oct-11	0.04	10.0	10		2.6	J	1.2	J	3.7	J	WL		1.7	J	WL		5.9	J	WL		1.5	J	4.8	J	WL		0.18	J
	26-Apr-12	0.04	10.0	9.8	J	3.1	J	1.0	J	5.8	J	WL		1.7	J	WL		6.2	J	WL		1.2	J	6.8	J	WL		0.09	J
	16-Oct-12	0.18	10.0	3.1	J	3.9	J	1.0	J	2.8	J	WL		2.4	J	WL		19		WL		2.7	J	3.4	J	WL		ND	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																														
		DL	RL	Background		Downgradient																										Blanks
				LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D		
Cobalt	Jul-93	NR	20	29		36		28		2		25		71		24		258		28		21		ND		52		ND
	Aug-93	NR	20	ND		ND		ND		ND		ND		62		ND		117		ND		ND		24		42		ND
	Sep-93	NR	20	ND		ND		ND		ND		186		83		ND		205		ND		ND		ND		ND		ND
	Sep-93	NR	20	ND		ND		ND		ND		ND		61		ND		188		ND		ND		ND		ND		ND
	Apr-94	NR	10	19	B	25		35		18	B	37	B	81	B	41	B	37	B	31	B	31	B	20	B	36	B	18
	Oct-94	NR	10	ND		ND		ND		ND		ND		ND		ND		14		ND		ND		ND		ND		ND
	Apr-95	NR	10	ND		ND		ND		ND		ND		53		ND		14		ND		ND		ND		ND		ND
	Oct-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND
	Apr-96	NR	10	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND
	Oct-96	NR	10	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-97	NR	10	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-97	NR	10	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-98	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-98	NR	10	ND		ND		ND		ND		WL		13		WL		ND		WL		ND		ND		WL		ND
	Mar-99	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-99	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-00	NR	10	ND		ND		ND		ND		WL		11		WL		ND		WL		ND		ND		WL		ND
	Oct-00	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Apr-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	Oct-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	15-Apr-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	14-Oct-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	05-Apr-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	27-Oct-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	21-Apr-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	12-Oct-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND
	10-Oct-07	0.41	10.0	0.5	J	0.5	J	ND		0.5	J	WL		5.8	J	WL		20		WL		ND		ND		WL		ND
GWPS = 70 µg/L (10/23/07)	03-Apr-08	0.03	10.0	0.5	J	0.4	J	0.4	J	0.4	J	WL		2.8	J	WL		2.3	J	WL		0.2	J	0.6	J	WL		ND
	28-Oct-08	0.03	10.0	0.3	J	0.7	J	0.7	J	0.8	J	WL		6.6	J	WL		1.8	J	WL		0.5	J	0.8	J	WL		ND
	08-Apr-09	0.02	10.0	0.4	J	0.4	J	0.4	J	0.6	J	WL		2.8	J	WL		1.6	J	WL		0.4	J	0.7	J	WL		ND
	27-Oct-09	0.02	10.0	0.4	J	0.4	J	0.5	J	0.5	J	WL		7.2	J	WL		2.2	J	WL		0.5	J	0.9	J	WL		ND
	08-Apr-10	0.10	10.0	0.4	J	0.4	J	0.5	J	0.6	J	WL		2.9	J	WL		1.2	J	WL		0.5	J	0.8	J	WL		ND
GWPS = 1 µg/L (10/1/10)	13-Oct-10	0.10	10.0	1	J	0.2	J	0.6	J	0.3	J	WL		6	J	WL		2.1	J	WL		0.4	J	0.5	J	WL		ND
	27-Apr-11	0.03	10.0	0.45	J	0.36	J	0.26	J	0.45	J	WL		3.4	J	WL		1.4	J	WL		0.41	J	0.50	J	WL		ND
	20-Oct-11	0.03	10.0	0.39	J	0.40	J	0.44	J	0.37	J	WL		6.6	J	WL		2.1	J	WL		0.32	J	0.38	J	WL		ND
	26-Apr-12	0.03	10.0	0.40	J	0.43	J	0.45	J	0.48	J	WL		5.1	J	WL		1.5	J	WL		0.38	J	0.53	J	WL		ND
	16-Oct-12	0.02	10.0	0.23	J	0.45	J	0.63	J	0.65	J	WL		2.4	J	WL		1.9	J	WL		0.76	J	0.39	J	WL		ND
Copper	Jul-93	NR	10	23	B	62		25		26	B	24	B	17	B	26	B	22	B	28	B	ND		19	B	36	B	17	
	Aug-93	NR	10	17	B	15		21		14	B	10	B	17	B	13	B	ND		12	B	11	B	16	B	33	B	19	
	Sep-93	NR	10	18	B	24		12		ND		195		16	B	14	B	11	B	13	B	14	B	14	B	ND		11	
	Sep-93	NR	10	19	B	27		12		36	B	46	B	29	B	35	B	44	B	31	B	10	B	38	B	37	B	39	
	Apr-94	NR	10	33	B	45		ND		25	B	31	B	15	B	58	B	47	B	41	B	31	B	25	B	27	B	21	
	Oct-94	NR	200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	200	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	200	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	200	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	200	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	200	ND		ND		ND		ND		ND		ND		WL		ND		WL		17		ND		WL		ND	
	Apr-98	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	200	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.20	10.0	1.1	B	0.6	B	0.9	B	0.8	B	WL		0.7	B	WL		0.7	B	WL		0.3	B	1.0	B	WL		0.4	J
NC 2L = 1,000 µg/L (10/23/07)	03-Apr-08	0.05	10.0	0.7	B	0.5	B	0.2	B	0.5	B	WL		1.6	J	WL		1.1	J	WL		0.3	B	0.8	B	WL		0.2	J
	28-Oct-08	0.05	10.0	1.6	B	2.2	J	1.1	B	2.6	J	WL		1.9	B	WL		1.9	B	WL		1.2	B	2.3	J	WL		0.4	J
	08-Apr-09	0.04	10.0	2.3	J	1.7	J	0.6	J	1.1	J	WL		1.3	J	WL		1.5	J	WL		0.9	J	1.7	J	WL		0.1	J
	27-Oct-09	0.04	10.0	2.4	J	1.9	J	1.4	J	3.1	J	WL		2.3	J	WL		3.7	J	WL		1.3	J	5.4	J	WL		0.1	J
	08-Apr-10	0.03	10.0	1.8	J	2.8	J	1.7	J	2.0	J	WL		0.9	B	WL		1.9	J	WL		3.5	J	2.1	J	WL		0.2	J
	13-Oct-10	0.03	10.0	3.7	J	1.1	J	1.1	J	1.1	J	WL		0.9	B	WL		1.5	J	WL		0.8	B	1.3	J	WL		0.2	J
	27-Apr-11	0.02	10.0	2.5	B	1.2	B	0.58	B	1.6	B	WL		0.51	B	WL		1.7	B	WL		1.4	B	1.2	B	WL		0.66	J
	20-Oct-11	0.02	10.0	1.8	J	1.0	J	0.88	B	1.2	J	WL		0.86	B	WL		1.7	J	WL		0.84	B	1.3	J	WL		0.20	J
	26-Apr-12	0.02	10.0	1.7	B	1.4	B	0.78	B	1.7	B	WL		0.91	B	WL		1.5	B	WL		1.7	B	0.79	B	WL		0.94	J
	16-Oct-12	0.06	10.0	1.5	J	1.6	J	0.73	B	1.4	J	WL		1.1	B	WL		1.9	J	WL		1.4	J	1.1	B	WL		0.25	J
Lead	Jul-93	NR	5	34		67		ND		7		ND		ND		ND		ND		8		28		ND		13		ND	
	Aug-93	NR	5	33		21		ND		15		ND		17		ND		ND		ND		ND		12		7		ND	
	Sep-93	NR	5	17		ND		ND		13		102		ND		ND		ND		ND		ND		5		ND		ND	
	Sep-93	NR	5	ND		16		ND		10		5		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	5	ND		12		47		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	10	ND		13		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	10	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	10	ND		ND		ND		ND		ND		ND		WL		14		WL		ND		ND		WL		ND	
	Apr-97	NR	10	10		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	10	15		ND		ND		20		ND		ND		WL		41		WL		ND		33		WL		ND	
	Apr-98	NR	10	17		ND		ND		ND		WL		22		WL		20		WL		ND		ND		WL		ND	
	Oct-98	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	10	ND		ND		ND		ND		WL		ND		WL		12		WL		ND		ND		WL		ND	
	Oct-99	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	10	11		23		ND		ND		WL		18		WL		20		WL		10		15		WL		ND	
	Oct-00	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	10	ND		ND		ND		ND		WL		ND		WL		14		WL		ND		ND		WL		ND	
	Oct-02	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.07	10.0	1.6	J	1.0	J	0.1	B	0.8	J	WL		1.0	J	WL		0.6	J	WL		0.1	B	1.8	J	WL		0.1	J
NC 2L = 15 µg/L (10/23/07)	03-Apr-08	0.04	10.0	0.8	J	0.6	J	0.2	J	1.1	J	WL		13		WL		5.0	J	WL		0.2	J	2.1	J	WL		ND	
	28-Oct-08	0.04	10.0	2.5	J	4	J	0.6	J	8.5	J	WL		11		WL		9.5	J	WL		1	J	12		WL		0.1	J
	08-Apr-09	0.04	10.0	4.4	J	1.6	J	0.3	B	3.0	J	WL		5.2	J	WL		6.2	J	WL		0.8	J	9.7	J	WL		0.1	J
	27-Oct-09	0.04	10.0	6.4	J	3.2	J	0.5	J	3.9	J	WL		3.3	J	WL		5.0	J	WL		0.9	J	9.7	J	WL		ND	
	08-Apr-10	0.01	10.0	5.1	J	1.8	J	0.4	B	4.4	J	WL		2.2	J	WL		4.3	J	WL		1.4	J	8.2	J	WL		0.1	J
	13-Oct-10	0.01	10.0	1.4	J	1.7	J	0.6	J	2.2	J	WL		2.1	J	WL		5.7	J	WL		0.6	J	7.5	J	WL		0.1	J
	27-Apr-11	0.02	10.0	4.9	J	1.4	J	0.30	J	3.6	J	WL		1.7	J	WL		5.2	J	WL		0.77	J	3.3	J	WL		ND	
	20-Oct-11	0.02	10.0	6.2	J	2.9	J	0.54	J	3.4	J	WL		2.3	J	WL		4.9	J	WL		0.70	J	3.7	J	WL		ND	
	26-Apr-12	0.02	10.0	5.2	J	2.6	J	0.41	J	4.5	J	WL		1.9	J	WL		4.6	J	WL		0.62	J	5.4	J	WL		0.02	J
	16-Oct-12	0.08	10.0	3.0	J	6.7	J	0.67	J	3.7	J	WL		2.6	J	WL		6.4	J	WL		1.7	J	3.1	J	WL		ND	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																													
		DL	RL	Background		Downgradient																								Blanks	
				LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D			
Nickel	Jul-93	NR	10	35		52		36		18		28		63		17		253		47		ND		23		80		ND	
	Aug-93	NR	10	39	B	46		21		41	B	44	B	103		38	B	164		39	B	37	B	26	B	40	B	11	
	Sep-93	NR	10	20	B	23		51		23	B	240		89		20	B	212		15	B	20	B	12	B	15	B	17	
	Sep-93	NR	10	19		ND		ND		12		15		60		16		194		14		13		49		17		ND	
	Apr-94	NR	10	30	B	45		ND		26	B	32	B	87	B	19	B	44	B	45	B	50		17	B	39	B	20	
	Oct-94	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	50	ND		ND		ND		ND		ND		61		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	50	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	50	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	50	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	50	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-98	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.66	50.0	1.6	J	1.2	J	1.9	J	1.3	J	WL		7.4	J	WL		25.5	J	WL		2.2	J	1	J	WL		ND	
NC 2L = 100 µg/L (10/23/07)	03-Apr-08	0.06	50.0	2.1	J	0.6	B	2.4	J	0.5	B	WL		3.5	J	WL		2.5	J	WL		3.4	J	1.0	B	WL		0.3	J
	28-Oct-08	0.06	50.0	1.4	B	1.4	B	3.3	J	1.5	B	WL		8	J	WL		2.7	J	WL		3.3	J	1.9	J	WL		0.3	J
	08-Apr-09	0.04	50.0	1.8	J	1.0	J	2.5	J	1.1	J	WL		3.5	J	WL		2.6	J	WL		2.9	J	1.7	J	WL		ND	
	27-Oct-09	0.04	50.0	2	J	1.4	J	1.7	J	1.4	J	WL		7.6	J	WL		3.4	J	WL		2.3	J	3.0	J	WL		0.2	J
	08-Apr-10	0.05	50.0	1.1	J	0.8	J	1.5	J	0.8	J	WL		3.0	J	WL		1.7	J	WL		2	J	1.0	J	WL		ND	
	13-Oct-10	0.05	50.0	11	J	2	J	3.4	J	1	J	WL		6.8	J	WL		3.1	J	WL		3.7	J	1.2	J	WL		0.1	J
	27-Apr-11	0.04	50.0	2.3	J	0.72	B	1.4	B	1.0	B	WL		3.9	J	WL		2.2	J	WL		1.9	J	0.98	B	WL		0.30	J
	20-Oct-11	0.04	50.0	2.0	B	1.3	B	2.1	B	0.86	B	WL		7.5	J	WL		3.2	J	WL		1.9	B	1.4	B	WL		0.56	J
	26-Apr-12	0.04	50.0	2.7	J	0.85	J	1.8	J	1.10	J	WL		5.3	J	WL		2.3	J	WL		1.8	J	1.5	J	WL		ND	
	16-Oct-12	0.06	50.0	1.7	J	1.5	J	2.8	J	1.6	J	WL		3.2	J	WL		5.8	J	WL		3.5	J	2.2	J	WL		0.23	J
Selenium	Jul-93	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		49		ND		ND		ND	
	Aug-93	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	20	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	20	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	20	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	20	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-98	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-00	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-02	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	20	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.35	10.0	1.4	B	3.4	B	1.1	B	1.4	B	WL		1.3	B	WL		1.3	B	WL		1.1	B	1.0	B	WL		0.9	J
NC 2L = 50 µg/L (10/23/07)	03-Apr-08	0.14	10.0	0.9	J	1.7	J	ND		0.2	J	WL		0.9	J	WL		ND		WL		ND		0.2	J	WL		ND	
	28-Oct-08	0.14	10.0	0.3	J	0.8	J	ND		0.3	J	WL		0.3	J	WL		0.2	J	WL		0.2	J	0.2	J	WL		ND	
	08-Apr-09	0.12	10.0	0.3	J	1.1	J	ND		0.2	J	WL		ND		WL		0.2	J	WL		0.2	J	0.3	J	WL		ND	
	27-Oct-09	0.12	10.0	0.6	J	0.9	J	0.5	J	0.5	J	WL		0.7	J	WL		0.8	J	WL		0.6	J	1.3	J	WL		ND	
NC 2L = 20 µg/L (1/1/10)	08-Apr-10	0.32	10.0	ND		1.9	J	0.4	J	ND		WL		ND		WL		ND		WL		0.3	J	ND		WL		ND	
	13-Oct-10	0.32	10.0	12		1.5	J	1.5	J	0.5	J	WL		0.6	J	WL		0.3	J	WL		3.1	J	0.4	J	WL		ND	
	27-Apr-11	0.20	10.0	1.1	J	1.1	J	ND		0.26	J	WL		ND		WL		0.42	J	WL		0.52	J	ND		WL		ND	
	20-Oct-11	0.20	10.0	0.50	J	0.51	J	0.32	J	0.28	J	WL		0.51	J	WL		0.43	J	WL		0.38	J	0.30	J	WL		ND	
	26-Apr-12	0.20	10.0	0.56	J	0.59	J	ND		0.2	J	WL		0.33	J	WL		0.29	J	WL		0.42	J	0.20	J	WL		ND	
	16-Oct-12	0.17	10.0	0.57	J	0.57	J	ND		0.92	J	WL		0.44	J	WL		0.63	J	WL		0.80	J	0.35	J	WL		ND	
Silver	03-Apr-08	0.04	10.0	0.1	B	0.1	B	ND		ND		WL		0.1	B	WL		ND		WL		ND		0.1	B	WL		0.1	J
NC 2L = 17.5 µg/L (10/23/07)	28-Oct-08	0.04	10.0	ND		0.1	J	ND		ND		WL		0.1	J	WL		0.1	J	WL		0.1	J	0.1	J	WL		ND	
	08-Apr-09	0.04	10.0	ND		ND		0.1	J	0.1	J	WL		ND		WL		ND		WL		0.1	J	ND		WL		ND	
	27-Oct-09	0.04	10.0	ND		0.1	J	0.1	J	ND		WL		ND		WL		0.1	J	WL		0.1	J	0.2	J	WL		ND	
NC 2L = 20 µg/L (1/1/10)	08-Apr-10	0.03	10.0	ND		ND		ND		ND		WL		ND		WL		0.1	B	WL		0.1	B	0.5	B	WL		0.1	J
	13-Oct-10	0.03	10.0	ND		ND		ND		ND		WL		0.1	J	WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.02	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.02	10.0	ND		ND		0.05	J	ND		WL		ND		WL		ND		WL		ND		0.04	J	WL		ND	
	26-Apr-12	0.02	10.0	0.02	J	0.06	J	0.04	J	0.03	J	WL		0.03	J	WL		ND		WL		ND		0.03	J	WL		ND	
	16-Oct-12	0.10	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Thallium	10-Oct-07	0.07	5.0	ND		0.2	J	0.2	J	0.1	J	WL		ND		WL		ND		WL		ND		ND		WL		ND	
GWPS = 0.28 µg/L (10/23/07)	03-Apr-08	0.04	5.0	0.2	J	0.1	J	ND		0.1	J	WL		0.1	J	WL		0.1	J	WL		0.1	J	0.1	J	WL		ND	
	28-Oct-08	0.04	5.0	0.1	J	0.1	J	ND		0.1	J	WL		0.1	J	WL		0.1	J	WL		ND		0.2	J	WL		ND	
	08-Apr-09	0.03	5.0	0.1	J	0.1	J	0.1	J	0.1	J	WL		0.1	J	WL		0.1	J	WL		ND		0.1	J	WL		ND	
	27-Oct-09	0.03	5.0	0.1	J	0.1	J	ND		ND		WL		ND		WL		0.1	J	WL		ND		0.3	J	WL		ND	
	08-Apr-10	0.05	5.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
GWPS = 0.2 µg/L (10/1/10)	13-Oct-10	0.05	5.5	0.1	J	ND		ND		ND		WL		0.1	J	WL		0.1	J	WL		ND		0.1	J	WL		ND	
	27-Apr-11	0.02	5.5	0.10	B	0.18	J	0.27	J	0.12	B	WL		0.04	B	WL		0.10	B	WL		ND		0.08	B	WL		0.03	J
	20-Oct-11	0.02	5.5	0.09	J	0.05	J	0.09	J	0.05	J	WL		0.05	J	WL		0.09	J	WL		ND		0.09	J	WL		ND	
	26-Apr-12	0.02	5.5	0.12	J	0.23	J	0.14	J	0.13	J	WL		0.20	J	WL		0.12	J	WL		0.03	J	0.11	J	WL		ND	
	16-Oct-12	0.07	5.5	ND		0.07	J	ND		0.24	J	WL		ND		WL		0.08	J	WL		ND		ND		WL		ND	
Vanadium	Jul-93	NR	2,000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Aug-93	NR	2,000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	2,000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	2,000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	40	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	40	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-97	NR	40	ND		ND		ND		ND		ND		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-97	NR	40	ND		ND		ND		ND		ND		ND		WL		50		WL		ND		48		WL		ND	
	Apr-98	NR	40	43		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-98	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-99	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	40	40		ND		ND		ND		WL		ND		WL		64		WL		ND		50		WL		ND	
	Oct-00	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	40	ND		ND		ND		ND		WL		ND		WL		55		WL		ND		ND		WL		ND	
	Oct-02	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-03	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	12-Oct-06	NR	40	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	25	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	10-Oct-07	0.42	25.0	4.0	J	0.5	J	ND		1.3	J	WL		0.9	J	WL		3.2	J	WL		ND		3.1	J	WL		ND	
GWPS = 3.5 µg/L (10/23/07)	03-Apr-08	0.07	25.0	2.0	J	0.8	J	0.6	J	2.4	J	WL		2.5	J	WL		9.5	J	WL		0.8	J	4.6	J	WL		ND	
	28-Oct-08	0.07	25.0	6.5	J	6.9	J	1.6	J	11.7	J	WL		4.5	J	WL		10.3	J	WL		2	J	14.8	J	WL		0.2	J
	08-Apr-09	0.28	25.0	12.6	J	4.6	J	2.3	J	6.4	J	WL		5.3	J	WL		10.0	J	WL		2.9	J	14.5	J	WL		ND	
	27-Oct-09	0.28	25.0	14.3	J	6.9	J	2.3	J	7.3	J	WL		3.3	J	WL		17.4	J	WL		2.2	J	17.1	J	WL		0.4	J
	08-Apr-10	0.03	25.0	10.4	J	3.0	J	1.0	B	6.3	J	WL		2.2	J	WL		6.9	J	WL		1.5	B	11.5	J	WL		0.4	J
GWPS = 0.3 µg/L (10/1/10)	13-Oct-10	0.03	25.0	3.6	J	2.1	B	1.9	B	3.5	J	WL		2.7	B	WL		9	J	WL		1.6	B	10.4	J	WL		0.6	J
	27-Apr-11	0.14	25.0	10.2	J	2.1	J	0.66	J	5.3	J	WL		1.6	J	WL		7.8	J	WL		1.4	J	5.9	J	WL		ND	
	20-Oct-11	0.14	25.0	13.9	J	3.5	J	0.76	J	5.1	J	WL		1.9	J	WL		6.5	J	WL		0.93	J	5.7	J	WL		ND	
	26-Apr-12	0.14	25.0	11.7	J	3.9	J	0.65	J	7.3	J	WL		1.4	J	WL		7.7	J	WL		0.76	J	8.5	J	WL		ND	
	16-Oct-12	0.10	25.0	5.6	J	5.7	J	1.5	J	4.1	J	WL		3.3	J	WL		9.6	J	WL		2.9	J	4.6	J	WL		ND	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																													
		DL	RL	Background		Downgradient																								Blanks	
				LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D			
Zinc	Jul-93	NR	10	71		102		26		24	B	26	B	132		30	B	797		54		84		36	B	257		10	
	Aug-93	NR	10	45		36		17		31		20		182		67		294		20		23		43		116		ND	
	Sep-93	NR	10	13		12		30		23		660		135		22		404		10		ND		19		33		ND	
	Sep-93	NR	10	43		37		25		42		63		130		36		555		18		14		19		29		ND	
	Apr-94	NR	10	42	B	78		50		40	B	33	B	176		32	B	90	B	27	B	32	B	64	B	40	B	20	
	Oct-94	NR	50	800		ND		ND		ND		ND		88		ND		69		ND		ND		ND		ND		ND	
	Apr-95	NR	50	ND		ND		ND		ND		ND		128		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	NR	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	NR	50	ND		ND		ND		ND		NA		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	NR	50	ND		ND		ND		ND		ND		ND		WL		67		WL		ND		ND		WL		ND	
	Apr-97	NR	50	ND		ND		ND		ND		ND		ND		WL		51		WL		ND		ND		WL		ND	
	Oct-97	NR	50	91		ND		ND		ND		ND		ND		WL		129		WL		ND		ND		WL		ND	
	Apr-98	NR	50	ND		ND		ND		ND		WL		ND		WL		62		WL		ND		ND		WL		ND	
	Oct-98	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Mar-99	NR	50	54		ND		ND		ND		WL		ND		WL		60		WL		ND		ND		WL		ND	
	Oct-99	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-00	NR	50	161		ND		ND		ND		WL		52		WL		67		WL		ND		ND		WL		ND	
	Oct-00	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-01	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Oct-01	NR	50	62		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-02	NR	50	105		ND		ND		ND		WL		ND		WL		77		WL		ND		ND		WL		ND	
	Oct-02	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	Apr-03	NR	50	82		ND		ND		ND		WL		ND		WL		ND		WL		ND		148		WL		ND	
	Oct-03	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	15-Apr-04	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	14-Oct-04	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	05-Apr-05	NR	50	55		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-05	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	21-Apr-06	NR	50	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-06	NR	50	ND		ND		ND		ND		WL		68		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-07	NR	10	22		ND		ND		ND		WL		17		WL		ND		WL		ND		11		WL		ND	
	10-Oct-07	0.20	10.0	17	B	3.8	B	4.9	B	7.7	B	WL		30	B	WL		53		WL		1.8	B	7.7	B	WL		6.6	J
NC 2L = 1,050 µg/L (10/23/07)	03-Apr-08	0.04	10.0	25	B	3.1	B	1.3	B	3.5	B	WL		24	B	WL		13	B	WL		4.4	B	15	B	WL		6.3	J
	28-Oct-08	0.04	10.0	18		8	J	6	J	11		WL		35		WL		15		WL		7.5	J	144		WL		0.9	J
	08-Apr-09	0.14	10.0	29		7.4	J	3.7	B	8.0	J	WL		22		WL		15		WL		6.6	J	107		WL		0.8	J
	27-Oct-09	0.14	10.0	21		17		5.4	B	9.2	J	WL		28		WL		22		WL		7.5	J	68		WL		1.4	J
NC 2L = 1,000 µg/L (1/1/10)	08-Apr-10	0.08	10.0	25		12		7.8	J	9.0	J	WL		26		WL		11		WL		8.7	J	78		WL		0.7	J
	13-Oct-10	0.08	10.0	39		5.1	B	8.1	B	5.2	B	WL		44		WL		14	B	WL		4.7	B	62		WL		4.1	J
	27-Apr-11	0.24	10.0	20		4.0	B	2.4	B	5.2	B	WL		28		WL		12		WL		5.3	B	24		WL		1.1	J
	20-Oct-11	0.24	10.0	21		4.5	J	5.6	J	3.2	J	WL		31		WL		15		WL		6.5	J	35		WL		0.28	J
	26-Apr-12	0.24	10.0	17		6.1	B	4.1	B	6.1	B	WL		26		WL		14		WL		4.7	B	46		WL		1.9	J
	16-Oct-12	0.48	10.0	15		10		7.9	J	7.5	J	WL		34		WL		22		WL		12		25		WL		ND	
2-Butanone	10-Oct-07	0.85	100.0	3.90	J	4.60	J	4.00	J	3.70	J	WL		3.80	J	WL		4.50	J	WL		4.10	J	2.90	J	WL		ND	
NC 2L = 4,200 µg/L (10/23/07) Resample	04-Dec-07	0.96	5.0	ND		ND		ND		ND		NS		ND		NS		ND		NS		ND		ND		NS		ND	
	03-Apr-08	0.85	100.0	ND		ND		0.90	J	ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Resample	15-May-08	0.96	100	NS		NS		ND		NS		NS		NS		NS		NS		NS		NS		NS		NS		ND	
	28-Oct-08	0.85	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-09	0.85	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	2.21	100.0	2.60	J	ND		2.40	J	2.80	J	WL		3.20	J	WL		2.40	J	WL		ND		2.50	J	WL		ND	
NC 2L = 4,000 µg/L (1/1/10)	08-Apr-10	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	13-Oct-10	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	2.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Acetone	10-Oct-07	1.21	100.0	3.20	J	3.50	J	3.10	J	3.30	J	WL		2.90	J	WL		3.40	J	WL		3.50	J	2.50	J	WL		ND	
NC 2L = 700 µg/L (10/23/07) Resample	04-Dec-07	2.20	25.0	ND		ND		ND		ND		NS		ND		NS		ND		NS		ND		ND		NS		4.6	J
	02-Apr-08	1.21	100.0	2.20	B	2.40	B	1.60	B	2.00	B	WL		1.90	B	WL		2.30	B	WL		2.00	B	2.20	B	WL		1.60	J
	28-Oct-08	1.21	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-09	1.21	100.0	ND		ND		ND		1.30	J	WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 6,000 µg/L (1/1/10)	08-Apr-10	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	13-Oct-10	9.06	100.0	ND		ND		41.90	J	10.70	J	WL		ND		WL		ND		WL		42.60	J	ND		WL		ND	
	27-Apr-11	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	9.06	100.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Benzene	13-Oct-10	0.24	1.0	0.30	J	ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 1 µg/L (1/1/10)	27-Apr-11	0.24	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.24	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	0.24	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.24	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Bromomethane	10-Oct-07	0.26	10.0	ND		0.30	J	ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = NE (10/23/07) Resample	04-Dec-07	0.29	5.0	NS		ND		NS		NS		NS		NS		NS		NS		NS		NS		NS		NS		ND	
	02-Apr-08	0.26	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	28-Oct-08	0.26	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-09	0.26	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-10	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
GWPS = 10 (8/1/10)	13-Oct-10	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.67	10.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Bromodichloromethane	03-Apr-08	0.13	10.0	1.40	J	ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 0.56 µg/L (10/23/07) Resample	04-Jun-08	0.13	10.0	ND		NS		NS		NS		NS		NS		NS		NS		NS		NS		NS		NS		ND	
	28-Oct-08	0.13	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-09	0.13	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 0.6 µg/L (1/1/10)	08-Apr-10	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	13-Oct-10	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.21	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Chloromethane	10-Oct-07	0.18	1.0	ND		1.00		0.80	J	0.70	J	WL		0.90	J	WL		0.90	J	WL		0.70	J	0.60	J	WL		ND	
NC 2L = 2.6 µg/L (10/23/07) Resample	04-Dec-07	0.11	1.0	NS		ND		ND		ND		NS		ND		NS		ND		NS		ND		ND		NS		ND	
	03-Apr-08	0.18	1.0	ND		ND		ND		ND		WL		ND		WL		0.20	J	WL		ND		ND		WL		ND	
Resample	15-May-08	0.11	1.0	NS		NS		NS		NS		NS		NS		NS		ND		NS		NS		NS		NS		ND	
	28-Oct-08	0.18	1.0	ND		ND		ND		ND		WL		ND		WL		0.20	J	WL		ND		ND		WL		ND	
	08-Apr-09	0.18	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 3 µg/L (1/1/10)	08-Apr-10	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	13-Oct-10	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.77	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
Methylene Chloride	10-Oct-07	0.14	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		0.20	J
NC 2L = 4.6 µg/L (10/23/07)	03-Apr-08	0.14	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	28-Oct-08	0.14	1.0	ND		0.30	J	ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	08-Apr-09	0.14	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Oct-09	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
NC 2L = 5 µg/L (1/1/10)	08-Apr-10	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	13-Oct-10	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	27-Apr-11	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	20-Oct-11	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	26-Apr-12	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	
	16-Oct-12	0.64	1.0	ND		ND		ND		ND		WL		ND		WL		ND		WL		ND		ND		WL		ND	

Notes:
1. All concentrations are in µg/L.
2. LST = Leachate storage tank monitoring well.
3. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
4. ND = Not detected above laboratory reporting limit.
5. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks.
6. NC 2L = North Carolina 2L Groundwater Standards.
7. GWPS = Groundwater Protection Standards.
8. When the NC 2L has not been established, the GWPS will be used.
9. Shaded values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
10. NE = Not established.
11. DL = Laboratory detection limit.
12. J = Estimated value between the DL and the RL.
13. NS = Not sampled and/or no water level measurements taken.
14. NR = Not Reported.
15. WL = May be monitored for water levels only.
16. NA = Data not available.

TABLE 11

SUMMARY OF FIELD PARAMETERS
LEACHATE STORAGE LAGOON AREA

Field Parameters	Date	Background	Downgradient										
		LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D
Conductivity	Jul-93	110	80	490	73	460	190	430	390	650	560	60	480
[uMhos]	Aug-93	140	110	400	81	400	210	360	280	520	500	62	270
	Sep-93	100	96	440	60	NA	210	330	270	460	680	86	380
	Sep-93	110	85	400	69	380	210	320	280	460	460	81	350
	Apr-94	120	84	470	60	480	230	400	11	430	530	97	480
	Oct-94	110	83	450	72	440	150	340	120	310	700	89	660
	Apr-95	120	77	460	54	460	250	360	120	320	480	56	490
	Oct-95	120	87	470	54	470	93	320	80	290	510	75	NA
	Apr-96	120	73	460	54	450	61	370	91	340	490	60	470
	Oct-96	120	63	380	52	WL	56	WL	98	WL	410	52	WL
	Apr-97	140	65	500	72	WL	90	WL	110	WL	490	55	WL
	Oct-97	120	61	440	72	WL	66	WL	110	WL	460	73	WL
	Apr-98	NA	60	60	84	WL	49	WL	NA	WL	500	40	WL
	Oct-98	130	64	440	77	WL	78	WL	78	WL	420	87	WL
	Mar-99	160	62	480	75	WL	46	WL	81	WL	500	46	WL
	Oct-99	210	56	450	77	WL	32	WL	49	WL	460	46	WL
	Apr-00	160	53	440	66	WL	62	WL	81	WL	460	34	WL
	Oct-00	160	53	460	68	WL	53	WL	83	WL	470	83	WL
	Apr-01	140	49	430	66	WL	NA	WL	71	WL	450	59	WL
	Oct-01	130	51	450	70	WL	49	WL	61	WL	NA	62	WL
	Apr-02	160	59	420	62	WL	52	WL	79	WL	430	38	WL
	Oct-02	38	71	296	65	WL	64	WL	11	WL	35	60	WL
	Apr-03	272	65	466	80	WL	81	WL	72	WL	484	70	WL
	Oct-03	196	73	449	95	WL	114	WL	77	WL	479	52	WL
	15-Apr-04	150	58	330	54	WL	41	WL	40	WL	340	48	WL
	14-Oct-04	126	73	436	87	WL	50	WL	55	WL	464	49	WL
	05-Apr-05	148	538	81	91	WL	65	WL	61	WL	561	40	WL
	27-Oct-05	212	81	468	88	WL	72	WL	49	WL	485	60	WL
	21-Apr-06	150	96	508	100	WL	77	WL	76	WL	525	42	WL
	12-Oct-06	134	87	489	94	WL	48	WL	52	WL	489	50	WL
	26-Apr-07	176	93	488	95	WL	47	WL	64	WL	509	43	WL
	10-Oct-07	190	95	494	100	WL	90	WL	199	WL	531	40	WL
Resample	04-Dec-07	229	89.8	54.5	103.0	NS	333	NS	163.5	NS	619	46.5	NS
	03-Apr-08	271	86	476	85	WL	130	WL	46	WL	518	44	WL
Resample	15-May-08	NS	NS	442	NS	NS	NS	NS	68.7	NS	NS	NS	NS
Resample	04-Jun-08	222	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Oct-08	185	69	475	84	WL	117	WL	44	WL	553	46	WL
	08-Apr-09	217	75	473	91	WL	77	WL	69	WL	560	47	WL
	27-Oct-09	148	68	472	88	WL	123	WL	38	WL	558	39	WL
	08-Apr-10	232	76	487	96	WL	65	WL	53	WL	587	50	WL
	13-Oct-10	1413	65	499	75	WL	104	WL	50	WL	608	53	WL
	27-Apr-11	390	74	494	76	WL	78	WL	44	WL	603	46	WL
	20-Oct-11	177	55	489	67	WL	142	WL	60	WL	551	45	WL
	26-Apr-12	256	79	494	76	WL	122	WL	58	WL	625	49	WL
	16-Oct-12	249	74	510	104	WL	75	WL	220	WL	589	49	WL
pH	Jun-93	5.5	5.1	6.4	4.9	6.1	5.3	6.4	4.4	6.2	6.1	5.5	6.9
[units]	Aug-93	6.1	5.8	6.5	5.9	6.4	5.7	6.5	4.5	6.4	6.9	5.7	6.8
	Sep-93	6.0	5.4	6.6	5.8	NA	5.9	6.9	4.6	6.3	6.6	5.5	6.4
	Sep-93	6.4	6.1	6.5	6.1	6.3	5.4	6.4	4.5	6.2	6.6	6.0	6.5
	Apr-94	6.3	6.0	6.4	5.9	6.5	5.1	6.3	5.1	6.2	6.4	5.6	6.4
	Oct-94	5.4	5.0	6.6	5.2	6.6	4.2	6.5	4.2	6.3	6.6	4.9	6.6
	Apr-95	6.0	6.2	6.0	6.4	6.2	5.3	6.0	5.3	6.0	6.5	6.5	6.4
	Oct-95	5.2	5.0	7.0	5.2	5.2	4.6	6.8	4.5	6.5	6.8	4.8	6.9
	Apr-96	5.6	5.0	6.3	5.9	6.6	5.4	6.5	4.7	6.2	6.5	5.8	6.6
	Oct-96	5.7	4.7	5.6	5.1	WL	4.6	WL	4.4	WL	5.8	4.8	WL
	Apr-97	5.7	5.3	6.1	5.2	WL	5.0	WL	5.2	WL	6.4	5.7	WL
	Oct-97	5.1	5.8	6.1	6.9	WL	4.9	WL	4.7	WL	5.8	4.7	WL
	Apr-98	NA	4.8	4.8	4.8	WL	4.6	WL	NA	WL	7.0	4.7	WL
	Oct-98	6.2	4.9	6.5	NA	WL	4.1	WL	4.9	WL	6.9	4.8	WL
	Mar-99	5.8	5.0	6.6	5.0	WL	4.5	WL	4.8	WL	6.8	4.9	WL
	Oct-99	5.8	5.0	6.8	4.8	WL	4.6	WL	4.6	WL	6.8	5.0	WL
	Apr-00	5.6	5.2	6.4	5.0	WL	5.4	WL	5.4	WL	6.5	5.0	WL
	Oct-00	5.2	4.8	6.6	4.8	WL	4.4	WL	4.1	WL	6.7	4.5	WL
	Apr-02	5.2	4.7	6.3	4.7	WL	4.9	WL	4.4	WL	6.5	4.6	WL
	Oct-02	5.2	5.0	6.0	5.2	WL	4.7	WL	4.4	WL	6.8	4.8	WL
	Apr-02	6.1	5.0	6.5	5.0	WL	4.7	WL	4.8	WL	6.7	4.9	WL
	Oct-02	5.9	5.1	7.0	5.0	WL	4.6	WL	4.7	WL	7.0	4.8	WL
	Apr-03	6.1	5.0	6.9	5.0	WL	4.5	WL	4.4	WL	6.9	4.8	WL
	Oct-03	6.4	4.6	6.7	4.4	WL	3.4	WL	3.9	WL	6.7	4.4	WL
	15-Apr-04	6.6	6.0	7.2	5.6	WL	5.4	WL	5.2	WL	7.0	5.6	WL
	14-Oct-04	6.7	4.7	6.7	4.8	WL	4.7	WL	4.5	WL	6.8	5.1	WL
	05-Apr-05	6.5	7.0	5.0	5.3	WL	4.9	WL	4.6	WL	6.9	4.9	WL
	27-Oct-05	6.5	4.8	6.8	4.9	WL	4.3	WL	4.6	WL	6.9	4.8	WL
	21-Apr-06	6.6	4.8	7.0	4.9	WL	4.5	WL	5.1	WL	7.0	5.1	WL
	12-Oct-06	6.5	4.8	7.0	4.8	WL	4.7	WL	5.0	WL	6.9	5.0	WL
	26-Apr-07	6.7	4.8	7.1	4.9	WL	4.8	WL	5.3	WL	7.0	5.0	WL
	10-Oct-07	6.1	4.8	7.1	5.0	WL	4.5	WL	4.6	WL	7.0	4.9	WL
Resample	04-Dec-07	7.13	5.81	6.88	5.30	NS	3.97	NS	4.05	NS	7.12	4.95	NS
	03-Apr-08	6.1	4.9	6.8	5.2	WL	5.5	WL	6.3	WL	6.9	5.2	WL
Resample	15-May-08	NS	NS	6.72	NS	NS	NS	NS	7.39	NS	NS	NS	NS
Resample	04-Jun-08	6.13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Oct-08	6.0	4.9	6.5	5.2	WL	4.7	WL	4.7	WL	6.8	5.4	WL
	08-Apr-09	6.1	4.8	6.7	4.9	WL	4.6	WL	5.0	WL	6.7	6.4	WL
	27-Oct-09	6.3	4.7	6.7	4.7	WL	4.4	WL	4.5	WL	6.7	5.1	WL
	08-Apr-10	6.2	4.8	6.9	4.8	WL	4.4	WL	4.4	WL	6.8	5.2	WL
	13-Oct-10	6.1	4.8	6.6	5.0	WL	4.6	WL	4.8	WL	6.6	5.4	WL
	27-Apr-11	6.2	4.9	6.9	5.1	WL	4.7	WL	5.1	WL	7.2	5.4	WL
	20-Oct-11	6.2	4.9	6.7	5.1	WL	4.4	WL	4.7	WL	6.8	5.2	WL
	26-Apr-12	6.1	4.9	6.8	5.9	WL	4.7	WL	4.9	WL	6.6	5.2	WL
	16-Oct-12	6.1	4.9	7.0	5.0	WL	4.8	WL	4.8	WL	6.9	5.0	WL
Temperature	Jun-93	23	25	21	26	22	27	19	23	20	18	23	24
[°C]	Aug-93	25	24	21	25	24	24	19	22	20	20	24	19
	Sep-93	24	25	19	25	NA	24	21	24	20	20	24	21
	Sep-93	24	25	21	25	21	24	20	24	21	21	25	21
	Apr-94	18	17	17	19	18	18	18	18	17	17	18	18
	Oct-94	21	20	19	21	20	21	19	21	16	19	20	19
	Apr-95	17	16	16	17	16	15	16	15	20	16	16	17
	Oct-95	23	23	20	23	20	22	20	22	13	20	21	20
	Apr-96	13	12	14	13	14	12	13	12	WL	14	12	14
	Oct-96	21	20	20	21	WL	22	WL	21	WL	21	22	WL
	Apr-97	15	14	15	14	WL	13	WL	13	WL	16	13	WL
	Oct-97	21	20	17	21	WL	20	WL	19	WL	17	18	WL
	Apr-98	NA	15	15	15	WL	15	WL	NA	WL	17	15	WL
	Oct-98	21	20	18	21	WL	18	WL	19	WL	19	20	WL
	Mar-99	15	13	16	13	WL	13	WL	15	WL	18	15	WL
	Oct-99	21	20	20	21	WL	20	WL	20	WL	20	19	WL
	Apr-00	15	15	17	15	WL	15	WL	14	WL	19	14	WL
	Oct-00	20	19	20	20	WL	19	WL	19	WL	20	20	WL
	Apr-02	16	15	15	16	WL	15	WL	14	WL	16	15	WL
	Oct-02	21	20	20	21	WL	20	WL	20	WL	21	21	WL
	Apr-02	18	16	16	18	WL	18	WL	16	WL	16	18	WL
	Oct-02	26	24	24	27	WL	25	WL	25	WL	22	21	WL
	Apr-03	16	15	15	15	WL	15	WL	15	WL	16	15	WL
	Oct-03	20	20	18	20	WL	19	WL	20	WL	20	20	WL
	15-Apr-04	13	13	13	14	WL	12	WL	14	WL	13	13	WL
	14-Oct-04	22	21	21	21	WL	21	WL	21	WL	21	21	WL
	05-Apr-05	16	15	15	16	WL	15	WL	15	WL	16	15	WL
	27-Oct-05	22	21	21	21	WL	21	WL	20	WL	22	20	WL
	21-Apr-06	18	17	18	17	WL	17	WL	17	WL	18	18	WL
	12-Oct-06	23	21	19	22	WL	21	WL	21	WL	19	22	WL
	26-Apr-07	17	16	18	16	WL	16	WL	16	WL	18	17	WL
	10-Oct-07	22	22	19	22	WL	20	WL	20	WL	20	22	WL
Resample	04-Dec-07	18.5	17.1	17.2	17.3	NS	15.5	NS	16.9	NS	17.7	17.3	NS
	03-Apr-08	15	15	17	15	WL	14	WL	14	WL	18	15	WL
Resample	15-May-08	NS	NS	17.9	NS	NS	NS	NS	17.9	NS	NS	NS	NS
Resample	04-Jun-08	20.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Oct-08	21	20	19	19	WL	19	WL	20	WL	20	19	WL
	08-Apr-09	14	14	16	14	WL	14	WL	14	WL	16	14	WL
	27-Oct-09	22	21	19	21	WL	20	WL	21	WL	19	21	WL
	08-Apr-10	16	16	18	16	WL	15	WL	15	WL	18	15	WL
	13-Oct-10	23	22	20	22	WL	22	WL	21	WL	20	23	WL
	27-Apr-11	17	18	18	18	WL	17	WL	17	WL	18	17	WL
	20-Oct-11	21	21	18	21	WL	20	WL	20	WL	19	20	WL
	26-Apr-12	18	18	18	18	WL	17	WL	17	WL	18	17	WL
	16-Oct-12	22	22	19	21	WL	21	WL	21	WL	19	21	WL
Turbidity	Jun-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
[NTU]	Aug-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sep-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Sep-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Apr-96	NA	NA	NA	NA	NA	NA	NA	NA	WL	NA	NA	NA
	Oct-96	NA	NA	NA	NA	WL	NA	WL	NA	WL	NA	NA	WL
	Apr-97	NA	NA	NA	NA	WL	NA	WL	NA	WL	NA	NA	WL
	Oct-97	NA	NA	NA	NA	WL	NA	WL	NA	WL	NA	NA	WL
	Apr-98	NA	NA	NA	NA	WL	NA	WL	NA	WL	NA	NA	WL
	Oct-98	150	330	170	270	WL	55	WL	360	WL	140	270	WL
	Mar-99	210	150	38	190	WL	15	WL	400	WL	75	NA	WL
	Oct-99	35	89	22	45	WL	39	WL	65	WL	18	32	WL
	Apr-00	80	110	14	110	WL	18	WL	180	WL	24	80	WL
	Oct-00	32	70	55	120	WL	12	WL	70	WL	22	28	WL
	Apr-02	26	36	24	38	WL	13	WL	27	WL	33	26	WL
	Oct-02	206	86	60	166	WL	20	WL	188	WL	51	85	WL
	Apr-02	70	27	25	130	WL	22	WL	57	WL	23	35	WL
	Oct-02	38	7.5	27	85	WL	28	WL	11	WL	35	21	WL
	Apr-03	85	33	22	55	WL	12	WL	45	WL	30	22	WL
	Oct-03	250	70	26	240	WL	16	WL	340	WL	100	36	WL
	15-Apr-04	45	250	20	270	WL	60	WL	70	WL	55	40	WL
	14-Oct-04	100	75	25	110	WL	9.3	WL	140	WL	80	95	WL
	05-Apr-05	160	32	60	220	WL	31	WL	100	WL	22	80	WL
	27-Oct-05	180	32	25	100	WL	36	WL	75	WL	27	90	WL
	21-Apr-06	14	<1.43	40	5.8	WL	1.7	WL	7.7	WL	75	45	WL
	12-Oct-06	25	12	50	<1.54	WL	310	WL	10	WL	60	70	WL
	26-Apr-07	9.6	<1.42	190	<1.42	WL	3.2	WL	3.5	WL	75	21	WL
	10-Oct-07	45	7.1	50	7.5	WL	9.5	WL	13	WL	70	40	WL
Resample	04-Dec-07	72.1	29.6	3.17	62.9	NS	91.0	NS	124	NS	19.56	885	NS
	03-Apr-08	11	14	42	23	WL	230	WL	220	WL	95	65	WL
Resample	15-May-08	NS	NS	42.9	NS	NS	NS	NS	64.3	NS	NS	NS	NS
Resample	04-Jun-08	212	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	28-Oct-08	110	90	55	230	WL	90	WL	230	WL	70	650	WL
	08-Apr-09	160	40	55	85	WL	24	WL	170	WL	75	450	WL
	27-Oct-09	450	75	65	110	WL	60	WL	300	WL	55	230	WL
	08-Apr-10	190	55	55	110	WL	45	WL	150	WL	130	370	WL
	13-Oct-10	50	30	70	65	WL	50	WL	180	WL	130	280	WL
	27-Apr-11	190	60	55	120	WL	23	WL	280	WL	70	110	WL
	20-Oct-11	230	60	75	80	WL	19	WL	130	WL	180	180	WL
	26-Apr-12	280	65	70	110	WL	25	WL	110	WL	60	120	WL
	16-Oct-12	70	85	55	90	WL	55	WL	220	WL	60	240	WL

Notes:
1. NS = Not sampled and/or no water level measurements taken.
2. WL = May be monitored for water levels only.
3. NA = Data not available.

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Antimony	11-Oct-07	0.05	6.0	0.1	B	0.7	J	Dry		Dry		0.1	J
NC 2B = NE (5/1/2007)	03-Apr-08	0.44	6.0	0.3	B	0.4	B	0.1	B	{0.2}	J	0.1 {ND}	J
	28-Oct-08	0.44	6.0	0.2	J	0.3	J	ND		{0.1}	J	ND {ND}	
	07-Apr-09	0.06	6.0	0.1	J	0.1	J	ND		0.1	J	ND	
	27-Oct-09	0.06	6.0	0.8	J	0.2	J	ND		ND		ND	
	07-Apr-10	0.22	6.0	0.2	B	0.3	B	0.2	B	0.2	B	0.7	J
	13-Oct-10	0.22	6.0	ND		ND		ND		ND		ND	
	27-Apr-11	0.14	6.0	ND		ND		0.16	J	ND		ND	
	20-Oct-11	0.14	6.0	Dry		0.38	J	0.14	J	0.16	J	ND	
	26-Apr-12	0.14	6.0	ND		ND		ND		ND		ND	
	16-Oct-12	0.02	6.0	0.07	J	0.09	J	0.05	J	ND		ND	
Arsenic	Jul-93	NR	5	ND		ND		ND		NA		ND	
	Aug-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Apr-94	NR	5	7		ND		ND		NA		ND	
	Oct-94	NR	10	ND		ND		ND		NA		ND	
	Apr-95	NR	10	ND		ND		ND		NA		ND	
	Oct-95	NR	10	ND		ND		ND		NA		ND	
	Apr-96	NR	10	ND		ND		ND		NA		ND	
	Oct-96	NR	10	ND		ND		ND		NA		ND	
	Apr-97	NR	10	Dry		Dry		ND		NA		ND	
	Oct-97	NR	10	Dry		Dry		ND		NA		ND	
	Apr-98	NR	10	NA		Dry		ND		NA		ND	
	Oct-98	NR	10	Dry		ND		Dry		NA		ND	
	Mar-99	NR	10	ND		ND		ND		NA		ND	
	Jul-99	NR	10	NA		NA		NA		ND		ND	
	Aug-99	NR	10	NA		NA		NA		ND		ND	
	Oct-99	NR	10	ND		ND		ND		ND		ND	
	Nov-99	NR	10	NA		NA		NA		ND		ND	
	Apr-00	NR	10	ND		ND		ND		NA		ND	
	Oct-00	NR	10	ND		ND		ND		ND		ND	
	Apr-01	NR	10	Dry		Dry		ND		NA		ND	
	Oct-01	NR	10	ND		ND		ND		ND		ND	
	Apr-02	NR	10	NA		ND		ND		ND		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	
	Oct-03	NR	10	ND		ND		ND		15		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		ND	
NC 2B = 50 µg/L (05/01/07)	11-Oct-07	0.47	10.0	1.4	J	13		Dry		Dry		ND	
	03-Apr-08	0.57	10.0	0.8	J	14		4.0	J	{2.0}	J	ND {0.2}	J
	28-Oct-08	0.57	10.0	0.8	B	9.7	J	0.9	B	1.3	B	0.5	J
	07-Apr-09	0.17	10.0	0.7	B	1.8	J	1.7	J	0.9	B	0.2	J
	27-Oct-09	0.17	10.0	1.2	J	7.2	J	1.3	J	1.1	J	ND	
	07-Apr-10	0.04	10.0	1.2	J	3.9	J	1.0	J	1.3	J	ND	
	13-Oct-10	0.04	10.0	0.8	J	2.2	J	1.9	J	1.7	J	ND	
	27-Apr-11	0.10	10.0	0.79	J	2.6	J	0.63	J	0.55	J	ND	
	20-Oct-11	0.10	10.0	Dry		1.4	J	0.76	J	0.59	J	ND	
	26-Apr-12	0.10	10.0	0.58	J	2.2	J	1.50	J	1.50	J	ND	
	16-Oct-12	0.13	10.0	1.2	B	1.3	B	1.1	B	0.37	B	0.40	J
Barium	Jul-93	NR	50	ND		140		71		NA		ND	
	Aug-93	NR	50	NA		NA		NA		NA		ND	
	Sep-93	NR	50	NA		NA		NA		NA		ND	
	Sep-93	NR	50	NA		NA		NA		NA		ND	
	Apr-94	NR	50	ND		ND		ND		NA		ND	
	Oct-94	NR	500	ND		ND		ND		NA		ND	
	Apr-95	NR	500	ND		ND		ND		NA		ND	
	Oct-95	NR	500	ND		ND		ND		NA		ND	
	Apr-96	NR	500	ND		ND		ND		NA		ND	
	Oct-96	NR	500	ND		ND		ND		NA		ND	
	Apr-97	NR	500	Dry		Dry		ND		NA		ND	
	Oct-97	NR	500	Dry		Dry		ND		NA		ND	
	Apr-98	NR	500	NA		Dry		ND		NA		ND	
	Oct-98	NR	500	Dry		ND		Dry		NA		ND	
	Mar-99	NR	500	ND		ND		ND		NA		ND	
	Jul-99	NR	500	NA		NA		NA		ND		ND	
	Aug-99	NR	500	NA		NA		NA		ND		ND	
	Oct-99	NR	500	ND		ND		ND		ND		ND	
	Nov-99	NR	500	NA		NA		NA		ND		ND	
	Apr-00	NR	500	ND		ND		ND		NA		ND	
	Oct-00	NR	500	ND		ND		ND		ND		ND	
	Apr-01	NR	500	Dry		Dry		ND		NA		ND	
	Oct-01	NR	500	ND		ND		ND		ND		ND	
	Apr-02	NR	500	NA		ND		ND		ND		ND	
	Oct-02	NR	500	ND		ND		ND		ND		ND	
	Apr-03	NR	500	ND		ND		ND		ND		ND	
	Oct-03	NR	500	ND		ND		ND		ND		ND	
	15-Apr-04	NR	500	ND		ND		ND		ND		ND	
	14-Oct-04	NR	500	ND		ND		ND		ND		ND	
	05-Apr-05	NR	500	ND		ND		ND		ND		ND	
	27-Oct-05	NR	500	ND		ND		ND		ND		ND	
	21-Apr-06	NR	500	ND		ND		ND		ND		ND	
	12-Oct-06	NR	500	ND		ND		ND		ND		ND	
	26-Apr-07	NR	100	ND		ND		ND		ND		ND	
NC 2B = NE (05/01/07)	11-Oct-07	0.04	100.0	47.4	J	187		Dry		Dry		0.2	J
	03-Apr-08	0.11	100.0	30.7	J	72.4	J	94.6	J	{71.1}	J	ND {0.4}	J
	28-Oct-08	0.11	100.0	30.8	J	122		36.9	J	93.6	J	0.7	J
	07-Apr-09	0.04	100.0	31.3	J	48.3	J	73.1	J	64.2	J	0.2	J
	27-Oct-09	0.04	100.0	25.5	J	106		42.9	J	102		0.1	J
	07-Apr-10	0.03	100.0	58.7	J	85.9	J	26.1	J	56.1	J	0.1	J
	13-Oct-10	0.03	100.0	14.7	J	61.4	J	62.9	J	85.3	J	0.2	J
	27-Apr-11	0.02	100.0	86.4	J	45.5	J	19.1	J	46.7	J	0.10	J
	20-Oct-11	0.02	100.0	Dry		61.7	J	18.2	J	63.8	J	0.10	J
	26-Apr-12	0.02	100.0	75.4	J	28.5	J	7.4	J	21.8	J	0.12	J
	16-Oct-12	0.07	100.0	29.9	J	38.4	J	39.5	J	60.5	J	0.28	J

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Beryllium	Jul-93	NR	1	ND		ND		ND		NA		ND	
	Aug-93	NR	1	NA		NA		NA		NA		ND	
	Sep-93	NR	1	NA		NA		NA		NA		ND	
	Sep-93	NR	1	NA		NA		NA		NA		ND	
	Apr-94	NR	1	ND		ND		64		NA		ND	
	Oct-94	NR	2	ND		ND		ND		NA		ND	
	Apr-95	NR	2	ND		ND		ND		NA		ND	
	Oct-95	NR	2	ND		ND		ND		NA		ND	
	Apr-96	NR	2	ND		ND		ND		NA		ND	
	Oct-96	NR	2	ND		ND		ND		NA		ND	
	Apr-97	NR	2	Dry		Dry		ND		NA		ND	
	Oct-97	NR	2	Dry		Dry		ND		NA		ND	
	Apr-98	NR	2	NA		Dry		ND		NA		ND	
	Oct-98	NR	2	Dry		ND		Dry		NA		ND	
	Mar-99	NR	2	ND		ND		ND		NA		ND	
	Jul-99	NR	2	NA		NA		NA		ND		ND	
	Aug-99	NR	2	NA		NA		NA		ND		ND	
	Oct-99	NR	2	ND		ND		ND		ND		ND	
	Nov-99	NR	2	NA		NA		NA		ND		ND	
	Apr-00	NR	2	ND		ND		ND		NA		ND	
	Oct-00	NR	2	ND		ND		ND		ND		ND	
	Apr-01	NR	2	Dry		Dry		ND		NA		ND	
	Oct-01	NR	2	ND		ND		ND		ND		ND	
	Apr-02	NR	2	NA		ND		ND		ND		ND	
	Oct-02	NR	2	ND		ND		ND		ND		ND	
	Apr-03	NR	2	ND		ND		ND		ND		ND	
	Oct-03	NR	2	ND		ND		ND		ND		ND	
	15-Apr-04	NR	2	ND		ND		ND		ND		ND	
	14-Oct-04	NR	2	ND		ND		ND		ND		ND	
	05-Apr-05	NR	2	ND		ND		ND		ND		ND	
	27-Oct-05	NR	2	ND		ND		ND		ND		ND	
	21-Apr-06	NR	2	ND		ND		ND		ND		ND	
	12-Oct-06	NR	2	ND		ND		ND		ND		ND	
	26-Apr-07	NR	1.0	ND		ND		ND		ND		ND	
NC 2B = 6.5 µg/L (05/01/07)	11-Oct-07	0.08	1.0	ND		0.4	J	Dry		Dry		ND	
	03-Apr-08	0.06	1.0	ND		ND		ND		ND		ND	
	28-Oct-08	0.06	1.0	ND		0.1	J	ND		ND		ND	
	07-Apr-09	0.06	1.0	ND		ND		ND		ND		ND	
	27-Oct-09	0.06	1.0	ND		0.1	J	ND		ND		ND	
	07-Apr-10	0.02	1.0	0.1	B	ND		0.1	B	0.1	B	0.1	J
	13-Oct-10	0.02	1.0	0.1	J	0.1	J	0.1	J	0.1	J	ND	
	27-Apr-11	0.02	1.0	ND		ND		ND		ND		ND	
	20-Oct-11	0.02	1.0	Dry		ND		0.06	J	ND		ND	
	26-Apr-12	0.02	1.0	ND		0.02	J	ND		ND		ND	
	16-Oct-12	0.07	1.0	ND		ND		ND		ND		ND	
Cadmium	Jul-93	NR	1	ND		ND		ND		NA		ND	
	Aug-93	NR	1	NA		NA		NA		NA		ND	
	Sep-93	NR	1	NA		NA		NA		NA		ND	
	Sep-93	NR	1	NA		NA		NA		NA		ND	
	Apr-94	NR	1	ND		ND		ND		NA		ND	
	Oct-94	NR	1	ND		ND		ND		NA		ND	
	Apr-95	NR	1	ND		ND		ND		NA		ND	
	Oct-95	NR	1	ND		ND		ND		NA		ND	
	Apr-96	NR	1	ND		ND		ND		NA		ND	
	Oct-96	NR	1	ND		ND		ND		NA		ND	
	Apr-97	NR	1	Dry		Dry		ND		NA		ND	
	Oct-97	NR	1	Dry		Dry		ND		NA		ND	
	Apr-98	NR	1	NA		Dry		ND		NA		ND	
	Oct-98	NR	1	Dry		ND		Dry		NA		ND	
	Mar-99	NR	1	ND		ND		ND		NA		ND	
	Jul-99	NR	1	NA		NA		NA		ND		ND	
	Aug-99	NR	1	NA		NA		NA		ND		ND	
	Oct-99	NR	1	ND		ND		ND		ND		ND	
	Nov-99	NR	1	NA		NA		NA		ND		ND	
	Apr-00	NR	1	ND		ND		ND		NA		ND	
	Oct-00	NR	1	ND		ND		ND		ND		ND	
	Apr-01	NR	1	Dry		Dry		ND		NA		ND	
	Oct-01	NR	1	ND		ND		ND		ND		ND	
	Apr-02	NR	1	NA		ND		ND		ND		ND	
	Oct-02	NR	1	ND		ND		ND		ND		ND	
	Apr-03	NR	1	2		ND		ND		ND		ND	
	Oct-03	NR	1	ND		ND		ND		ND		ND	
	15-Apr-04	NR	1	ND		ND		ND		ND		ND	
	14-Oct-04	NR	1	ND		2		ND		ND		ND	
	05-Apr-05	NR	1	ND		ND		ND		ND		ND	
	27-Oct-05	NR	1	ND		ND		ND		ND		ND	
	21-Apr-06	NR	1	ND		ND		2 (ND)		4 (ND)		ND	
	12-Oct-06	NR	1	ND		ND		ND		ND		ND	
	26-Apr-07	NR	1.0	ND		ND		ND		ND		ND	
NC 2B = 2 µg/L (05/01/07)	11-Oct-07	0.06	1.0	0.1	B	0.2	B	Dry		Dry		0.1	J
	03-Apr-08	0.05	1.0	0.1	J	0.1	J	0.1	J	0.1	J	ND	
	28-Oct-08	0.05	1.0	0.1	J	0.3	J	ND		ND		ND	
	07-Apr-09	0.04	1.0	0.2	J	0.1	J	ND		0.1	J	ND	
	27-Oct-09	0.04	1.0	0.1	J	0.1	J	0.1	J	0.1	J	ND	
	07-Apr-10	0.02	1.0	0.1	B	0.3	B	0.1	B	0.1	B	0.1	J
	13-Oct-10	0.02	1.0	0.1	J	0.1	J	ND		0.1	J	ND	
	27-Apr-11	0.02	1.0	0.08	J	ND		0.04	J	0.04	J	ND	
	20-Oct-11	0.02	1.0	Dry		ND		ND		ND		ND	
	26-Apr-12	0.02	1.0	0.03	J	0.06	J	0.02	J	ND		ND	
	16-Oct-12	0.03	1.0	0.04	J	0.05	J	0.05	J	0.05	J	ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Chromium	Jul-93	NR	5	ND		ND		ND		NA		ND	
	Aug-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Apr-94	NR	5	ND		ND		ND		NA		ND	
	Oct-94	NR	10	ND		ND		ND		NA		ND	
	Apr-95	NR	10	ND		ND		ND		NA		ND	
	Oct-95	NR	10	ND		ND		ND		NA		ND	
	Apr-96	NR	10	ND		ND		ND		NA		ND	
	Oct-96	NR	10	ND		ND		ND		NA		ND	
	Apr-97	NR	10	Dry		Dry		ND		NA		ND	
	Oct-97	NR	10	Dry		Dry		ND		NA		ND	
	Apr-98	NR	10	NA		Dry		18		NA		ND	
	Oct-98	NR	10	Dry		ND		Dry		NA		ND	
	Mar-99	NR	10	ND		ND		ND		NA		ND	
	Jul-99	NR	10	NA		NA		NA		12		ND	
	Aug-99	NR	10	NA		NA		NA		13		ND	
	Oct-99	NR	10	ND		ND		ND		ND		ND	
	Nov-99	NR	10	NA		NA		NA		ND		ND	
	Apr-00	NR	5	ND		28		ND		NA		ND	
	Oct-00	NR	10	ND		16		ND		ND		ND	
	Apr-01	NR	10	Dry		Dry		ND		NA		ND	
	Oct-01	NR	10	ND		ND		ND		ND		ND	
	Apr-02	NR	10	NA		ND		ND		ND		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	
	Oct-03	NR	10	ND		ND		ND		20		ND	
	15-Apr-04	NR	10	ND		ND		ND		22		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		ND	
NC 2B = 50 µg/L (05/01/07)	11-Oct-07	0.24	10.0	1.7	B	12		Dry		Dry		1.2	J
	03-Apr-08	0.11	10.0	1.3	J	12		0.8	J	0.5	J	ND	
	28-Oct-08	0.11	10.0	0.3	J	13		0.2	J	0.4	J	ND	
	07-Apr-09	0.10	10.0	0.3	J	1.2	J	0.5	J	ND		ND	
	27-Oct-09	0.10	10.0	0.6	J	11		0.5	J	0.5	J	ND	
	07-Apr-10	0.03	10.0	1.0	J	0.6	J	0.8	J	0.5	J	ND	
	13-Oct-10	0.03	10.0	2.5	J	1.1	J	1.3	J	0.3	J	ND	
	27-Apr-11	0.04	10.0	0.52	B	0.70	B	0.59	B	0.38	B	0.18	J
	20-Oct-11	0.04	10.0	Dry		1.0	J	2.5	J	0.71	B	0.18	J
	26-Apr-12	0.04	10.0	0.28	B	0.7	J	0.42	B	0.38	B	0.09	J
	16-Oct-12	0.18	10.0	1.1	J	0.93	J	0.74	J	ND		ND	
Cobalt	Jul-93	NR	20	ND		ND		28		NA		ND	
	Aug-93	NR	20	NA		NA		NA		NA		ND	
	Sep-93	NR	20	NA		NA		NA		NA		ND	
	Sep-93	NR	20	NA		NA		NA		NA		ND	
	Apr-94	NR	10	34	B	45	B	46	B	NA		18	
	Oct-94	NR	10	ND		ND		ND		NA		ND	
	Apr-95	NR	10	ND		ND		ND		NA		ND	
	Oct-95	NR	10	ND		ND		ND		NA		ND	
	Apr-96	NR	10	ND		ND		ND		NA		ND	
	Oct-96	NR	10	ND		ND		ND		NA		ND	
	Apr-97	NR	10	Dry		Dry		ND		NA		ND	
	Oct-97	NR	10	Dry		Dry		ND		NA		ND	
	Apr-98	NR	10	NA		Dry		ND		NA		ND	
	Oct-98	NR	10	Dry		ND		Dry		NA		ND	
	Mar-99	NR	10	ND		ND		ND		NA		ND	
	Jul-99	NR	10	NA		NA		NA		ND		ND	
	Aug-99	NR	10	NA		NA		NA		ND		ND	
	Oct-99	NR	10	ND		ND		ND		ND		ND	
	Nov-99	NR	10	NA		NA		NA		ND		ND	
	Apr-00	NR	10	ND		12		ND		NA		ND	
	Oct-00	NR	10	ND		ND		ND		ND		ND	
	Apr-01	NR	10	Dry		Dry		ND		NA		ND	
	Oct-01	NR	10	10		ND		ND		ND		ND	
	Apr-02	NR	10	NA		ND		ND		ND		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	
	Oct-03	NR	10	ND		ND		ND		14		ND	
	15-Apr-04	NR	10	ND		ND		ND		ND		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		ND	
NC 2B = NE µg/L (05/01/07)	11-Oct-07	0.41	10.0	1.5	J	3.4	J	Dry		Dry		ND	
	03-Apr-08	0.03	10.0	0.6	J	3.2	J	3.0	J	1.0	J	ND	
	28-Oct-08	0.03	10.0	0.3	J	4.6	J	0.3	J	0.9	J	ND	
	07-Apr-09	0.02	10.0	0.7	J	2.7	J	1.7	J	0.7	J	ND	
	27-Oct-09	0.02	10.0	0.3	J	2.4	J	0.5	J	1.1	J	ND	
	07-Apr-10	0.10	10.0	1.1	J	2.3	J	0.5	J	1.0	J	ND	
	13-Oct-10	0.10	10.0	0.4	J	1.3	J	0.9	J	0.7	J	ND	
	27-Apr-11	0.03	10.0	1.7	J	1.8	J	0.20	J	0.52	J	ND	
	20-Oct-11	0.03	10.0	Dry		0.73	J	0.33	J	0.44	J	ND	
	26-Apr-12	0.03	10.0	0.49	J	1.8	J	0.17	J	0.55	J	ND	
	16-Oct-12	0.02	10.0	0.52	J	0.96	J	0.38	J	0.37	J	ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Copper	Jul-93	NR	10	15	B	13	B	10	B	NA		17	
	Aug-93	NR	10	NA		NA		NA		NA		19	
	Sep-93	NR	10	NA		NA		NA		NA		11	
	Sep-93	NR	10	NA		NA		NA		NA		39	
	Apr-94	NR	10	28	B	40	B	43	B	NA		21	
	Oct-94	NR	200	ND		ND		ND		NA		ND	
	Apr-95	NR	200	ND		ND		ND		NA		ND	
	Oct-95	NR	200	ND		ND		ND		NA		ND	
	Apr-96	NR	200	ND		ND		ND		NA		ND	
	Oct-96	NR	200	ND		ND		ND		NA		ND	
	Apr-97	NR	200	Dry		Dry		ND		NA		ND	
	Oct-97	NR	200	Dry		Dry		ND		NA		ND	
	Apr-98	NR	200	NA		Dry		ND		NA		ND	
	Oct-98	NR	200	Dry		ND		Dry		NA		ND	
	Mar-99	NR	200	ND		ND		15		NA		ND	
	Jul-99	NR	200	NA		NA		NA		ND		ND	
	Aug-99	NR	200	NA		NA		NA		11		ND	
	Oct-99	NR	200	ND		ND		ND		ND		ND	
	Nov-99	NR	200	NA		NA		NA		ND		ND	
	Apr-00	NR	200	ND		ND		ND		NA		ND	
	Oct-00	NR	200	ND		ND		ND		ND		ND	
	Apr-01	NR	200	Dry		Dry		ND		NA		ND	
	Oct-01	NR	200	ND		ND		ND		ND		ND	
	Apr-02	NR	200	NA		ND		ND		ND		ND	
	Oct-02	NR	200	ND		ND		ND		ND		ND	
	Apr-03	NR	200	ND		ND		ND		ND		ND	
	Oct-03	NR	200	ND		ND		ND		ND		ND	
	15-Apr-04	NR	200	ND		ND		ND		ND		ND	
	14-Oct-04	NR	200	ND		ND		ND		ND		ND	
	05-Apr-05	NR	200	ND		ND		ND		ND		ND	
	27-Oct-05	NR	200	ND		ND		ND		ND		ND	
	21-Apr-06	NR	200	ND		ND		ND		ND		ND	
	12-Oct-06	NR	200	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		ND	
NC 2B =7 µg/L (05/01/07)	11-Oct-07	0.20	10.0	0.7	B	3.9	J	Dry		Dry		0.4	J
	03-Apr-08	0.05	10.0	1.0	B	2.8	J	1.7	J	0.7	B	0.2	J
	28-Oct-08	0.05	10.0	0.8	B	3	B	0.7	B	1.4	B	1.1	J
	07-Apr-09	0.04	10.0	0.9	J	1.2	J	1.3	J	1.0	J	0.1	J
	27-Oct-09	0.04	10.0	3.0	J	1.7	J	0.5	B	0.8	J	0.1	J
	07-Apr-10	0.03	10.0	1.8	J	1.3	J	1.2	J	0.7	B	0.2	J
	13-Oct-10	0.03	10.0	1.3	J	0.9	B	1	B	0.5	B	0.2	J
	27-Apr-11	0.02	10.0	0.81	B	0.85	B	1.2	B	1.0	B	0.66	J
	20-Oct-11	0.02	10.0	Dry		0.96	B	0.66	B	0.48	B	0.20	J
	26-Apr-12	0.02	10.0	0.67	B	1.5	B	1.2	B	0.80	B	0.94	J
	16-Oct-12	0.06	10.0	2.4	J	1.4	J	0.54	B	0.26	B	0.25	J
Lead	Jul-93	NR	5	ND		ND		ND		NA		ND	
	Aug-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Sep-93	NR	5	NA		NA		NA		NA		ND	
	Apr-94	NR	5	ND		5		ND		NA		ND	
	Oct-94	NR	10	ND		ND		ND		NA		ND	
	Apr-95	NR	10	ND		ND		ND		NA		ND	
	Oct-95	NR	10	ND		ND		ND		NA		ND	
	Apr-96	NR	10	ND		ND		ND		NA		ND	
	Oct-96	NR	10	ND		ND		ND		NA		ND	
	Apr-97	NR	10	Dry		Dry		ND		NA		ND	
	Oct-97	NR	10	Dry		Dry		ND		NA		ND	
	Apr-98	NR	10	NA		Dry		11		NA		ND	
	Oct-98	NR	10	Dry		ND		Dry		NA		ND	
	Mar-99	NR	10	ND		ND		ND		NA		ND	
	Jul-99	NR	10	NA		NA		NA		ND		ND	
	Aug-99	NR	10	NA		NA		NA		ND		ND	
	Oct-99	NR	10	ND		ND		ND		ND		ND	
	Nov-99	NR	10	NA		NA		NA		ND		ND	
	Apr-00	NR	10	ND		ND		ND		NA		ND	
	Oct-00	NR	10	ND		ND		ND		ND		ND	
	Apr-01	NR	10	Dry		Dry		ND		NA		ND	
	Oct-01	NR	10	ND		ND		ND		ND		ND	
	Apr-02	NR	10	NA		ND		ND		ND		ND	
	Oct-02	NR	10	ND		ND		ND		ND		ND	
	Apr-03	NR	10	ND		ND		ND		ND		ND	
	Oct-03	NR	10	ND		ND		ND		15		ND	
	15-Apr-04	NR	10	ND		ND		ND		12		ND	
	14-Oct-04	NR	10	ND		ND		ND		ND		ND	
	05-Apr-05	NR	10	ND		ND		ND		ND		ND	
	27-Oct-05	NR	10	ND		ND		ND		ND		ND	
	21-Apr-06	NR	10	ND		ND		ND		ND		ND	
	12-Oct-06	NR	10	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	ND		ND		ND		ND		ND	
NC 2B = 25 µg/L (05/01/07)	11-Oct-07	0.07	10.0	1.1	J	8.6	J	Dry		Dry		0.1	J
	03-Apr-08	0.32	10.0	1.0	J	0.8	J	0.3	B	0.1	B	0.1	J
	28-Oct-08	0.32	10.0	0.4	B	3.8	J	0.2	B	0.1	B	0.1	J
	07-Apr-09	0.04	10.0	0.9	J	0.1	B	0.2	B	0.1	B	0.1	J
	27-Oct-09	0.04	10.0	0.9	J	1.8	J	0.2	J	0.5	J	ND	
	07-Apr-10	0.01	10.0	0.8	J	0.3	B	0.5	B	0.3	B	0.1	J
	13-Oct-10	0.01	10.0	1.9	J	0.5	B	0.6	J	0.2	B	0.1	J
	27-Apr-11	0.02	10.0	0.32	J	0.19	J	0.43	J	0.09	J	ND	
	20-Oct-11	0.02	10.0	Dry		0.29	J	0.92	J	0.28	J	ND	
	26-Apr-12	0.02	10.0	0.12	J	0.38	J	0.26	J	0.23	J	0.02	J
	16-Oct-12	0.08	10.0	0.79	J	0.35	J	0.54	J	0.09	J	ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Nickel	Jul-93	NR	10	20		20		24		NA		ND	
	Aug-93	NR	10	NA		NA		NA		NA		11	
	Sep-93	NR	10	NA		NA		NA		NA		17	
	Sep-93	NR	10	NA		NA		NA		NA		ND	
	Apr-94	NR	10	37	B	51	B	57	B	NA		20	
	Oct-94	NR	50	ND		ND		ND		NA		ND	
	Apr-95	NR	50	ND		ND		ND		NA		ND	
	Oct-95	NR	50	ND		ND		ND		NA		ND	
	Apr-96	NR	50	ND		ND		ND		NA		ND	
	Oct-96	NR	50	ND		ND		ND		NA		ND	
	Apr-97	NR	50	Dry		Dry		ND		NA		ND	
	Oct-97	NR	50	Dry		Dry		ND		NA		ND	
	Apr-98	NR	50	NA		Dry		ND		NA		ND	
	Oct-98	NR	50	Dry		ND		Dry		NA		ND	
	Mar-99	NR	50	ND		ND		ND		NA		ND	
	Jul-99	NR	50	NA		NA		NA		ND		ND	
	Aug-99	NR	50	NA		NA		NA		ND		ND	
	Oct-99	NR	50	ND		ND		ND		ND		ND	
	Nov-99	NR	50	NA		NA		NA		ND		ND	
	Apr-00	NR	50	ND		ND		ND		NA		ND	
	Oct-00	NR	50	ND		ND		ND		ND		ND	
	Apr-01	NR	50	Dry		Dry		ND		NA		ND	
	Oct-01	NR	50	ND		ND		ND		ND		ND	
	Apr-02	NR	50	NA		ND		ND		ND		ND	
	Oct-02	NR	50	ND		ND		ND		ND		ND	
	Apr-03	NR	50	ND		ND		ND		ND		ND	
	Oct-03	NR	50	ND		ND		ND		ND		ND	
	15-Apr-04	NR	50	ND		ND		ND		ND		ND	
	14-Oct-04	NR	50	ND		ND		ND		ND		ND	
	05-Apr-05	NR	50	ND		ND		ND		ND		ND	
	27-Oct-05	NR	50	ND		ND		ND		ND		ND	
	21-Apr-06	NR	50	ND		ND		ND		ND		ND	
	12-Oct-06	NR	50	ND		ND		ND		ND		ND	
	26-Apr-07	NR	50	ND		ND		ND		ND		ND	
NC 2B = 88 µg/L (05/01/07)	11-Oct-07	0.66	50.0	3.4	J	15.2	J	Dry		Dry		ND	
	03-Apr-08	0.06	50.0	5.2	J	16	J	9.6	J	8.4	J	0.3	J
	28-Oct-08	0.06	50.0	3.8	J	14.6	J	2.2	J	7	J	0.2	J
	07-Apr-09	0.04	50.0	6.9	J	11.8	J	5.7	J	6.5	J	ND	
	27-Oct-09	0.04	50.0	2.3	J	13.5	J	2.7	J	3.7	J	0.2	J
	07-Apr-10	0.05	50.0	4.3	J	4.2	J	1.8	J	3.7	J	ND	
	13-Oct-10	0.05	50.0	1.7	J	6.7	J	3.1	J	6.2	J	0.1	J
	27-Apr-11	0.04	50.0	5.1	J	6.1	J	1.5	B	4.1	J	0.30	J
	20-Oct-11	0.04	50.0	Dry		4.2	J	1.5	B	2.9	J	0.56	J
	26-Apr-12	0.04	50.0	1.7	J	2.7	J	ND		1.9	J	ND	
	16-Oct-12	0.06	50.0	3.1	J	4.7	J	2.3	J	3.6	J	0.23	J
Selenium	11-Oct-07	0.35	10.0	0.5	B	19		Dry		Dry		0.9	J
Resample	04-Dec-07	3.8	10.0	NS		ND		NS		NS		ND	
NC 2B = 5 µg/L (05/01/07)	03-Apr-08	0.51	10.0	0.5	J	7.2	J	ND		{4.5}	B	ND {1.5}	J
	28-Oct-08	0.51	10.0	0.7	B	ND		0.6	B	3.3	B	1.9	J
	07-Apr-09	0.12	10.0	0.2	J	2.3	J	2.9	J	0.9	J	ND	
	27-Oct-09	0.12	10.0	0.4	J	3.1	J	1.5	J	2.0	J	ND	
	07-Apr-10	0.32	10.0	ND		0.3	J	ND		0.6	J	ND	
	13-Oct-10	0.32	10.0	ND		3.1	J	2.9	J	2.5	J	ND	
	27-Apr-11	0.20	10.0	0.72	J	2.4	J	ND		1.1	J	ND	
	20-Oct-11	0.20	10.0	Dry		1.6	J	ND		0.87	J	ND	
	26-Apr-12	0.20	10.0	0.53	J	1.3	J	ND		1.20	J	ND	
	16-Oct-12	0.17	10.0	0.51	J	2.0	J	0.85	J	0.75	J	ND	
Silver	28-Oct-08	0.04	10.0	0.1	B	0.1	B	0.1	B	0.1	B	0.1	J
NC 2B = 0.06 µg/L (05/01/07)	07-Apr-09	0.04	10.0	ND		0.1	J	ND		0.1	J	ND	
	27-Oct-09	0.04	10.0	0.1	J	ND		ND		ND		ND	
	07-Apr-10	0.03	10.0	0.1	B	ND		0.1	B	ND		0.1	J
	13-Oct-10	0.03	10.0	ND		ND		0.1	J	ND		ND	
	27-Apr-11	0.02	10.0	ND		ND		ND		ND		ND	
	20-Oct-11	0.02	10.0	Dry		ND		ND		ND		ND	
	26-Apr-12	0.02	10.0	ND		ND		ND		ND		ND	
	16-Oct-12	0.10	10.0	ND		ND		ND		ND		ND	
Thallium	11-Oct-07	0.07	5.0	ND		0.1	J	Dry		Dry		ND	
NC 2B = 0.47 µg/L (05/01/07)	03-Apr-08	0.63	5.0	ND		ND		ND		ND		ND	
	28-Oct-08	0.63	5.0	ND		ND		ND		ND		ND	
	27-Oct-09	0.03	5.0	0.1	J	ND		ND		ND		ND	
	07-Apr-10	0.05	5.0	ND		ND		ND		ND		ND	
	13-Oct-10	0.05	5.5	ND		ND		ND		ND		ND	
	27-Apr-11	0.02	5.5	ND		ND		0.15	B	0.05	B	0.03	J
	20-Oct-11	0.02	5.5	Dry		ND		ND		ND		ND	
	26-Apr-12	0.02	5.5	0.02	J	ND		ND		ND		ND	
	16-Oct-12	0.07	5.5	ND		ND		ND		ND		ND	
Vanadium	10-Oct-07	0.42	25.0	2.5	J	16.5	J	Dry		Dry		ND	
NC 2B = NE (05/01/07)	03-Apr-08	0.07	25.0	2.1	J	2.6	J	1.7	J	{0.8}	J	ND {0.1}	J
	28-Oct-08	0.07	25.0	0.5	B	8.7	J	1.2	J	0.5	B	0.2	J
	07-Apr-09	0.28	25.0	1.9	J	1.4	J	2.1	J	2.4	J	ND	
	27-Oct-09	0.28	25.0	1.8	B	3.4	J	1.2	B	1.5	B	0.4	J
	07-Apr-10	0.03	25.0	1.1	B	1.0	B	1.1	B	0.7	B	0.4	J
	13-Oct-10	0.03	25.0	3.8	J	1.9	B	2.8	B	1.1	B	0.6	J
	27-Apr-11	0.14	25.0	0.74	J	0.9	J	0.38	J	ND		ND	
	20-Oct-11	0.14	25.0	Dry		0.55	J	2.8	J	0.41	J	ND	
	26-Apr-12	0.14	25.0	0.16	J	1.0	J	0.39	J	0.37	J	ND	
	16-Oct-12	0.10	25.0	1.5	J	0.88	J	1.3	J	0.35	J	ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)											
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Zinc	Jul-93	NR	10	11	B	23	B	11	B	NA		10	
	Aug-93	NR	10	NA		NA		NA		NA		ND	
	Sep-93	NR	10	NA		NA		NA		NA		ND	
	Sep-93	NR	10	NA		NA		NA		NA		ND	
	Apr-94	NR	10	36	B	98	B	65	B	NA		20	
	Oct-94	NR	50	ND		ND		ND		NA		ND	
	Apr-95	NR	50	ND		ND		ND		NA		ND	
	Oct-95	NR	50	ND		ND		ND		NA		ND	
	Apr-96	NR	50	ND		ND		ND		NA		ND	
	Oct-96	NR	50	ND		ND		ND		NA		ND	
	Apr-97	NR	50	Dry		Dry		ND		NA		ND	
	Oct-97	NR	50	Dry		Dry		ND		NA		ND	
	Apr-98	NR	50	NA		Dry		ND		NA		ND	
	Oct-98	NR	50	Dry		ND		Dry		NA		ND	
	Mar-99	NR	50	ND		ND		ND		NA		ND	
	Jul-99	NR	50	NA		NA		NA		ND		ND	
	Aug-99	NR	50	NA		NA		NA		ND		ND	
	Oct-99	NR	50	ND		ND		ND		ND		ND	
	Nov-99	NR	50	NA		NA		NA		ND		ND	
	Apr-00	NR	50	ND		ND		ND		NA		ND	
	Oct-00	NR	50	ND		ND		ND		ND		ND	
	Apr-01	NR	50	Dry		Dry		ND		NA		ND	
	Oct-01	NR	50	ND		ND		ND		ND		ND	
	Apr-02	NR	50	NA		ND		ND		ND		ND	
	Oct-02	NR	50	ND		ND		ND		ND		ND	
	Apr-03	NR	50	ND		ND		ND		ND		ND	
	Oct-03	NR	50	ND		ND		ND		81		ND	
	15-Apr-04	NR	50	ND		ND		ND		ND		ND	
	14-Oct-04	NR	50	ND		ND		ND		ND		ND	
	05-Apr-05	NR	50	ND		ND		ND		ND		ND	
	27-Oct-05	NR	50	ND		ND		ND		ND		ND	
	21-Apr-06	NR	50	100 (ND)		ND		ND		ND		ND	
	12-Oct-06	NR	50	ND		ND		ND		ND		ND	
	26-Apr-07	NR	10	45		ND		17		19		ND	
NC 2B = 50 µg/L (05/01/07)	11-Oct-07	0.20	10.0	44		22	B	Dry		Dry		6.6	J
	03-Apr-08	0.04	10.0	35		9.0	B	9.8	B	{2.1}	B	6.3 {2.2}	J,J
	28-Oct-08	0.04	10.0	27		25		4.1	J	1.5	B	0.4	J
	07-Apr-09	0.14	10.0	44		6.8	J	7.1	J	2.8	B	0.8	J
	27-Oct-09	0.14	10.0	23		16		11		3.8	B	1.4	J
	07-Apr-10	0.08	10.0	24		8	J	8.2	J	3.7	J	0.7	J
	13-Oct-10	0.08	10.0	6.8	B	4.7	B	12		2.8	B	4.1	J
	27-Apr-11	0.24	10.0	77		3.4	B	4.6	B	2.3	B	1.1	J
	20-Oct-11	0.24	10.0	Dry		3.6	J	4.5	J	1.8	J	0.28	J
	26-Apr-12	0.24	10.0	36		7.6	B	6.2	B	1.9	B	1.9	J
	16-Oct-12	0.48	10.0	36		4.3	J	14		1.2	J	ND	
Acetone	Jul-93	NR	NA	ND		ND		ND		NA		NA	
	Aug-93	NR	NA	NA		NA		NA		NA		NA	
	Sep-93	NR	NA	NA		NA		NA		NA		NA	
	Sep-93	NR	NA	NA		NA		NA		NA		NA	
	Apr-94	NR	NA	ND		ND		ND		NA		NA	
	Oct-94	NR	NA	ND		ND		ND		NA		NA	
	Apr-95	NR	NA	ND		ND		ND		NA		NA	
	Oct-95	NR	NA	ND		ND		ND		NA		NA	
	Apr-96	NR	NA	ND		ND		ND		NA		NA	
	Oct-96	NR	NA	ND		ND		ND		NA		NA	
	Apr-97	NR	NA	Dry		Dry		ND		NA		NA	
	Oct-97	NR	NA	Dry		Dry		ND		NA		NA	
	Apr-98	NR	NA	NA		Dry		ND		NA		NA	
	Oct-98	NR	NA	Dry		ND		Dry		NA		NA	
	Mar-99	NR	NA	NA		NA		NA		NA		NA	
	Jul-99	NR	NA	NA		NA		NA		ND		NA	
	Aug-99	NR	NA	NA		NA		NA		ND		NA	
	Oct-99	NR	NA	ND		172		ND		ND		NA	
	Nov-99	NR	NA	NA		NA		NA		ND		NA	
	Apr-00	NR	NA	ND		ND		ND		NA		NA	
	Oct-00	NR	NA	ND		ND		ND		ND		NA	
	Apr-01	NR	NA	Dry		Dry		ND		NA		NA	
	Oct-01	NR	100	ND		ND		ND		ND		ND	
	Apr-02	NR	100	NA		ND		ND		ND		ND	
	Oct-02	NR	100	ND		ND		ND		ND		ND	
	Apr-03	NR	100	ND		ND		ND		ND		ND	
	Oct-03	NR	100	ND		ND		ND		ND		ND	
	15-Apr-04	NR	100	ND		ND		ND		ND		ND	
	14-Oct-04	NR	100	ND		ND		ND		ND		ND	
	05-Apr-05	NR	100	ND		ND		ND		ND		ND	
	27-Oct-05	NR	100	ND		ND		ND		ND		ND	
	21-Apr-06	NR	100	ND		ND		ND		ND		ND	
	12-Oct-06	NR	100	ND		ND		ND		ND		ND	
	26-Apr-07	NR	100	ND		ND		ND		ND		ND	
NC 2B = 2,000 µg/L (05/01/07)	11-Oct-07	1.21	100.0	1.40	J	6.40	J	Dry		Dry		ND	
Resample	04-Dec-07	2.2	25.0	ND		ND		NS		NS		4.3	J
	03-Apr-08	1.21	100.0	2.90	B	9.20	J	5.40	B	{5.60}	B	1.50 {2.10}	J,J
Resample	14-May-08	20.0	100	NS		ND		NS		NS		ND	
	28-Oct-08	1.21	100.0	1.80	B	3.70	B	1.60	B	2.10	B	1.30	J
	07-Apr-09	1.21	100.0	ND		1.70	J	2.00	J	2.00	J	ND	
	27-Oct-09	9.06	100.0	ND		ND		ND		ND		ND	
	07-Apr-10	9.06	100.0	ND		ND		ND		ND		ND	
	13-Oct-10	9.06	100.0	ND		ND		ND		9.90	J	ND	
	27-Apr-11	9.06	100.0	ND		ND		ND		ND		ND	
	20-Oct-11	9.06	100.0	Dry		ND		ND		ND		ND	
	26-Apr-12	9.06	100.0	ND		ND		ND		ND		ND	
	16-Oct-12	9.06	100.0	ND		ND		ND		ND		ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)						
		DL	RL	Upstream	Downstream			Blanks
				SWPT-1	SWPT-2	UD-1	UD-2	
2-Butanone	Jul-93	NR	NA	ND	ND	ND	NA	NA
	Aug-93	NR	NA	NA	NA	NA	NA	NA
	Sep-93	NR	NA	NA	NA	NA	NA	NA
	Sep-93	NR	NA	NA	NA	NA	NA	NA
	Apr-94	NR	NA	ND	ND	ND	NA	NA
	Oct-94	NR	NA	ND	ND	ND	NA	NA
	Apr-95	NR	NA	ND	ND	ND	NA	NA
	Oct-95	NR	NA	ND	ND	ND	NA	NA
	Apr-96	NR	NA	ND	ND	ND	NA	NA
	Oct-96	NR	NA	ND	ND	ND	NA	NA
	Apr-97	NR	NA	Dry	Dry	ND	NA	NA
	Oct-97	NR	NA	Dry	Dry	ND	NA	NA
	Apr-98	NR	NA	NA	Dry	ND	NA	NA
	Oct-98	NR	NA	Dry	ND	Dry	NA	NA
	Mar-99	NR	NA	NA	NA	NA	NA	NA
	Jul-99	NR	NA	NA	NA	NA	ND	NA
	Aug-99	NR	NA	NA	NA	NA	ND	NA
	Oct-99	NR	NA	ND	137	ND	ND	NA
	Nov-99	NR	NA	NA	NA	NA	ND	NA
	Apr-00	NR	NA	ND	ND	ND	NA	NA
	Oct-00	NR	NA	ND	ND	ND	ND	NA
	Apr-01	NR	NA	Dry	Dry	ND	NA	NA
	Oct-01	NR	100	ND	ND	ND	ND	ND
	Apr-02	NR	100	NA	ND	ND	ND	ND
	Oct-02	NR	100	ND	ND	ND	ND	ND
	Apr-03	NR	100	ND	ND	ND	ND	ND
	Oct-03	NR	100	ND	ND	ND	ND	ND
	15-Apr-04	NR	100	ND	ND	ND	ND	ND
	14-Oct-04	NR	100	ND	ND	ND	ND	ND
	05-Apr-05	NR	100	ND	ND	ND	ND	ND
	27-Oct-05	NR	100	ND	ND	ND	ND	ND
	21-Apr-06	NR	100	ND	ND	ND	ND	ND
	12-Oct-06	NR	100	ND	ND	ND	ND	ND
	26-Apr-07	NR	100	ND	ND	ND	ND	ND
NC 2B = 160,000 µg/L (05/01/07)	11-Oct-07	0.85	100.0	ND	1.50 J	Dry	Dry	ND
Resample	04-Dec-07	0.96	5.0	NS	ND	NS	NS	ND
	03-Apr-08	0.85	100.0	1.50 J	2.20 J	1.40 J	2.50 J	ND
	14-May-08	0.96	100.0	ND	ND	ND	ND	ND
	28-Oct-08	0.85	100.0	1.20 J	ND	ND	ND	ND
	07-Apr-09	0.85	100.0	ND	ND	ND	ND	ND
	27-Oct-09	2.21	100.0	4.50 J	ND	2.40 J	6.60 J	ND
	07-Apr-10	2.21	100.0	4.70 J	5.20 J	ND	ND	ND
	13-Oct-10	2.21	100.0	ND	ND	ND	4.10 J	ND
	27-Apr-11	2.21	100.0	ND	ND	ND	ND	ND
	20-Oct-11	2.21	100.0	Dry	ND	ND	ND	ND
	26-Apr-12	2.21	100.0	ND	ND	ND	ND	ND
	16-Oct-12	2.21	100.0	ND	ND	ND	ND	ND
Carbon Disulfide	11-Oct-07	0.14	100.0	ND	0.30 J	Dry	Dry	ND
Resample	04-Dec-07	1.2	2.0	NS	ND	NS	NS	ND
NC 2B = NE (05/01/07)	03-Apr-08	0.14	100.0	ND	ND	ND	ND	ND
	28-Oct-08	0.14	100.0	ND	ND	ND	ND	ND
	07-Apr-09	0.14	100.0	ND	ND	ND	ND	ND
	27-Oct-09	0.23	100.0	ND	ND	ND	ND	ND
	07-Apr-10	0.23	100.0	ND	ND	ND	ND	ND
	13-Oct-10	0.23	100.0	ND	ND	ND	ND	ND
	27-Apr-11	0.23	100.0	ND	ND	ND	ND	ND
	20-Oct-11	0.23	100.0	Dry	ND	ND	ND	ND
	26-Apr-12	0.23	100.0	ND	ND	ND	ND	ND
	16-Oct-12	0.23	100.0	ND	ND	ND	ND	ND
Chloromethane	11-Oct-07	0.18	1.0	0.80 J	1.10	Dry	Dry	ND
Resample	04-Dec-07	0.11	1.0	ND	ND	NS	NS	ND
NC 2B = 96 µg/L (05/01/07)	03-Apr-08	0.18	1.0	ND	0.30 J	0.20 J	0.30 J	ND
Resample	14-May-08	0.11	1.0	NS	ND	ND	ND	ND
	28-Oct-08	0.18	1.0	0.20 J	0.20 J	ND	ND	ND
	07-Apr-09	0.18	1.0	ND	ND	ND	ND	ND
	27-Oct-09	0.77	1.0	ND	ND	ND	0.90 J	ND
	07-Apr-10	0.77	1.0	ND	ND	ND	ND	ND
	13-Oct-10	0.77	1.0	ND	ND	ND	ND	ND
	27-Apr-11	0.77	1.0	ND	ND	ND	ND	ND
	20-Oct-11	0.77	1.0	Dry	ND	ND	ND	ND
	26-Apr-12	0.77	1.0	ND	ND	ND	ND	ND
	16-Oct-12	0.77	1.0	ND	ND	ND	ND	ND
1,1-Dichloroethane	27-Oct-09	0.02	5.0	ND	0.20 J	ND	ND	ND
NC 2B = 20,000 µg/L (05/01/07)	07-Apr-10	0.02	5.0	ND	ND	ND	ND	ND
	13-Oct-10	0.02	5.0	ND	ND	ND	ND	ND
	27-Apr-11	0.20	5.0	ND	ND	ND	ND	ND
	20-Oct-11	0.20	5.0	Dry	ND	ND	ND	ND
	26-Apr-12	0.20	5.0	ND	ND	ND	ND	ND
	16-Oct-12	0.20	5.0	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	03-Apr-08	0.21	1.0	ND	0.40 J	ND	ND	ND
Resample	14-May-08	0.33	1.0	NS	ND	NS	NS	ND
NC 2B = 100 µg/L (05/01/07)	28-Oct-08	0.21	1.0	ND	ND	ND	ND	ND
	07-Apr-09	0.21	1.0	ND	ND	ND	ND	ND
	27-Oct-09	0.39	1.0	ND	0.50 J	ND	ND	ND
	07-Apr-10	0.39	1.0	ND	ND	ND	ND	ND
	13-Oct-10	0.39	1.0	ND	ND	ND	ND	ND
	27-Apr-11	0.39	1.0	ND	ND	ND	ND	ND
	20-Oct-11	0.39	1.0	Dry	ND	ND	ND	ND
	26-Apr-12	0.39	1.0	ND	ND	ND	ND	ND
	16-Oct-12	0.39	1.0	ND	ND	ND	ND	ND

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)										
		DL	RL	Upstream		Downstream						Blanks	
				SWPT-1		SWPT-2		UD-1		UD-2			
Methylene Chloride	11-Oct-07	0.14	1.0	ND		ND		Dry		Dry		0.20	J
NC 2B = 590 µg/L (05/01/07)	03-Apr-08	0.14	1.0	ND		ND		ND		ND		ND	
	28-Oct-08	0.14	1.0	0.20	J	0.20	J	0.20	J	0.20	J	ND	
	07-Apr-09	0.14	1.0	ND		ND		ND		ND		ND	
	27-Oct-09	0.64	1.0	ND		ND		ND		ND		ND	
	07-Apr-10	0.64	1.0	ND		ND		ND		ND		ND	
	13-Oct-10	0.64	1.0	ND		ND		ND		ND		ND	
	27-Apr-11	0.64	1.0	ND		ND		ND		ND		ND	
	20-Oct-11	0.64	1.0	Dry		ND		ND		ND		ND	
	26-Apr-12	0.64	1.0	ND		ND		ND		ND		ND	
	16-Oct-12	0.64	1.0	ND		ND		ND		ND		ND	
Styrene	27-Oct-09	0.19	1.0	ND		0.50	J	ND		ND		ND	
NC 2B = NE (05/01/07)	07-Apr-10	0.19	1.0	ND		ND		ND		ND		ND	
	13-Oct-10	0.19	1.0	ND		ND		ND		ND		ND	
	27-Apr-11	0.19	1.0	ND		ND		ND		ND		ND	
	20-Oct-11	0.19	1.0	Dry		ND		ND		ND		ND	
	26-Apr-12	0.19	1.0	ND		ND		ND		ND		ND	
	16-Oct-12	0.19	1.0	ND		ND		ND		ND		ND	
Toluene	Jul-93	NR	NA	ND		ND		ND		NA		NA	
	Aug-93	NR	NA	NA		NA		NA		NA		NA	
	Sep-93	NR	NA	NA		NA		NA		NA		NA	
	Sep-93	NR	NA	NA		NA		NA		NA		NA	
	Apr-94	NR	NA	ND		ND		ND		NA		NA	
	Oct-94	NR	NA	12		ND		33		NA		NA	
	Apr-95	NR	NA	ND		ND		ND		NA		NA	
	Oct-95	NR	NA	ND		ND		ND		NA		NA	
	Apr-96	NR	NA	ND		ND		ND		NA		NA	
	Oct-96	NR	NA	ND		11		ND		NA		NA	
	Apr-97	NR	NA	Dry		Dry		ND		NA		NA	
	Oct-97	NR	NA	Dry		Dry		ND		NA		NA	
	Apr-98	NR	NA	NA		Dry		ND		NA		NA	
	Oct-98	NR	NA	Dry		ND		Dry		NA		NA	
	Mar-99	NR	NA	NA		NA		NA		NA		NA	
	Jul-99	NR	NA	NA		NA		NA		ND		NA	
	Aug-99	NR	NA	NA		NA		NA		ND		NA	
	Oct-99	NR	NA	ND		ND		ND		ND		NA	
	Nov-99	NR	NA	NA		NA		NA		ND		NA	
	Apr-00	NR	NA	ND		ND		ND		NA		NA	
	Oct-00	NR	NA	ND		ND		ND		ND		NA	
	Apr-01	NR	NA	Dry		Dry		ND		NA		NA	
	Oct-01	NR	5	ND		ND		ND		ND		ND	
	Apr-02	NR	5	NA		ND		ND		ND		ND	
	Oct-02	NR	5	ND		ND		ND		ND		ND	
	Apr-03	NR	5	ND		ND		ND		ND		ND	
	Oct-03	NR	5	ND		ND		ND		ND		ND	
	15-Apr-04	NR	5	ND		ND		ND		ND		ND	
	14-Oct-04	NR	5	ND		ND		ND		ND		ND	
	05-Apr-05	NR	5	ND		ND		ND		ND		ND	
	27-Oct-05	NR	5	ND		ND		ND		ND		ND	
	21-Apr-06	NR	5	ND		ND		ND		ND		ND	
	12-Oct-06	NR	5	ND		ND		ND		ND		ND	
	26-Apr-07	NR	5	ND		ND		ND		ND		ND	
NC 2B = 11 µg/L (05/01/07)	11-Oct-07	0.13	1.0	ND		ND		Dry		Dry		ND	
	03-Apr-08	0.13	1.0	ND		ND		ND		ND		ND	
	28-Oct-08	0.13	1.0	ND		ND		ND		ND		ND	
	07-Apr-09	0.13	1.0	ND		ND		ND		ND		ND	
	27-Oct-09	0.23	1.0	ND		ND		ND		ND		ND	
	07-Apr-10	0.23	1.0	ND		ND		ND		ND		ND	
	13-Oct-10	0.23	1.0	ND		ND		ND		ND		ND	
	27-Apr-11	0.23	1.0	ND		ND		ND		ND		ND	
	20-Oct-11	0.23	1.0	Dry		ND		ND		ND		ND	
	26-Apr-12	0.23	1.0	ND		0.60	J	0.5	J	2.1		ND	
	16-Oct-12	0.23	1.0	ND		ND		ND		ND		ND	

Notes:
1. All concentrations are in micrograms per Liter (µg/L).
2. SWPT = Surface water monitoring point
3. UD = Underdrain surface water monitoring point.
4. RL = Laboratory reporting limit (NC SWSL or lower October 2007 to present).
5. ND = Not detected above laboratory reporting limit.
6. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks
7. Shaded values are above the NC 2B Surface Water Standards (NC2B)
8. NA = Not available.
9. NR = Not reported.
10. NS = Not sampled.
11. Dry = Surface water monitoring point was considered to be dry.
12. ( ) = Resample event results
13. DL = Laboratory detection limit.
14. J = Concentrations detected between the DL and RL and are considered estimated.
15. Surface waters are classified as Freshwater Aquatic life, nutrient sensitive, and swamp waters (Jumping Run).
16. { } = Samples assigned a different Eequipment Blank set containing Equipment Blank concentrations higher than the Trip and/or Method Blanks.
17. NE = Not established.

TABLE 13

SUMMARY OF FIELD PARAMETERS
SURFACE WATER

Field Parameters	Date	Upstream	Downstream		
		SWPT-1	SWPT-2	UD-1	UD-2
Conductivity	Jul-93	80	340	50	NA
[uMhos]	Apr-94	310	450	610	NA
	Oct-94	490	500	1100	NA
	Apr-95	500	380	480	NA
	Oct-95	480	910	500	NA
	Apr-96	400	560	390	NA
	Oct-96	460	920	260	NA
	Apr-97	Dry	Dry	840	NA
	Oct-97	Dry	Dry	1,900	NA
	Apr-98	NA	Dry	420	NA
	Oct-98	Dry	680	Dry	NA
	Jul-99	NA	NA	NA	160
	Aug-99	NA	NA	NA	1,300
	Oct-99	450	880	320	980
	Nov-99	NA	NA	NA	780
	Apr-00	420	3,000	470	NA
	Oct-00	110	1,100	480	790
	Apr-01	Dry	Dry	380	NA
	Oct-01	320	320	870	630
	Apr-02	NA	1,800	510	640
	Oct-02	1,000	1,700	620	778
	Apr-03	601	1,048	1,181	894
	Oct-03	741	974	481	1,331
	15-Apr-04	340	380	120	690
	14-Oct-04	255	363	375	329
	05-Apr-05	677	795	1,281	1,021
	27-Oct-05	722	522	199	607
	21-Apr-06	616	1,010	1,122	1,034
	12-Oct-06	456	523	530	538
	26-Apr-07	517	758	837	1,022
	11-Oct-07	562	2,820	Dry	Dry
Resample	04-Dec-07	2,140	3,630	NS	NS
	03-Apr-08	643	1,836	1,647	1,220
Resample	14-May-08	2,890	1,198	1,191	1,458
	28-Oct-08	571	2,320	410	1,245
	07-Apr-09	1,038	1,432	583	1,128
	27-Oct-09	521	1,820	319	1,004
	07-Apr-10	991	995	420	978
	13-Oct-10	78	911	625	896
	27-Apr-11	1,196	1,283	268	1,116
	20-Oct-11	Dry	819	295	838
	26-Apr-12	1,124	1,050	250	1,046
	16-Oct-12	625	967	562	1038
pH	Jun-93	5.9	6.3	6.3	-
[standard units]	Apr-94	6.7	7.0	7.2	NA
	Oct-94	7.2	7.3	7.6	NA
	Apr-95	7.2	7.1	7.3	NA
	Oct-95	7.1	7.5	7.4	NA
	Apr-96	7.1	6.0	7.1	NA
	Oct-96	6.1	6.8	6.8	NA
	Apr-97	Dry	Dry	6.3	NA
	Oct-97	Dry	Dry	7.1	NA
	Apr-98	NA	Dry	7.0	NA
	Oct-98	Dry	6.1	Dry	NA
	Jul-99	NA	NA	NA	7.0
	Aug-99	NA	NA	NA	6.2
	Oct-99	7.4	7.2	7.1	7.1
	Nov-99	NA	NA	NA	6.6
	Apr-00	6.9	8.1	6.6	NA
	Oct-00	7.0	7.6	6.6	6.4
	Apr-01	Dry	Dry	6.5	NA
	Oct-01	7.0	7.3	7.4	5.2
	Apr-02	NA	7.4	7.4	6.2
	Oct-02	7.5	7.9	7.0	6.2
	Apr-03	7.2	7.3	7.5	6.2
	Oct-03	7.3	7.2	6.9	6.4
	15-Apr-04	7.2	7.1	7.6	6.8
	14-Oct-04	7.4	4.0	7.0	7.2
	05-Apr-05	7.4	7.5	8.0	7.3
	27-Oct-05	7.3	7.0	6.9	7.1
	21-Apr-06	7.0	7.1	8.0	6.8
	12-Oct-06	7.1	7.8	7.2	7.1
	26-Apr-07	7.3	8.8	7.5	6.9
	11-Oct-07	7.1	7.1	Dry	Dry
Resample	04-Dec-07	8.09	7.48	NS	NS
	03-Apr-08	7.7	6.6	7.4	6.6
Resample	14-May-08	7.74	7.84	8.07	7.41
	28-Oct-08	7.3	7.4	7.2	6.8
	07-Apr-09	6.8	6.9	6.8	6.4
	27-Oct-09	6.6	7.0	7.3	6.8
	07-Apr-10	6.8	7.0	7.1	6.5
	13-Oct-10	6.8	7.1	7.0	6.2
	27-Apr-11	6.8	7.0	7.0	6.6
	20-Oct-11	Dry	7.3	7.7	6.8
	26-Apr-12	7	7.4	8.8	7.2
	16-Oct-12	7.2	7.2	7.5	6.7

TABLE 13

SUMMARY OF FIELD PARAMETERS
SURFACE WATER

Field Parameters	Date	Upstream	Downstream		
		SWPT-1	SWPT-2	UD-1	UD-2
Temperature [oC]	Jun-93	17	15	15	NA
	Apr-94	23	20	23	NA
	Oct-94	17	16	18	NA
	Apr-95	20	22	18	NA
	Oct-95	19	19	22	NA
	Apr-96	11	10	11	NA
	Oct-96	21	21	23	NA
	Apr-97	Dry	Dry	15	NA
	Oct-97	Dry	Dry	15	NA
	Apr-98	NA	Dry	19	NA
	Oct-98	Dry	20	Dry	NA
	Jul-99	NA	NA	NA	24
	Aug-99	NA	NA	NA	23
	Oct-99	21	18	18	19
	Nov-99	NA	NA	NA	14
	Apr-00	11	15	19	NA
	Oct-00	13	13	15	15
	Apr-01	Dry	Dry	20	NA
	Oct-01	16	16	18	18
	Apr-02	NA	16	20	18
	Oct-02	25	22	22	22
	Apr-03	20	19	17	24
	Oct-03	17	15	15	15
	15-Apr-04	13	12	13	13
	14-Oct-04	20	20	19	19
	05-Apr-05	17	15	16	14
	27-Oct-05	15	13	14	14
	21-Apr-06	18	16	24	17
	12-Oct-06	21	26	21	23
	26-Apr-07	19	29	20	17
	11-Oct-07	21	23	Dry	Dry
	Resample 04-Dec-07	8.5	8.1	NS	NS
	03-Apr-08	14	13	14	15
	Resample 14-May-08	23.5	28.9	22.6	22.6
	28-Oct-08	14	9	12	13
	07-Apr-09	15	11	15	15
	27-Oct-09	18	17	18	18
	07-Apr-10	16	18	19	19
	13-Oct-10	21	21	19	21
	27-Apr-11	19	23	23	23
	20-Oct-11	Dry	16	18	18
	26-Apr-12	12	14	15	15
	16-Oct-12	18	17	18	18
Turbidity [NTU]	Jun-93	NA	NA	NA	NA
	Apr-94	NA	NA	NA	NA
	Oct-94	NA	NA	NA	NA
	Apr-95	NA	NA	NA	NA
	Oct-95	NA	NA	NA	NA
	Apr-96	NA	NA	NA	NA
	Oct-96	NA	NA	NA	NA
	Apr-97	Dry	Dry	NA	NA
	Oct-97	Dry	Dry	NA	NA
	Apr-98	NA	Dry	NA	NA
	Oct-98	Dry	38	Dry	NA
	Jul-99	NA	NA	NA	NA
	Aug-99	NA	NA	NA	300
	Oct-99	160	120	65	70
	Nov-99	NA	NA	NA	21
	Apr-00	14	310	25	NA
	Oct-00	100	120	46	11
	Apr-01	Dry	Dry	26	NA
	Oct-01	70	60	4.2	60
	Apr-02	NA	21	8.6	140
	Oct-02	28	32	25	130
	Apr-03	33	60	35	170
	Oct-03	26	14	27	39
	15-Apr-04	28	55	50	330
	14-Oct-04	180	90	80	110
	05-Apr-05	23	80	27	8.1
	27-Oct-05	25	45	27	40
	21-Apr-06	34	21	13	11
	12-Oct-06	50	70	28	80
	26-Apr-07	50	80	31	12
	11-Oct-07	37	350	Dry	Dry
	Resample 04-Dec-07	10.49	21.2	NS	NS
	03-Apr-08	40	65	28	40
	Resample 14-May-08	43.2	45.5	11.64	79.0
	28-Oct-08	17	120	26	60
	07-Apr-09	17	15	12	80
	27-Oct-09	34	150	12	37
	07-Apr-10	33	26	15	35
	13-Oct-10	60	22	20	110
	27-Apr-11	32	16	15	28
	20-Oct-11	Dry	13	38	36
	26-Apr-12	36	38	7.9	45
	16-Oct-12	32	22	16	45

Notes:
1. NA = Not available.
2. NS = Not sampled.
3. Dry = Surface water monitoring point was considered to be dry.

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Antimony	Oct-99	NR	30	47		ND	
	Apr-00	NR	30	ND		ND	
	Oct-00	NR	30	ND		ND	
	Apr-01	NR	30	ND		ND	
	Oct-01	NR	30	ND		ND	
	Apr-02	NR	30	ND		ND	
	Apr-03	NR	30	ND		ND	
	05-Apr-05	NR	30	ND		ND	
	15-Dec-05	NR	30	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	6.0	7		ND	
	11-Oct-07	0.05	6.0	4.0	J	0.1	J
	03-Apr-08	0.08	6.0	6.2		ND	
	28-Oct-08	0.08	6.0	8.8		ND	
	07-Apr-09	0.06	6.0	5.7	J	ND	
	27-Oct-09	0.06	6.0	39		ND	
	08-Apr-10	0.22	6.0	1.8	B	0.7	J
	13-Oct-10	0.22	6.0	4.6	J	ND	
	27-Apr-11	0.14	6.0	7		ND	
	20-Oct-11	0.14	6.0	46		ND	
	26-Apr-12	0.14	6.0	12		ND	
	16-Oct-12	0.02	6.0	44		ND	
Arsenic	Oct-99	NR	10	ND		ND	
	Apr-00	NR	10	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	10	ND		ND	
	Oct-01	NR	10	12		ND	
	Apr-02	NR	10	27		ND	
	Apr-03	NR	10	55		ND	
	05-Apr-05	NR	10	74		ND	
	15-Dec-05	NR	10	52		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	14		ND	
	11-Oct-07	0.47	10.0	59		ND	
	03-Apr-08	0.07	10.0	45		0.2	J
	28-Oct-08	0.07	10.0	66		0.5	J
	07-Apr-09	0.17	10.0	58		0.2	J
	27-Oct-09	0.17	10.0	124		ND	
	08-Apr-10	0.04	10.0	86		ND	
	13-Oct-10	0.35	10.0	75		ND	
	27-Apr-11	0.43	10.0	114		ND	
	20-Oct-11	0.10	10.0	120		ND	
	26-Apr-12	0.10	10.0	149		ND	
	16-Oct-12	0.25	10.0	147		0.4	J
Barium	Oct-99	NR	500	ND		ND	
	Apr-00	NR	500	ND		ND	
	Oct-00	NR	500	ND		ND	
	Apr-01	NR	500	ND		ND	
	Oct-01	NR	500	537		ND	
	Apr-02	NR	500	1,358		ND	
	Apr-03	NR	500	794		ND	
	05-Apr-05	NR	500	542		ND	
	15-Dec-05	NR	500	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	100	112		ND	
	11-Oct-07	0.04	100.0	754		0.2	J
	03-Apr-08	0.11	100.0	838		0.4	J
	28-Oct-08	0.11	100.0	868		0.7	J
	07-Apr-09	0.04	100.0	788		0.2	J
	27-Oct-09	0.04	100.0	1,055		0.1	J
	08-Apr-10	0.03	100.0	1,001		0.1	J
	13-Oct-10	0.03	100.0	1,022		0.2	J
	27-Apr-11	0.02	100.0	934		0.10	J
	20-Oct-11	0.02	100.0	727		0.10	J
	26-Apr-12	0.02	100.0	983		0.12	J
	16-Oct-12	0.07	100.0	826		0.28	J

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Beryllium	Oct-99	NR	2	ND		ND	
	Apr-00	NR	2	ND		ND	
	Oct-00	NR	2	ND		ND	
	Apr-01	NR	2	ND		ND	
	Oct-01	NR	2	ND		ND	
	Apr-02	NR	2	ND		ND	
	Apr-03	NR	2	ND		ND	
	05-Apr-05	NR	2	ND		ND	
	15-Dec-05	NR	2	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	1.0	ND		ND	
	11-Oct-07	0.08	1.0	0.1	J	ND	
	03-Apr-08	0.06	1.0	0.1	J	ND	
	28-Oct-08	0.06	1.0	0.2	J	ND	
	07-Apr-09	0.06	1.0	0.1	J	ND	
	27-Oct-09	0.06	1.0	0.5	J	ND	
	08-Apr-10	0.02	1.0	0.1	B	0.1	J
	13-Oct-10	0.02	1.0	0.1	J	ND	
	27-Apr-11	0.02	1.0	0.10	J	ND	
	20-Oct-11	0.02	1.0	0.09	J	ND	
	26-Apr-12	0.02	1.0	0.09	J	ND	
	16-Oct-12	0.07	1.0	0.12	J	ND	
Cadmium	Oct-99	NR	1	ND		ND	
	Apr-00	NR	1	ND		ND	
	Oct-00	NR	1	ND		ND	
	Apr-01	NR	1	ND		ND	
	Oct-01	NR	1	ND		ND	
	Apr-02	NR	1	2		ND	
	Apr-03	NR	1	ND		ND	
	05-Apr-05	NR	1	ND		ND	
	15-Dec-05	NR	1	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	1.0	ND		ND	
	11-Oct-07	0.06	1.0	2		0.1	J
	03-Apr-08	0.04	1.0	4		ND	
	28-Oct-08	0.04	1.0	3.6		ND	
	07-Apr-09	0.04	1.0	3		ND	
	27-Oct-09	0.04	1.0	2.5		ND	
	08-Apr-10	0.02	1.0	5		0.1	J
	13-Oct-10	0.02	1.0	7		ND	
	27-Apr-11	0.02	1.0	4		ND	
	20-Oct-11	0.02	1.0	3		ND	
	26-Apr-12	0.02	1.0	3		ND	
	16-Oct-12	0.03	1.0	5		ND	
Chromium	Oct-99	NR	10	ND		ND	
	Apr-00	NR	10	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	10	20		ND	
	Oct-01	NR	10	37		ND	
	Apr-02	NR	10	158		ND	
	Apr-03	NR	10	50		ND	
	05-Apr-05	NR	10	48		ND	
	15-Dec-05	NR	10	36		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	ND		ND	
	11-Oct-07	0.24	10.0	81		1.2	J
	03-Apr-08	0.11	10.0	61		ND	
	28-Oct-08	0.11	10.0	72		ND	
	07-Apr-09	0.10	10.0	47		ND	
	27-Oct-09	0.10	10.0	108		ND	
	08-Apr-10	0.03	10.0	56		ND	
	13-Oct-10	0.03	10.0	49		ND	
	27-Apr-11	0.04	10.0	42		0.18	J
	20-Oct-11	0.04	10.0	43		0.18	J
	26-Apr-12	0.04	10.0	41		0.09	J
	16-Oct-12	0.18	10.0	51		ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Cobalt	Oct-99	NR	10	ND		ND	
	Apr-00	NR	10	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	10	ND		ND	
	Oct-01	NR	10	ND		ND	
	Apr-02	NR	10	ND		ND	
	Apr-03	NR	10	23		ND	
	05-Apr-05	NR	10	15		ND	
	15-Dec-05	NR	10	22		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	ND		ND	
	11-Oct-07	0.41	10.0	14		ND	
	03-Apr-08	0.03	10.0	13		ND	
	28-Oct-08	0.03	10.0	15		ND	
	07-Apr-09	0.02	10.0	12		ND	
	27-Oct-09	0.02	10.0	18		ND	
	08-Apr-10	0.10	10.0	15		ND	
	13-Oct-10	0.10	10.0	15		ND	
	27-Apr-11	0.03	10.0	14		ND	
	20-Oct-11	0.03	10.0	13		ND	
	26-Apr-12	0.03	10.0	13		ND	
	16-Oct-12	0.02	10.0	17		ND	
Copper	Oct-99	NR	200	ND		ND	
	Apr-00	NR	200	ND		ND	
	Oct-00	NR	200	ND		ND	
	Apr-01	NR	200	NA		ND	
	Oct-01	NR	200	ND		ND	
	Apr-02	NR	200	ND		ND	
	Apr-03	NR	200	ND		ND	
	05-Apr-05	NR	200	ND		ND	
	15-Dec-05	NR	200	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	ND		ND	
	11-Oct-07	0.20	10.0	9.4	J	0.4	J
	03-Apr-08	0.05	10.0	12		0.2	J
	28-Oct-08	0.05	10.0	6.5	J	1.1	J
	07-Apr-09	0.04	10.0	10		0.1	J
	27-Oct-09	0.04	10.0	31		0.1	J
	08-Apr-10	0.03	10.0	10		0.2	J
	13-Oct-10	0.03	10.0	9.6	J	0.2	J
	27-Apr-11	0.02	10.0	6.7	J	0.66	J
	20-Oct-11	0.02	10.0	7.3	J	0.2	J
	26-Apr-12	0.02	10.0	9.6	J	0.94	J
	16-Oct-12	0.06	10.0	25		0.25	J
Lead	Oct-99	NR	10	ND		ND	
	Apr-00	NR	10	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	10	ND		ND	
	Oct-01	NR	10	ND		ND	
	Apr-02	NR	10	30		ND	
	Apr-03	NR	10	ND		ND	
	05-Apr-05	NR	10	11		ND	
	15-Dec-05	NR	10	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	ND		ND	
	11-Oct-07	0.07	10.0	1.4	J	0.1	J
	03-Apr-08	0.04	10.0	0.7	J	0.1	J
	28-Oct-08	0.04	10.0	1.1	J	0.1	J
	07-Apr-09	0.04	10.0	0.3	B	0.1	J
	27-Oct-09	0.04	10.0	16		ND	
	08-Apr-10	0.01	10.0	0.2	B	0.1	J
	13-Oct-10	0.01	10.0	0.2	B	0.1	J
	27-Apr-11	0.02	10.0	0.13	J	ND	
	20-Oct-11	0.02	10.0	0.22	J	ND	
	26-Apr-12	0.02	10.0	0.12	J	0.02	J
	16-Oct-12	0.08	10.0	0.34	J	ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Nickel	Oct-99	NR	50	ND		ND	
	Apr-00	NR	50	ND		ND	
	Oct-00	NR	50	ND		ND	
	Apr-01	NR	50	ND		ND	
	Oct-01	NR	50	77		ND	
	Apr-02	NR	50	394		ND	
	Apr-03	NR	50	141		ND	
	05-Apr-05	NR	50	112		ND	
	15-Dec-05	NR	50	84		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	50	ND		ND	
	11-Oct-07	0.66	50.0	77		ND	
	03-Apr-08	0.06	50.0	77		0.3	J
	28-Oct-08	0.06	50.0	81		0.2	J
	07-Apr-09	0.04	50.0	70		ND	
	27-Oct-09	0.04	50.0	130		0.2	J
	08-Apr-10	0.05	50.0	85		ND	
	13-Oct-10	0.05	50.0	82		0.1	J
	27-Apr-11	0.04	50.0	74		0.3	J
	20-Oct-11	0.04	50.0	72		0.56	J
	26-Apr-12	0.04	50.0	68		ND	
	16-Oct-12	0.06	50.0	81		0.23	J
Selenium	Oct-99	NR	20	ND		ND	
	Apr-00	NR	20	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	20	ND		ND	
	Oct-01	NR	20	ND		ND	
	Apr-02	NR	20	ND		ND	
	Apr-03	NR	20	ND		ND	
	05-Apr-05	NR	20	20		ND	
	15-Dec-05	NR	20	33		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	20		ND	
	11-Oct-07	0.35	10.0	51		0.9	J
	03-Apr-08	0.14	10.0	0.6	B	1.5	J
	28-Oct-08	0.14	10.0	ND		1.9	J
	07-Apr-09	0.12	10.0	42		ND	
	27-Oct-09	0.12	10.0	60		ND	
	08-Apr-10	0.32	10.0	65		ND	
	13-Oct-10	0.30	10.0	ND		ND	
	27-Apr-11	0.32	10.0	ND		ND	
	20-Oct-11	0.32	10.0	ND		ND	
	26-Apr-12	0.32	10.0	28		ND	
	16-Oct-12	0.54	10.0	ND		ND	
Silver	Oct-99	NR	10	ND		ND	
	Apr-00	NR	10	ND		ND	
	Oct-00	NR	10	ND		ND	
	Apr-01	NR	10	ND		ND	
	Oct-01	NR	10	ND		ND	
	Apr-02	NR	10	ND		ND	
	Apr-03	NR	10	ND		ND	
	05-Apr-05	NR	10	ND		ND	
	15-Dec-05	NR	10	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	ND		ND	
	11-Oct-07	NA	10	ND		ND	
	03-Apr-08	0.04	10.0	0.7	J	ND	
	28-Oct-08	0.04	10.0	0.7	J	0.1	J
	07-Apr-09	0.04	10.0	0.8	J	ND	
	27-Oct-09	0.04	10.0	0.8	J	ND	
	08-Apr-10	0.03	10.0	1.0	J	0.1	J
	13-Oct-10	0.03	10.0	1.5	J	ND	
	27-Apr-11	0.02	10.0	0.82	J	ND	
	20-Oct-11	0.02	10.0	0.73	J	ND	
	26-Apr-12	0.02	10.0	0.94	J	ND	
	16-Oct-12	0.10	10.0	1.20	J	ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Thallium	27-Apr-11	0.02	5.5	0.04	B	0.03	J
	20-Oct-11	0.02	5.5	ND		ND	
	26-Apr-12	0.02	5.5	ND		ND	
	16-Oct-12	0.07	5.5	0.29	J	ND	
Vanadium	Oct-99	NR	40	ND		ND	
	Apr-00	NR	40	ND		ND	
	Oct-00	NR	40	ND		ND	
	Apr-01	NR	40	ND		ND	
	Oct-01	NR	40	ND		ND	
	Apr-02	NR	40	ND		ND	
	Apr-03	NR	40	ND		ND	
	05-Apr-05	NR	40	ND		ND	
	15-Dec-05	NR	40	51		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	25	ND		ND	
	11-Oct-07	0.42	25.0	17.6	J	ND	
	03-Apr-08	0.07	25.0	14.9	J	0.1	J
	28-Oct-08	0.07	25.0	18.5	J	0.2	J
	07-Apr-09	0.28	25.0	13.3	J	ND	
	27-Oct-09	0.28	25.0	28		0.4	J
	08-Apr-10	0.03	25.0	17.2		0.4	J
	13-Oct-10	0.03	25.0	15.6	J	0.6	J
	27-Apr-11	0.14	25.0	13.3	J	ND	
	20-Oct-11	0.14	25.0	12.9	J	ND	
	26-Apr-12	0.14	25.0	12.5	J	ND	
	16-Oct-12	0.10	25.0	15.3	J	ND	
Zinc	Oct-99	NR	50	ND		ND	
	Apr-00	NR	50	ND		ND	
	Oct-00	NR	50	ND		ND	
	Apr-01	NR	50	60		ND	
	Oct-01	NR	50	101		ND	
	Apr-02	NR	50	298		ND	
	Apr-03	NR	50	691		ND	
	05-Apr-05	NR	50	721		ND	
	15-Dec-05	NR	50	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	10	22		ND	
	11-Oct-07	0.20	10.0	42		6.6	J
	03-Apr-08	0.04	10.0	23		2.2	J
	28-Oct-08	0.04	10.0	20		0.4	J
	07-Apr-09	0.14	10.0	11		0.8	J
	27-Oct-09	0.14	10.0	822		1.4	J
	08-Apr-10	0.08	10.0	12		0.7	J
	13-Oct-10	0.08	10.0	8.4	B	4.1	J
	27-Apr-11	0.24	10.0	8.2	J	1.1	J
	20-Oct-11	0.24	10.0	5.3	J	0.28	J
	26-Apr-12	0.24	10.0	7.7	J	1.9	J
	16-Oct-12	0.48	10.0	28		ND	
Acetone	Oct-99	NR	NA	ND		ND	
	Apr-00	NR	NA	3,829		ND	
	Oct-00	NR	NA	ND		ND	
	Apr-01	NR	NA	ND		ND	
	Oct-01	NR	100	NA		ND	
	Apr-02	NR	100	9,690		ND	
	Apr-03	NR	500	1,090		ND	
	05-Apr-05	NR	500	4,570		ND	
	15-Dec-05	NR	500	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	100	ND		ND	
	11-Oct-07	1.21	100.0	81.70	J	ND	
	03-Apr-08	1.21	100.0	148.00		2.10	J
	28-Oct-08	1.21	100.0	237.00		1.30	J
	07-Apr-09	1.21	100.0	40.60	J	ND	
	27-Oct-09	9.06	100.0	50.20	J	ND	
	08-Apr-10	9.06	100.0	13.60	J	ND	
	13-Oct-10	9.06	100.0	26.50	J	ND	
	27-Apr-11	9.06	100.0	ND		ND	
	20-Oct-11	9.06	100.0	211.00		ND	
	26-Apr-12	9.06	100.0	20.20	J	ND	
	16-Oct-12	9.06	100.0	708.00		ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
Benzene	Oct-99	NR	NA	ND		ND
	Apr-00	NR	NA	ND		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	12		ND
	Oct-01	NR	5	NA		ND
	Apr-02	NR	5	NA		ND
	Apr-03	NR	25	ND		ND
	05-Apr-05	NR	25	7.3		ND
	15-Dec-05	NR	25	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	3.00	ND		ND
	11-Oct-07	0.16	1.0	3.90		ND
	03-Apr-08	0.16	1.0	2.60		ND
	28-Oct-08	0.16	1.0	1.80		ND
	07-Apr-09	0.16	1.0	1.50		ND
	27-Oct-09	0.24	1.0	1.60		ND
	08-Apr-10	0.24	1.0	2.10		ND
	13-Oct-10	0.24	1.0	2.20		ND
	27-Apr-11	0.24	1.0	3.50		ND
	20-Oct-11	0.24	1.0	3.70		ND
	26-Apr-12	0.24	1.0	3.50		ND
	16-Oct-12	0.24	1.0	3.80		ND
Chlorobenzene	11-Oct-07	0.13	3.0	1.80	J	ND
	03-Apr-08	0.13	3.0	1.30	J	ND
	28-Oct-08	0.13	3.0	0.90	J	ND
	07-Apr-09	0.13	3.0	0.60	J	ND
	27-Oct-09	0.30	3.0	0.50	J	ND
	08-Apr-10	0.30	3.0	0.70	J	ND
	13-Oct-10	0.30	3.0	0.70	J	ND
	27-Apr-11	0.30	3.0	1.10	J	ND
	20-Oct-11	0.30	3.0	1.10	J	ND
	26-Apr-12	0.30	3.0	1.10	J	ND
	16-Oct-12	0.30	3.0	1.20	J	ND
Chloroethane	Oct-99	NR	NA	ND		ND
	Apr-00	NR	NA	ND		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	19		ND
	Oct-01	NR	10	NA		ND
	Apr-02	NR	10	NA		ND
	Apr-03	NR	50	ND		ND
	05-Apr-05	NR	50	ND		ND
	15-Dec-05	NR	50	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	5.00	ND		ND
	11-Oct-07	0.29	10.0	0.50	J	ND
	03-Apr-08	0.29	10.0	0.40	J	ND
	28-Oct-08	0.29	10.0	ND		ND
	07-Apr-09	0.29	10.0	ND		ND
	27-Oct-09	0.48	10.0	ND		ND
	08-Apr-10	0.48	10.0	ND		ND
	13-Oct-10	0.48	10.0	ND		ND
	27-Apr-11	0.48	10.0	ND		ND
	20-Oct-11	0.48	10.0	0.50	J	ND
	26-Apr-12	0.48	10.0	ND		ND
	16-Oct-12	0.48	10.0	ND		ND
Chloromethane	11-Oct-07	0.18	1.0	2.40		ND
	03-Apr-08	0.18	1.0	ND		ND
	28-Oct-08	0.18	1.0	ND		ND
	07-Apr-09	0.18	1.0	ND		ND
	27-Oct-09	0.77	1.0	ND		ND
	08-Apr-10	0.77	1.0	ND		ND
	13-Oct-10	0.77	1.0	ND		ND
	27-Apr-11	0.77	1.0	ND		ND
	20-Oct-11	0.77	1.0	ND		ND
	26-Apr-12	0.77	1.0	ND		ND
	16-Oct-12	0.77	1.0	ND		ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
Cis-1,2-Dichloroethane	16-Oct-12	0.25	5.0	1.10	J	ND
Cis-1,2-Dichloroethylene	11-Oct-07	0.14	5.0	2.00	J	ND
	03-Apr-08	0.14	5.0	2.00	J	ND
	28-Oct-08	0.14	5.0	1.40	J	ND
	07-Apr-09	0.14	5.0	0.70	J	ND
	27-Oct-09	0.25	5.0	0.80	J	ND
	08-Apr-10	0.25	5.0	2.10	J	ND
	13-Oct-10	0.25	5.0	1.70	J	ND
	27-Apr-11	0.25	5.0	3.00	J	ND
	20-Oct-11	0.25	5.0	2.50	J	ND
	26-Apr-12	0.25	5.0	1.90	J	ND
	16-Oct-12	NS	NS	NS		NS
1,1-Dichloroethane	Oct-99	NR	NA	ND		ND
	Apr-00	NR	NA	15		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	ND		ND
	Oct-01	NR	5	NA		ND
	Apr-02	NR	5	NA		ND
	Apr-03	NR	25	ND		ND
	05-Apr-05	NR	25	ND		ND
	15-Dec-05	NR	25	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	5.00	ND		ND
	11-Oct-07	0.16	5.0	0.30	J	ND
	03-Apr-08	0.14	5.0	ND		ND
	28-Oct-08	0.16	5.0	ND		ND
	07-Apr-09	0.16	5.0	ND		ND
	27-Oct-09	0.20	5.0	ND		ND
	08-Apr-10	0.20	5.0	ND		ND
	13-Oct-10	0.20	5.0	ND		ND
	27-Apr-11	0.20	5.0	0.30	J	ND
	20-Oct-11	0.17	5.0	ND		ND
	26-Apr-12	0.17	5.0	ND		ND
	16-Oct-12	0.20	5.0	ND		ND
1,2-Dichloroethane	11-Oct-07	0.12	1.0	0.40	J	ND
	03-Apr-08	0.12	1.0	0.30	J	ND
	28-Oct-08	0.12	1.0	0.20	J	ND
	07-Apr-09	0.12	1.0	ND		ND
	27-Oct-09	0.27	1.0	ND		ND
	08-Apr-10	0.27	1.0	ND		ND
	13-Oct-10	0.27	1.0	ND		ND
	27-Apr-11	0.27	1.0	ND		ND
	20-Oct-11	0.27	1.0	ND		ND
	26-Apr-12	0.27	1.0	ND		ND
	16-Oct-12	0.27	1.0	ND		ND
1,2-Dichloropropane	11-Oct-07	0.17	1.0	0.30	J	ND
	03-Apr-08	0.17	1.0	ND		ND
	28-Oct-08	0.17	1.0	0.20	J	ND
	07-Apr-09	0.17	1.0	ND		ND
	27-Oct-09	0.21	1.0	ND		ND
	08-Apr-10	0.21	1.0	ND		ND
	13-Oct-10	0.21	1.0	ND		ND
	27-Apr-11	0.21	1.0	0.30	J	ND
	20-Oct-11	0.21	1.0	0.30	J	ND
	26-Apr-12	0.21	1.0	0.40	J	ND
	16-Oct-12	0.21	1.0	ND		ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
2-Butanone	Oct-99	NR	NA	ND		ND
	Apr-00	NR	NA	5,343		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	ND		ND
	Oct-01	NR	100	ND		ND
	Apr-02	NR	100	5,640		ND
	Apr-03	NR	500	861		ND
	05-Apr-05	NR	500	1,580		ND
	15-Dec-05	NR	500	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	100.00	ND		ND
	11-Oct-07	0.85	100.0	45.10	J	ND
	03-Apr-08	0.85	100.0	81.90	J	ND
	28-Oct-08	0.85	100.0	166.00		ND
	07-Apr-09	0.85	100.0	33.30	J	ND
	27-Oct-09	2.21	100.0	6.70	J	ND
	08-Apr-10	2.21	100.0	ND		ND
	13-Oct-10	2.21	100.0	5.30	J	ND
	27-Apr-11	2.21	100.0	4.60	J	ND
	20-Oct-11	2.21	100.0	81.70	J	ND
	26-Apr-12	2.21	100.0	3.00	J	ND
	16-Oct-12	2.21	100.0	276.00		ND
2-Hexanone	05-Apr-05	NR	50	67.1		ND
	15-Dec-05	NR	250	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	50.00	ND		ND
	11-Oct-07	1.00	50.0	ND		ND
	03-Apr-08	1.00	50.0	ND		ND
	28-Oct-08	1.00	50.0	ND		ND
	07-Apr-09	1.00	50.0	ND		ND
	27-Oct-09	1.57	50.0	ND		ND
	08-Apr-10	1.57	50.0	ND		ND
	13-Oct-10	1.57	50.0	ND		ND
	27-Apr-11	1.57	50.0	ND		ND
	20-Oct-11	1.57	50.0	ND		ND
	26-Apr-12	1.57	50.0	ND		ND
	16-Oct-12	1.57	50.0	4.00		ND
Styrene	05-Apr-05	NR	10	33.2		ND
	15-Dec-05	NR	50	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	10.00	ND		ND
	11-Oct-07	0.16	1.0	2.10		ND
	03-Apr-08	0.16	1.0	1.70		ND
	28-Oct-08	0.16	1.0	ND		ND
	07-Apr-09	0.16	1.0	2.00		ND
	27-Oct-09	0.19	1.0	1.90		ND
	08-Apr-10	0.19	1.0	7.30		ND
	13-Oct-10	0.19	1.0	5.90		ND
	27-Apr-11	0.19	1.0	11.70		ND
	20-Oct-11	0.19	1.0	10.20		ND
	26-Apr-12	0.19	1.0	6.50		ND
	16-Oct-12	0.19	1.0	2.00		ND
1,2-Dichlorobenzene	11-Oct-07	0.13	5.0	1.10	J	ND
	03-Apr-08	0.13	5.0	1.10	J	ND
	28-Oct-08	0.13	5.0	0.90	J	ND
	07-Apr-09	0.13	5.0	ND		ND
	27-Oct-09	0.32	5.0	0.80	J	ND
	08-Apr-10	0.32	5.0	ND		ND
	13-Oct-10	0.32	5.0	ND		ND
	27-Apr-11	0.32	5.0	ND		ND
	20-Oct-11	0.32	5.0	ND		ND
	26-Apr-12	0.32	5.0	0.60	J	ND
	16-Oct-12	0.32	5.0	0.40	J	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
1,4-Dichlorobenzene	05-Apr-05	NR	5	12.5	ND
	15-Dec-05	NR	25	ND	ND
	21-Apr-06	NS	NS	NS	ND
	12-Oct-06	NS	NS	NS	ND
	26-Apr-07	NR	3.00	13.40	ND
	11-Oct-07	0.21	1.0	15.70	ND
	03-Apr-08	0.21	1.0	14.90	ND
	28-Oct-08	0.21	1.0	13.40	ND
	07-Apr-09	0.21	1.0	9.60	ND
	27-Oct-09	0.39	1.0	11.90	ND
	08-Apr-10	0.39	1.0	13.10	ND
	13-Oct-10	0.39	1.0	11.30	ND
	27-Apr-11	0.39	1.0	13.90	ND
	20-Oct-11	0.39	1.0	11.80	ND
	26-Apr-12	0.39	1.0	15.30	ND
	16-Oct-12	0.39	1.0	13.20	ND
Trichloroethylene	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	5.6	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	ND	ND
	Oct-01	NR	5	NA	ND
	Apr-02	NR	5	NA	ND
	Apr-03	NR	25	ND	ND
	05-Apr-05	NR	25	ND	ND
	15-Dec-05	NR	25	ND	ND
	21-Apr-06	NS	NS	NS	ND
	12-Oct-06	NS	NS	NS	ND
	26-Apr-07	NR	3.00	ND	ND
	11-Oct-07	0.13	1.0	0.30 J	ND
	03-Apr-08	0.13	1.0	0.20 J	ND
	28-Oct-08	0.13	1.0	0.50 J	ND
	07-Apr-09	0.13	1.0	ND	ND
	27-Oct-09	0.23	1.0	ND	ND
	08-Apr-10	0.23	1.0	0.50 J	ND
	13-Oct-10	0.23	1.0	ND	ND
	27-Apr-11	0.23	1.0	1.40	ND
	20-Oct-11	0.23	1.0	2.60	ND
	26-Apr-12	0.23	1.0	0.60 J	ND
	16-Oct-12	NS	NS	NS	ND
Tetrachloroethylene	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	22	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	ND	ND
	Oct-01	NR	5	NA	ND
	Apr-02	NR	5	ND	ND
	Apr-03	NR	25	ND	ND
	05-Apr-05	NR	25	ND	ND
	15-Dec-05	NR	25	ND	ND
	21-Apr-06	NS	NS	NS	ND
	12-Oct-06	NS	NS	NS	ND
	26-Apr-07	NR	3.00	ND	ND
	11-Oct-07	0.16	1.0	ND	ND
	03-Apr-08	0.16	1.0	ND	ND
	28-Oct-08	0.16	1.0	ND	ND
	07-Apr-09	0.16	1.0	ND	ND
	27-Oct-09	0.17	1.0	ND	ND
	08-Apr-10	0.17	1.0	ND	ND
	13-Oct-10	0.17	1.0	ND	ND
	27-Apr-11	0.17	1.0	ND	ND
	20-Oct-11	0.17	1.0	ND	ND
	26-Apr-12	0.17	1.0	ND	ND
	16-Oct-12	NR	NR	NS	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
Ethylbenzene	Oct-99	NR	NA	ND		ND	
	Apr-00	NR	NA	ND		ND	
	Oct-00	NR	NA	ND		ND	
	Apr-01	NR	NA	66		ND	
	Oct-01	NR	5	NA		ND	
	Apr-02	NR	5	93.8		ND	
	Apr-03	NR	25	128		ND	
	05-Apr-05	NR	25	176		ND	
	15-Dec-05	NR	25	126		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	5.00	9.50		ND	
	11-Oct-07	0.16	1.0	179.00		ND	
	03-Apr-08	0.16	1.0	160.00		ND	
	28-Oct-08	0.16	1.0	105.00		ND	
	07-Apr-09	0.16	1.0	34.60		ND	
	27-Oct-09	0.21	1.0	37.80		ND	
	08-Apr-10	0.21	1.0	113.00		ND	
	13-Oct-10	0.21	1.0	93.70		ND	
	27-Apr-11	0.21	1.0	97.60		ND	
	20-Oct-11	0.21	1.0	70.20		ND	
	26-Apr-12	0.21	1.0	80.50		ND	
	16-Oct-12	0.21	1.0	25.00		ND	
Methylene Chloride	Oct-99	NR	NA	32		ND	
	Apr-00	NR	NA	234		ND	
	Oct-00	NR	NA	ND		ND	
	Apr-01	NR	NA	69		ND	
	Oct-01	NR	10	NA		ND	
	Apr-02	NR	10	NA		ND	
	Apr-03	NR	50	ND		ND	
	05-Apr-05	NR	50	ND		ND	
	15-Dec-05	NR	50	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	5.00	ND		ND	
	11-Oct-07	0.14	1.0	0.30	B	0.20	J
	03-Apr-08	0.14	1.0	ND		ND	
	28-Oct-08	0.14	1.0	0.20	J	ND	
	07-Apr-09	0.14	1.0	ND		ND	
	27-Oct-09	0.64	1.0	ND		ND	
	08-Apr-10	0.64	1.0	ND		ND	
	13-Oct-10	0.64	1.0	ND		ND	
	27-Apr-11	0.64	1.0	ND		ND	
	20-Oct-11	0.64	1.0	ND		ND	
	26-Apr-12	0.64	1.0	ND		ND	
	16-Oct-12	0.61	1.0	ND		ND	
Toluene	Oct-99	NR	NA	9		ND	
	Apr-00	NR	NA	16		ND	
	Oct-00	NR	NA	ND		ND	
	Apr-01	NR	NA	251		ND	
	Oct-01	NR	5	NA		ND	
	Apr-02	NR	5	148		ND	
	Apr-03	NR	25	125		ND	
	05-Apr-05	NR	25	108		ND	
	15-Dec-05	NR	25	ND		ND	
	21-Apr-06	NS	NS	NS		ND	
	12-Oct-06	NS	NS	NS		ND	
	26-Apr-07	NR	5.00	5.60		ND	
	11-Oct-07	0.13	1.0	22.80		ND	
	03-Apr-08	0.13	1.0	20.10		ND	
	28-Oct-08	0.13	1.0	24.00		ND	
	07-Apr-09	0.13	1.0	12.00		ND	
	27-Oct-09	0.23	1.0	14.00		ND	
	08-Apr-10	0.23	1.0	23.90		ND	
	13-Oct-10	0.23	1.0	20.40		ND	
	27-Apr-11	0.23	1.0	36.40		ND	
	20-Oct-11	0.23	1.0	31.80		ND	
	26-Apr-12	0.23	1.0	13.00		ND	
	16-Oct-12	0.23	1.0	8.20		ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
1,1,1-Trichloroethane	Oct-99	NR	NA	75		ND
	Apr-00	NR	NA	29		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	ND		ND
	Oct-01	NR	5	NA		ND
	Apr-02	NR	5	NA		ND
	Apr-03	NR	25	ND		ND
	05-Apr-05	NR	25	ND		ND
	15-Dec-05	NR	25	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	5.00	ND		ND
	11-Oct-07	0.11	1.0	ND		ND
	03-Apr-08	0.11	1.0	ND		ND
	28-Oct-08	0.11	1.0	ND		ND
	07-Apr-09	0.11	1.0	ND		ND
	27-Oct-09	0.19	1.0	ND		ND
	08-Apr-10	0.19	1.0	ND		ND
	13-Oct-10	0.19	1.0	ND		ND
	27-Apr-11	0.19	1.0	ND		ND
	20-Oct-11	0.19	1.0	ND		ND
	26-Apr-12	0.19	1.0	ND		ND
	16-Oct-12	0.19	1.0	ND		ND
1,2,3-Trichloropropane	11-Oct-07	0.06	1.0	0.10	J	ND
	03-Apr-08	0.06	1.0	ND		ND
	28-Oct-08	0.06	1.0	ND		ND
	07-Apr-09	0.06	1.0	ND		ND
	27-Oct-09	0.43	1.0	ND		ND
	08-Apr-10	0.43	1.0	ND		ND
	13-Oct-10	0.43	1.0	ND		ND
	27-Apr-11	0.43	1.0	ND		ND
	20-Oct-11	0.43	1.0	ND		ND
	26-Apr-12	0.43	1.0	ND		ND
	16-Oct-12	0.43	1.0	ND		ND
1,1,2,2-Tetrachloroethane	11-Oct-07	0.16	3.0	0.30	J	ND
	03-Apr-08	0.16	3.0	ND		ND
	28-Oct-08	0.16	3.0	ND		ND
	07-Apr-09	0.16	3.0	ND		ND
	27-Oct-09	0.26	3.0	ND		ND
	08-Apr-10	0.26	3.0	ND		ND
	13-Oct-10	0.26	3.0	ND		ND
	27-Apr-11	0.26	3.0	ND		ND
	20-Oct-11	0.26	3.0	ND		ND
	26-Apr-12	0.26	3.0	0.30	J	ND
	16-Oct-12	0.26	3.0	ND		ND
Trichlorofluoromethane	Oct-99	NR	NA	220		ND
	Apr-00	NR	NA	37		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	10		ND
	Oct-01	NR	5	NA		ND
	Apr-02	NR	5	NA		ND
	Apr-03	NR	25	ND		ND
	05-Apr-05	NR	25	ND		ND
	15-Dec-05	NR	25	ND		ND
	21-Apr-06	NS	NS	NS		ND
	12-Oct-06	NS	NS	NS		ND
	26-Apr-07	NR	5.00	ND		ND
	11-Oct-07	0.13	1.0	ND		ND
	03-Apr-08	0.13	1.0	ND		ND
	28-Oct-08	0.13	1.0	ND		ND
	07-Apr-09	0.13	1.0	ND		ND
	27-Oct-09	0.24	1.0	ND		ND
	08-Apr-10	0.24	1.0	ND		ND
	13-Oct-10	0.24	1.0	ND		ND
	27-Apr-11	0.24	1.0	ND		ND
	20-Oct-11	0.24	1.0	ND		ND
	26-Apr-12	0.24	1.0	ND		ND
	16-Oct-12	0.24	1.0	ND		ND

TABLE 14

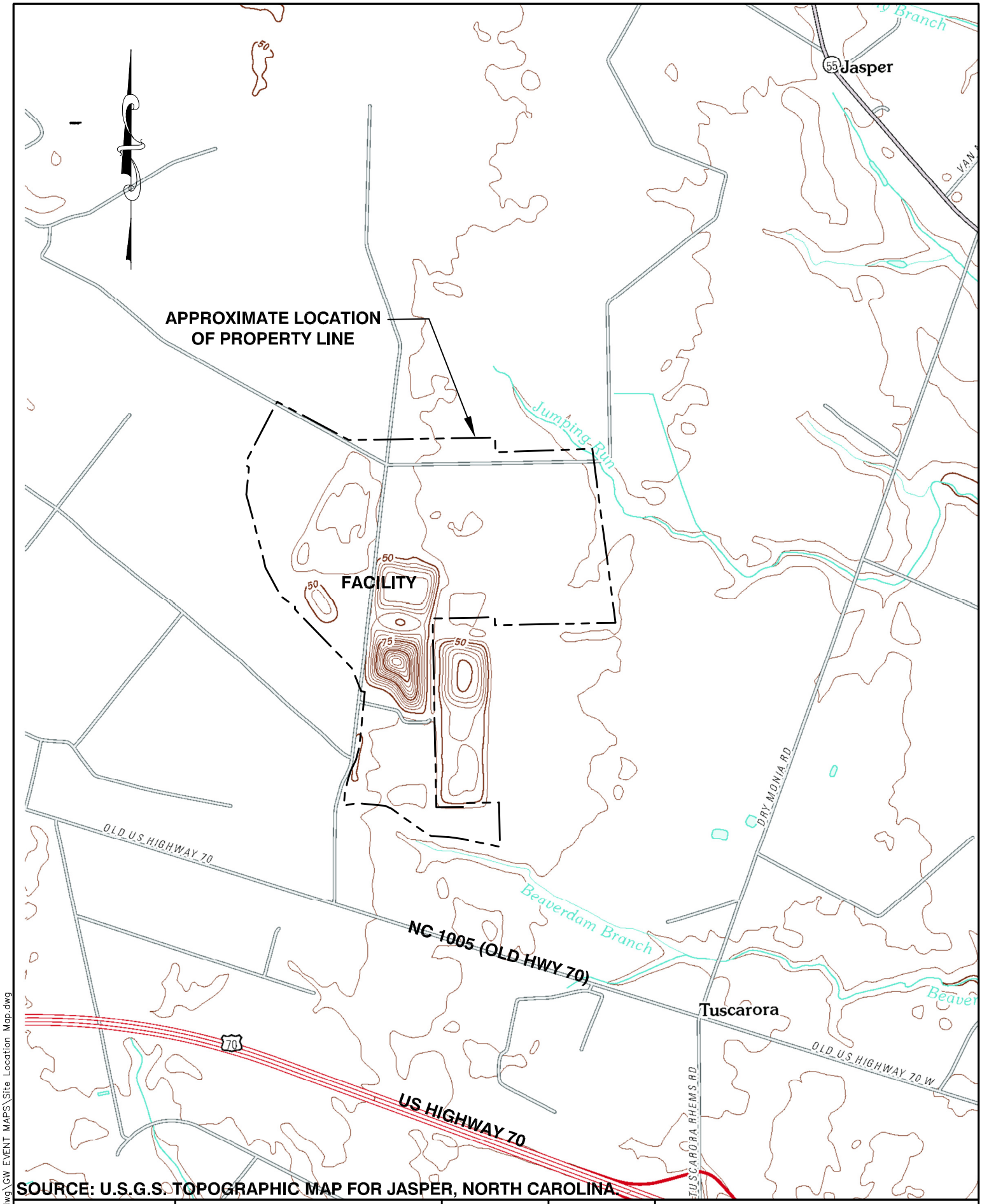
SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
Vinyl Chloride	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	ND	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	36	ND
	Oct-01	NR	10	NA	ND
	Apr-02	NR	10	NA	ND
	Apr-03	NR	50	ND	ND
	05-Apr-05	NR	50	ND	ND
	15-Dec-05	NR	50	ND	ND
	21-Apr-06	NS	NS	NS	ND
	12-Oct-06	NS	NS	NS	ND
	26-Apr-07	NR	5.00	ND	ND
	11-Oct-07	0.34	1.0	1.10	ND
	03-Apr-08	0.34	1.0	ND	ND
	28-Oct-08	0.34	1.0	ND	ND
	07-Apr-09	0.34	1.0	ND	ND
	27-Oct-09	0.63	1.0	ND	ND
	08-Apr-10	0.63	1.0	ND	ND
	13-Oct-10	0.63	1.0	ND	ND
	27-Apr-11	0.63	1.0	ND	ND
	20-Oct-11	0.63	1.0	ND	ND
	26-Apr-12	0.63	1.0	ND	ND
	16-Oct-12	0.63	1.0	ND	ND
4-Methyl-2-Pentanone	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	116	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	471	ND
	Oct-01	NR	50	NA	ND
	Apr-02	NR	50	NA	ND
	Apr-03	NR	500	923	ND
	05-Apr-05	NR	500	2530	ND
	15-Dec-05	NR	500	ND	ND
	21-Apr-06	NS	NS	NS	ND
	12-Oct-06	NS	NS	NS	ND
	26-Apr-07	NR	100.00	ND	ND
	11-Oct-07	0.68	100.0	51.50 J	ND
	03-Apr-08	0.68	100.0	130.00	ND
	28-Oct-08	0.68	100.0	230.00	ND
	07-Apr-09	0.68	100.0	25.80 J	ND
	27-Oct-09	1.19	100.0	1.40 J	ND
	08-Apr-10	1.19	100.0	3.60 J	ND
	13-Oct-10	1.19	100.0	7.10 J	ND
	27-Apr-11	1.19	100.0	2.20 J	ND
	20-Oct-11	1.19	100.0	46.50 J	ND
	26-Apr-12	1.19	100.0	3.70 J	ND
	16-Oct-12	1.19	100.0	52.30 J	ND
Xylenes (total)	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	ND	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	52	ND
	Oct-01	NR	5	NA	ND
	Apr-02	NR	5	60.6	ND
	Apr-03	NR	25	102	ND
	05-Apr-05	NR	25	147	ND
	15-Dec-05	NR	25	189	ND
	21-Apr-06	NR	NS	NS	ND
	12-Oct-06	NR	NS	NS	ND
	26-Apr-07	NR	4.00	37.20	ND
	11-Oct-07	0.48	5.0	158.00	ND
	03-Apr-08	0.48	5.0	97.20	ND
	23-Oct-08	0.48	5.0	61.70	ND
	07-Apr-09	0.48	5.0	33.20	ND
	27-Oct-09	0.68	5.0	36.00	ND
	08-Apr-10	0.68	5.0	55.40	ND
	13-Oct-10	0.68	5.0	51.20	ND
	27-Apr-11	0.68	5.0	90.90	ND
	20-Oct-11	0.68	5.0	64.50	ND
	26-Apr-12	0.68	5.0	29.60	ND
	16-Oct-12	0.68	5.0	36.50	ND

Notes:
1. All concentrations are in µg/L.
2. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present)
3. ND = Not detected above reporting limit
4. J = Estimated value between the DL and the QL
5. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks
6. DL = Laboratory detection limit
7. NA = Data not available.
8. NS = Not sampled.
9. NR = Not Reported.

Figure

Figure No. 1 Site Location Map



SOURCE: U.S.G.S. TOPOGRAPHIC MAP FOR JASPER, NORTH CAROLINA.

FIGURE NO. 1	JOYCE ENGINEERING	2211 WEST MEADOWVIEW ROAD GREENSBORO, N.C. 27407 PHONE: (336) 323-0092 © 2012 Joyce Engineering, Inc. All rights reserved.	SCALE 1"=2000'	PROJECT NO. 618.1201.12	CRSWMA: TUSCARORA LANDFILLS SITE LOCATION MAP

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Drawings

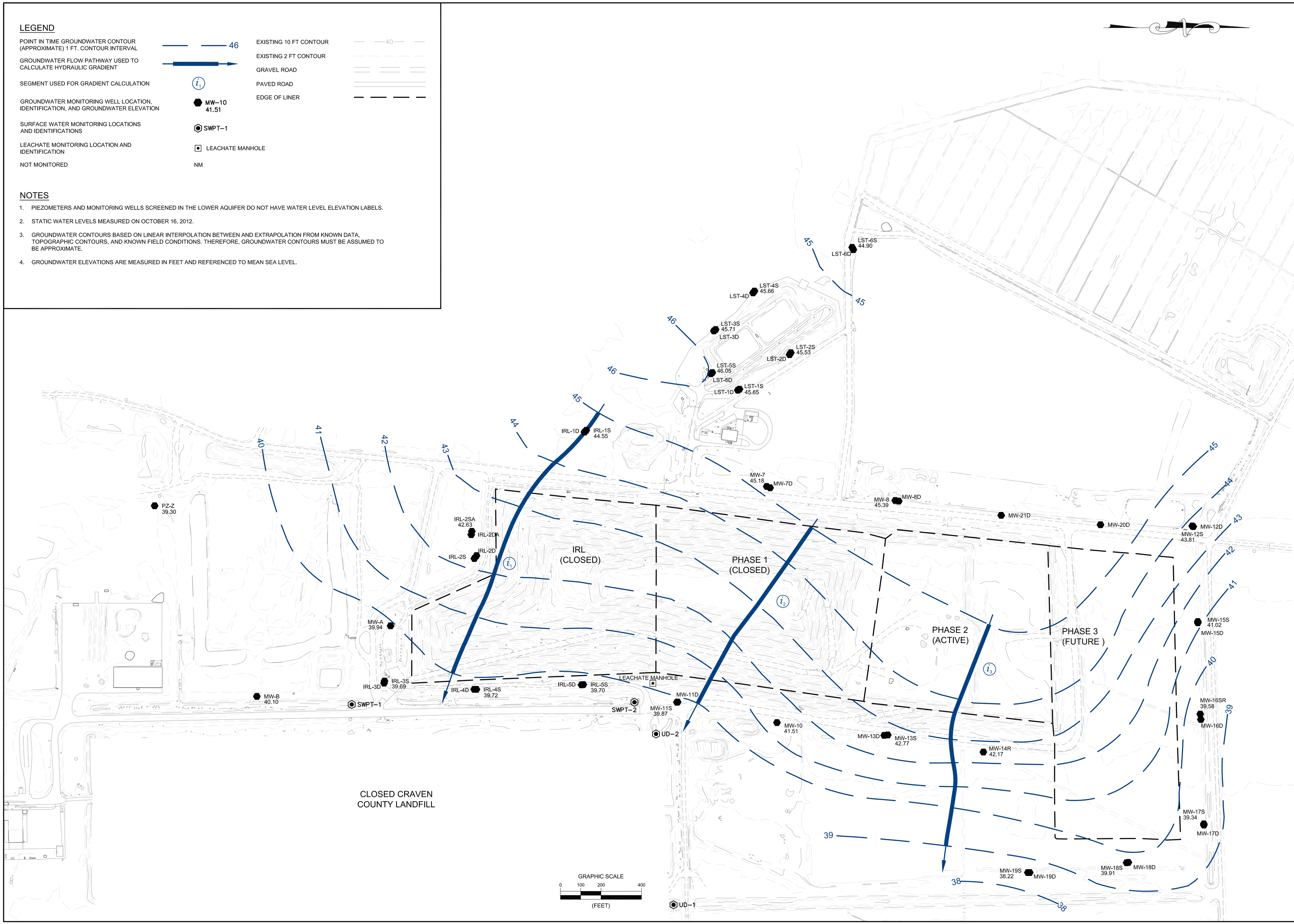
Drawing No. 1 Shallow Aquifer Potentiometric Surface Contour Map
Drawing No. 2 Deep Aquifer Potentiometric Surface Contour Map

LEGEND

POINT IN TIME GROUNDWATER CONTOUR (APPROXIMATE) 1 FT. CONTOUR INTERVAL	46
GROUNDWATER FLOW PATHWAY USED TO CALCULATE HYDRAULIC GRADIENT	
SEGMENT USED FOR GRADIENT CALCULATION	i_1
GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION	MW-10 41.51
SURFACE WATER MONITORING LOCATIONS AND IDENTIFICATIONS	SWPT-1
LEACHATE MONITORING LOCATION AND IDENTIFICATION	LEACHATE MANHOLE
NOT MONITORED	NM
EXISTING 10 FT CONTOUR	40
EXISTING 2 FT CONTOUR	
GRAVEL ROAD	
PAVED ROAD	
EDGE OF LINER	

NOTES

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE LOWER AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON OCTOBER 16, 2012.
3. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MUST BE ASSUMED TO BE APPROXIMATE.
4. GROUNDWATER ELEVATIONS ARE MEASURED IN FEET AND REFERENCED TO MEAN SEA LEVEL.



DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED ALF/DSG
DRAWN HRW
CHECKED DSG
APPROVED TLH
DATE 01/15/13

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JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC. C-0782

CRSWMA: TUSCARORA LANDFILL
TUSCARORA, NORTH CAROLINA

SHALLOW AQUIFER POTENTIOMETRIC SURFACE CONTOUR MAP
OCTOBER 16, 2012

PROJECT NO. 618.1201.12.01

SCALE AS NOTED

DRAWING NO. 1

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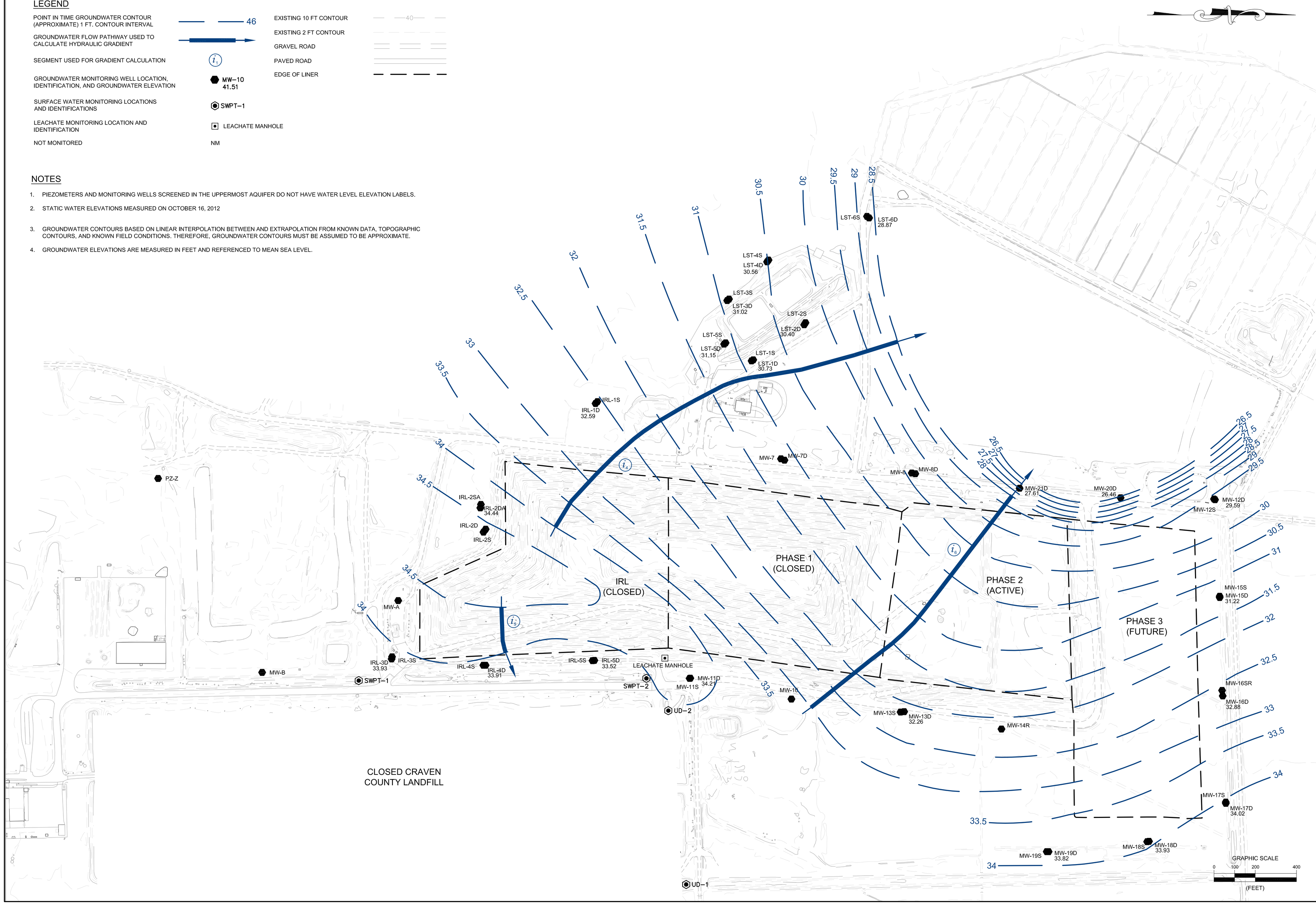
LEGEND

POINT IN TIME GROUNDWATER CONTOUR (APPROXIMATE) 1 FT. CONTOUR INTERVAL	46
GROUNDWATER FLOW PATHWAY USED TO CALCULATE HYDRAULIC GRADIENT	
SEGMENT USED FOR GRADIENT CALCULATION	i_1
GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION	MW-10 41.51
SURFACE WATER MONITORING LOCATIONS AND IDENTIFICATIONS	SWPT-1
LEACHATE MONITORING LOCATION AND IDENTIFICATION	LEACHATE MANHOLE
NOT MONITORED	NM
EXISTING 10 FT CONTOUR	40
EXISTING 2 FT CONTOUR	
GRAVEL ROAD	
PAVED ROAD	
EDGE OF LINER	

NOTES

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE UPPERMOST AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER ELEVATIONS MEASURED ON OCTOBER 16, 2012
3. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MUST BE ASSUMED TO BE APPROXIMATE.
4. GROUNDWATER ELEVATIONS ARE MEASURED IN FEET AND REFERENCED TO MEAN SEA LEVEL.



DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED	DSG
DRAWN	HRW
CHECKED	DSG
APPROVED	TLH
DATE	01/15/13

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JOYCE ENGINEERING
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

CRSWMA: TUSCARORA LANDFILL
TUSCARORA, NORTH CAROLINA

DEEP AQUIFER POTENTIOMETRIC SURFACE CONTOUR MAP
OCTOBER 16, 2012

PROJECT NO.
618.1201.12.01

SCALE
AS NOTED

DRAWING NO.
2

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Appendices

Appendix 1	Laboratory Analytical Reports and Field Data
Appendix 2	Statistical Analysis Worksheets and Results Summary

Appendix 1

Laboratory Analytical Reports and Field Data

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL	Regional LF 1S	Regional LF 1D	Regional Land. 2S-A	Regional Land. 2-D-A	Regional LF 3S	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.5	6.2			5.9	10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	--- U	0.15 J			0.16 J	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.45 J	1.6 J			1.8 J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	139	42.5 J			48.1 J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.54 J	0.08 J			0.11 J	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.20 J	0.25 J			0.24 J	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.93 J	0.46 J			0.66 J	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.93 J	1.4 J			0.73 J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	1.6 J	1.6 J			2.0 J	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	1.9 J	1.4 J			1.6 J	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.2 J	1.6 J			3.8 J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.19 J	0.33 J			3.0 J	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U			--- U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	--- U			--- U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.2 J	2.3 J			2.7 J	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	5.9 J	7.2 J			12	10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	18	55			75	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	139	193			886	10/16/12	RJH	2510B-97
Temperature, °C			21	19			21	10/16/12	RJH	2550B-00
Static Water Level, feet			6.01	17.60	8.74	17.04	9.33	10/16/12	RJH	
Well Depth, feet			17.72	43.96	17.78	30.99	16.34	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL	Regional LF 3D	Regional LF 4S	Regional LF 4D	Regional LF 5S	Regional LF 5D	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.8	4.9	6.9	6.2		10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.39 J	0.23 J	0.19 J	0.12 J		10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.29 J	1.5 J	0.41 J	2.5 J		10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	53.5 J	78.0 J	34.5 J	95.9 J		10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.13 J	0.25 J	0.15 J	--- U		10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.21 J	0.39 J	0.11 J	0.15 J		10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.33 J	2.6 J	0.40 J	1.0 J		10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.59 J	0.82 J	0.69 J	1.1 J		10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	2.1 J	0.80 J	1.5 J	0.40 J		10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.83 J	0.29 J	0.43 J	0.45 J		10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.6 J	3.7 J	2.0 J	5.1 J		10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.22 J	2.1 J	--- U	2.9 J		10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U	--- U		10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	0.08 J	0.07 J	--- U		10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.0 J	0.29 J	1.6 J	1.1 J		10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	4.0 J	7.6 J	3.1 J	107		10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	110	18	50	140		10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	628	532	574	1502		10/16/12	RJH	2510B-97
Temperature, °C			20	22	21	22		10/16/12	RJH	2550B-00
Static Water Level, feet			15.00	8.62	14.44	9.08	15.14	10/16/12	RJH	
Well Depth, feet			38.50	14.98	34.19	14.61	35.51	10/16/12	RJH	
Zinc, Total Dissolved, ug/l						6.8		10/20/12	LFJ	EPA200.8

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-A	MW-B	Piezometer #1	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.2				10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.07 J				10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	2.7 J				10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	35.6 J				10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.10 J				10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.10 J				10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.30 J				10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.61 J				10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	0.74 J				10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.60 J				10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	1.0 J				10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.66 J				10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U				10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U				10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	1.0 J				10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	5.0 J				10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	45				10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	102				10/16/12	RJH	2510B-97
Temperature, °C			22				10/16/12	RJH	2550B-00
Static Water Level, feet			6.10	8.80	10.22		10/16/12	RJH	
Well Depth, feet			20.46				10/16/12	RJH	

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Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

Page: 1

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VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Regional LF 1S	Regional LF 1D	Regional LF 3S	Regional LF 3D	Regional LF 4S
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Regional LF 4D	Regional LF 5S	MW-A	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
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C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
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REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	95.0	99.7	98.4
Laboratory Control std.	70-130	90.7	96.7	93.8
Method Blank	70-130	93.4	98.7	98.6
Regional Landfill 1S	70-130	95.1	100	97.3
Regional Landfill 1D	70-130	94.6	104	97.4
Regional Landfill 3S	70-130	93.4	101	97.2
Regional Landfill 3D	70-130	94.9	103	96.0
Regional Landfill 4S	70-130	93.8	102	95.6
Regional Landfill 4D	70-130	94.2	103	95.2
Regional Landfill 5S	70-130	95.0	101	95.3
Monitoring Well A	70-130	94.4	101	95.7
Trip Blank	70-130	94.8	106	95.8
Regional Landfill 1S M.S.	70-130	97.0	103	98.3
Regional Landfill 1S M.S.D.	70-130	97.6	103	96.3

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Regional Landfill 1S (6035A)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	17.59	88.0	17.58	87.9	0.1
Benzene	20.0	--- U	19.69	98.5	20.39	102	3.5
Trichloroethene	20.0	--- U	18.98	94.9	19.92	99.6	4.8
Toluene	20.0	--- U	18.96	94.8	19.79	99.0	4.3
Chlorobenzene	20.0	--- U	18.50	92.5	19.21	96.1	3.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	17.16	85.8
Benzene	20.00	19.52	97.6
Trichloroethene	20.00	19.45	97.3
Toluene	20.00	18.96	94.8
Chlorobenzene	20.00	18.56	92.8

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: **6035 A** **Week: 43**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION		COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	Metals (Dis.)	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
								<2					<2	<2	<2	<2	<2
							P	P	P	P	P		P	G	G	G	G
							A	A	A	A	A		A	E	E	E	E
Regional LF 1S	10	16 12	1225		21	7	G	G	G	G	G	G		G	G	G	G
Regional LF 1D	10	16 12	1220		19	5	G	G	G	G	G	G		G	G		
Regional Land. 2S-A	10	16 12				1						G					
Regional Land. 2-D-A	10	16 12				1						G					
Regional LF 3S	10	16 12	0900		21	5	G	G	G	G	G	G		G	G		
Regional LF 3D	10	16 12	0855		20	5	G	G	G	G	G	G		G	G		
Regional LF 4S	10	16 12	0910		22	5	G	G	G	G	G	G		G	G		
Regional LF 4D	10	16 12	0915		21	5	G	G	G	G	G	G		G	G		
Regional LF 5S	10	16 12	0930		22	7	G	G	G	G	G	G	G	G	G	G	
Regional LF 5D	10	16 12				1						G					
MW-A	10	16 12	1230		22	5	G	G	G	G	G	G		G	G		

CHLORINE NEUTRALIZED AT COLLECTION

PARAMETERS

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Nilgoe/Fox

SAMPLES RECEIVED IN LAB AT 4.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
[signature]	10/6/12 3:00PM	[signature]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

No 250833

FORM #5

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: **6035 A** **Week: 43**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	Metals (Dis.)	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
CHLORINE NEUTRALIZED AT COLLECTION																
pH CHECK (LAB)																
CONTAINER TYPE, P/G						P	P	P	P	P		P	G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		A	E	E	E	E
MW-B	10/6/12				1						G					
Piezometer #1	10/6/12				1						G					
Trip Blank					2								G	G		

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

SAMPLES COLLECTED BY:
(Please Print)
H Lane Fox

SAMPLES RECEIVED IN LAB AT 3.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	10/6/12 3:00PM	[illegible]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

FORM #5

No. 250933

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 3D	Leach Stor 4S	Leach Stor 4D	Leach Stor 5S	Leach Stor 5D	Analysis Date	Analyst	Method Code
PH (field measurement), Units				4.8		6.1	6.9	10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0		0.09 J		0.88 J	0.78 J	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0		2.0 J		1.6 J	2.6 J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0		58.4 J		37.8 J	96.3 J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0		0.40 J		--- U	0.47 J	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0		0.39 J		0.17 J	0.50 J	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0		1.9 J		0.23 J	0.76 J	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0		1.9 J		1.5 J	1.4 J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0		19		3.1 J	2.7 J	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0		6.4 J		3.0 J	1.7 J	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0		5.8 J		1.7 J	3.5 J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0		0.63 J		0.57 J	0.80 J	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0		--- U		--- U	--- U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5		0.08 J		--- U	--- U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0		9.6 J		5.6 J	2.9 J	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0		22		15	12	10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0		220		70	60	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0		51		249	589	10/16/12	RJH	2510B-97
Temperature, °C				21		22	19	10/16/12	RJH	2550B-00
Static Water Level, feet			20.85	5.72	21.00	6.32	21.12	10/16/12	RJH	
Well Depth, feet			34.85	17.62	36.12	15.41	38.66	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 1S	Leach Stor 1D	Leach Stor 2S	Leach Stor 2D	Leach Stor 3S	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.9	7.0	5.0		4.8	10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.17 J	0.64 J	0.11 J		0.08 J	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.67 J	1.0 J	0.86 J		0.52 J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	57.7 J	49.3 J	52.9 J		57.1 J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.42 J	0.13 J	0.40 J		0.25 J	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.28 J	0.13 J	0.44 J		0.36 J	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.45 J	0.63 J	0.65 J		2.4 J	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	1.6 J	0.73 J	1.4 J		1.1 J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	3.9 J	1.0 J	2.8 J		2.4 J	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	6.7 J	0.67 J	3.7 J		2.6 J	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	1.5 J	2.8 J	1.6 J		3.2 J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.57 J	--- U	0.92 J		0.44 J	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U		--- U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	0.07 J	--- U	0.24 J		--- U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	5.7 J	1.5 J	4.1 J		3.3 J	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	10	7.9 J	7.5 J		34	10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	85	55	90		55	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	74	510	104		75	10/16/12	RJH	2510B-97
Temperature, °C			22	19	21		21	10/16/12	RJH	2550B-00
Static Water Level, feet			5.27	20.19	5.47	20.54	6.46	10/16/12	RJH	
Well Depth, feet			15.04	34.86	14.45	33.29	17.65	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 6S	Leach Stor 6D	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.0			10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.04 J			10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.47 J			10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	44.8 J			10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.20 J			10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.14 J			10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.39 J			10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	1.1 J			10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	3.4 J			10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	3.1 J			10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.2 J			10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.35 J			10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U			10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U			10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	4.6 J			10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	25			10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	240			10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	49			10/16/12	RJH	2510B-97
Temperature, °C			21			10/16/12	RJH	2550B-00
Static Water Level, feet			6.33	22.30		10/16/12	RJH	
Well Depth, feet			16.44	34.37		10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Leach Stor 1S	Leach Stor 1D	Leach Stor 2S	Leach Stor 3S	Leach Stor 4S
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Leach Stor 5S	Leach Stor 5D	Leach Stor 6S	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 **Week:** 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION		COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
CHLORINE NEUTRALIZED AT COLLECTION																
pH CHECK (LAB)								12					12	12	12	12
CONTAINER TYPE, P/G							P	P	P	P	P		G	G	G	G
CHEMICAL PRESERVATION							A	A	A	A	A		E	E	E	E
Leach Stor 1S	10	16/12	1120		22	7	G	G	G	G	G	G	G	G	G	G
Leach Stor 1D	10	16/12	1125		19	5	G	G	G	G	G	G	G	G		
Leach Stor 2S	10	16/12	1130		21	5	G	G	G	G	G	G	G	G		
Leach Stor 2D	10	16/12				1						G				
Leach Stor 3S	10	16/12	1200		21	5	G	G	G	G	G	G	G	G		
Leach Stor 3D	10	16/12				1						G				
Leach Stor 4S	10	16/12	1155		22	5	G	G	G	G	G	G	G	G		
Leach Stor 4D	10	16/12				1						G				
Leach Stor 5S	10	16/12	1145		22	5	G	G	G	G	G	G	G	G		
Leach Stor 5D	10	16/12	1140		19	5	G	G	G	G	G	G	G	G		
Leach Stor 6S	10	16/12	1125		21	6	G	G	G	G	G	G	G	G	G	

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) H Page Fox

SAMPLES RECEIVED IN LAB AT 3.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
H Page Fox	10/16/12 3:00PM	[illegible signature]	10/16/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

No 250935

FORM #5

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: **6035** **Week: 43**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
CHLORINE NEUTRALIZED AT COLLECTION															
pH CHECK (LAB)															
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E	E
Leach Stor 6D	10/16/12				1						G				
Trip Blank					3										

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

SAMPLES COLLECTED BY:
(Please Print)
Bob Hoe Fox

SAMPLES RECEIVED IN LAB AT 2.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hoe	10/16/12 3:00PM	[signature]	10/16/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

No. 250924

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	94.3	97.1	99.3
Laboratory Control std.	70-130	94.4	101	99.1
Method Blank	70-130	93.1	99.2	97.3
Leachate Storage 1S	70-130	91.8	102	98.1
Leachate Storage 1D	70-130	91.7	106	95.3
Leachate Storage 2S	70-130	92.2	99.0	96.7
Leachate Storage 3S	70-130	92.6	96.8	96.6
Leachate Storage 4S	70-130	93.5	97.0	96.2
Leachate Storage 5S	70-130	92.5	95.5	96.5
Leachate Storage 5D	70-130	93.0	100	96.0
Leachate Storage 6S	70-130	92.4	96.2	96.6
Trip Blank	70-130	92.2	95.6	96.8
Leachate Storage 1S M.S.	70-130	94.9	104	99.8
Leachate Storage 1S M.S.D.	70-130	95.1	101	97.5

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Leachate Storage 1S (6035)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	16.36	81.8	16.93	84.7	3.4
Benzene	20.0	--- U	19.47	97.4	19.84	99.2	1.9
Trichloroethene	20.0	--- U	19.10	95.5	19.29	96.5	1.0
Toluene	20.0	--- U	19.25	96.3	19.53	97.7	1.4
Chlorobenzene	20.0	--- U	19.01	95.1	19.34	96.7	1.7

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	18.50	92.5
Benzene	20.00	20.78	104
Trichloroethene	20.00	20.45	102
Toluene	20.00	21.08	105
Chlorobenzene	20.00	20.21	101

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL	Regional LF 1S	Regional LF 1D	Regional Land. 2S-A	Regional Land. 2-D-A	Regional LF 3S	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.5	6.2			5.9	10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	--- U	0.15 J			0.16 J	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.45 J	1.6 J			1.8 J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	139	42.5 J			48.1 J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.54 J	0.08 J			0.11 J	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.20 J	0.25 J			0.24 J	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.93 J	0.46 J			0.66 J	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.93 J	1.4 J			0.73 J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	1.6 J	1.6 J			2.0 J	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	1.9 J	1.4 J			1.6 J	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.2 J	1.6 J			3.8 J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.19 J	0.33 J			3.0 J	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U			--- U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	--- U			--- U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.2 J	2.3 J			2.7 J	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	5.9 J	7.2 J			12	10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	18	55			75	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	139	193			886	10/16/12	RJH	2510B-97
Temperature, °C			21	19			21	10/16/12	RJH	2550B-00
Static Water Level, feet			6.01	17.60	8.74	17.04	9.33	10/16/12	RJH	
Well Depth, feet			17.72	43.96	17.78	30.99	16.34	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL LF 3D	Regional LF 4S	Regional LF 4D	Regional LF 5S	Regional LF 5D	Analysis Date	Analyst	Method Code
PH (field measurement), Units		6.8	4.9	6.9	6.2		10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.39 J	0.23 J	0.19 J	0.12 J	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.29 J	1.5 J	0.41 J	2.5 J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	53.5 J	78.0 J	34.5 J	95.9 J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.13 J	0.25 J	0.15 J	--- U	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.21 J	0.39 J	0.11 J	0.15 J	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.33 J	2.6 J	0.40 J	1.0 J	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.59 J	0.82 J	0.69 J	1.1 J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	2.1 J	0.80 J	1.5 J	0.40 J	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.83 J	0.29 J	0.43 J	0.45 J	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	2.6 J	3.7 J	2.0 J	5.1 J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.22 J	2.1 J	--- U	2.9 J	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U	--- U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	0.08 J	0.07 J	--- U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	2.0 J	0.29 J	1.6 J	1.1 J	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	4.0 J	7.6 J	3.1 J	107	10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	110	18	50	140	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	628	532	574	1502	10/16/12	RJH	2510B-97
Temperature, °C			20	22	21	22	10/16/12	RJH	2550B-00
Static Water Level, feet			15.00	8.62	14.44	9.08	15.14	10/16/12	RJH
Well Depth, feet			38.50	14.98	34.19	14.61	35.51	10/16/12	RJH
Zinc, Total Dissolved, ug/l						6.8		10/20/12	LFJ	EPA200.8

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 A

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-A	MW-B	Piezometer #1	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.2				10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.07 J				10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	2.7 J				10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	35.6 J				10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.10 J				10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.10 J				10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.30 J				10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.61 J				10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	0.74 J				10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.60 J				10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	1.0 J				10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.66 J				10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U				10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U				10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	1.0 J				10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	5.0 J				10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	45				10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	102				10/16/12	RJH	2510B-97
Temperature, °C			22				10/16/12	RJH	2550B-00
Static Water Level, feet			6.10	8.80	10.22		10/16/12	RJH	
Well Depth, feet			20.46				10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

Page: 1

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Regional LF 1S	Regional LF 1D	Regional LF 3S	Regional LF 3D	Regional LF 4S
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Regional LF 4D	Regional LF 5S	MW-A	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 A **Week:** 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	Metals (Dis.)	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
CHLORINE NEUTRALIZED AT COLLECTION																
pH CHECK (LAB)							L2					L2	L2	L2	L2	L2
CONTAINER TYPE, P/G						P	P	P	P	P		P	G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		A	E	E	E	E
Regional LF 1S	10/6/12	1225		21	7	G	G	G	G	G	G		G	G	G	G
Regional LF 1D	10/6/12	1220		19	5	G	G	G	G	G	G		G	G		
Regional Land. 2S-A	10/6/12				1						G					
Regional Land. 2-D-A	10/6/12				1						G					
Regional LF 3S	10/6/12	0900		21	5	G	G	G	G	G	G		G	G		
Regional LF 3D	10/6/12	0855		20	5	G	G	G	G	G	G		G	G		
Regional LF 4S	10/6/12	0910		22	5	G	G	G	G	G	G		G	G		
Regional LF 4D	10/6/12	0915		21	5	G	G	G	G	G	G		G	G		
Regional LF 5S	10/6/12	0930		22	7	G	G	G	G	G	G	G	G	G	G	
Regional LF 5D	10/6/12				1						G					
MW-A	10/6/12	1230		22	5	G	G	G	G	G	G		G	G		

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
☐ WASTEWATER (NPDES)
☐ DRINKING WATER
☐ DWQ/GW
☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) Hilgoe / Fox

SAMPLES RECEIVED IN LAB AT 2.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hilgoe	10/6/12 3:00PM	[illegible]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

No 250833

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: **6035 A** **Week: 43**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	Metals (Dis.)	EPA 8260B	8260 Dup. 1	8260 Dup. 2	8260 Dup. 3
CONTAINER TYPE, P/G						P	P	P	P	P		P	G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		A	E	E	E	E
MW-B 10/6/12					1						G					
Piezometer #1 10/6/12					1						G					
Trip Blank					2											

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

PARAMETERS

A - NONE D - NAOH
B - HNO_3 E - HCL
C - H_2SO_4 F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY:
(Please Print)
H Lane Fox

SAMPLES RECEIVED IN LAB AT 3.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	10/6/12 3:00PM	[illegible]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

FORM #5

No. 250933

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	95.0	99.7	98.4
Laboratory Control std.	70-130	90.7	96.7	93.8
Method Blank	70-130	93.4	98.7	98.6
Regional Landfill 1S	70-130	95.1	100	97.3
Regional Landfill 1D	70-130	94.6	104	97.4
Regional Landfill 3S	70-130	93.4	101	97.2
Regional Landfill 3D	70-130	94.9	103	96.0
Regional Landfill 4S	70-130	93.8	102	95.6
Regional Landfill 4D	70-130	94.2	103	95.2
Regional Landfill 5S	70-130	95.0	101	95.3
Monitoring Well A	70-130	94.4	101	95.7
Trip Blank	70-130	94.8	106	95.8
Regional Landfill 1S M.S.	70-130	97.0	103	98.3
Regional Landfill 1S M.S.D.	70-130	97.6	103	96.3

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Regional Landfill 1S (6035A)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	17.59	88.0	17.58	87.9	0.1
Benzene	20.0	--- U	19.69	98.5	20.39	102	3.5
Trichloroethene	20.0	--- U	18.98	94.9	19.92	99.6	4.8
Toluene	20.0	--- U	18.96	94.8	19.79	99.0	4.3
Chlorobenzene	20.0	--- U	18.50	92.5	19.21	96.1	3.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	17.16	85.8
Benzene	20.00	19.52	97.6
Trichloroethene	20.00	19.45	97.3
Toluene	20.00	18.96	94.8
Chlorobenzene	20.00	18.56	92.8

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 B

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	SW-1	SW-2	Under Drain	Under Drain #2	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.2	7.2	7.5	6.7		10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	0.07 J	0.09 J	0.05 J	--- U		10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	1.2 J	1.3 J	1.1 J	0.37 J		10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	29.9 J	38.4 J	39.5 J	60.5 J		10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	--- U	--- U	--- U	--- U		10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	0.04 J	0.05 J	0.05 J	0.05 J		10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	0.52 J	0.96 J	0.38 J	0.37 J		10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	2.4 J	1.4 J	0.54 J	0.26 J		10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	1.1 J	0.93 J	0.74 J	--- U		10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.79 J	0.35 J	0.54 J	0.09 J		10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	3.1 J	4.7 J	2.3 J	3.6 J		10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	0.51 J	2.0 J	0.85 J	0.75 J		10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	--- U	--- U	--- U	--- U		10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	--- U	--- U	--- U	--- U		10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	1.5 J	0.88 J	1.3 J	0.35 J		10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	36	4.3 J	14	1.2 J		10/20/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	32	22	16	45		10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	625	967	562	1038		10/16/12	RJH	2510B-97
Temperature, °C			18	17	18	18		10/16/12	RJH	2550B-00

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

Page: 1

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	SW-1	SW-2	Under Drain	Under Drain #2	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.25	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 B **Week: 43**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	EPA 8260B	8260 Dup. 1
						12					12	12
						P	P	P	P	P	G	G
						A	A	A	A	A	E	E
SW-1 10	16 12	0905		18	5	G	G	G	G	G	G	G
SW-2 10	16 12	1005		17	5	G	G	G	G	G	G	G
Under Drain 10	16 12	1020		18	5	G	G	G	G	G	G	G
Under Drain #2 10	16 12	1010		18	5	G	G	G	G	G	G	G
Trip Blank					2							

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
(Y) N

SAMPLES COLLECTED BY:
(Please Print)
N Gore / Fed

SAMPLES RECEIVED IN LAB AT 2.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob N Gore 10	16 12 3:00PM	[illegible]	10/16/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

No 250831

FORM #5

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	95.0	99.7	98.4
Laboratory Control std.	70-130	90.7	96.7	93.8
Method Blank	70-130	93.4	98.7	98.6
Surface Water #1	70-130	92.6	97.1	95.9
Surface Water #2	70-130	93.6	103	96.3
Under Drain	70-130	95.3	105	96.5
Under Drain #2	70-130	96.3	102	95.1
Trip Blank	70-130	96.6	99.8	93.3
Regional Landfill 1S M.S.	70-130	97.0	103	98.3
Regional Landfill 1S M.S.D.	70-130	97.6	103	96.3

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/25/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Regional Landfill 1S (6035A)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	17.59	88.0	17.58	87.9	0.1
Benzene	20.0	--- U	19.69	98.5	20.39	102	3.5
Trichloroethene	20.0	--- U	18.98	94.9	19.92	99.6	4.8
Toluene	20.0	--- U	18.96	94.8	19.79	99.0	4.3
Chlorobenzene	20.0	--- U	18.50	92.5	19.21	96.1	3.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	17.16	85.8
Benzene	20.00	19.52	97.6
Trichloroethene	20.00	19.45	97.3
Toluene	20.00	18.96	94.8
Chlorobenzene	20.00	18.56	92.8

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 E

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	Leachate SWSL	Manhole	Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.3	10/16/12	RJH	4500HB-00
Antimony, ug/l	0.02	6.0	44	10/29/12	LFJ	EPA200.8
Arsenic, ug/l	0.25	10.0	147	11/02/12	MEL	3113B-04
Barium, ug/l	0.07	100.0	826	10/29/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	0.12 J	10/29/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	5	10/29/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	17	10/29/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	25	10/29/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	51	10/29/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	0.34 J	10/29/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	81	10/29/12	LFJ	EPA200.8
Selenium, ug/l	0.54	10.0	--- U	11/07/12	MEL	3113B-04
Silver, ug/l	0.10	10.0	1.2 J	10/29/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	0.29 J	10/29/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	15.3 J	10/29/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	28	11/01/12	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	60	10/17/12	HLB	2130B-01
Conductivity (at 25c), uMhos/cm	1.0	1.0	9930	10/16/12	RJH	2510B-97
Temperature, °C			28	10/16/12	RJH	2550B-00

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/26/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Leachate Manhole
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	708.00
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	1.10 J
15. 2-Butanone	2.21	100.0	276.00
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	3.80
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	52.30 J
27. Toluene	0.23	1.0	8.20
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	4.00 J
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	1.20 J
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	25.00
37. Xylenes	0.68	5.0	36.50
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	2.00
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	13.20
44. 1,2-Dichlorobenzene	0.32	5.0	0.40 J
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 E Week: 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION													
pH CHECK (LAB)							L2				L2	L2	L2
CONTAINER TYPE, P/G						P	P	P	P	P	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A	E	E	E
Leachate Manhole 10	10/6/12	0955		28	6	G	G	G	G	G	G	G	G

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) [illegible]

SAMPLES RECEIVED IN LAB AT 2.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hagel 10	10/6/12 3:00PM	[illegible]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

FORM #5

No. 250828

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/26/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/26/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	97.8	102	96.9
Laboratory Control std.	70-130	94.3	105	97.2
Method Blank	70-130	94.6	105	95.7
Leachate Manhole	70-130	102	106	101
Monitoring Well #7 M.S.	70-130	97.6	100	99.3
Monitoring Well #7 M.S.D.	70-130	96.8	108	97.3

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/26/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Monitoring Well #7 (6035D)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	17.51	87.6	16.43	82.2	6.4
Benzene	20.0	--- U	19.72	98.6	19.52	97.6	1.0
Trichloroethene	20.0	--- U	19.52	97.6	19.23	96.7	1.5
Toluene	20.0	--- U	19.24	96.2	18.73	93.7	2.7
Chlorobenzene	20.0	--- U	18.60	93.0	18.71	93.6	0.6

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	16.02	80.1
Benzene	20.00	18.78	93.9
Trichloroethene	20.00	19.12	95.6
Toluene	20.00	17.90	89.5
Chlorobenzene	20.00	17.87	89.4

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 C

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 11/12/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	Equipment Blank		Analysis Date	Analyst	Method Code
Antimony, ug/l	0.02	6.0	---	U	10/20/12	LFJ	EPA200.8
Arsenic, ug/l	0.13	10.0	0.40	J	10/20/12	LFJ	EPA200.8
Barium, ug/l	0.07	100.0	0.28	J	10/22/12	LFJ	EPA200.8
Beryllium, ug/l	0.07	1.0	---	U	10/20/12	LFJ	EPA200.8
Cadmium, ug/l	0.03	1.0	---	U	10/20/12	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	---	U	10/20/12	LFJ	EPA200.8
Copper, ug/l	0.06	10.0	0.25	J	10/20/12	LFJ	EPA200.8
Total Chromium, ug/l	0.18	10.0	---	U	10/20/12	LFJ	EPA200.8
Lead, ug/l	0.08	10.0	---	U	10/20/12	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	0.23	J	10/20/12	LFJ	EPA200.8
Selenium, ug/l	0.17	10.0	---	U	10/20/12	LFJ	EPA200.8
Silver, ug/l	0.10	10.0	---	U	10/20/12	LFJ	EPA200.8
Thallium, ug/l	0.07	5.5	---	U	10/22/12	LFJ	EPA200.8
Vanadium, ug/l	0.10	25.0	---	U	10/20/12	LFJ	EPA200.8
Zinc, ug/l	0.48	10.0	---	U	10/20/12	LFJ	EPA200.8

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MAO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B R1(96)

PARAMETERS, ug/l	MDL	SWSL	Equipment Blank
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	--- U
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 C Week: 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Metals	EPA 8260B	8260 Dup. 1
						2	2	2
						P	G	G
						A	E	E
Equipment Blank 12	12/12	1210			3	G	G	G

CHLORINE NEUTRALIZED AT COLLECTION	
pH CHECK (LAB)	
CONTAINER TYPE, P/G	
CHEMICAL PRESERVATION	
PARAMETERS	A - NONE; B - HNO_3; C - H_2SO_4; D - NAOH; E - HCL; F - ZINC ACETATE; G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY: (Y) N

SAMPLES COLLECTED BY: (Please Print) N Dagoe / FOX

SAMPLES RECEIVED IN LAB AT 2.8 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob N Dagoe 10	16 12 3:00PM	[signature]	10/16/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

FORM #5

No. 250820

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.77	1.00	--- U
2. Vinyl Chloride	0.63	1.00	--- U
3. Bromomethane	0.67	10.00	--- U
4. Chloroethane	0.48	10.00	--- U
5. Trichlorofluoromethane	0.24	1.00	--- U
6. 1,1-Dichloroethene	0.17	5.00	--- U
7. Acetone	9.06	100.00	--- U
8. Iodomethane	0.26	10.00	--- U
9. Carbon Disulfide	0.23	100.00	--- U
10. Methylene Chloride	0.64	1.00	--- U
11. trans-1,2-Dichloroethene	0.23	5.00	--- U
12. 1,1-Dichloroethane	0.20	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.25	5.00	--- U
15. 2-Butanone	2.21	100.00	--- U
16. Bromochloromethane	0.27	3.00	--- U
17. Chloroform	0.25	5.00	--- U
18. 1,1,1-Trichloroethane	0.19	1.00	--- U
19. Carbon Tetrachloride	0.22	1.00	--- U
20. Benzene	0.24	1.00	--- U
21. 1,2-Dichloroethane	0.27	1.00	--- U
22. Trichloroethene	0.23	1.00	--- U
23. 1,2-Dichloropropane	0.21	1.00	--- U
24. Bromodichloromethane	0.21	1.00	--- U
25. cis-1,3-Dichloropropene	0.24	1.00	--- U
26. 4-methyl-2-Pentanone	1.19	100.00	--- U
27. Toluene	0.23	1.00	--- U
28. trans-1,3-Dichloropropene	0.28	1.00	--- U
29. 1,1,2-Trichloroethane	0.25	1.00	--- U
30. Tetrachloroethene	0.17	1.00	--- U
31. 2-Hexanone	1.57	50.00	--- U
32. Dibromochloromethane	0.24	3.00	--- U
33. 1,2-Dibromoethane	0.26	1.00	--- U
34. Chlorobenzene	0.30	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.00	--- U
36. Ethylbenzene	0.21	1.00	--- U
37. Xylenes	0.68	5.00	--- U
38. Dibromomethane	0.28	10.00	--- U
39. Styrene	0.19	1.00	--- U
40. Bromoform	0.20	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.00	--- U
42. 1,2,3-Trichloropropane	0.43	1.00	--- U
43. 1,4-Dichlorobenzene	0.39	1.00	--- U
44. 1,2-Dichlorobenzene	0.32	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.00	--- U
46. Acrylonitrile	2.72	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.00	--- U

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	94.3	97.1	99.3
Laboratory Control std.	70-130	94.4	101	99.1
Method Blank	70-130	93.1	99.2	97.3
Equipment Blank	70-130	95.1	102	97.0
Regional Landfill 1S M.S.	70-130	94.9	104	99.8
Regional Landfill 1S M.S.D.	70-130	95.1	101	97.5

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
Mr. BOBBY DARDEN
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MO
DATE COLLECTED: 10/16/12
DATE ANALYZED: 10/19/12
DATE REPORTED: 11/12/12

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Sample Spiked: Leachate Storage 1S (6035)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	16.36	81.8	16.93	84.7	3.4
Benzene	20.0	--- U	19.47	97.4	19.84	99.2	1.9
Trichloroethene	20.0	--- U	19.10	95.5	19.29	96.5	1.0
Toluene	20.0	--- U	19.25	96.3	19.53	97.7	1.4
Chlorobenzene	20.0	--- U	19.01	95.1	19.34	96.7	1.7

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.00	18.50	92.5
Benzene	20.00	20.78	104
Trichloroethene	20.00	20.45	102
Toluene	20.00	21.08	105
Chlorobenzene	20.00	20.21	101

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 F

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 10/18/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-7D	MW-8D	MW-15S	MW-15D	MW-16S	Analysis Date	Analyst	Method Code
Static Water Level, feet			19.35	19.27	6.18	16.00	7.67	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6035 F

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 10/18/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-16D	MW-17S	MW-17D	MW-18S	MW-18D	Analysis Date	Analyst	Method Code
Static Water Level, feet			14.29	6.32	11.91	6.43	12.21	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
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ID#: 6035 F

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 10/16/12
DATE REPORTED : 10/18/12

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-19S	MW-19D	MW-20D	MW-21D	Analysis Date	Analyst	Method Code
Static Water Level, feet			8.58	12.93	19.87	19.60	10/16/12	RJH	

J = Between MDL and SWSL, U = Below ALL Quanititation Limits.

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 F **Week:** 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- [ ] CHLORINE
- [ ] UV
- [ ] NONE
- [ ] _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field Parameter
MW-7D	10/6/12				1	G
MW-8D	10/6/12				1	G
MW-15S	10/6/12				1	G
MW-15D	10/6/12				1	G
MW-16S	10/6/12				1	G
MW-16D	10/6/12				1	G
MW-17S	10/6/12				1	G
MW-17D	10/6/12				1	G
MW-18S	10/6/12				1	G
MW-18D	10/6/12				1	G
MW-19S	10/6/12				1	G

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- [ ] WASTEWATER (NPDES)
- [ ] DRINKING WATER
- [ ] DWQ/GW
- [x] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

SAMPLES COLLECTED BY: (Please Print)
H Pope / Fox

SAMPLES RECEIVED IN LAB AT N/A °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Pope	10/6/12 8:00AM	[illegible]	10/6/12 8:00AM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

FORM #5

No. 250827

Environment 1, Inc.
P.O. Box 7085, 114 Oakmont Dr.
Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CHAIN OF CUSTODY RECORD

CLIENT: 6035 F **Week:** 43

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. BOBBY DARDEN
P.O. BOX 128
COVE CITY NC 28523

(252) 633-1564

DISINFECTION
- ☐ CHLORINE
- ☐ UV
- ☐ NONE
- ☐ _____

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l OR ug/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field Parameter
MW-19D	10/6/12				1	G
MW-20D	10/6/12				1	G
MW-21D	10/6/12				1	G

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

A - NONE
B - HNO_3
C - H_2SO_4
D - NAOH
E - HCL
F - ZINC ACETATE
G - NA THIOSULFATE

CLASSIFICATION:
- ☐ WASTEWATER (NPDES)
- ☐ DRINKING WATER
- ☐ DWQ/GW
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

SAMPLES COLLECTED BY:
(Please Print)
H Lane Fox

SAMPLES RECEIVED IN LAB AT N/A °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	10/6/12 3:00PM	[illegible]	10/6/12 3:00PM
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested

FORM #5

No. 250826

Appendix 2

Statistical Analysis Worksheets and Results Summary

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Task No: **01**
Date: **16-Oct-12**

Analyte: **Chromium**

Sample No.	Sample Date	Location	Concentration		Reporting Limit	Sorted Concentration	
1	Jul-93	IRL-1S	36.0		5	0.20	112
2	Aug-93	IRL-1S	14.0		5	0.30	87.0
3	Sep-93	IRL-1S	11.0		5	0.50	58.0
4	Sep-93	IRL-1S	19.0		5	0.50	50.0
5	Apr-94	IRL-1S	10.0		5	0.53	43.0
6	Oct-94	IRL-1S	ND		10	0.70	43.0
7	Apr-95	IRL-1S	ND		10	0.70	39.0
8	Oct-95	IRL-1S	13.0		10	0.70	38.0
9	Apr-96	IRL-1S	ND		10	0.90	36.0
10	Oct-96	IRL-1S	39.0		10	0.90	29.0
11	Apr-97	IRL-1S	23.0		10	1.1	29.0
12	Oct-97	IRL-1S	50.0		10	1.1	23.0
13	Apr-98	IRL-1S	18.0		10	1.2	22.0
14	Oct-98	IRL-1S	ND		10	1.5	21.0
15	Mar-99	IRL-1S	58.0		10	1.6	21.0
16	Oct-99	IRL-1S	21.0		10	1.6	19.0
17	Apr-00	IRL-1S	87.0		5	1.6	18.0
18	Oct-00	IRL-1S	21.0		10	1.6	18.0
19	Apr-01	IRL-1S	11.0		10	1.6	18.0
20	Oct-01	IRL-1S	ND		10	1.6	17.0
21	Apr-02	IRL-1S	ND		10	2.2	16.0
22	Oct-02	IRL-1S	15.0		10	2.3	15.0
23	Apr-03	IRL-1S	ND		10	3.0	15.0
24	Oct-03	IRL-1S	12.0		10	3.1	14.0
25	15-Apr-04	IRL-1S	13.0		10	3.4	14.0
26	14-Oct-04	IRL-1S	ND		10	3.9	14.0
27	05-Apr-05	IRL-1S	ND		10	3.9	14.0
28	27-Oct-05	IRL-1S	ND		10	5.9	13.0
29	21-Apr-06	IRL-1S	ND		10	6.1	13.0
30	12-Oct-06	IRL-1S	ND		10	6.1	12.0
31	26-Apr-07	IRL-1S	ND		10	6.4	11.0
32	10-Oct-07	IRL-1S	1.6	B	10	6.7	11.0
33	02-Apr-08	IRL-1S	1.6	J	10	7.8	11.0
34	28-Oct-08	IRL-1S	3.0	J	10	8.7	11.0
35	08-Apr-09	IRL-1S	6.1	J	10	8.7	11.0
36	27-Oct-09	IRL-1S	7.8	J	10	9.8	11.0
37	08-Apr-10	IRL-1S	5.9	J	10	8.0	10.0
38	13-Oct-10	IRL-1S	0.7	J	10	10.0	10.0
39	27-Apr-11	IRL-1S	0.8	B	10	10.0	9.8
40	20-Oct-11	IRL-1S	1.6	J	10	11.0	8.7
41	26-Apr-12	IRL-1S	3.9	J	10	11.0	8.7
42	16-Oct-12	IRL-1S	1.6	J	10	11.0	8.0
43	Jul-93	IRL-1D	18.0		5	11.0	7.8
44	Aug-93	IRL-1D	8.0		5	11.0	6.7
45	Sep-93	IRL-1D	11.0		5	11.0	6.4
46	Sep-93	IRL-1D	43.0		5	12.0	6.1
47	Apr-94	IRL-1D	ND		5	13.0	6.1
48	Oct-94	IRL-1D	ND		10	13.0	5.9
49	Apr-95	IRL-1D	ND		10	14.0	3.9
50	Oct-95	IRL-1D	ND		10	14.0	3.9
51	Apr-96	IRL-1D	ND		10	14.0	3.4
52	27-Oct-05	IRL-1D	29.0		10	14.0	3.1
53	21-Apr-06	IRL-1D	ND		10	15.0	3.0
54	12-Oct-06	IRL-1D	ND		10	15.0	2.3
55	26-Apr-07	IRL-1D	ND		10	16.0	2.2
56	10-Oct-07	IRL-1D	1.2	B	10	17.0	1.6
57	02-Apr-08	IRL-1D	ND		10	18.0	1.6
58	28-Oct-08	IRL-1D	1.6	J	10	18.0	1.6
59	08-Apr-09	IRL-1D	1.1	J	10	18.0	1.6
60	27-Oct-09	IRL-1D	2.2	J	10	19.0	1.6
61	08-Apr-10	IRL-1D	0.9	J	10	21.0	1.6
62	13-Oct-10	IRL-1D	3.4	J	10	21.0	1.5
63	27-Apr-11	IRL-1D	0.6	B	10	22.0	1.2
64	20-Oct-11	IRL-1D	2.3	J	10	23.0	1.1
65	26-Apr-12	IRL-1D	1.5	J	10	29.0	1.1
66	16-Oct-12	IRL-1D	1.6	J	10	29.0	0.90
67	Oct-02	LST-5S	ND		10	36.0	0.90
68	Apr-03	LST-5S	14.0		10	38.0	0.70
69	Oct-03	LST-5S	14.0		10	39.0	0.70
70	15-Apr-04	LST-5S	11.0		10	43.0	0.70
71	14-Oct-04	LST-5S	ND		10	43.0	0.53
72	05-Apr-05	LST-5S	ND		10	50.0	0.50
73	27-Oct-05	LST-5S	ND		10	58.0	0.50
74	21-Apr-06	LST-5S	ND		10	87.0	0.30
75	12-Oct-06	LST-5S	ND		10	112	0.20
76	26-Apr-07	LST-5S	ND		10		
77	10-Oct-07	LST-5S	3.2	B	10		
78	03-Apr-08	LST-5S	0.5	J	10		
79	28-Oct-08	LST-5S	3.9	J	10		
80	08-Apr-09	LST-5S	6.4	J	10		
81	27-Oct-09	LST-5S	8.7	J	10		
82	08-Apr-10	LST-5S	6.1	J	10		
83	13-Oct-10	LST-5S	8.7	J	10		
84	27-Apr-11	LST-5S	6.7	J	10		
85	20-Oct-11	LST-5S	10.0		10		
86	26-Apr-12	LST-5S	9.8	J	10		
87	16-Oct-12	LST-5S	3.1	J	10		
88	Jul-99	MW-7	112.0		10		
89	Aug-99	MW-7	29.0		10		
90	Oct-99	MW-7	14.0		1		
91	Nov-99	MW-7	22.0		10		
92	Apr-00	MW-7	11.0		10		
93	Oct-00	MW-7	16.0		10		
94	Apr-01	MW-7	11.0		10		
95	Oct-01	MW-7	38.0		10		
96	Apr-02	MW-7	43.0		10		
97	Oct-02	MW-7	15.0		10		
98	Apr-03	MW-7	ND		10		
99	Oct-03	MW-7	ND		10		
100	Apr-04	MW-7	18.0		10		
101	Oct-04	MW-7	ND		10		
102	Apr-02	MW-12S	ND		10		
103	Oct-02	MW-12S	ND		10		
104	Apr-03	MW-12S	ND		10		
105	Oct-03	MW-12S	ND		10		
106	15-Apr-04	MW-12S	ND		10		
107	14-Oct-04	MW-12S	ND		10		
108	05-Apr-05	MW-12S	ND		10		
109	27-Oct-05	MW-12S	ND		10		
110	21-Apr-06	MW-12S	ND		10		
111	12-Oct-06	MW-12S	ND		10		
112	26-Apr-07	MW-12S	ND		10		
113	10-Oct-07	MW-12S	ND		10		
114	03-Apr-08	MW-12S	ND		10		
115	28-Oct-08	MW-12S	ND		10		
116	08-Apr-09	MW-12S	0.5	J	10		
117	27-Oct-09	MW-12S	ND		10		
118	08-Apr-10	MW-12S	ND		10		
119	13-Oct-10	MW-12S	0.2	J	10		
120	27-Apr-11	MW-12S	0.4	B	10		
121	20-Oct-11	MW-12S	0.6	B	10		
122	26-Apr-12	MW-12S	0.4	B	10		
123	16-Oct-12	MW-12S	ND		10		
124	Apr-02	MW-12D	ND		10		
125	Oct-02	MW-12D	ND		10		
126	Apr-03	MW-12D	ND		10		
127	Oct-03	MW-12D	ND		10		
128	15-Apr-04	MW-12D	ND		10		
129	14-Oct-04	MW-12D	ND		10		
130	05-Apr-05	MW-12D	ND		10		
131	27-Oct-05	MW-12D	ND		10		
132	21-Apr-06	MW-12D	ND		10		
133	12-Oct-06	MW-12D	ND		10		
134	26-Apr-07	MW-12D	ND		10		
135	10-Oct-07	MW-12D	ND		10		
136	03-Apr-08	MW-12D	ND		10		
137	28-Oct-08	MW-12D	0.7	J	10		
138	08-Apr-09	MW-12D	0.9	J	10		
139	27-Oct-09	MW-12D	1.1	J	10		
140	08-Apr-10	MW-12D	0.3	J	10		
141	13-Oct-10	MW-12D	0.7	J	10		
142	27-Apr-11	MW-12D	0.8	B	10		
143	20-Oct-11	MW-12D	1.6	J	10		
144	26-Apr-12	MW-12D	1.2	J	10		
145	16-Oct-12	MW-12D	0.53	J	10		
146	15-Apr-04	MW-13S	17.0		10		
147	14-Oct-04	MW-13S	ND		10		
148	05-Apr-05	MW-13S	ND		10		
149	27-Oct-05	MW-13S	ND		10		
150	15-Apr-04	MW-13D	ND		10		
151	14-Oct-04	MW-13D	ND		10		
152	05-Apr-05	MW-13D	ND		10		
153	27-Oct-05	MW-13D	ND		10		
154	15-Apr-04	MW-14	ND		10		
155	14-Oct-04	MW-14	ND		10		
156	05-Apr-05	MW-14	ND		10		
157	27-Oct-05	MW-14	ND		10		

Number of Data:	148.0	
Number of Truncated Data:	73.0	
Percentage of Truncated Data:	49.3%	
Upper Tolerance Limit	**37.6**	**µg/L**

All concentrations in micrograms per liter (µg/L).
B = Blank qualified data not used in statistical calculations.
J = Estimated concentration below Reporting Limit.
ND = Not detected (truncated data).

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Task No: **01**
Date: **16-Oct-12**

Probability Plots to determine the distribution of **Chromium**

Complete the following table where

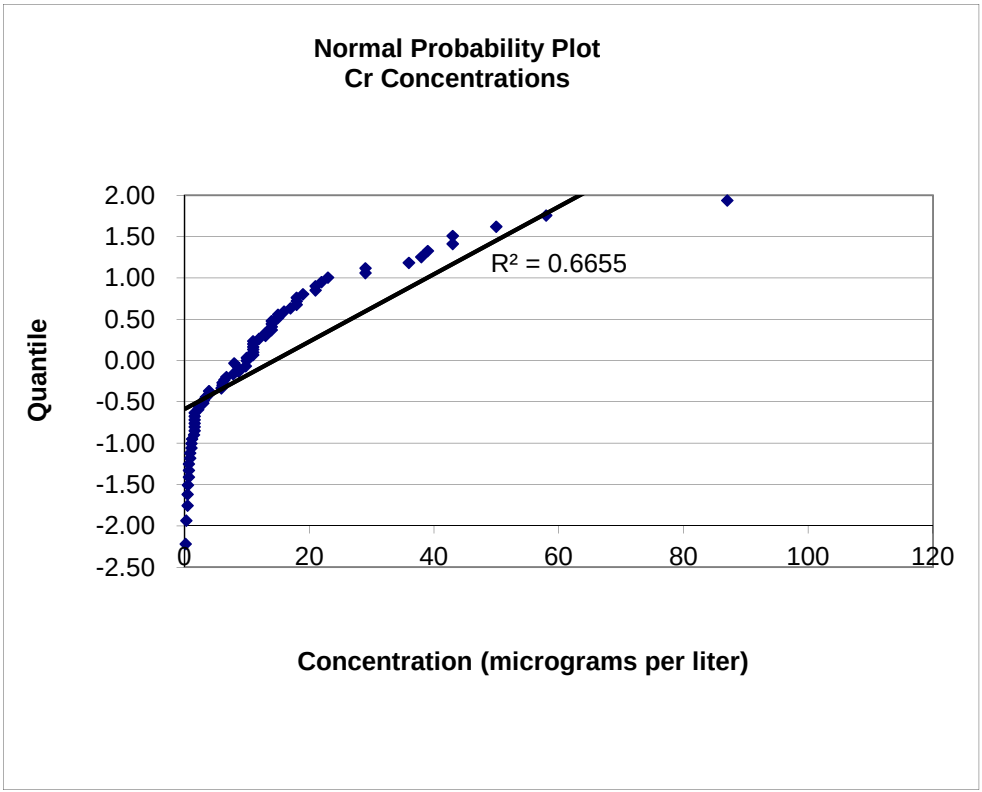
i = ordered value of sample, arranged from smallest to largest
X(i) = sample values arranged from smallest to largest
LN[X(i)] = Natural Log Value of sample concentrations arranged from smallest to largest
[i/(n+1)] = Cumulative probability
n = number of samples = 75

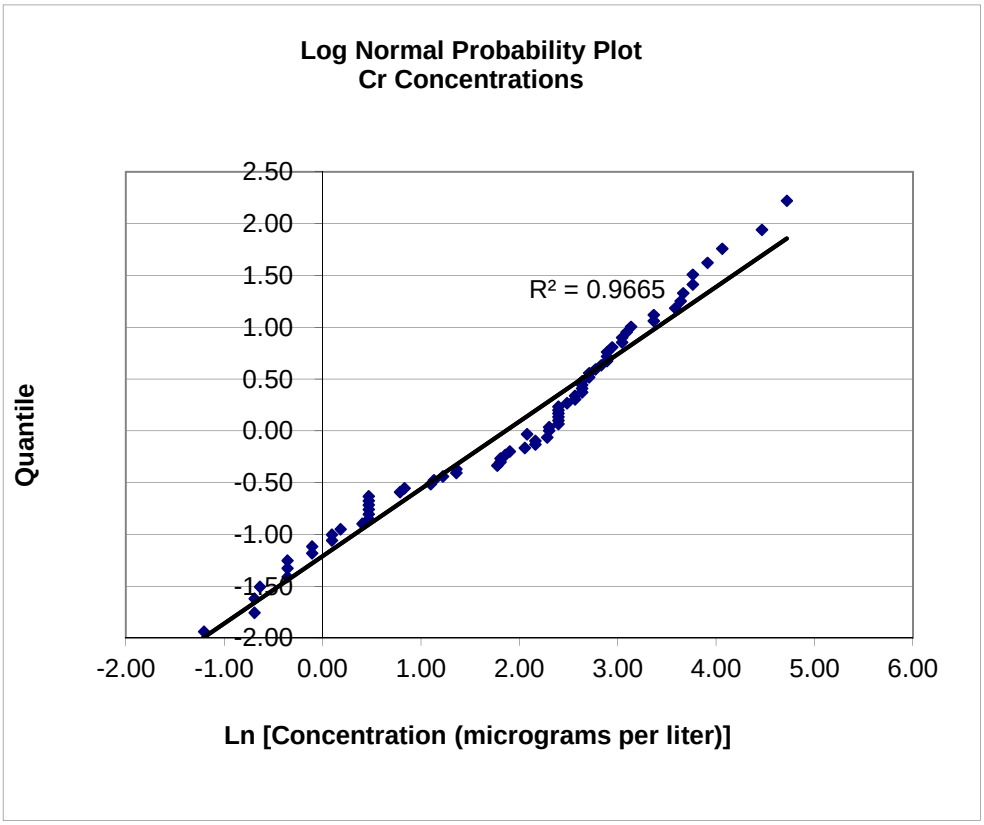
X(i)	LN[X(i)]	i	Rank	[Rank/(n+1)]	Quantiles
0.2	-1.61	1	1	0.013	-2.22
0.3	-1.20	2	2	0.026	-1.94
0.5	-0.69	3	3	0.039	-1.76
0.5	-0.69	4	4	0.053	-1.62
0.53	-0.63	5	5	0.066	-1.51
0.7	-0.36	6	6	0.079	-1.41
0.7	-0.36	7	7	0.092	-1.33
0.7	-0.36	8	8	0.105	-1.25
0.9	-0.11	9	9	0.118	-1.18
0.9	-0.11	10	10	0.132	-1.12
1.1	0.10	11	11	0.145	-1.06
1.1	0.10	12	12	0.158	-1.00
1.2	0.18	13	13	0.171	-0.95
1.5	0.41	14	14	0.184	-0.90
1.6	0.47	15	15	0.197	-0.85
1.6	0.47	16	16	0.211	-0.80
1.6	0.47	17	17	0.224	-0.76
1.6	0.47	18	18	0.237	-0.72
1.6	0.47	19	19	0.250	-0.67
1.6	0.47	20	20	0.263	-0.63
2.2	0.79	21	21	0.276	-0.59
2.3	0.83	22	22	0.289	-0.55
3	1.10	23	23	0.303	-0.52
3.1	1.13	24	24	0.316	-0.48
3.4	1.22	25	25	0.329	-0.44
3.9	1.36	26	26	0.342	-0.41
3.9	1.36	27	27	0.355	-0.37
5.9	1.77	28	28	0.368	-0.34
6.1	1.81	29	29	0.382	-0.30
6.1	1.81	30	30	0.395	-0.27
6.4	1.86	31	31	0.408	-0.23
6.7	1.90	32	32	0.421	-0.20
7.8	2.05	33	33	0.434	-0.17
8.7	2.16	34	34	0.447	-0.13
8.7	2.16	35	35	0.461	-0.10
9.8	2.28	36	36	0.474	-0.07
8	2.08	37	37	0.487	-0.03
10	2.30	38	38	0.500	0.00
10	2.30	39	39	0.513	0.03
11	2.40	40	40	0.526	0.07
11	2.40	41	41	0.539	0.10
11	2.40	42	42	0.553	0.13
11	2.40	43	43	0.566	0.17
11	2.40	44	44	0.579	0.20
11	2.40	45	45	0.592	0.23
12	2.48	46	46	0.605	0.27
13	2.56	47	47	0.618	0.30
13	2.56	48	48	0.632	0.34
14	2.64	49	49	0.645	0.37
14	2.64	50	50	0.658	0.41
14	2.64	51	51	0.671	0.44
14	2.64	52	52	0.684	0.48
15	2.71	53	53	0.697	0.52
15	2.71	54	54	0.711	0.55
16	2.77	55	55	0.724	0.59
17	2.83	56	56	0.737	0.63
18	2.89	57	57	0.750	0.67
18	2.89	58	58	0.763	0.72
18	2.89	59	59	0.776	0.76
19	2.94	60	60	0.789	0.80
21	3.04	61	61	0.803	0.85
21	3.04	62	62	0.816	0.90
22	3.09	63	63	0.829	0.95
23	3.14	64	64	0.842	1.00
29	3.37	65	65	0.855	1.06
29	3.37	66	66	0.868	1.12
36	3.58	67	67	0.882	1.18
38	3.64	68	68	0.895	1.25
39	3.66	69	69	0.908	1.33
43	3.76	70	70	0.921	1.41
43	3.76	71	71	0.934	1.51
50	3.91	72	72	0.947	1.62
58	4.06	73	73	0.961	1.76
87	4.47	74	74	0.974	1.94
112	4.72	75	75	0.987	2.22

Plot analysis indicates that the data more closely follow a normal distribution in the log-transformed format.

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Task No: **01**
Date: **16-Oct-12**

Probability Plots to determine the distribution of **Chromium**





JEI Project: **CRSWMA**
Project No: **618.1202.12**
Task No: **01**
Date: **16-Oct-12**

Determination of reported background value as an outlier

Analyte: **Chromium**

Background Data

Sample No.	Sample Date	Location	ln(Concentration) (ug/l)		Quantitation Limit (ug/l)
1	Jul-93	IRL-1S	3.584		5
2	Aug-93	IRL-1S	2.639		5
3	Sep-93	IRL-1S	2.398		5
4	Sep-93	IRL-1S	2.944		5
5	Apr-94	IRL-1S	2.303		5
6	Oct-95	IRL-1S	2.565		10
7	Oct-96	IRL-1S	3.664		10
8	Apr-97	IRL-1S	3.135		10
9	Oct-97	IRL-1S	3.912		10
10	Apr-98	IRL-1S	2.890		10
11	Mar-99	IRL-1S	4.060		10
12	Oct-99	IRL-1S	3.045		10
13	Apr-00	IRL-1S	4.466		5
14	Oct-00	IRL-1S	3.045		10
15	Apr-01	IRL-1S	2.398		10
16	Oct-02	IRL-1S	2.708		10
17	Oct-03	IRL-1S	2.485		10
18	Apr-04	IRL-1S	2.565		10
19	Apr-08	IRL-1S	0.470	J	10
20	Oct-08	IRL-1S	1.099	J	10
21	Apr-09	IRL-1S	1.808	J	10
22	Oct-09	IRL-1S	2.054	J	10
23	Apr-10	IRL-1S	1.775	J	10
24	Oct-10	IRL-1S	-0.357	J	10
25	Oct-11	IRL-1S	0.470	J	10
26	Apr-12	IRL-1S	1.361	J	10
27	Oct-12	IRL-1S	0.470	J	10
28	Jul-93	IRL-1D	2.890		5
29	Aug-93	IRL-1D	2.079		5
30	Sep-93	IRL-1D	2.398		5
31	Sep-93	IRL-1D	3.761		5
32	Oct-05	IRL-1D	3.367		10
33	Oct-08	IRL-1D	0.470	J	10
34	Apr-09	IRL-1D	0.095	J	10
35	Oct-09	IRL-1D	0.788	J	10
36	Apr-10	IRL-1D	-0.105	J	10
37	Oct-10	IRL-1D	1.224	J	10
38	Oct-11	IRL-1D	0.833	J	10
39	Apr-12	IRL-1D	0.405	J	10
40	Oct-12	IRL-1D	0.470	J	10
41	Apr-03	LST-5S	2.639		10
42	Oct-03	LST-5S	2.639		10
43	Apr-04	LST-5S	2.398		10
44	Apr-08	LST-5S	-0.693	J	10
45	Oct-08	LST-5S	1.361	J	10
46	Apr-09	LST-5S	1.856	J	10
47	Oct-09	LST-5S	2.163	J	10
48	Apr-10	LST-5S	1.808	J	10
49	Oct-10	LST-5S	2.163	J	10
50	Apr-11	LST-5S	1.902	J	10
51	Oct-11	LST-5S	2.303		10
52	Apr-12	LST-5S	2.282	J	10
53	Oct-12	LST-5S	1.131	J	10
54	Jul-99	MW-7	4.718		10
55	Aug-99	MW-7	3.367		10
56	Oct-99	MW-7	2.639		1
57	Nov-99	MW-7	3.091		10
58	Apr-00	MW-7	2.398		10
59	Oct-00	MW-7	2.773		10
60	Apr-01	MW-7	2.398		10
61	Oct-01	MW-7	3.638		10
62	Apr-02	MW-7	3.761		10
63	Oct-02	MW-7	2.708		10
64	Apr-04	MW-7	2.890		10
65	Apr-09	MW-12S	-0.693	J	10
66	Oct-10	MW-12S	-1.609	J	10
67	Oct-08	MW-12D	-0.357	J	10
68	Apr-09	MW-12D	-0.105	J	10
69	Oct-09	MW-12D	0.095	J	10
70	Apr-10	MW-12D	-1.204	J	10
71	Oct-10	MW-12D	-0.357	J	10
72	Oct-11	MW-12D	0.470	J	10
73	Apr-12	MW-12D	0.182	J	10
74	Oct-12	MW-12D	-0.635	J	10
75	Apr-04	MW-13S	2.833		10
		mean =	1.861		
		STD =	1.448		

Note: All concentrations are micrograms per liter

Using the data listed above, form the statisitc Tn:

Tn = (Xn - mean) / STD

where: Xn = largest observed sample value
mean = mean of the background values
STD = standard deviation of the background values

For Xn = 4.718
mean = 1.861
STD = 1.448

Tn = 1.973

From Table 8 included in the Staistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Interim Final Guidance, the critical value for the given sample group is

Number of samples = 75
Tc = 3.107

Since Tc>Tn, the sample result is not considered to be an outlier

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Date: **10/16/12**

Aitchison's Adjustment for **Chromium**

Background Values (positive detects only)

Sample No.	Sample Date	Location	Concentration (ug/l)	Qualifer
1	Jul-93	IRL-1S	36	
2	Aug-93	IRL-1S	14	
3	Sep-93	IRL-1S	11	
4	Sep-93	IRL-1S	19	
5	Apr-94	IRL-1S	10	
6	Oct-95	IRL-1S	13	
7	Oct-96	IRL-1S	39	
8	Apr-97	IRL-1S	23	
9	Oct-97	IRL-1S	50	
10	Apr-98	IRL-1S	18	
11	Mar-99	IRL-1S	58	
12	Oct-99	IRL-1S	21	
13	Apr-00	IRL-1S	87	
14	Oct-00	IRL-1S	21	
15	Apr-01	IRL-1S	11	
16	Oct-02	IRL-1S	15	
17	Oct-03	IRL-1S	12	
18	Apr-04	IRL-1S	13	
19	Apr-08	IRL-1S	1.6	J
20	Oct-08	IRL-1S	3	J
21	Apr-09	IRL-1S	6.1	J
22	Oct-09	IRL-1S	7.8	J
23	Apr-10	IRL-1S	5.9	J
24	Oct-10	IRL-1S	0.7	J
25	Oct-11	IRL-1S	1.6	J
26	Apr-12	IRL-1S	3.9	J
27	Oct-12	IRL-1S	1.6	J
28	Jul-93	IRL-1D	18	
29	Aug-93	IRL-1D	8	
30	Sep-93	IRL-1D	11	
31	Sep-93	IRL-1D	43	
32	Oct-05	IRL-1D	29	
33	Oct-08	IRL-1D	1.6	J
34	Apr-09	IRL-1D	1.1	J
35	Oct-09	IRL-1D	2.2	J
36	Apr-10	IRL-1D	0.9	J
37	Oct-10	IRL-1D	3.4	J
38	Oct-11	IRL-1D	2.3	J
39	Apr-12	IRL-1D	1.5	J
40	Oct-12	IRL-1D	1.6	J
41	Apr-03	LST-5S	14	
42	Oct-03	LST-5S	14	
43	Apr-04	LST-5S	11	
44	Apr-08	LST-5S	0.5	J
45	Oct-08	LST-5S	3.9	J
46	Apr-09	LST-5S	6.4	J
47	Oct-09	LST-5S	8.7	J
48	Apr-10	LST-5S	6.1	J
49	Oct-10	LST-5S	8.7	J
50	Apr-11	LST-5S	6.7	J
51	Oct-11	LST-5S	10	
52	Apr-12	LST-5S	9.8	J
53	Oct-12	LST-5S	3.1	J
54	Jul-99	MW-7	112	
55	Aug-99	MW-7	29	
56	Oct-99	MW-7	14	
57	Nov-99	MW-7	22	
58	Apr-00	MW-7	11	
59	Oct-00	MW-7	16	
60	Apr-01	MW-7	11	
61	Oct-01	MW-7	38	
62	Apr-02	MW-7	43	
63	Oct-02	MW-7	15	
64	Apr-04	MW-7	18	
65	Apr-09	MW-12S	0.5	J
66	Oct-10	MW-12S	0.2	J
67	Oct-08	MW-12D	0.7	J
68	Apr-09	MW-12D	0.9	J
69	Oct-09	MW-12D	1.1	J
70	Apr-10	MW-12D	0.3	J
71	Oct-10	MW-12D	0.7	J
72	Oct-11	MW-12D	1.6	J
73	Apr-12	MW-12D	1.2	J
74	Oct-12	MW-12D	0.53	J
75	Apr-04	MW-13S	17	

Mean of detected values = 14.45
Standard Deviation of detected values = 19.12

The adjusted mean can be found using

$$M(a) = (1-d/n) \times M$$

where:	d =	number non- detected values	=	73
	n =	total number samples	=	148
	M =	mean detected values	=	14.45
		M(a)	**=**	**7.32**

The adjusted standard deviation squared may be found using

$$STD(a) = [(n-(d+1))/(n-1)]\ S + d/n((n-d)/(n-1))MM$$

where:	n =	total number samples	=	148
	d =	number non-detected values	=	73
	S =	std deviation of detected values squared	=	365.48
	MM =	mean of detected values squared	=	208.68
		STD(a)	=	236.50

and the adjusted standard deviation is then

S(a) = SQRT(STD(a)) = 15.38

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Task No: **01**
Date: **16-Oct-12**

Shapiro-Francia Test Statistic (W') for normality of total

Analyte: **Chromium**

Complete the following table where

i = ordered value of sample, arranged from smallest to largest
X(i) = sample values arranged from smallest to largest
m(i) = ith order Normal quantile

i	X(i)	ith/n	m(i)	m(i)^2	m(i)X(i)
1	0.20	0.0132	-2.22	4.94	-0.44
2	0.30	0.0263	-1.94	3.76	-0.58
3	0.50	0.0395	-1.76	3.09	-0.88
4	0.50	0.0526	-1.62	2.62	-0.81
5	0.53	0.0658	-1.51	2.27	-0.80
6	0.70	0.0789	-1.41	1.99	-0.99
7	0.70	0.0921	-1.33	1.76	-0.93
8	0.70	0.1053	-1.25	1.57	-0.88
9	0.90	0.1184	-1.18	1.40	-1.06
10	0.90	0.1316	-1.12	1.25	-1.01
11	1.10	0.1447	-1.06	1.12	-1.17
12	1.10	0.1579	-1.00	1.01	-1.10
13	1.20	0.1711	-0.95	0.90	-1.14
14	1.50	0.1842	-0.90	0.81	-1.35
15	1.60	0.1974	-0.85	0.72	-1.36
16	1.60	0.2105	-0.80	0.65	-1.29
17	1.60	0.2237	-0.76	0.58	-1.22
18	1.60	0.2368	-0.72	0.51	-1.15
19	1.60	0.2500	-0.67	0.45	-1.08
20	1.60	0.2632	-0.63	0.40	-1.01
21	2.20	0.2763	-0.59	0.35	-1.31
22	2.30	0.2895	-0.55	0.31	-1.28
23	3.00	0.3026	-0.52	0.27	-1.55
24	3.10	0.3158	-0.48	0.23	-1.49
25	3.40	0.3289	-0.44	0.20	-1.51
26	3.90	0.3421	-0.41	0.17	-1.59
27	3.90	0.3553	-0.37	0.14	-1.45
28	5.90	0.3684	-0.34	0.11	-1.98
29	6.10	0.3816	-0.30	0.09	-1.84
30	6.10	0.3947	-0.27	0.07	-1.63
31	6.40	0.4079	-0.23	0.05	-1.49
32	6.70	0.4211	-0.20	0.04	-1.33
33	7.80	0.4342	-0.17	0.03	-1.29
34	8.70	0.4474	-0.13	0.02	-1.15
35	8.70	0.4605	-0.10	0.01	-0.86
36	9.80	0.4737	-0.07	0.00	-0.65
37	8.00	0.4868	-0.03	0.00	-0.26
38	10.00	0.5000	0.00	0.00	0.00
39	10.00	0.5132	0.03	0.00	0.33
40	11.00	0.5263	0.07	0.00	0.73
41	11.00	0.5395	0.10	0.01	1.09
42	11.00	0.5526	0.13	0.02	1.46
43	11.00	0.5658	0.17	0.03	1.82
44	11.00	0.5789	0.20	0.04	2.19
45	11.00	0.5921	0.23	0.05	2.56
46	12.00	0.6053	0.27	0.07	3.20
47	13.00	0.6184	0.30	0.09	3.92
48	13.00	0.6316	0.34	0.11	4.37
49	14.00	0.6447	0.37	0.14	5.20
50	14.00	0.6579	0.41	0.17	5.69
51	14.00	0.6711	0.44	0.20	6.20
52	14.00	0.6842	0.48	0.23	6.71
53	15.00	0.6974	0.52	0.27	7.75
54	15.00	0.7105	0.55	0.31	8.32
55	16.00	0.7237	0.59	0.35	9.50
56	17.00	0.7368	0.63	0.40	10.77
57	18.00	0.7500	0.67	0.45	12.14
58	18.00	0.7632	0.72	0.51	12.90
59	18.00	0.7763	0.76	0.58	13.68
60	19.00	0.7895	0.80	0.65	15.29
61	21.00	0.8026	0.85	0.72	17.87
62	21.00	0.8158	0.90	0.81	18.89
63	22.00	0.8289	0.95	0.90	20.90
64	23.00	0.8421	1.00	1.01	23.07
65	29.00	0.8553	1.06	1.12	30.72
66	29.00	0.8684	1.12	1.25	32.45
67	36.00	0.8816	1.18	1.40	42.59
68	38.00	0.8947	1.25	1.57	47.58
69	39.00	0.9079	1.33	1.76	51.79
70	43.00	0.9211	1.41	1.99	60.72
71	43.00	0.9342	1.51	2.27	64.84
72	50.00	0.9474	1.62	2.62	80.99
73	58.00	0.9605	1.76	3.09	101.90
74	87.00	0.9737	1.94	3.76	168.60
75	112.00	0.9868	2.22	4.94	248.81
			Sum	67.8	1104.65

The test statistic W' can be found using:

W' = [(sum(mi*x(I))/((n-1)^.5*SD*(sum(mi^2))^.5]

where:
SD = standard deviation of the sample = 19.12
X = Mean of the sample = 14.45
n = number of samples = 75

W' = 0.816

Compare this value to the critical value in Table A-2 of Statistical Analysisof Ground-Water Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance (Draft) July, 1992, to determine if the data is normally distributed.

From Table A-2 with (n) samples and a 95% confidence level, the critical value is

W(crit) = 0.969
and the calculated W' = 0.816

Therefore the data is Non Normal

JEI Project: **CRSWMA**
Project No: **618.1202.12**
Date: **10/16/12**

Parametric Tolerance Interval for Aitchison's adjusted data

Analyte: **Chromium**

Background Data

Sample No.	Sample Date	Location	Concentration (ug/l)	Quantitation Limit (ug/l)	Qualifer
1	07/01/93	IRL-1S	36.0	5.0	
2	08/01/93	IRL-1S	14.0	5.0	
3	09/01/93	IRL-1S	11.0	5.0	
4	09/01/93	IRL-1S	19.0	5.0	
5	04/01/94	IRL-1S	10.0	5.0	
6	10/01/95	IRL-1S	13.0	10.0	
7	10/01/96	IRL-1S	39.0	10.0	
8	04/01/97	IRL-1S	23.0	10.0	
9	10/01/97	IRL-1S	50.0	10.0	
10	04/01/98	IRL-1S	18.0	10.0	
11	03/01/99	IRL-1S	58.0	10.0	
12	10/01/99	IRL-1S	21.0	10.0	
13	04/01/00	IRL-1S	87.0	5.0	
14	10/01/00	IRL-1S	21.0	10.0	
15	04/01/01	IRL-1S	11.0	10.0	
16	10/03/02	IRL-1S	15.0	10.0	
17	10/03/03	IRL-1S	12.0	10.0	
18	04/15/04	IRL-1S	13.0	10.0	
19	04/02/08	IRL-1S	1.6	10.0	J
20	10/28/08	IRL-1S	3.0	10.0	J
21	04/08/09	IRL-1S	6.1	10.0	J
22	10/27/09	IRL-1S	7.8	10.0	J
23	04/08/10	IRL-1S	5.9	10.0	J
24	10/13/10	IRL-1S	0.7	10.0	J
25	10/20/11	IRL-1S	1.6	10.0	J
26	04/26/12	IRL-1S	3.9	10.0	J
27	10/16/12	IRL-1S	1.6	10.0	J
28	07/01/93	IRL-1D	18.0	5.0	
29	08/01/93	IRL-1D	8.0	5.0	
30	09/01/93	IRL-1D	11.0	5.0	
31	09/01/93	IRL-1D	43.0	5.0	
32	10/27/05	IRL-1D	29.0	10.0	
33	10/28/08	IRL-1D	1.6	10.0	J
34	04/08/09	IRL-1D	1.1	10.0	J
35	10/27/09	IRL-1D	2.2	10.0	J
36	04/08/10	IRL-1D	0.9	10.0	J
37	10/13/10	IRL-1D	3.4	10.0	J
38	10/20/11	IRL-1D	2.3	10.0	J
39	04/26/12	IRL-1D	1.5	10.0	J
40	10/16/12	IRL-1D	1.6	10.0	J
41	04/02/03	LST-5S	14.0	10.0	
42	10/01/03	LST-5S	14.0	10.0	
43	04/15/04	LST-5S	11.0	10.0	
44	04/03/08	LST-5S	0.5	10.0	J
45	10/28/08	LST-5S	3.9	10.0	J
46	04/08/09	LST-5S	6.4	10.0	J
47	10/27/09	LST-5S	8.7	10.0	J
48	04/08/10	LST-5S	6.1	10.0	J
49	10/13/10	LST-5S	8.7	10.0	J
50	04/27/11	LST-5S	6.7	10.0	J
51	10/20/11	LST-5S	10.0	10.0	
52	04/26/12	LST-5S	9.8	10.0	J
53	10/16/12	LST-5S	3.1	10.0	J
54	07/01/99	MW-7	112.0	10.0	
55	08/01/99	MW-7	29.0	10.0	
56	10/01/99	MW-7	14.0	1.0	
57	11/01/99	MW-7	22.0	10.0	
58	04/01/00	MW-7	11.0	10.0	
59	10/01/00	MW-7	16.0	10.0	
60	04/01/01	MW-7	11.0	10.0	
61	10/01/01	MW-7	38.0	10.0	
62	04/02/02	MW-7	43.0	10.0	
63	10/03/02	MW-7	15.0	10.0	
64	04/15/04	MW-7	18.0	10.0	
65	04/08/09	MW-12S	0.5	10.0	J
66	10/13/10	MW-12S	0.2	10.0	J
67	10/28/08	MW-12D	0.7	10.0	J
68	04/08/09	MW-12D	0.9	10.0	J
69	10/27/09	MW-12D	1.1	10.0	J
70	04/08/10	MW-12D	0.3	10.0	J
71	10/13/10	MW-12D	0.7	10.0	J
72	10/20/11	MW-12D	1.6	10.0	J
73	04/26/12	MW-12D	1.2	10.0	J
74	10/16/12	MW-12D	0.5	10.0	J
75	04/15/04	MW-13S	17.0	10.0	

Note: All sample concentrations are micrograms per liter

The background mean and standard deviation were modified using Aitchison's Adjustment.
The adjusted mean and standard deviation are as follows:

The adjusted mean and standard deviation are

adjusted mean = 7.32
adjusted standard deviation = 15.38

Using the background data, the upper Tolerance Limit can be determined using

Upper Tolerance Limit = (Mean Concentration) + K x (Standard Deviation Samples)

where: K = factor for constructing one sided normal tolerance limit taken from table 4-2, page 87, Statistical Methods for Groundwater Monitoring, Gibbons, 1994
n = number of background samples

For: K = 1.972
n = 75

UTL = 37.65 µg/L

Appendix 2
Summary of Statistical Analyses
Second Semiannual Sampling Event
CRSWMA Tuscarora Landfill, Permit Nos. 25-04 and 25-09
Craven County, North Carolina

Constituent	NC 2L	GWPS	Data Distribution	Statistical Method used to Establish Background	Calculated Background Concentration	Sample Location	Sample Result in (µg/L)	SSI
Chromium	10	N/E	49.3% Truncated	Upper Tolerance Limit	37.6	MW-8	19	NO

Notes:

1. Concentrations are in micrograms per liter (µg/L).
2. NC 2L = North Carolina 2L Groundwater Standard.
3. GWPS = Groundwater Protection Standard.
4. SSI = Statistically significant increase over background.
5. N/E = Not established.
5. N/A = Not applicable.