Prepared for:

Coastal Regional Solid Waste Management Authority
P.O. Box 128
Cove City, North Carolina 28523

JEI Project No. 618.08, Task No. 01

THE COASTAL ENVIRONMENTAL PARTNERSHIP
COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY

FIRST SEMIANNUAL GROUNDWATER MONITORING REPORT OF 2009

COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY
TUSCARORA LANDFILLS
CRAVEN COUNTY, NORTH CAROLINA
PERMIT NUMBERS 25-04 & 25-09

July 2009

Prepared by:

JOYCE ENGINEERING, INC.

2211 West Meadowview Road, Suite 101
Greensboro, North Carolina 27407
Phone: (336) 323-0092
Fax: (336) 323-0093

DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

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, Inc.

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

Name: Jeremey J. Kerly Phone: (336) 323-0092

E-mail: jkerly@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
CRSWMA (Coastal Regional Solid Waste Management Authority) Tuscarora Landfills	7400 Old Hwy 70 West New Bern, NC 28562	25-04 & 25-09	.1600	April 7-8, 2009 June 1, 2009

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 or explosive methane gas limits 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.

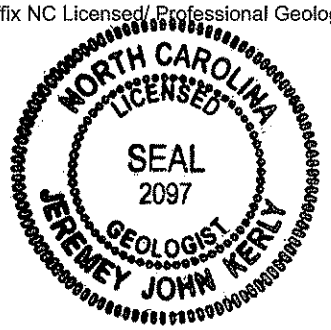
Certification

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.

Jeremey J. Kerly	Project Consultant	(336) 323-0092
Facility Representative Name (Print)	Title	(Area Code) Telephone Number

Signature 7-22-09 Date

Affix NC Licensed/ Professional Geologist Seal



Revised 10/2006

First Semiannual Groundwater Monitoring Report of 2009
Coastal Regional Solid Waste Management Authority Tuscarora Landfills
Craven County, North Carolina

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Site Information 1
1.2 Site Geology 1
1.3 Regulatory Status 1
2.0 FACILITY MONITORING PROGRAMS 2
2.1 Tuscarora Interim Regional Landfill Monitoring Program 2
2.2 Tuscarora Long-Term Regional Landfill Monitoring Program 3
2.3 Leachate Storage Lagoon Area Monitoring Program 3
2.4 Surface Water Monitoring Program 4
2.5 Leachate Monitoring Program 4
3.0 FIRST SEMIANNUAL SAMPLING EVENT OF 2009 4
3.1 Fieldwork 4
3.2 Laboratory Analysis and JEI Quality Control 5
4.0 HYDROGEOLOGICAL CONDITIONS 6
5.0 DATA ANANLYSIS AND STATISTICAL RESULTS 7
5.1 Statistical Methods 7
5.1.1 Treatment of Censored Data 8
5.1.2 Assumption of Normality 8
5.1.3 Parametric Upper Tolerance Limit 8
5.1.4 Aitchison's Adjusted Parametric Tolerance Limit 8
5.1.5 Non-parametric Upper Tolerance Limit 9
5.1.6 Poisson Upper Prediction Limit 9
5.2 Statistical Results 9
5.3 Analytical Results for Groundwater/Surface Water and Comparison to Standards 10
5.3.1 Tuscarora Interim Regional Landfill 10
5.3.2 Tuscarora Long-Term Regional Landfill 10
5.3.3 Leachate Storage Lagoon Area 11
5.3.4 Surface Water 12
5.3.5 Leachate 13
6.0 CONCLUSION 13
7.0 REFERENCES 14

First Semiannual Groundwater Monitoring Report of 2009
Coastal Regional Solid Waste Management Authority Tuscarora Landfills
Craven County, North Carolina

TABLE OF CONTENTS CONTINUED

Tables

Table 1	Summary of Groundwater Elevations: Tuscarora Interim Regional Landfill
Table 2	Summary of Groundwater Elevations: Tuscarora Long-Term Regional Landfill
Table 3	Summary of Groundwater Elevations: Leachate Storage Lagoon Area
Table 4	Estimated Hydraulic Gradients and Average Linear Velocities for the Shallow Aquifer
Table 5	Estimated Hydraulic Gradients and Average Linear Velocities for the Deep Aquifer
Table 6	Summary of Historical Groundwater Constituents: Tuscarora Interim Regional Landfill
Table 7	Summary of Field Parameters: Tuscarora Interim Regional Landfill
Table 8	Summary of Historical Groundwater Constituents: Tuscarora Long-Term Regional Landfill
Table 9	Summary of Field Parameters: Tuscarora Long-Term Regional Landfill
Table 10	Summary of Historical Groundwater Constituents: Leachate Storage Lagoon Area
Table 11	Summary of Field Parameters: Leachate Storage Lagoon Area
Table 12	Summary of Historical Surface Water Constituents
Table 13	Summary of Field Parameters: Surface Water
Table 14	Summary of Historical Constituents: Leachate

Figure

Figure No. 1	Site Location Map

Drawings

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

Appendices

Appendix 1	Laboratory Analytical Reports and Field Data
Appendix 2	Statistical Analyses Worksheets

1.0 INTRODUCTION

1.1 Site Information

The Tuscarora Landfills are 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 landfills are 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 (Drawing No. 1). Surface water is directed through a network of constructed drain ditches to the north-northeast towards Jumping Run, a tributary of Bachelor Creek. 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 Tuscarora Landfills are indentified as three waste cells - the closed Tuscarora Interim Regional Landfill and Phase 1&2 of the Tuscarora Long-Term Regional Landfill. The Interim Regional Landfill and Phase 1&2 of the Long-Term Regional Landfill were constructed with a composite liner and leachate collection system. The current waste footprint comprises approximately 74.8 acres. 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 1 of the Long-Term Regional Landfill was constructed in accordance with Subtitle D regulations in 1999 while Phase 2 was constructed in 2005. The Tuscarora Long-Term Regional Landfill began receiving waste after November 1999 and is still operational.

1.2 Site Geology

The Tuscarora Landfills are 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 Landfills according to the North Carolina State Geologic Map (Brown, 1985).

The uppermost 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. In general, the material becomes denser with depth.

1.3 Regulatory Status

The Tuscarora Landfills are currently in detection monitoring. Statistical analyses of the laboratory data has been prepared in accordance with the required compliance demonstration

Rule .1632(g), (h), and (i) of the North Carolina Division of Waste Management, Solid Waste Section.

Dissolved zinc for well IRL-5S continues to be analyzed, as requested by Larry Rose of the Solid Waste Section in September 2004, due to past statistically significant increases. Since statistically significant increases can initiate Assessment Monitoring, dissolved samples can be used as Alternate Source Demonstrations (ASD). An ASD is used to explain the contamination or statistically significant increases as coming from sources other than landfill influence.

2.0 FACILITY MONITORING PROGRAMS

Groundwater programs for each of the landfills, surface water, and the leachate storage system are discussed in the following sections and locations 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 wells (IRL-1S & IRL-1D) and six downgradient 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 / Saprolite
IRL-1D	6/29/93	Background	Detection	45.91	Deep Aquifer / Saprolite
IRL-2S	6/30/93	Abandoned	-	-	-
IRL-2SA	1/13/01	Observation	Water Level	17.63	Shallow Aquifer / Saprolite
IRL-2D	6/30/93	Abandoned	-	-	-
IRL-2SD	1/13/01	Observation	Water Level	41.76	Deep Aquifer / Saprolite
IRL-3S	7/02/93	Compliance	Detection	16.59	Shallow Aquifer / Saprolite
IRL-3D	7/02/93	Compliance	Detection	40.91	Deep Aquifer / Saprolite
IRL-4S	7/02/93	Compliance	Detection	15.23	Shallow Aquifer / Saprolite
IRL-4D	7/02/93	Compliance	Detection	25.87	Deep Aquifer / Saprolite
IRL-5S	7/01/93	Compliance	Detection	14.69	Shallow Aquifer / Saprolite
IRL-5D	7/01/93	Observation	Water Level	26.10	Deep Aquifer / Saprolite
IRL-6S	7/02/93	Abandoned	-	-	-
IRL-6D	7/02/93	Abandoned	-	-	-
MW-A	12/13/00	Compliance	Detection	22.00	Shallow Aquifer / Saprolite
MW-B	1/12/01	Observation	Water Level	22.06	Shallow Aquifer / Saprolite
PZ-Z	12/15/00	Observation	Water Level	32.35	Shallow Aquifer / Saprolite

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 begin construction of Phase 2 of the Long-Term Regional Landfill. Well MW-14 was accidentally destroyed by facility equipment prior to the October 2006 sampling event and was replaced as 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 / Saprolite
MW-8	7/15/99	Compliance	Detection	15.14	Shallow Aquifer / Saprolite
MW-9	7/15/99	Abandoned	-	-	-
MW-10	7/15/99	Compliance	Detection	16.92	Shallow Aquifer / Saprolite
MW-11S	7/15/99	Compliance	Detection	12.07	Shallow Aquifer / Saprolite
MW-11D	7/15/99	Compliance	Detection	36.85	Deep Aquifer / Saprolite
MW-12S	4/09/02	Background	Detection	18.02	Shallow Aquifer / Saprolite
MW-12D	4/09/02	Background	Detection	38.00	Deep Aquifer / Saprolite
MW-13S	4/21/03	Compliance	Detection	17.48	Shallow Aquifer/ Saprolite
MW-13D	4/23/03	Compliance	Detection	42.29	Deep Aquifer / Saprolite
MW-14	4/18/03	Abandoned	-	-	-
MW-14R	10/04/07	Compliance	Detection	16.85	Shallow Aquifer / Saprolite

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 upgradient/background well (LST-5S) and seven downgradient 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 / Saprolite
LST-1D	6/24/93	Compliance	Detection	36.01	Deep Aquifer / Saprolite
LST-2S	6/24/93	Compliance	Detection	14.74	Shallow Aquifer / Saprolite
LST-2D	6/24/93	Observation	Water Level	33.96	Deep Aquifer / Saprolite
LST-3S	6/25/93	Compliance	Detection	18.34	Shallow Aquifer / Saprolite
LST-3D	6/24/93	Observation	Water Level	35.57	Deep Aquifer / Saprolite
LST-4S	6/25/93	Compliance	Detection	18.18	Shallow Aquifer / Saprolite
LST-4D	6/24/93	Observation	Water Level	36.39	Deep Aquifer / Saprolite
LST-5S	6/28/93	Background	Detection	16.75	Shallow Aquifer / Saprolite
LST-5D	6/28/93	Compliance	Detection	39.04	Deep Aquifer / Saprolite
LST-6S	6/28/93	Compliance	Detection	17.25	Shallow Aquifer / Saprolite
LST-6D	9/28/93	Observation	Water Level	35.17	Deep Aquifer / Saprolite

2.4 Surface Water Monitoring Program

Surface water monitoring at the Tuscarora Landfills 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 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	Detection
SWPT-2	Compliance	Detection
UD-1	Compliance	Detection
UD-2	Compliance	Detection

2.5 Leachate Monitoring Program

One leachate monitoring point (Leachate Manhole) is sampled at the Tuscarora Landfills 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 FIRST SEMIANNUAL SAMPLING EVENT OF 2009

3.1 Field Work

On April 7-8, 2009 personnel from Environmental 1, Inc. visited the CRSWMA Landfills to obtain water levels 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 monitoring points and one leachate monitoring point were also sampled during the April 2009 event. In addition, for monitoring wells not part of the compliance network depth-to-water measurement were obtained to the nearest 0.01 foot using an electronic water level indicator.

Monitoring wells were purged and sampled using reusable bailers during the April 2009 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 both the April 2009 sampling event and the June 2009 resampling 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 flow 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 sampled collection, the sampled were placed in a laboratory provided cooler and chilled on ice.

Leachate samples were collected from a vented manhole. 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 JEI Quality Control

The April 2009 groundwater, surface water, and leachate samples were submitted to Environment 1, Incorporated of Greenville, North Carolina and the June 2009 resample was also submitted to Environment 1, Inc. 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 and the resample was analyzed for zinc and dissolved zinc. JEI requested a Level II data report for the final laboratory reports. The samples were received by the laboratory on April 8, 2009 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 (also referred to as a Field Blank) was collected by Environment 1, Inc. personnel as part of the April 2009 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 was reviewed by JEI 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, NC 2Ls, and NC 2Bs; and
- Detections that are above historical levels.

After receipt of the April 2009 data package, it was determined that a resampling event was required for the following monitoring well: IRL-5S. Zinc detected in monitoring well IRL-5S was considered to be a statistically significant increase above background levels.

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 influence by barrow 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 April 2009 water level measurements. Groundwater at the site flows predominantly from the northwest to the southeast for the shallow aquifer. However, due to barrow area pumping, groundwater in the deep aquifer flows to the southeast from the closed Tuscarora Interim Regional Landfill while groundwater beneath the Tuscarora Long Term Regional Landfill flows to the northwest. The barrow area is situated in the northwestern area of the property as shown on Drawing Nos. 1 and 2.

Horizontal groundwater gradients were estimated based on April 2009 groundwater levels. The groundwater contours and the groundwater flow arrows were used to calculate hydraulic

gradients for the site. The horizontal gradients were estimated to range from 0.0026 to 0.0072 ft/ft (Table 4) for the shallow aquifer and 0.0011 to 0.0026 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, wet stormwater drainage ditches and basins located within the site, and dewatering associated with on-site borrow operations.

Average hydraulic conductivity (K) for each slug-tested well was used to estimate average linear groundwater flow velocities. The gradient and flow velocity calculations are included in Tables 4 and 5. Linear groundwater flow velocities were computed using the following modified Darcy equation:

$$V = Ki/n$$

where V = average linear velocity (feet per day) , K = hydraulic conductivity (ft/day), i = horizontal hydraulic gradient, and n = effective porosity.

The calculated linear groundwater flow velocities range from 0.009 to 0.024 ft/day (Table 4) for the uppermost aquifer range and 0.024 to 0.057 ft/day (Table 5) for the deep aquifer. However, the linear velocity equation and resultant rates make the simplified assumptions of a homogeneous and isotropic aquifer. This equation can grossly overestimate velocity when applied to heterogeneous and/or anisotropic conditions.

5.0 DATA ANALYSIS AND STATISTICAL RESULTS

Results from the April 2009 sampling event were received May 13, 2009 from Environment 1, Inc. and are found in Appendix 1. Statistical comparisons of baseline monitoring data to compliance groundwater data are part of the required compliance demonstration (Rule .1632(g), (h), and (i)) for the closed Tuscarora Interim Regional Landfill and the Tuscarora Long-Term Regional Landfill. Background data and statistical methods used to evaluate the data from the closed Tuscarora Interim Regional Landfill and the Tuscarora Long-Term Regional Landfill are discussed as follows.

5.1 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. The results of the statistical analyses are summarized in Appendix 1 of this report. Individual tests are presented on each page to clearly document these tests. Background data, tests for normality, outliers, Aitchison's adjustment, or parametric tolerance interval follow, as appropriate, based on the background data. For each set of data, all of the parameters used to calculate the test statistic are presented beneath the raw data. The result of the test and any comments relating to quality assurance are presented at the bottom of the page.

The statistical test by which downgradient 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. These methods and the criteria for their use are discussed below.

5.1.1 Treatment of Censored Data

Generally, the laboratory reporting limits (RLs) are known and background data are censored as follows. When less than or equal to 15% of the background data values are less than the RL, any data reported less than the RL will be treated as one-half the RL.

5.1.2 Assumption of Normality

Prior to conducting statistical tests that are based on the assumption of normally distributed data, normality of the background data is evaluated using the Shapiro-Francia statistic (W') when the number of data in a sample set is greater than 50. Normality is assessed at the 95% confidence level. In the event that the raw data fail to follow a normal distribution, the data are transformed using a base-10 logarithm. The transformed data are then tested for normality using the Shapiro-Francia statistic. In the event that the log-transformed data also fail to follow a normal distribution, a non-parametric approach is applied.

5.1.3 Parametric Upper Tolerance Limit

In those cases where the background data consist of a minimum of eight independent data values and less than or equal to 15% of the background data values are less than the RL for a given analyte, the downgradient values are compared to the parametric upper tolerance limit in accordance with the procedure summarized in the USEPA guidance documents, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance* (April 1989) and *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance* (July 1992).

5.1.4 Aitchison's Adjusted Parametric Tolerance Limit

When the background data consist of a minimum of eight independent data values and more than 15%, but less than or equal to 50%, of the background data values are less than the RL for a given analyte, the mean and standard deviation are adjusted in accordance with the procedure described by Aitchison (1955) and summarized in the USEPA guidance document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance* (July 1992). After the adjustments are made, the downgradient values are compared to the Aitchison's adjusted parametric upper tolerance limit in accordance with the procedures summarized in the USEPA guidance documents, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance* (April 1989) and *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance* (July 1992).

5.1.5 Non-parametric Upper Tolerance Limit

In those cases where more than 50%, but less than or equal to 90%, of the background data values are less than the RL for a given analyte or the background data fail to follow a normal or log-normal distribution, downgradient values are compared to the non-parametric upper tolerance limit. These comparisons are made in accordance with the procedures summarized in the USEPA guidance documents, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance* (April 1989) and *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance* (July 1992).

5.1.6 Poisson Upper Prediction Limit

In those cases where more than 90% of the background data values are less than the RL for a given analyte, then the downgradient values are compared to the Poisson upper prediction limit. This is done in accordance with the procedure summarized in the USEPA guidance document, *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance* (July 1992).

5.2 Statistical Results

Statistical background values were calculated using data from historical semiannual sampling events at the facility through this event. A summary of the April 2009 statistical background calculations are provided below in the following table. Detailed results of statistical analyses can be found in Appendix 2. The data set from wells IRL-1S, IRL-1D, LST-5S, MW-7, MW-12S, MW-12D, MW-13S, MW-13D, and MW-14 were evaluated to determine the appropriate procedure for calculation of the background value for each parameter.

Constituent	Data Distribution	Statistical Method used to Establish Background	Background Concentration	Noted Increased
Barium	N/A	Non-Parametric Prediction Interval	869	None
Beryllium	N/A	Non-Parametric Prediction Interval	6	None
Zinc	N/A	Non-Parametric Prediction Interval	192	IRL-5S*

1. Concentrations are in micrograms per liter (µg/L)
2. N/A = Not Applicable
3. * = Resample concentration was not considered to be an increase above background levels.

Background concentrations for inorganic constituents were determined using statistical procedures as discussed in Section 5.1. Zinc was considered to be a statistically significant increase above background level in IRL-5S from samples collected during the April 2009 sampling event. Samples analyzed from the June 2009 resampling event indicated zinc concentrations below background levels. There were no organic constituents detected at

quantified concentrations in the groundwater compliance wells. Therefore, there are no organic detections that are considered to be statistically significant over background values.

5.3 Analytical Results for Groundwater/Surface Water and Comparisons to Standards

5.3.1 Tuscarora Interim Regional Landfill

Background concentrations were determined as discussed in Section 5.2 and detailed in the Appendix 2. The following inorganic and organic constituents were detected during the April 2009 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

Constituent	NC2L/ GWPS	Background		Downgradient						Blanks
		IRL-1S	IRL-1D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	MW-A	
Antimony	1.4	ND	ND	0.1 J	0.1 J	ND	ND	0.9 J	0.1 J	ND
Arsenic	50	1.2 J	1.4 J	1.2 J	1.4 J	2.7 J	0.5 B	4.2 J	3.8 J	0.2 J
Barium	2,000	118	41.1 J	72.6 J	107	176	43.8 J	92.8 J	42.0 J	0.2 J
Beryllium	4	0.6 J	0.1 J	0.2 J	0.5 J	0.2 J	0.1 J	ND	1.2 J	ND
Cadmium	1.75	0.2 J	0.1 J	0.6 J	0.4 J	0.6 J	0.1 J	0.1 J	0.1 J	ND
Chromium	50	6.1 J	1.1 J	2.7 J	5.9 J	1.6 J	1.2 J	0.6 J	2.1 J	ND
Cobalt	70	1.3 J	0.8 J	0.6 J	1.2 J	1.4 J	0.5 J	1.5 J	0.7 J	ND
Copper	1,000	2.2 J	0.9 J	1.7 J	1.6 J	1.9 J	0.4 B	2.3 J	1.1 J	0.1 J
Lead	15	4.8 J	0.9 J	1.9 J	8.9 J	1.4 J	0.4 B	0.6 J	1.7 J	0.1 J
Nickel	100	3.1 J	1.0 J	4.6 J	6.4 J	1.9 J	1.7 J	6.3 J	0.8 J	ND
Selenium	50	ND	ND	0.8 J	2.0 J	3.0 J	ND	3.1 J	0.9 J	ND
Silver	17.5	ND	ND	ND	ND	0.1 J	ND	ND	ND	ND
Thallium	0.28	0.1 J	ND	0.1 J	0.1 J	0.1 J	ND	ND	ND	ND
Vanadium	3.5	7.8 J	1.9 J	6.2 J	8.2 J	3.1 J	2.1 J	3.0 J	3.7 J	ND
Zinc	1,050	9.5 J	13	18	18	11	2.1 B	380	6.4 J	0.8 J
Zinc (Resample)	1,050	NS	NS	NS	NS	NS	NS	26	NS	NS
Acetone	700	ND	ND	ND	1.40 J	ND	ND	1.40 J	ND	ND

1. NS = Not sampled.
2. NA = Not available.
3. ND = Not detected.

The inorganic analytical results from the April 2009 groundwater sampling event at the closed Tuscarora Interim Regional Landfill are summarized in the Table 6 and field parameters are summarized on the Table 7 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 Appendix 1. No inorganic or organic constituents were detected above the NC 2L or Groundwater Protection Standards.

5.3.2 Tuscarora Long-Term Regional Landfill

Background concentrations were determined as discussed in Section 5.2 and are detailed in the Appendix 2. The following inorganic constituents were detected during the April 2009 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J"

are considered to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

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	
Antimony	1.4	0.1 J	0.2 J	0.1 J	ND	ND	ND	ND	0.9 J	0.2 J	0.1 J	ND
Arsenic	50	1.2 J	0.8 B	1.2 J	3.9 J	3.5 J	0.6 B	0.3 B	1.6 J	0.4 B	0.4 B	0.2 J
Barium	2,000	109	33.6 J	61.0 J	82.8 J	66.5 J	52.4 J	42.8 J	59.4 J	50.4 J	99.7 J	0.2 J
Beryllium	4	0.6 J	0.1 J	0.1 J	0.7 J	0.3 J	2	0.1 J	0.4 J	0.1 J	0.4 J	ND
Cadmium	1.75	0.2 J	0.2 J	0.3 J	0.3 J	0.2 J	0.7 J	0.5 J	0.3 J	0.2 J	0.2 J	ND
Chromium	50	0.5 J	0.9 J	3.3 J	8.3 J	3.1 J	1.4 J	ND	1.2 J	0.6 J	1.3 J	ND
Cobalt	70	2.3 J	0.2 J	0.6 J	1.1 J	1.1 J	6.1 J	0.1 J	0.5 J	0.2 J	1.2 J	ND
Copper	1,000	2 J	0.9 J	1.5 J	1.5 J	1.6 J	1.0 J	0.4 B	1.1 J	0.7 J	1.9 J	0.1 J
Lead	15	0.6 J	0.2 B	2.3 J	6.6 J	2.7 J	1.9 J	0.1 B	0.9 J	0.4 B	1 J	0.1 J
Nickel	100	2.9 J	2 J	2.5 J	1.6 J	1.5 J	8.5 J	1.2 J	1.1 J	1.9 J	2.2 J	ND
Selenium	50	2.4 J	0.7 J	ND	0.2 J	0.3 J	0.5 J	ND	0.5 J	ND	0.9 J	ND
Silver	17.5	0.1 J	ND	0.1 J	ND	ND	ND	ND	0.1 J	ND	ND	ND
Thallium	0.28	0.1 J	ND	0.1 J	0.1 J	0.1 J	ND	ND	0.1 J	ND	ND	ND
Vanadium	3.5	1.5 J	1.7 J	6.9 J	13.5 J	6.5 J	2.7 J	0.8 J	2.3 J	1.8 J	2.1 J	ND
Zinc	1,050	23	1.3 B	16	9.4 J	7.5 J	14	1.8 B	5.4 J	1.9 B	8.7 J	0.8 J

* ND = Not detected.

The inorganic and organic analytical results from the April 2009 groundwater sampling event at the Tuscarora Long-Term Regional Landfill are summarized in the Table 8 and field parameters are summarized on the 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 inorganic constituents were detected above the NC 2L or Groundwater Protection Standards.

5.3.3 Leachate Storage Lagoon Area

Background concentrations were determined as discussed in Section 5.2 and detailed in the Appendix 2. The following inorganic and organic constituents were detected during the April 2009 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

Constituent	NC2L/ GWPS	Background	Downgradient						Blanks
		LST-5S	LST-1S	LST-1D	LST-2S	LST-3S	LST-4S	LST-5D	LST-6S	
Antimony	1.4	0.2 J	0.2 J	0.1 J	ND	ND	ND	0.1 J	ND	ND
Arsenic	50	1.9 J	0.8 B	0.8 B	1.0 B	1.0 B	2.1 J	0.9 B	1.5 J	0.2 J
Barium	2,000	33.1 J	61.2 J	44.5 J	55.6 J	77.3 J	52.9 J	85.0 J	79.7 J	0.2 J
Beryllium	4	0.2 J	0.5 J	0.1 J	0.4 J	0.5 J	0.6 J	0.2 J	0.4 J	ND
Cadmium	1.75	0.1 J	0.3 J	0.1 J	0.2 J	0.5 J	0.2 J	0.2 J	0.3 J	ND
Chromium	50	6.4 J	1.9 J	0.2 J	2.8 J	2.4 J	6.2 J	1.1 J	8.0 J	ND
Cobalt	70	0.4 J	0.4 J	0.4 J	0.6 J	2.8 J	1.6 J	0.4 J	0.7 J	ND

Table Continues on Next Page

Constituent	NC2L/ GWPS	Background	Downgradient						Blanks
		LST-5S	LST-1S	LST-1D	LST-2S	LST-3S	LST-4S	LST-5D	LST-6S	
Copper	1,000	2.3 J	1.7 J	0.6 J	1.1 J	1.3 J	1.5 J	0.9 J	1.7 J	0.1 J
Lead	15	4.4 J	1.6 J	0.3 B	3.0 J	5.2 J	6.2 J	0.8 J	9.7 J	0.1 J
Nickel	100	1.8 J	1.0 J	2.5 J	1.1 J	3.5 J	2.6 J	2.9 J	1.7 J	ND
Selenium	50	0.3 J	1.1 J	ND	0.2 J	ND	0.2 J	0.2 J	0.3 J	ND
Silver	17.5	ND	ND	0.1 J	0.1 J	ND	ND	0.1 J	ND	ND
Thallium	0.28	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	0.1 J	ND
Vanadium	3.5	12.6 J	4.6 J	2.3 J	6.4 J	5.3 J	10.0 J	2.9 J	14.5 J	ND
Zinc	1,050	29	7.4 J	3.7 B	8.0 J	22	15	6.6 J	107	0.8 J
Acetone	700	ND	ND	ND	1.30 J	ND	ND	ND	ND	ND

*ND = Not detected.

The inorganic and organic analytical results from the April 2009 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. No inorganic or organic constituents were detected above the NC 2L or Groundwater Protection Standards.

5.3.4 Surface Water

The following inorganic and organic constituents were detected during the April 2009 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

Constituent	NC2B/EPA National Criteria	Upstream	Downstream			Blanks
		SWPT-1	SWPT-2	UD-1	UD-2	
Antimony	NE	0.1 J	0.1 J	ND	0.1 J	ND
Arsenic	50	0.7 B	1.8 J	1.7 J	0.9 B	0.2 J
Barium	NE	31.3 J	48.3 J	73.1 J	64.2 J	0.2 J
Cadmium	2	0.2 J	0.1 J	ND	0.1 J	ND
Chromium	50	0.3 J	1.2 J	0.5 J	ND	ND
Cobalt	2.5	0.7 J	2.7 J	1.7 J	0.7 J	ND
Copper	7	0.9 J	1.2 J	1.3 J	1.0 J	0.1 J
Lead	25	0.9 J	0.1 B	0.2 B	0.1 B	0.1 J
Nickel	88	6.9 J	11.8 J	5.7 J	6.5 J	ND
Selenium	5	0.2 J	2.3 J	2.9 J	0.9 J	ND
Silver	0.06	ND	0.1 J	ND	0.1 J	ND
Vanadium	NE	1.9 J	1.4 J	2.1 J	2.4 J	ND
Zinc	50	44	6.8 J	7.1 J	2.8 B	0.8 J
Acetone	2,000	ND	1.70 J	2.00 J	2.00 J	ND

1. ND = Not detected.
2. NE =Not established.

The analytical results from the surface water April 2009 sampling event at the CRSWMA landfills are summarized in the Table 12 and field parameters are summarized on the Table 13. 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. No

inorganic or organic constituents were detected above the North Carolina 2B Surface Water Standards or National Criteria per EPA.

5.3.5 Leachate

The following inorganic and organic constituents were detected in leachate during the April 2009 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

Constituent	Leachate	Blanks
Antimony	5.7 J	ND
Arsenic	58	0.2 J
Barium	788	0.2 J
Beryllium	0.1 J	ND
Cadmium	3	ND
Chromium	47	ND
Cobalt	12	ND
Copper	10	0.1 J
Lead	0.3 B	0.1 J
Nickel	70	ND
Selenium	42	ND
Silver	0.8 J	ND
Vanadium	13.3 J	ND
Zinc	11	0.8 J
Acetone	40.60 J	ND
Benzene	1.50	ND
Chlorobenzene	0.60 J	ND
Cis-1,2-Dichloroethylene	0.70 J	ND
2-Butanone	33.30 J	ND
1,4-Dichlorobenzene	9.60	ND
Ethylbenzene	34.60	ND
Styrene	2.00	ND
Toluene	12.00	ND
4-Methyl-2-Pentanone	25.80 J	ND
Xylenes	33.20	ND

*ND = Not detected.

The analytical results from the April 2009 leachate sampling event at the CRSWMA landfills are summarized in the Table 14 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.

6.0 CONCLUSION

Based on the analytical results from the April 2009 sampling event, zinc detected in monitoring well IRL-5S was considered to be a statistically significant increase above background levels. Monitoring well IRL-5S was resampled in June and analytical results indicated zinc was below background levels. No additional inorganic or organic constituents were considered to be

detected at statistically significant levels above calculated background concentrations at the Leachate Storage Lagoon Area, closed Tuscarora Interim Regional Landfill, and Tuscarora Long-Term Regional Landfill. In addition, no constituents were considered to be in exceedence of North Carolina 2L Groundwater Standards, Groundwater Protection Standards, North Carolina 2B Surface Water Standards, or National Criteria per EPA for surface water. Therefore, the results of the first semiannual monitoring event of 2009 indicate that the Coastal Regional Solid Waste Management Authority Tuscarora Landfills shall remain in the Detection Monitoring Program. The next semiannual monitoring event is scheduled for October 2009.

7.0 REFERENCES

Barnett, V. and Lewis, T., 1978, *Outliers in Statistical Data*, John Wiley & Sons.

Brown, Philip M., Chief Geologist, 1985, *Geologic Map of North Carolina*, The North Carolina Geologic Survey, scale 1:500,000.

Fetter, C.W., 1994, *Applied Hydrogeology*, Third Edition: Macmillan College Publishing Company.

Harris, W. Burleigh and Zullo, Victor A., 1991, Eocene and Oligocene stratigraphy of the Outer Coastal Plain, in Horton, J. W., Jr., and Zullo, V. A., eds., *The Geology of the Carolinas: Carolina Geological Society Fiftieth Anniversary Volume:* The University of Tennessee Press, p. 251-262.

HDR Engineering, Inc., 1995, *Site Study: The Tuscarora Long-Term Regional Landfill; The Coastal Regional Solid Waste Management Authority, Craven County, North Carolina*, November.

HDR Engineering, Inc., 1997, *Construction Permit Application: Phase I The Tuscarora Long-Term Regional Landfill: The Coastal Regional Solid Waste Management Authority, Tuscarora, North Carolina*, March.

McKim & Creed, P.A., 1997, *The Tuscarora Long-Term Regional Landfill: Subtitle D Landfill Construction Plan Application Modification For The Coastal Regional Solid Waste Management Authority, Tuscarora, North Carolina*, March.

McKim & Creed, P.A., 1999, *The Tuscarora Long-Term Regional Landfill: Subtitle D Landfill Site Application Modification For The Coastal Regional Solid Waste Management Authority, Tuscarora, North Carolina*, September.

North Carolina Dept. Environment, Health, and Natural Resources (NCDEHNR), 1995, *N.C. Water Quality Monitoring Guidance Document for Solid Waste Facilities*, March.

USEPA, 1986, *RCRA Ground Water Monitoring Technical Enforcement Guidance Document* (TEGD).

USEPA, 1992, "*Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Addendum to Interim Final Guidance*", Chapter 2, July.

Tables

Table 1	Summary of Groundwater Elevations: Tuscarora Interim Regional Landfill
Table 2	Summary of Groundwater Elevations: Tuscarora Long-Term Regional Landfill
Table 3	Summary of Groundwater Elevations: Leachate Storage Lagoon Area
Table 4	Estimated Hydraulic Gradients and Average Linear Velocities for the Shallow Aquifer
Table 5	Estimated Hydraulic Gradients and Average Linear Velocities for the Deep Aquifer
Table 6	Summary of Historical Groundwater Constituents: Tuscarora Interim Regional Landfill
Table 7	Summary of Field Parameters: Tuscarora Interim Regional Landfill
Table 8	Summary of Historical Groundwater Constituents: Tuscarora Long-Term Regional Landfill
Table 9	Summary of Field Parameters: Tuscarora Long-Term Regional Landfill
Table 10	Summary of Historical Groundwater Constituents: Leachate Storage Lagoon Area
Table 11	Summary of Field Parameters: Leachate Storage Lagoon Area
Table 12	Summary of Historical Surface Water Constituents
Table 13	Summary of Field Parameters: Surface Water
Table 14	Summary of Historical Constituents: Leachate

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

NOTES:

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

TABLE 2

SUMMARY OF GROUNDWATER ELEVATIONS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Well No.	Background		Downgradient							
	MW-12S	MW-12D	MW-7	MW-8	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14R
Well TOC Elev.	52.12	51.90	50.69	50.94	47.32	47.67	47.55	46.21	45.93	46.98
Well Depth	35.95	17.96	16.22	15.61	15.95	14.03	34.73	15.00	33.00	14.00
Jul-99	NI	NI	46.76	46.16	44.60	38.94	36.60	NI	NI	NI
Aug-99	NI	NI	45.10	44.41	43.13	39.19	34.87	NI	NI	NI
Oct-99	NI	NI	46.94	46.08	43.34	40.79	40.34	NI	NI	NI
Nov-99	NI	NI	46.19	44.13	42.34	38.85	39.71	NI	NI	NI
Apr-00	NI	NI	46.96	45.66	42.96	39.04	39.93	NI	NI	NI
Oct-00	NI	NI	45.79	43.94	42.30	38.74	39.05	NI	NI	NI
Apr-01	NI	NI	47.33	45.62	43.60	39.37	40.16	NI	NI	NI
Oct-01	NI	NI	44.81	42.99	41.57	38.92	35.41	NI	NI	NI
Apr-02	43.69	40.78	43.86	44.74	43.10	39.39	39.09	NI	NI	NI
Oct-02	45.15	36.77	45.18	44.19	41.28	39.49	35.26	NI	NI	NI
Apr-03	45.77	42.00	47.26	45.74	43.27	40.40	40.24	NI	NI	NI
Oct-03	46.32	42.32	47.98	46.34	42.64	41.67	40.44	NI	NI	NI
15-Apr-04	46.79	41.70	47.78	46.47	43.40	41.57	38.78	43.27	38.93	NI
14-Oct-04	45.16	41.09	46.69	45.04	43.09	40.29	39.53	41.28	38.41	NI
05-Apr-05	44.54	41.89	47.05	44.88	43.29	40.28	40.18	43.29	39.19	NI
27-Oct-05	45.51	42.62	47.16	46.12	42.63	41.93	40.81	44.51	39.82	NI
21-Apr-06	45.43	41.59	47.12	46.02	43.53	40.37	39.89	43.17	38.82	NI
12-Oct-06	45.70	41.72	47.20	46.27	43.05	40.85	39.87	44.03	38.79	NI
26-Apr-07	45.52	41.49	47.06	45.66	43.34	41.06	39.74	43.01	38.59	NI
11-Oct-07	42.18	35.60	43.67	43.94	41.35	39.98	34.08	41.19	33.02	39.25
03-Apr-08	44.74	39.14	45.99	45.68	42.42	38.85	38.47	44.00	37.32	42.10
28-Oct-08	44.67	35.23	44.56	45.67	41.58	38.95	35.90	44.07	34.59	42.13
08-Apr-09	45.31	33.90	46.77	45.98	42.67	39.69	36.40	43.17	34.92	41.94

NOTES:

1. All elevations are referenced to mean sea level.
2. NI = Well/Piezometer not installed.
3. Elevations are measured in feet.

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

NOTES:

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

TABLE 4

ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE SHALLOW AQUIFER

			April 2009				
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	1088	NE	46 42	0.0037	5.67E-01	0.17	0.012
i_2	834	SE	46 40	0.0072	5.67E-01	0.17	0.024
i_3	1942	S-SE	46 41	0.0026	5.67E-01	0.17	0.009
			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

			April 2009				
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	1789	NW	36 34	0.0011	5.39E+00	0.25	0.024
i_5	189	E-SE	36.5 36	0.0026	5.39E+00	0.25	0.057
i_6	1062	N-NW	36.5 35	0.0014	5.39E+00	0.25	0.030
			Average	0.0017		Average	0.037

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)																		
		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	
Antimony	10-Oct-07	0.05	6.0	0.1 B	0.1 B	AB	NI	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	NI	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	NI	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	NI	AB	WL	0.1 J	0.1 J	ND	ND	0.9 J	WL	AB	AB	0.1 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
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

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	
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
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

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	DL	RL	Background: IRL-1S	Background: IRL-1D	Downgradient: 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	Blanks
		Concentrations (ug/L)																		
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
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

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	DL	RL	Concentrations (ug/L)																													Blanks	
				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		
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
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

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Concentrations (ug/L)

Constituent	Date	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	
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
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
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
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
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

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent	Date	DL	RL	Concentrations (ug/L)																												Blanks	
				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		
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	
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	
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	
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	
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	

Notes:
1. All concentrations are in micrograms per liter (mg/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	1000	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	1000	82	82	420	NI	NI
	Apr-95	67	360	160	NI	560	NI	240	670	290	520	1900	490	69	450	NI	NI
	Oct-95	65	270	260	NI	660	NI	260	700	330	520	1300	480	75	450	NI	NI
	Apr-96	79	360	340	NI	580	NI	700	320	290	520	1500	450	77	440	NI	NI
	Oct-96	63	NS	NA	NI	AB	NI	410	530	250	400	1000	WL	87	AB	NI	NI
	Apr-97	80	NS	640	NI	AB	NI	330	690	270	530	1800	WL	NA	AB	NI	NI
	Oct-97	84	NS	630	NI	AB	NI	720	270	270	490	1200	WL	NA	AB	NI	NI
	Apr-98	73	NS	700	NI	AB	NI	360	770	240	520	1400	WL	110	AB	NI	NI
	Oct-98	74	NS	600	NI	AB	NI	480	750	230	490	1200	WL	AB	AB	NI	NI
	Mar-99	77	NS	810	NI	AB	NI	880	760	760	520	1200	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	1100	1400	170	500	900	WL	AB	AB	NI	NI
	Oct-00	76	NS	AB	NI	AB	NI	1100	720	230	500	900	WL	AB	AB	NI	NI
	Apr-01	67	NS	AB	64	AB	WL	1100	710	190	470	840	WL	AB	AB	NS	NS
	Oct-01	74	NS	AB	170	AB	WL	1000	710	200	500	1700	WL	AB	AB	NS	NS
	Apr-02	68	NS	AB	120	AB	WL	950	710	200	450	1700	WL	AB	AB	90	120
	Oct-02	19	NS	AB	448	AB	WL	970	830	192	550	1848	WL	AB	AB	98	132
	Apr-03	100	NS	AB	329	AB	WL	1082	804	215	486	1024	WL	AB	AB	86	157
	Oct-03	96	NS	AB	182	AB	WL	1110	849	205	506	1393	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	1188	WL	AB	AB	86	123
	05-Apr-05	96	NS	AB	WL	AB	WL	1033	942	287	601	1491	WL	AB	AB	89	WL
	27-Oct-05	105	195	AB	WL	AB	WL	876	775	250	502	1323	WL	AB	AB	91	WL
	21-Apr-06	104	231	AB	WL	AB	WL	927	736	271	553	1424	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	1287	WL	AB	AB	75	WL
	10-Oct-07	105	192	AB	WL	AB	WL	850	702	354	550	1570	WL	AB	AB	98	WL
Resample	04-Dec-07	109.2	357	AB	WL	AB	WL	963	1052	379	610	1829	WL	AB	AB	108.7	WL
	02-Apr-08	109	169	AB	WL	AB	WL	1096	713	253	540	1272	WL	AB	AB	86	WL
	28-Oct-08	109	217	AB	WL	AB	WL	935	931	266	533	1468	WL	AB	AB	103	WL
	08-Apr-09	106	215	AB	WL	AB	WL	1092	894	283	541	1265	WL	AB	AB	95	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
[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

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
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
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	>1000	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

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	DL	RL	Concentrations (µg/L) 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
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
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

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	DL	RL	Concentrations (µg/L)																						Blanks	
				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		
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
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	
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	

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	Concentrations (µg/L)																														Blanks	
		DL	RL	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			
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	
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
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

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									
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									
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									
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									
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									
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									
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								

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent	Date	DL	RL	Concentrations (µg/L) Background MW-12S	MW-12D	Downgradient MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	Blanks
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
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
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
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

Notes:
1. All concentrations are in micrograms per liter (mg/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	2000	150	200	420	NI	NI	NI	NI
	Nov-99	NI	NI	140	91	1600	150	270	430	NI	NI	NI	NI
	Apr-00	NI	NI	150	88	1800	140	270	420	NI	NI	NI	NI
	Oct-00	NI	NI	140	92	1200	130	30	410	NI	NI	NI	NI
	Apr-01	NI	NI	140	88	1300	120	290	390	NI	NI	NI	NI
	Oct-01	NI	NI	140	98	1200	120	250	410	NI	NI	NI	NI
	Apr-02	160	460	140	82	1600	110	290	370	NI	NI	NI	NI
	Oct-02	153	478	356	93	1650	132	288	500	NI	NI	NI	NI
	Apr-03	164	448	482	169	1857	167	406	440	NI	NI	NI	NI
	Oct-03	146	434	373	76	1497	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	1200	460	149	435	AB	116
pH	Jul-99	NI	NI	5.7	5.4	5.1	5.6	6.0	7.0	NI	NI	NI	NI
[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

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
Temperature	Jul-99	NI	NI	20	23	21	23	20	24	NI	NI	NI	NI
[oC]	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
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

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)																												Blanks	
		DL	RL	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			
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	
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

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		
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	
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	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																										Blanks	
		DL	RL	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			
Cadmium	Jul-93	NR	1	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		1		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	
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	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																										Blanks	
		DL	RL	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			
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	
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

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																										Blanks	
		DL	RL	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			
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
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	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																												Blanks	
		DL	RL	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			
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	
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	
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	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																												Blanks	
		DL	RL	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			
Vanadium	Jul-93	NR	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Aug-93	NR	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	NR	2000	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	
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

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent	Date	Concentrations (µg/L)																												Blanks	
		DL	RL	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			
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	
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	
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	
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	
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	
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	

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
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

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
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
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

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
NC2B/EPA NC = NE (03/28/08)	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	
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	
	11-Oct-07	0.47	10.0	1.4	J	13		Dry		Dry		ND	
NC2B/EPA NC = 50 µg/L (03/28/08)	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
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	
	11-Oct-07	0.04	100.0	47.4	J	187		Dry		Dry		0.2	J
NC2B/EPA NC = NE (03/28/08)	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

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)												Blanks	
		DL	RL	Upstream		Downstream									
				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	
	11-Oct-07	0.08	1.0	ND		0.4	J	Dry		Dry				ND	
NC2B/EPA NC = 6.5 µg/L (03/28/08)	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	
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	
	11-Oct-07	0.06	1.0	0.1	B	0.2	B	Dry		Dry				0.1	J
NC2B/EPA NC = 2 µg/L (03/28/08)	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	

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	
	11-Oct-07	0.24	10.0	1.7	B	12		Dry		Dry		1.2	J
NC2B/EPA NC = 50 µg/L (03/28/08)	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	
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	
	11-Oct-07	0.41	10.0	1.5	J	3.4	J	Dry		Dry		ND	
NC2B/EPA NC = 2.5 µg/L (03/28/08)	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	

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	
	11-Oct-07	0.20	10.0	0.7	B	3.9	J	Dry		Dry		0.4	J
NC2B/EPA NC = 7 µg/L (03/28/08)	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
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	
	11-Oct-07	0.07	10.0	1.1	J	8.6	J	Dry		Dry		0.1	J
NC2B/EPA NC = 25 µg/L (03/28/08)	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

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	
	11-Oct-07	0.66	50.0	3.4	J	15.2	J	Dry		Dry		ND	
NC2B/EPA NC = 88 µg/L (03/28/08)	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	
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	
NC2B/EPA NC = 5 µg/L (03/28/08)	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	
Silver	28-Oct-08	0.04	10.0	0.1	B	0.1	B	0.1	B	0.1	B	0.1	J
NC2B/EPA NC = 0.06 µg/L (03/28/08)	07-Apr-09	0.04	10.0	ND		0.1	J	ND		0.1	J	ND	
Thallium	11-Oct-07	0.07	5.0	ND		0.1	J	Dry		Dry		ND	
NC2B/EPA NC = NE (03/28/08)	03-Apr-08	0.63	5.0	ND		ND		ND		ND		ND	
	28-Oct-08	0.63	5.0	ND		ND		ND		ND		ND	
Vanadium	10-Oct-07	0.42	25.0	2.5	J	16.5	J	Dry		Dry		ND	
NC2B/EPA NC = NE (03/28/08)	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	

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	
	11-Oct-07	0.20	10.0	44		22	B	Dry		Dry				6.6	J
NC2B/EPA NC = 50 µg/L (03/28/08)	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
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	
	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
NC2B/EPA NC = 2,000 µg/L (03/28/08)	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	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent	Date	Concentrations (µg/L)												Blanks	
		DL	RL	Upstream		Downstream									
				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	
	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	
NC2B/EPA NC = 160,000 µg/L (03/28/08)	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	
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	
NC2B/EPA NC = NE (03/28/08)	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	
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	
NC2B/EPA NC = NE (03/28/08)	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	
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	
NC2B/EPA NC = 100 µg/L (03/28/08)	28-Oct-08	0.21	1.0	ND		ND		ND		ND				ND	
	07-Apr-09	0.21	1.0	ND		ND		ND		ND				ND	
Methylene Chloride	11-Oct-07	0.14	1.0	ND		ND		Dry		Dry				0.20	J
NC2B/EPA NC = NE (03/28/08)	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	

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	
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
	11-Oct-07	0.13	1.0	ND	ND	Dry	Dry	ND
NC2B/EPA NC = 11 µg/L (03/28/08)	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

Notes:
1. All concentrations are in micrograms per Liter (ug/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) or EPA National Criteria (EPA NC).
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	1900	NA
	Apr-98	NA	Dry	420	NA
	Oct-98	Dry	680	Dry	NA
	Jul-99	NA	NA	NA	160
	Aug-99	NA	NA	NA	1300
	Oct-99	450	880	320	980
	Nov-99	NA	NA	NA	780
	Apr-00	420	3000	470	NA
	Oct-00	110	1100	480	790
	Apr-01	Dry	Dry	380	NA
	Oct-01	320	320	870	630
	Apr-02	NA	1800	510	640
	Oct-02	1000	1700	620	778
	Apr-03	601	1048	1181	894
	Oct-03	741	974	481	1331
	15-Apr-04	340	380	120	690
	14-Oct-04	255	363	375	329
	05-Apr-05	677	795	1281	1021
	27-Oct-05	722	522	199	607
	21-Apr-06	616	1010	1122	1034
	12-Oct-06	456	523	530	538
	26-Apr-07	517	758	837	1022
	11-Oct-07	562	2820	Dry	Dry
Resample	04-Dec-07	2140	3630	NS	NS
	03-Apr-08	643	1836	1647	1220
Resample	14-May-08	2890	1198	1191	1458
	28-Oct-08	571	2320	410	1245
	07-Apr-09	1038	1432	583	1128
pH	Jun-93	5.9	6.3	6.3	-
[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

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
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

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	
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
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	1358		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

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
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
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

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
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
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

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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)					
		DL	RL	Leachate		Blanks	
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	
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
Acetone	Oct-99	NR	NA	ND		ND	
	Apr-00	NR	NA	3829		ND	
	Oct-00	NR	NA	ND		ND	
	Apr-01	NR	NA	ND		ND	
	Oct-01	NR	100	NA		ND	
	Apr-02	NR	100	9690		ND	
	Apr-03	NR	500	1090		ND	
	05-Apr-05	NR	500	4570		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	

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
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
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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
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
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
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
2-Butanone	Oct-99	NR	NA	ND		ND
	Apr-00	NR	NA	5343		ND
	Oct-00	NR	NA	ND		ND
	Apr-01	NR	NA	ND		ND
	Oct-01	NR	100	ND		ND
	Apr-02	NR	100	5640		ND
	Apr-03	NR	500	861		ND
	05-Apr-05	NR	500	1580		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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)				
		DL	RL	Leachate		Blanks
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
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
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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
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
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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
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
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
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

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

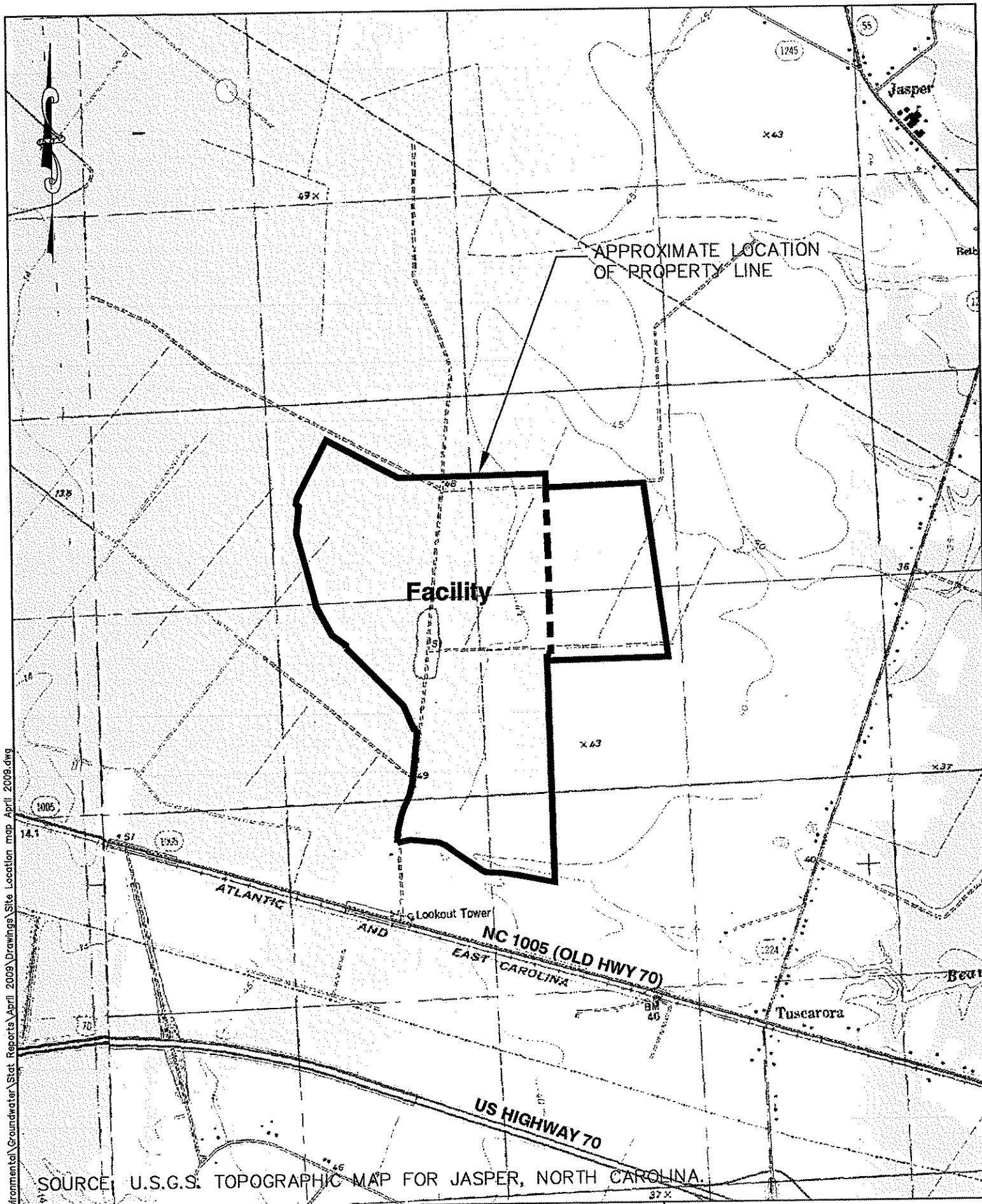
Constituent	Date	Concentration (ug/L)			
		DL	RL	Leachate	Blanks
Xylenes (total)	Oct-99	NR	NA	ND	ND
	Apr-00	NR	NA	ND	ND
	Oct-00	NR	NA	ND	ND
	Apr-01	NR	NA	52	ND
	Oct-01	NR	5	NA	ND
	Apr-02	NR	5	60.6	ND
	Apr-03	NR	25	102	ND
	05-Apr-05	NR	25	147	ND
	15-Dec-05	NR	25	189	ND
	21-Apr-06	NR	NS	NS	ND
	12-Oct-06	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

Notes:

1. All concentrations are in ug/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



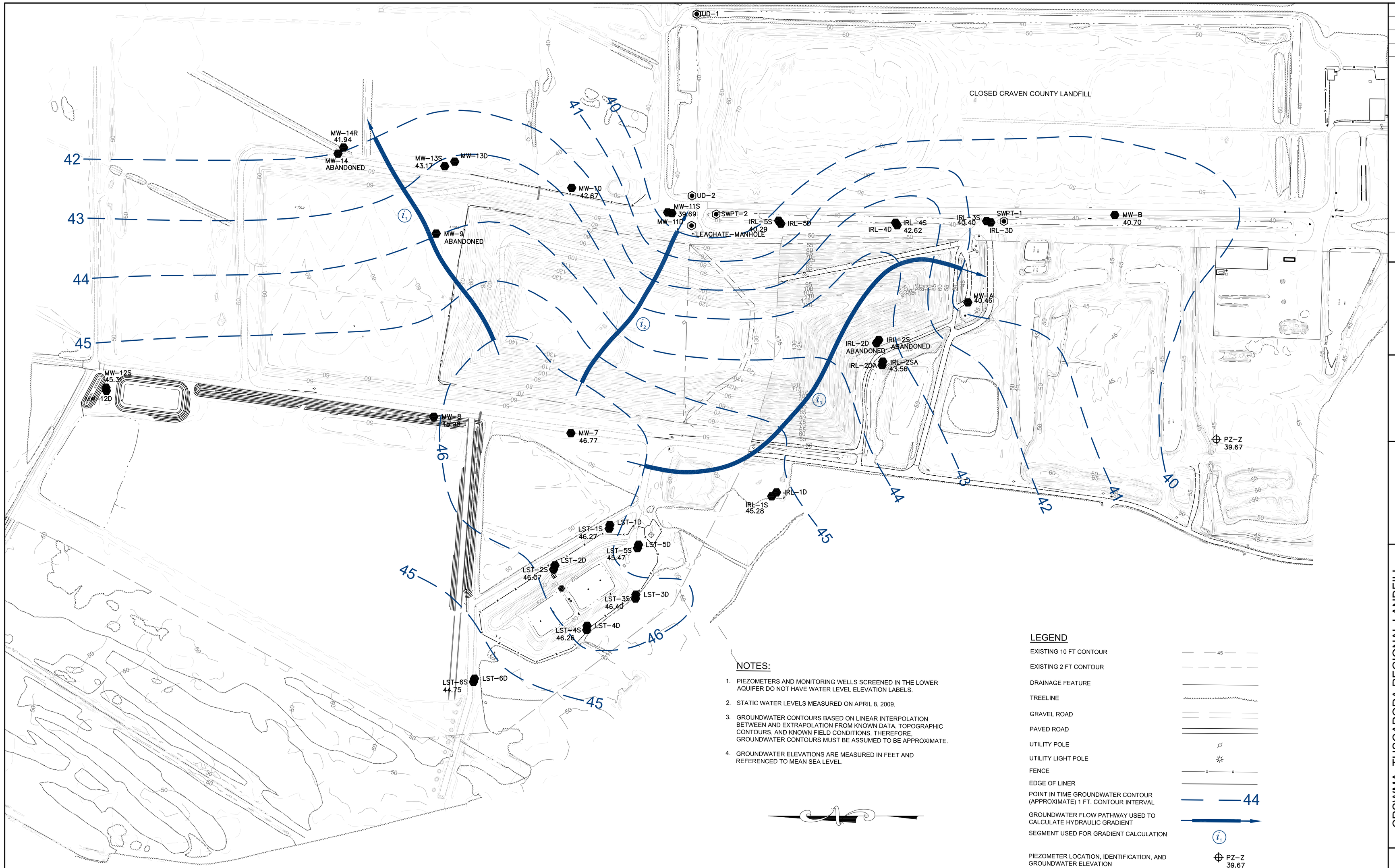
SOURCE: U.S.G.S. TOPOGRAPHIC MAP FOR JASPER, NORTH CAROLINA.

FIGURE NO. 1	JOYCE ENGINEERING, INC. 2211 WEST MEADOWVIEW ROAD GREENSBORO, N.C. 27407 PHONE: (336) 323-0092 © 2009 Joyce Engineering, Inc. All rights reserved.	SCALE 1"=2000'	PROJECT NO. 618.08.01	CRSWMA: TUSCARORA LANDFILL SITE LOCATION MAP

P:\CRSWMA\Environmental\Groundwater\Stat Reports\April 2009\Drawings\Site Location map April 2009.dwg

Drawings

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



NOTES:

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE LOWER AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON APRIL 8, 2009.
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.

GRAPHIC SCALE

0 100 200 400

(FEET)

LEGEND

- EXISTING 10 FT CONTOUR — 45
- EXISTING 2 FT CONTOUR
- DRAINAGE FEATURE
- TREELINE
- GRAVEL ROAD
- PAVED ROAD
- UTILITY POLE
- UTILITY LIGHT POLE
- FENCE — x — x —
- EDGE OF LINER
- POINT IN TIME GROUNDWATER CONTOUR (APPROXIMATE) 1 FT. CONTOUR INTERVAL — 44
- GROUNDWATER FLOW PATHWAY USED TO CALCULATE HYDRAULIC GRADIENT
- SEGMENT USED FOR GRADIENT CALCULATION i_1
- PIEZOMETER LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION — PZ-Z 39.67
- GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION — MW-10 42.67
- SURFACE WATER/LEACHATE MONITORING LOCATIONS AND IDENTIFICATIONS — SWPT-1

NO	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

DESIGNED JJK
DRAWN CADD/JJK
CHECKED GVB
APPROVED GVB
DATE 05/20/09

© 2008 Joyce Engineering, Inc. All rights reserved.

JOYCE ENGINEERING, INC.
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092

CRSWMA: TUSCARORA REGIONAL LANDFILL

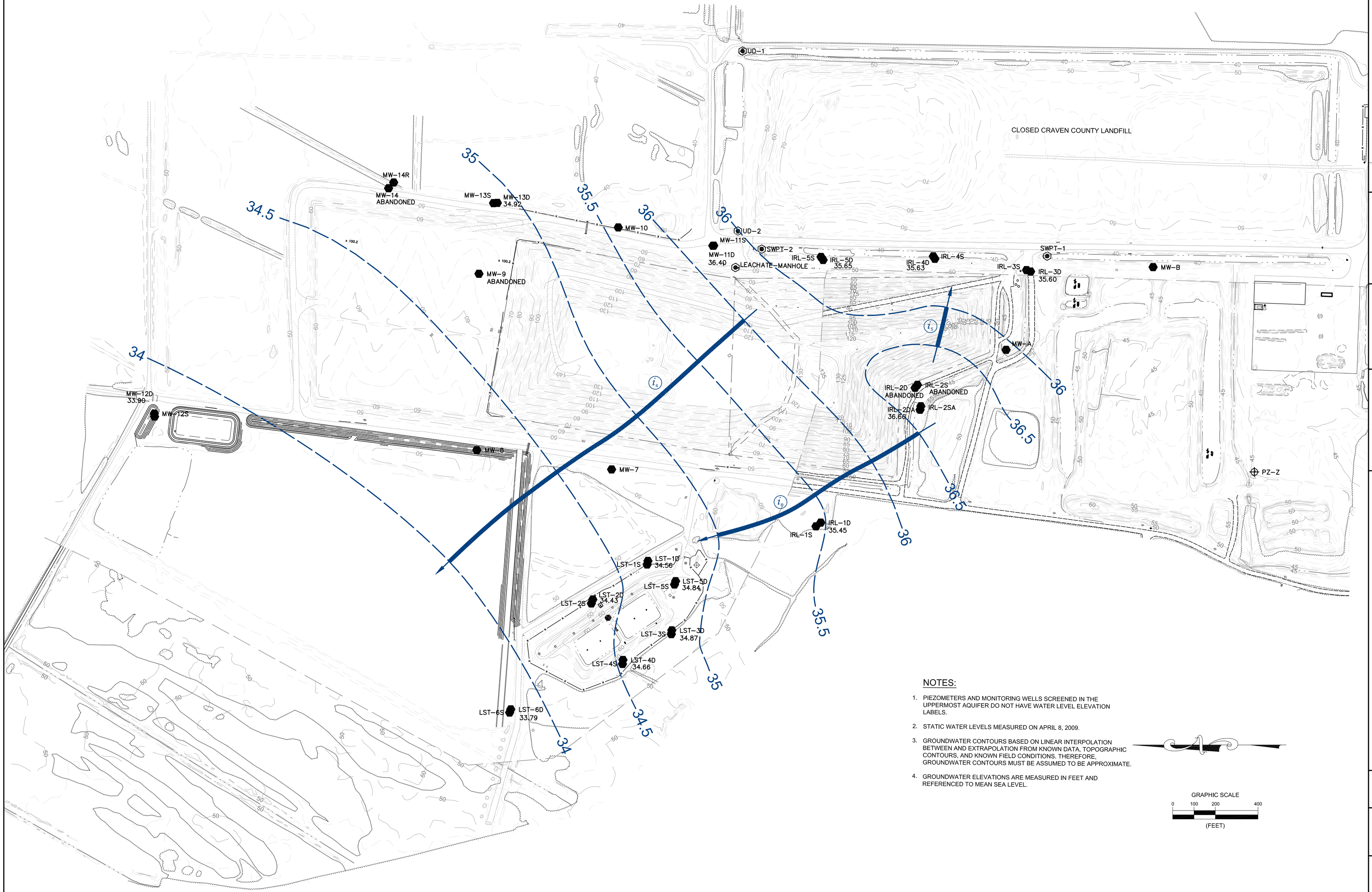
SHALLOW AQUIFER GROUNDWATER SURFACE CONTOUR MAP APRIL 8, 2009

PROJECT NO.
618.08.01

SCALE
AS NOTED

DRAWING NO.
1

P:\CRSWMA\Environmental\Groundwater\Stat Reports\April 2009\Drawings\CRSWMA GW Event Upper Aquifer April 2009.dwg Layout=Layout1



NOTES:

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE UPPERMOST AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON APRIL 8, 2009.
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.

GRAPHIC SCALE
0 100 200 400
(FEET)

NO	BY	CK	APP	DATE	REVISIONS AND RECORD OF ISSUE

DESIGNED JJK
DRAWN CADD/JJK
CHECKED GVB
APPROVED GVB
DATE 05/21/09

© 2009 Joyce Engineering, Inc. All rights reserved.

JOYCE ENGINEERING, INC.
2211 W. MEADOWVIEW ROAD
GREENSBORO, NC 27407
PHONE: (336) 323-0092

CRSWMA: TUSCARORA REGIONAL LANDFILL

DEEP AQUIFER GROUNDWATER SURFACE CONTOUR MAP APRIL 8, 2009

PROJECT NO.
618.08.01

SCALE
AS NOTED

DRAWING NO.
2

P:\CRSWMA\Environmental\Groundwater\Stat Reports\April 2009\Drawings\CRSWMA GW Event Lower Aquifer April 2009.dwg Layout=Layout1

Appendices

Appendix 1	Laboratory Analytical Reports and Field Data
Appendix 2	Statistical Analyses Worksheets

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

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

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

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			4.8	6.7	4.9		4.6	04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.2 J	0.1 J	--- U		--- U	04/14/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	0.8 J	0.8 J	1.0 J		1.0 J	04/14/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	61.2 J	44.5 J	55.6 J		77.3 J	04/14/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.5 J	0.1 J	0.4 J		0.5 J	04/14/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.3 J	0.1 J	0.2 J		0.5 J	04/14/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	0.4 J	0.4 J	0.6 J		2.8 J	04/14/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.7 J	0.6 J	1.1 J		1.3 J	04/14/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	1.9 J	0.2 J	2.8 J		2.4 J	04/14/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	1.6 J	0.3 J	3.0 J		5.2 J	04/14/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	1.0 J	2.5 J	1.1 J		3.5 J	04/14/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	1.1 J	--- U	0.2 J		--- U	04/14/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	0.1 J		--- U	04/14/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J	0.1 J	0.1 J		0.1 J	04/14/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	4.6 J	2.3 J	6.4 J		5.3 J	04/14/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	7.4 J	3.7 J	8.0 J		22	04/14/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	40	55	85		24	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	75	473	91		77	04/08/09	RJH	SM2510B
Temperature, °C			14	16	14		14	04/08/09	RJH	SM2550B
Static Water Level, feet			4.65	16.36	4.93	16.51	5.77	04/08/09	RJH	
Well Depth, feet			15.04	34.86	14.45	33.29	17.65	04/08/09	RJH	

RECEIVED MAY 13 2009

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	Leach SWSLStor 3D	Leach Stor 4S	Leach Stor 4D	Leach Stor 5S	Leach Stor 5D	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.0		6.1	6.7	04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	--- U		0.2 J	0.1 J	04/14/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	2.1 J		1.9 J	0.9 J	04/14/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	52.9 J		33.1 J	85.0 J	04/14/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.6 J		0.2 J	0.2 J	04/14/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.2 J		0.1 J	0.2 J	04/14/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	1.6 J		0.4 J	0.4 J	04/14/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.5 J		2.3 J	0.9 J	04/14/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	6.2 J		6.4 J	1.1 J	04/14/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	6.2 J		4.4 J	0.8 J	04/14/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	2.6 J		1.8 J	2.9 J	04/14/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	0.2 J		0.3 J	0.2 J	04/14/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U		0.1 J	0.1 J	04/14/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J		0.1 J	--- U	04/14/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	10.0 J		12.6 J	2.9 J	04/14/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	15		29	6.6 J	04/14/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	170		160	75	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	69		217	560	04/08/09	RJH	SM2510B
Temperature, °C			14		14	16	04/08/09	RJH	SM2550B
Static Water Level, feet		17.00	5.12	16.90	6.90	17.43	04/08/09	RJH	
Well Depth, feet		34.85	17.62	36.12	15.41	38.66	04/08/09	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 6S	Leach Stor 6D	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.4			04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	--- U			04/14/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	1.5 J			04/14/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	79.7 J			04/14/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.4 J			04/14/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.3 J			04/14/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	0.7 J			04/14/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.7 J			04/14/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	8.0 J			04/14/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	9.7 J			04/14/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	1.7 J			04/14/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	0.3 J			04/14/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U			04/14/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J			04/14/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	14.5 J			04/14/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	107			04/14/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	450			04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	47			04/08/09	RJH	SM2510B
Temperature, °C			14			04/08/09	RJH	SM2550B
Static Water Level, feet			6.48	17.38		04/08/09	RJH	
Well Depth, feet			16.44	34.37		04/08/09	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Leach Stor 1S	Leach Stor 1D	Leach Stor 2S	Leach Stor 3S	Leach Stor 4S
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	1.30 J	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/11/09

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Leach Stor 5S	Leach Stor 5D	Leach Stor 6S	Trip Blank
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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
FAX (252) 756-0633

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

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	92.2	105	107
Laboratory Control std.	70-130	85.5	98.2	101
Method Blank	70-130	83.6	94.9	102
Leachate Storage 1S	70-130	84.8	100	97.1
Leachate Storage 1D	70-130	84.0	99.8	98.4
Leachate Storage 2S	70-130	85.1	97.6	99.8
Leachate Storage 3S	70-130	84.5	97.4	99.7
Leachate Storage 4S	70-130	84.7	98.5	100
Leachate Storage 5S	70-130	94.7	109	111
Leachate Storage 5D	70-130	88.8	102	103
Leachate Storage 6S	70-130	84.4	97.1	99.1
Trip Blank	70-130	102	117	121
Leachate Storage 1S M.S.	70-130	85.2	96.8	101
Leachate Storage 1S M.S.D.	70-130	85.7	97.0	102

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	15.87	79.4	16.17	80.9	1.9
Benzene	20.0	--- U	18.49	92.5	19.09	95.5	3.2
Trichloroethene	20.0	--- U	17.69	88.5	18.38	91.9	3.8
Toluene	20.0	--- U	16.84	84.2	17.74	88.7	5.2
Chlorobenzene	20.0	--- U	16.32	81.6	17.13	85.7	4.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.08	80.4
Benzene	20.0	19.43	97.2
Trichloroethene	20.0	18.94	94.7
Toluene	20.0	18.58	92.9
Chlorobenzene	20.0	18.01	90.1

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:** 16

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

(252) 633-1564

DISINFECTION: ☐ CHLORINE ☐ UV ☐ NONE ☐ _____

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB): 2 2 2 2

CONTAINER TYPE, P/G: P P P P P G G G G

CHEMICAL PRESERVATION: A A A A A E E E E

PARAMETERS

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/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
Leach Stor 1S	04 08 09	1030		14	7	G	G	G	G	G	G	G	G	G	G
Leach Stor 1D	04 08 09	1035		16	5	G	G	G	G	G	G	G	G		
Leach Stor 2S	04 08 09	1025		14	5	G	G	G	G	G	G	G	G		
Leach Stor 2D	04 08 09				1						G				
Leach Stor 3S	04 08 09	1010		14	5	G	G	G	G	G	G	G	G		
Leach Stor 3D	04 08 09				1						G				
Leach Stor 4S	04 08 09	1025		14	5	G	G	G	G	G	G	G	G		
Leach Stor 4D	04 08 09				1						G				
Leach Stor 5S	04 08 09	1040		14	5	G	G	G	G	G	G	G	G		
Leach Stor 5D	04 08 09	1045		16	5	G	G	G	G	G	G	G	G		
Leach Stor 6S	04 08 09	1005		14	6	G	G	G	G	G	G	G	G	G	

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

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

SAMPLES COLLECTED BY: (Please Print) R Hope

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
R Hope	04 08 09 12:25		4/8/09 2:25
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.

№ 178053

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: 16**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. ALLEN HARDISON
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 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
						P	P	P	P	P		G	G	G	G
						A	A	A	A	A		E	E	E	E
Leach Stor 6D	04 08 09				1						✓				
Trip Blank					3										

PARAMETERS

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

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
- [X] SOLID WASTE SECTION

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

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

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Sgoe	04 08 09 2:25	[signature]	4/8/9 2:25
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.

№ 178052

FORM #5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL 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		4.9	6.0			5.5	04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	--- U			0.1 J	04/16/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	1.2 J			1.2 J	04/16/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	118			72.6 J	04/16/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.6 J	41.1 J		0.2 J	04/16/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.2 J	0.1 J		0.6 J	04/16/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	1.3 J	0.1 J		0.6 J	04/16/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	2.2 J	0.8 J		1.7 J	04/16/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	6.1 J	0.9 J		2.7 J	04/16/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	4.8 J	1.1 J		1.9 J	04/16/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	3.1 J	0.9 J		4.6 J	04/16/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	--- U	1.0 J		0.8 J	04/16/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	--- U		--- U	04/16/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J	--- U		0.1 J	04/16/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	7.8 J	1.9 J		6.2 J	04/16/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	9.5 J	13		18	04/16/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	130	56		90	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	106	215		1092	04/08/09	RJH	SM2510B
Temperature, °C			14	16		14	04/08/09	RJH	SM2550B
Static Water Level, feet			5.28	14.74	7.81	14.92	8.62	04/08/09	RJH
Well Depth, feet			17.72	43.96		30.99	16.34	04/08/09	RJH

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

RECEIVED MAY 13 2009

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

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		6.4	4.9	6.7	8.5		04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.1 J	--- U	--- U	0.9 J	04/16/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	1.4 J	2.7 J	0.5 J	4.2 J	04/16/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	107	176	43.8 J	92.8 J	04/16/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.5 J	0.2 J	0.1 J	--- U	04/16/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.4 J	0.6 J	0.1 J	0.7 J	04/16/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	1.2 J	1.4 J	0.5 J	1.5 J	04/16/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.6 J	1.9 J	0.4 J	2.3 J	04/16/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	5.9 J	1.6 J	1.2 J	0.6 J	04/16/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	8.9 J	1.4 J	0.4 J	0.6 J	04/16/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	6.4 J	1.9 J	1.7 J	6.3 J	04/16/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	2.0 J	3.0 J	--- U	3.1 J	04/16/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	--- U	--- U	04/16/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J	0.1 J	--- U	--- U	04/16/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	8.2 J	3.1 J	2.1 J	3.0 J	04/16/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	18	11	2.1 J	380	04/16/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	260	120	38	32	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	894	283	541	1265	04/08/09	RJH	SM2510B
Temperature, °C			16	15	16	15	04/08/09	RJH	SM2550B
Static Water Level, feet			13.33	5.72	12.72	8.49	13.01	04/08/09	RJH	
Well Depth, feet			38.50	14.98	34.19	35.51	35.51	04/08/09	RJH	
Zinc, Total Dissolved, ug/l						8.7		04/16/09	CMF	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-A	MW-B	Piezometer #1	Trip Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.1				04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.1 J				04/16/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	3.8 J				04/16/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	42.0 J				04/16/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.2 J				04/16/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.1 J				04/16/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	0.7 J				04/16/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.1 J				04/16/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	2.1 J				04/16/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	1.7 J				04/16/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	0.8 J				04/16/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	0.9 J				04/16/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U				04/16/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	--- U				04/16/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	3.7 J				04/16/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	6.4 J				04/16/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	90				04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	95				04/08/09	RJH	SM2510B
Temperature, °C			14				04/08/09	RJH	SM2550B
Static Water Level, feet			5.58	8.20	9.85		04/08/09	RJH	
Well Depth, feet			20.46				04/08/09	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Regional LF 1S	Regional LF 1D	Regional LF 3S	Regional LF 3D	Regional LF 4S
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	1.40 J	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Regional LF 4D	Regional LF 5S	MW-A	Trip Blank
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	1.40 J	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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
FAX (252) 756-0633

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

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	93.2	96.6	94.4
Laboratory Control std.	70-130	92.1	97.0	93.8
Method Blank	70-130	90.6	96.0	92.2
Regional Landfill 1S	70-130	89.8	95.4	89.6
Regional Landfill 1D	70-130	89.3	47.3	43.8
Regional Landfill 3S	70-130	91.0	96.3	90.2
Regional Landfill 3D	70-130	90.4	94.5	90.1
Regional Landfill 4S	70-130	92.3	96.3	93.5
Regional Landfill 4D	70-130	92.4	94.9	91.7
Regional Landfill 5S	70-130	91.9	96.5	90.3
Monitoring Well A	70-130	91.6	96.1	92.5
Trip Blank	70-130	91.1	94.5	90.1
Regional Landfill 1S M.S.	70-130	92.5	94.3	94.1
Regional Landfill 1S M.S.D.	70-130	92.3	95.6	94.0

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	16.00	80.0	16.28	81.4	1.7
Benzene	20.0	--- U	17.76	88.8	18.11	90.6	2.0
Trichloroethene	20.0	--- U	16.91	84.6	17.30	86.5	2.2
Toluene	20.0	--- U	18.24	91.2	18.03	90.2	1.2
Chlorobenzene	20.0	--- U	17.19	86.0	17.33	86.7	0.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.96	84.8
Benzene	20.0	18.70	93.5
Trichloroethene	20.0	17.82	89.1
Toluene	20.0	18.70	93.5
Chlorobenzene	20.0	18.09	90.5

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:** 16

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. ALLEN HARDISON
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 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	04 08 09	1055		14	7	G	G	G	G	G	G		G	G	G	G
Regional LF 1D	04 08 09	1100		16	5	G	G	G	G	G	G		G	G		
Regional Land. 2S-A	04 08 09				1						G					
Regional Land. 2-D-A	04 08 09				1						G					
Regional LF 3S	04 08 09	1145		14	5	G	G	G	G	G	G		G	G		
Regional LF 3D	04 08 09	1220		16	5	G	G	G	G	G	G		G	G		
Regional LF 4S	04 08 09	1150		15	5	G	G	G	G	G	G		G	G		
Regional LF 4D	04 08 09	1155		16	5	G	G	G	G	G	G		G	G		
Regional LF 5S	04 08 09	1210		15	7	G	G	G	G	G	G	G	G	G	G	
Regional LF 5D	04 08 09				1						G					
MW-A	04 08 09	1105		14	5	G	G	G	G	G	G		G	G		

PARAMETERS

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

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
- [X] SOLID WASTE SECTION

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

SAMPLES COLLECTED BY: (Please Print)
H Hope / F of

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Hope 04	08 09 2:25	[signature]	4/8 2:25
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.

№ 178051

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:** 16

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. ALLEN HARDISON
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 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						PARAMETERS
						P	P	P	P	P		P	G	G	G	G						
						A	A	A	A	A		A	E	E	E	E						
MW-B	04	0809			1						G											
Piezometer #1	04	0809			1						G											
Trip Blank					2																	

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

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
- [X] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

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

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Jaque	04 0809 2:25	[signature]	4/8/9 2:25
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.

№ 178050

FORM #5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 06/01/09
DATE REPORTED : 06/16/09

REVIEWED BY:

PARAMETERS	MDL	Regional SWSL LF 5S		Analysis Date	Analyst	Method Code
Zinc, ug/l	0.14	10.0	26	06/15/09	CMF	EPA200.8
Zinc, Total Dissolved, ug/l			16	06/15/09	CMF	EPA200.8

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: 6035A

CRSWMA

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	PARAMETERS: ZINC	PARAMETERS: DISSOLVED ZN	CHLORINE NEUTRALIZED AT COLLECTION	pH CHECK (LAB)	CONTAINER TYPE, P/G	CHEMICAL PRESERVATION
						P	P				
						A	A				
IRL-55	6-01-09	0925		19	2	G	G				

PARAMETERS — CHEMICAL PRESERVATION
- 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)
Bobby Fox

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bobby Fox	6-01-09 2:37	B Jeffers	6-1-9 2:37
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:
ANALYZE FOR TOTAL ZINC AND DISSOLVED ZINC

Instructions for completing this form are 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.

№ 172625

FORM #5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/07/09
DATE REPORTED : 05/11/09

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			6.8	6.9	6.8	6.4		04/07/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.1 J	0.1 J	--- U	0.1 J		04/14/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	0.7 J	1.8 J	1.7 J	0.9 J		04/14/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	31.3 J	48.3 J	73.1 J	64.2 J		04/14/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	--- U	--- U	--- U	--- U		04/14/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.2 J	0.1 J	--- U	0.1 J		04/14/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	0.7 J	2.7 J	1.7 J	0.7 J		04/14/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	0.9 J	1.2 J	1.3 J	1.0 J		04/14/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	0.3 J	1.2 J	0.5 J	--- U		04/14/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.9 J	0.1 J	0.2 J	0.1 J		04/14/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	6.9 J	11.8 J	5.7 J	6.5 J		04/14/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	0.2 J	2.3 J	2.9 J	0.9 J		04/14/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	--- U	0.1 J		04/14/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	--- U	--- U	--- U	--- U		04/14/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	1.9 J	1.4 J	2.1 J	2.4 J		04/14/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	44	6.8 J	7.1 J	2.8 J		04/14/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	17	15	12	80		04/07/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	1038	1432	583	1128		04/07/09	RJH	SM2510B
Temperature, °C			15	11	15	15		04/08/09	RJH	SM2550B

RECEIVED MAY 13 2009

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MAO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/11/09

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	SW-1	SW-2	Under Drain	Under Drain #2	Trip Blank
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	1.70 J	2.00 J	2.00 J	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- U	--- 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
FAX (252) 756-0633

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

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	92.2	105	107
Laboratory Control std.	70-130	85.5	98.2	101
Method Blank	70-130	83.6	94.9	102
Surface Water #1	70-130	85.8	97.4	101
Surface Water #2	70-130	85.1	96.9	101
Under Drain	70-130	83.8	97.1	101
Under Drain #2	70-130	83.2	99.0	98.1
Trip Blank	70-130	85.4	96.5	102
Leachate Storage 1S M.S.	70-130	85.2	96.8	101
Leachate Storage 1S M.S.D.	70-130	85.7	97.0	102

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 B

ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	15.87	79.4	16.17	80.9	1.9
Benzene	20.0	--- U	18.49	92.5	19.09	95.5	3.2
Trichloroethene	20.0	--- U	17.69	88.5	18.38	91.9	3.8
Toluene	20.0	--- U	16.84	84.2	17.74	88.7	5.2
Chlorobenzene	20.0	--- U	16.32	81.6	17.13	85.7	4.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.08	80.4
Benzene	20.0	19.43	97.2
Trichloroethene	20.0	18.94	94.7
Toluene	20.0	18.58	92.9
Chlorobenzene	20.0	18.01	90.1

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:** 16

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

(252) 633-1564

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

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

PARAMETERS

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	EPA 8260B	8260 Dup. 1
						P	P	P	P	P	G	G
						A	A	A	A	A	E	E
SW-1	04/07/09	1220		15	5	G	G	G	G	G	G	G
SW-2	04/07/09	0920		11	5	G	G	G	G	G	G	G
Under Drain	04/07/09	0945		15	5	G	G	G	G	G	G	G
Under Drain #2	04/07/09	0910		15	5	G	G	G	G	G	G	G
Trip Blank					2						G	G

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

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

SAMPLES COLLECTED BY:
(Please Print)
[illegible]

SAMPLES RECEIVED IN LAB AT 0.5 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
[illegible]	04/07/09 3:01	[illegible]	4/7/09 3:01
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.

№ 178049

FORM #5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	Equipment SWSL	Blank		Analysis Date	Analyst	Method Code
Antimony, ug/l	0.06	6.0	---	U	04/16/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	0.2	J	04/16/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	0.2	J	04/16/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	---	U	04/16/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	---	U	04/16/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	---	U	04/16/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	0.1	J	04/16/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	---	U	04/16/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.1	J	04/16/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	---	U	04/16/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	---	U	04/16/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	---	U	04/16/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	---	U	04/16/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	---	U	04/16/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	0.8	J	04/16/09	CMF	EPA200.8

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

RECEIVED MAY 18 ...
RECEIVED MAY 13 2009

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Equipment Blank
1. Chloromethane	0.18	1.0	--- U
2. Vinyl Chloride	0.34	1.0	--- U
3. Bromomethane	0.26	10.0	--- U
4. Chloroethane	0.29	10.0	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U
7. Acetone	1.21	100.0	--- U
8. Iodomethane	0.12	10.0	--- U
9. Carbon Disulfide	0.14	100.0	--- U
10. Methylene Chloride	0.14	1.0	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U
15. 2-Butanone	0.85	100.0	--- U
16. Bromochloromethane	0.11	3.0	--- U
17. Chloroform	0.13	5.0	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U
20. Benzene	0.16	1.0	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U
22. Trichloroethene	0.13	1.0	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U
24. Bromodichloromethane	0.13	1.0	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U
27. Toluene	0.13	1.0	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U
30. Tetrachloroethene	0.16	1.0	--- U
31. 2-Hexanone	1.00	50.0	--- U
32. Dibromochloromethane	0.14	3.0	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U
34. Chlorobenzene	0.13	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U
36. Ethylbenzene	0.16	1.0	--- U
37. Xylenes	0.48	5.0	--- U
38. Dibromomethane	0.17	10.0	--- U
39. Styrene	0.16	1.0	--- U
40. Bromoform	0.11	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U
46. Acrylonitrile	1.49	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- 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
FAX (252) 756-0633

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

CLIENT ID: 6035 C

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	93.2	96.6	94.4
Laboratory Control std.	70-130	92.1	97.0	93.8
Method Blank	70-130	90.6	96.0	92.2
Equipment Blank	70-130	91.3	94.6	88.3
Regional Landfill 1S M.S.	70-130	92.5	94.3	94.1
Regional Landfill 1S M.S.D.	70-130	92.3	95.6	94.0

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 C
ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	16.00	80.0	16.28	81.4	1.7
Benzene	20.0	--- U	17.76	88.8	18.11	90.6	2.0
Trichloroethene	20.0	--- U	16.91	84.6	17.30	86.5	2.2
Toluene	20.0	--- U	18.24	91.2	18.03	90.2	1.2
Chlorobenzene	20.0	--- U	17.19	86.0	17.33	86.7	0.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.96	84.8
Benzene	20.0	18.70	93.5
Trichloroethene	20.0	17.82	89.1
Toluene	20.0	18.70	93.5
Chlorobenzene	20.0	18.09	90.5

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 C **Week:** 16

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

(252) 633-1564

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

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB): 2 2 2

CONTAINER TYPE, P/G: P G G

CHEMICAL PRESERVATION: A E E

PARAMETERS

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

SAMPLE LOCATION	COLLECTION DATE	COLLECTION TIME	TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Metals	EPA 8260B	8260 Dup. 1
Equipment Blank 04	04/08/09				3	G	G	G

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

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

SAMPLES COLLECTED BY: (Please Print) Wade Fox

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Wade Fox	04/08/09 2:10		4/8/09 2:20
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.

№ 178071

FORM #5

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 D

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

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-7	MW-8	MW-10	MW-11S	MW-11D	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.2	4.9	5.0	4.0	6.7	04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.1 J	--- U	--- U	--- U	--- U	04/16/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	1.2 J	3.9 J	3.5 J	0.6 J	0.3 J	04/16/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	61.0 J	82.8 J	66.5 J	52.4 J	42.8 J	04/16/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.1 J	0.7 J	0.3 J	2	0.1 J	04/16/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.3 J	0.3 J	0.2 J	0.7 J	0.5 J	04/16/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	0.6 J	1.1 J	1.1 J	6.1 J	0.1 J	04/16/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	1.5 J	1.5 J	1.6 J	1.0 J	0.4 J	04/16/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	3.3 J	8.3 J	3.1 J	1.4 J	--- U	04/16/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	2.3 J	6.6 J	2.7 J	1.9 J	0.1 J	04/16/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	2.5 J	1.6 J	1.5 J	8.5 J	1.2 J	04/16/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	--- U	0.2 J	0.3 J	0.5 J	--- U	04/16/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	--- U	--- U	--- U	--- U	04/16/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J	0.1 J	0.1 J	--- U	--- U	04/16/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	6.9 J	13.5 J	6.5 J	2.7 J	0.8 J	04/16/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	16	9.4 J	7.5 J	14	1.8 J	04/16/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	75	250	90	39	50	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	475	60	131	1200	460	04/08/09	RJH	SM2510B
Temperature, °C			14	14	13	14	15	04/08/09	RJH	SM2550B
Static Water Level, feet			3.92	4.96	4.65	7.98	11.15	04/08/09	RJH	
Well Depth, feet			16.59	15.62	15.95	14.04	34.42	04/08/09	RJH	

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

RECEIVED MAY 13 2009

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 D

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

DATE COLLECTED: 04/08/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-12s	Well #12 Deep	Well #13 Shallow	Well #13 Deep	MW-14R	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.9	6.8	4.8	6.6	4.6	04/08/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	0.1 J	0.2 J	0.9 J	0.2 J	0.1 J	04/17/09	LFJ	EPA200.8
Arsenic, ug/l	0.17	10.0	1.2 J	0.8 J	1.6 J	0.4 J	0.4 J	04/17/09	LFJ	EPA200.8
Barium, ug/l	0.04	100.0	109	33.6 J	59.4 J	50.4 J	99.7 J	04/17/09	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0	0.6 J	0.1 J	0.4 J	0.1 J	0.4 J	04/17/09	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	04/17/09	LFJ	EPA200.8
Cobalt, ug/l	0.02	10.0	2.3 J	0.2 J	0.5 J	0.2 J	1.2 J	04/17/09	LFJ	EPA200.8
Copper, ug/l	0.04	10.0	2 J	0.9 J	1.1 J	0.7 J	1.9 J	04/17/09	LFJ	EPA200.8
Total Chromium, ug/l	0.10	10.0	0.5 J	0.9 J	1.2 J	0.6 J	1.3 J	04/17/09	LFJ	EPA200.8
Lead, ug/l	0.04	10.0	0.6 J	0.2 J	0.9 J	0.4 J	1 J	04/17/09	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	2.9 J	2 J	1.1 J	1.9 J	2.2 J	04/17/09	LFJ	EPA200.8
Selenium, ug/l	0.12	10.0	2.4 J	0.7 J	0.5 J	--- U	0.9 J	04/17/09	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	--- U	0.1 J	--- U	--- U	04/17/09	LFJ	EPA200.8
Thallium, ug/l	0.03	5.0	0.1 J	--- U	0.1 J	--- U	--- U	04/17/09	LFJ	EPA200.8
Vanadium, ug/l	0.28	25.0	1.5 J	1.7 J	2.3 J	1.8 J	2.1 J	04/17/09	LFJ	EPA200.8
Zinc, ug/l	0.14	10.0	23	1.3 J	5.4 J	1.9 J	8.7 J	04/17/09	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	38	70	40	120	27	04/08/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	148	429	149	435	116	04/08/09	RJH	SM2510B
Temperature, °C			14	17	14	15	13	04/08/09	RJH	SM2550B
Static Water Level, feet			6.81	18.00	3.04	11.01	5.04	04/08/09	RJH	
Well Depth, feet			17.99	36.03	17.74	34.31	17.37	04/08/09	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/22/09 MW-7	04/21/09 MW-8	04/21/09 MW-10	04/21/09 MW-11S	04/21/09 MW-11D
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/21/09 MW-12s	04/21/09 Well #12 Deep	04/21/09 Well #13 Shallow	04/21/09 Well #13 Deep	04/21/09 MW-14R
1. Chloromethane	0.18	1.0	--- U	--- U	--- U	--- U	--- U
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
7. Acetone	1.21	100.0	--- U	--- U	--- U	--- U	--- U
8. Iodomethane	0.12	10.0	--- U	--- U	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	--- U	--- U	--- U	--- U	--- U
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	--- U	--- U	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MAO
DATE COLLECTED: 04/08/09
DATE REPORTED: 05/11/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/21/09 Trip Blank
1. Chloromethane	0.18	1.0	--- U
2. Vinyl Chloride	0.34	1.0	--- U
3. Bromomethane	0.26	10.0	--- U
4. Chloroethane	0.29	10.0	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U
7. Acetone	1.21	100.0	--- U
8. Iodomethane	0.12	10.0	--- U
9. Carbon Disulfide	0.14	100.0	--- U
10. Methylene Chloride	0.14	1.0	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U
15. 2-Butanone	0.85	100.0	--- U
16. Bromochloromethane	0.11	3.0	--- U
17. Chloroform	0.13	5.0	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U
20. Benzene	0.16	1.0	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U
22. Trichloroethene	0.13	1.0	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U
24. Bromodichloromethane	0.13	1.0	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U
27. Toluene	0.13	1.0	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U
30. Tetrachloroethene	0.16	1.0	--- U
31. 2-Hexanone	1.00	50.0	--- U
32. Dibromochloromethane	0.14	3.0	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U
34. Chlorobenzene	0.13	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U
36. Ethylbenzene	0.16	1.0	--- U
37. Xylenes	0.48	5.0	--- U
38. Dibromomethane	0.17	10.0	--- U
39. Styrene	0.16	1.0	--- U
40. Bromoform	0.11	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U
46. Acrylonitrile	1.49	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- 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
FAX (252) 756-0633

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

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/22/09
DATE REPORTED: 05/08/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	0.2 J
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	0.4 J
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.00	--- U

Environment 1, Incorporated

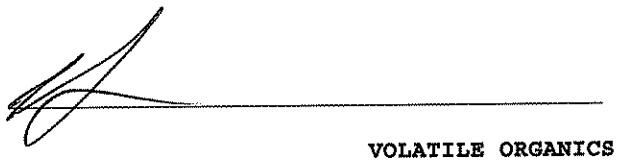
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

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

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

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	93.2	96.6	94.4
Laboratory Control std.	70-130	92.1	97.0	93.8
Method Blank	70-130	90.6	96.0	92.2
Monitoring Well #8	70-130	93.5	96.8	91.9
Monitoring Well #10	70-130	92.8	96.4	93.4
Monitoring Well #11S	70-130	91.8	95.1	90.1
Monitoring Well #11D	70-130	92.8	97.2	91.7
Monitoring Well #12S	70-130	94.1	94.5	92.4
Monitoring Well #12D	70-130	90.6	95.9	90.8
Monitoring Well #13S	70-130	92.3	96.1	90.8
Regional Landfill 1S M.S.	70-130	92.5	94.3	94.1
Regional Landfill 1S M.S.D.	70-130	92.3	95.6	94.0

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/22/09
DATE REPORTED: 05/08/09

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	92.1	95.7	91.9
Laboratory Control std.	70-130	90.0	97.1	93.0
Method Blank	70-130	90.8	97.0	90.2
Monitoring Well #7	70-130	89.8	96.6	89.8
Monitoring Well #13D	70-130	92.2	96.3	90.0
Monitoring Well #14R	70-130	91.3	93.9	91.5
Trip Blank	70-130	91.3	95.7	89.7
Regional Landfill 1S M.S.	70-130	89.7	96.5	93.3
Regional Landfill 1S M.S.D.	70-130	90.0	95.8	93.6

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/21/09
DATE REPORTED: 05/06/09

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	16.00	80.0	16.28	81.4	1.7
Benzene	20.0	--- U	17.76	88.8	18.11	90.6	2.0
Trichloroethene	20.0	--- U	16.91	84.6	17.30	86.5	2.2
Toluene	20.0	--- U	18.24	91.2	18.03	90.2	1.2
Chlorobenzene	20.0	--- U	17.19	86.0	17.33	86.7	0.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.96	84.8
Benzene	20.0	18.70	93.5
Trichloroethene	20.0	17.82	89.1
Toluene	20.0	18.70	93.5
Chlorobenzene	20.0	18.09	90.5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D
ANALYST: MO
DATE COLLECTED: 04/08/09
DATE ANALYZED: 04/22/09
DATE REPORTED: 05/08/09

REVIEWED BY: _____

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

Sample Spiked: Monitoring Well #7	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	15.21	76.1	15.81	79.1	3.9
Benzene	20.0	--- U	18.38	91.9	18.65	93.3	1.5
Trichloroethene	20.0	--- U	17.23	86.2	17.53	87.7	1.7
Toluene	20.0	--- U	18.99	95.0	18.84	94.2	0.8
Chlorobenzene	20.0	--- U	18.08	90.4	18.37	91.9	1.6

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	15.25	76.3
Benzene	20.0	17.74	88.7
Trichloroethene	20.0	16.74	83.7
Toluene	20.0	17.94	89.7
Chlorobenzene	20.0	17.43	87.2

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 D **Week: 16**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. ALLEN HARDISON
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 AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
							<2					<2	<2	<2
						P	P	P	P	P		G	G	G
						A	A	A	A	A		E	E	E
MW-7	04 08 09	0950		14	6	G	G	G	G	G	G	G	G	G
MW-8	04 08 09	0945		14	5	G	G	G	G	G	G	G	G	
MW-10	04 08 09	0910		13	5	G	G	G	G	G	G	G	G	
MW-11S	04 08 09	0855		14	5	G	G	G	G	G	G	G	G	
MW-11D	04 08 09	0900		15	5	G	G	G	G	G	G	G	G	
MW-12s	04 08 09	0940		14	5	G	G	G	G	G	G	G	G	
Well #12 Deep	04 08 09	0935		17	5	G	G	G	G	G	G	G	G	
Well #13 Shallow	04 08 09	0915		14	5	G	G	G	G	G	G	G	G	
Well #13 Deep	04 08 09	0925		15	5	G	G	G	G	G	G	G	G	
MW-14R	04 08 09	0930		13	5	G	G	G	G	G	G	G	G	
Trip Blank					2									

PARAMETERS

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

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
- [X] SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

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

SAMPLES RECEIVED IN LAB AT 0.3 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Hope 04	08 09 2:25	[signature]	4/8 2:25
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.

№ 178069

FORM #5

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY ,NC 28523

DATE COLLECTED: 04/07/09
DATE REPORTED : 05/11/09

REVIEWED BY:

PARAMETERS	MDL	Leachate SWSLManhole		Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.1	04/07/09	RJH	SM4500HB
Antimony, ug/l	0.06	6.0	5.7 J	04/14/09	CMF	EPA200.8
Arsenic, ug/l	0.17	10.0	58	04/14/09	CMF	EPA200.8
Barium, ug/l	0.04	100.0	788	04/14/09	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.1 J	04/14/09	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	3	04/14/09	CMF	EPA200.8
Cobalt, ug/l	0.02	10.0	12	04/14/09	CMF	EPA200.8
Copper, ug/l	0.04	10.0	10	04/14/09	CMF	EPA200.8
Total Chromium, ug/l	0.10	10.0	47	04/14/09	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.3 J	04/14/09	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	70	04/14/09	CMF	EPA200.8
Selenium, ug/l	0.12	10.0	42	04/14/09	CMF	EPA200.8
Silver, ug/l	0.04	10.0	0.8 J	04/14/09	CMF	EPA200.8
Thallium, ug/l	0.03	5.0	--- U	04/14/09	CMF	EPA200.8
Vanadium, ug/l	0.28	25.0	13.3 J	04/14/09	CMF	EPA200.8
Zinc, ug/l	0.14	10.0	11	04/14/09	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	16	04/07/09	MJN	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	8820	04/07/09	RJH	SM2510B
Temperature, °C			28	04/08/09	RJH	SM2550B

RECEIVED MAY 13 2009

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E

ANALYST: MAO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/11/09

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Leachate Manhole
1. Chloromethane	0.18	1.0	--- U
2. Vinyl Chloride	0.34	1.0	--- U
3. Bromomethane	0.26	10.0	--- U
4. Chloroethane	0.29	10.0	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U
7. Acetone	1.21	100.0	40.60 J
8. Iodomethane	0.12	10.0	--- U
9. Carbon Disulfide	0.14	100.0	--- U
10. Methylene Chloride	0.14	1.0	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	0.70 J
15. 2-Butanone	0.85	100.0	33.30 J
16. Bromochloromethane	0.11	3.0	--- U
17. Chloroform	0.13	5.0	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U
20. Benzene	0.16	1.0	1.50
21. 1,2-Dichloroethane	0.12	1.0	--- U
22. Trichloroethene	0.13	1.0	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U
24. Bromodichloromethane	0.13	1.0	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	25.80 J
27. Toluene	0.13	1.0	12.00
28. trans-1,3-Dichloropropene	0.14	1.0	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U
30. Tetrachloroethene	0.16	1.0	--- U
31. 2-Hexanone	1.00	50.0	--- U
32. Dibromochloromethane	0.14	3.0	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U
34. Chlorobenzene	0.13	3.0	0.60 J
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U
36. Ethylbenzene	0.16	1.0	34.60
37. Xylenes	0.48	5.0	33.20
38. Dibromomethane	0.17	10.0	--- U
39. Styrene	0.16	1.0	2.00
40. Bromoform	0.11	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	9.60
44. 1,2-Dichlorobenzene	0.13	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U
46. Acrylonitrile	1.49	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- 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
FAX (252) 756-0633

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

CLIENT ID: 6035 E
ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
METHOD BLANK RESULTS

PARAMETERS, ug/l	MDL	SWSL	Concentration
1. Chloromethane	0.18	1.00	--- U
2. Vinyl Chloride	0.34	1.00	--- U
3. Bromomethane	0.26	10.00	--- U
4. Chloroethane	0.29	10.00	--- U
5. Trichlorofluoromethane	0.13	1.00	--- U
6. 1,1-Dichloroethene	0.14	5.00	--- U
7. Acetone	1.21	100.00	--- U
8. Iodomethane	0.12	10.00	--- U
9. Carbon Disulfide	0.14	100.00	--- U
10. Methylene Chloride	0.14	1.00	--- U
11. trans-1,2-Dichloroethene	0.13	5.00	--- U
12. 1,1-Dichloroethane	0.16	5.00	--- U
13. Vinyl Acetate	0.20	50.00	--- U
14. cis-1,2-Dichloroethene	0.14	5.00	--- U
15. 2-Butanone	0.85	100.00	--- U
16. Bromochloromethane	0.11	3.00	--- U
17. Chloroform	0.13	5.00	--- U
18. 1,1,1-Trichloroethane	0.11	1.00	--- U
19. Carbon Tetrachloride	0.13	1.00	--- U
20. Benzene	0.16	1.00	--- U
21. 1,2-Dichloroethane	0.12	1.00	--- U
22. Trichloroethene	0.13	1.00	--- U
23. 1,2-Dichloropropane	0.17	1.00	--- U
24. Bromodichloromethane	0.13	1.00	--- U
25. cis-1,3-Dichloropropene	0.17	1.00	--- U
26. 4-methyl-2-Pentanone	0.68	100.00	--- U
27. Toluene	0.13	1.00	--- U
28. trans-1,3-Dichloropropene	0.14	1.00	--- U
29. 1,1,2-Trichloroethane	0.20	1.00	--- U
30. Tetrachloroethene	0.16	1.00	--- U
31. 2-Hexanone	1.00	50.00	--- U
32. Dibromochloromethane	0.14	3.00	--- U
33. 1,2-Dibromoethane	0.13	1.00	--- U
34. Chlorobenzene	0.13	3.00	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.00	--- U
36. Ethylbenzene	0.16	1.00	--- U
37. Xylenes	0.48	5.00	--- U
38. Dibromomethane	0.17	10.00	--- U
39. Styrene	0.16	1.00	--- U
40. Bromoform	0.11	3.00	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.00	--- U
42. 1,2,3-Trichloropropane	0.06	1.00	--- U
43. 1,4-Dichlorobenzene	0.21	1.00	--- U
44. 1,2-Dichlorobenzene	0.13	5.00	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.00	--- U
46. Acrylonitrile	1.49	200.00	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E
ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	92.2	105	107
Laboratory Control std.	70-130	85.5	98.2	101
Method Blank	70-130	88.7	97.2	120
Leachate Manhole	70-130	85.8	97.4	101
Leachate Storage 1S M.S.	70-130	85.2	96.8	101
Leachate Storage 1S M.S.D.	70-130	85.7	97.0	102

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. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 E
ANALYST: MO
DATE COLLECTED: 04/07/09
DATE ANALYZED: 04/20/09
DATE REPORTED: 05/04/09

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	15.87	79.4	16.17	80.9	1.9
Benzene	20.0	--- U	18.49	92.5	19.09	95.5	3.2
Trichloroethene	20.0	--- U	17.69	88.5	18.38	91.9	3.8
Toluene	20.0	--- U	16.84	84.2	17.74	88.7	5.2
Chlorobenzene	20.0	--- U	16.32	81.6	17.13	85.7	4.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.08	80.4
Benzene	20.0	19.43	97.2
Trichloroethene	20.0	18.94	94.7
Toluene	20.0	18.58	92.9
Chlorobenzene	20.0	18.01	90.1

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: 16**

CRSWMA INTERIM REGIONAL LANDFILL
C/O COASTAL PARTNERSHIP
MR. ALLEN HARDISON
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 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)							2				2	2	2	
CONTAINER TYPE, P/G						P	P	P	P	P	G	G	G	
CHEMICAL PRESERVATION						A	A	A	A	A	E	E	E	
Leachate Manhole	04 07 09	0930		28	6	☒	☒	☒	☒	☒	☒	☒	☒	

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) H Lane Fox

SAMPLES RECEIVED IN LAB AT 07 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
H Lane Fox	04 07 09 | 3:01		4/7/9 3:01
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

№ 178067

Appendix 2 Statistical Analyses Worksheets

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.08.01**
Sample Date: **8-Apr-09**

Analyte: **Barium**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Jul-93	IRL-1S	268		50
2	Aug-93	IRL-1S	122		50
3	Sep-93	IRL-1S	113		50
4	Sep-93	IRL-1S	109		50
5	Apr-94	IRL-1S	73		50
6	Oct-94	IRL-1S	ND		500
7	Apr-95	IRL-1S	ND		500
8	Oct-95	IRL-1S	ND		500
9	Apr-96	IRL-1S	ND		500
10	Oct-96	IRL-1S	ND		500
11	Apr-97	IRL-1S	ND		500
12	Oct-97	IRL-1S	ND		500
13	Apr-98	IRL-1S	ND		500
14	Oct-98	IRL-1S	ND		500
15	Mar-99	IRL-1S	ND		500
16	Oct-99	IRL-1S	ND		500
17	Apr-00	IRL-1S	ND		500
18	Oct-00	IRL-1S	ND		500
19	Apr-01	IRL-1S	ND		500
20	Oct-01	IRL-1S	ND		500
21	Apr-02	IRL-1S	ND		500
22	Oct-02	IRL-1S	ND		500
23	Apr-03	IRL-1S	ND		500
24	Oct-03	IRL-1S	ND		500
25	15-Apr-04	IRL-1S	ND		500
26	14-Oct-04	IRL-1S	ND		500
27	05-Apr-05	IRL-1S	ND		500
28	27-Oct-05	IRL-1S	ND		500
29	21-Apr-06	IRL-1S	ND		500
30	12-Oct-06	IRL-1S	ND		500
31	26-Apr-07	IRL-1S	ND		100
32	10-Oct-07	IRL-1S	44.8	J	100.0
33	02-Apr-08	IRL-1S	72.9	J	100.0
34	28-Oct-08	IRL-1S	94.9	J	100.0
35	08-Apr-09	IRL-1S	118		100.0
36	Jul-93	IRL-1D	343		50
37	Aug-93	IRL-1D	252		50
38	Sep-93	IRL-1D	105		50
39	Sep-93	IRL-1D	212		50
40	Apr-94	IRL-1D	131		50
41	Oct-94	IRL-1D	ND		500
42	Apr-95	IRL-1D	ND		500
43	Oct-95	IRL-1D	ND		500
44	Apr-96	IRL-1D	ND		500

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
45	27-Oct-05	IRL-1D	ND		500
46	21-Apr-06	IRL-1D	ND		500
47	12-Oct-06	IRL-1D	ND		500
48	26-Apr-07	IRL-1D	ND		100
49	10-Oct-07	IRL-1D	56.4	J	100.0
50	02-Apr-08	IRL-1D	33.4	J	100.0
51	28-Oct-08	IRL-1D	39.6	J	100.0
52	08-Apr-09	IRL-1D	41.1	J	100.0
53	Oct-02	LST-5S	ND		500
54	Apr-03	LST-5S	ND		500
55	Oct-03	LST-5S	ND		500
56	15-Apr-04	LST-5S	ND		500
57	14-Oct-04	LST-5S	ND		500
58	05-Apr-05	LST-5S	ND		500
59	27-Oct-05	LST-5S	ND		500
60	21-Apr-06	LST-5S	ND		500
61	12-Oct-06	LST-5S	ND		500
62	26-Apr-07	LST-5S	ND		100
63	10-Oct-07	LST-5S	30.9	J	100.0
64	03-Apr-08	LST-5S	27.9	J	100.0
65	28-Oct-08	LST-5S	34	J	100.0
66	08-Apr-09	LST-5S	33.1	J	100.0
67	Jul-99	MW-7	869		500
68	Aug-99	MW-7	ND		500
69	Oct-99	MW-7	ND		500
70	Nov-99	MW-7	ND		500
71	Apr-00	MW-7	ND		500
72	Oct-00	MW-7	ND		500
73	Apr-01	MW-7	ND		500
74	Oct-01	MW-7	ND		500
75	Apr-02	MW-7	ND		500
76	Oct-02	MW-7	ND		500
77	Apr-03	MW-7	ND		500
78	Oct-03	MW-7	ND		500
79	15-Apr-04	MW-7	ND		500
80	14-Oct-04	MW-7	ND		500
81	Apr-02	MW-12S	ND		500
82	Oct-02	MW-12S	ND		500
83	Apr-03	MW-12S	ND		500
84	Oct-03	MW-12S	ND		500
85	15-Apr-04	MW-12S	ND		500
86	14-Oct-04	MW-12S	ND		500
87	05-Apr-05	MW-12S	ND		500
88	27-Oct-05	MW-12S	ND		500
89	21-Apr-06	MW-12S	ND		500
90	12-Oct-06	MW-12S	ND		500
91	26-Apr-07	MW-12S	ND		100
92	10-Oct-07	MW-12S	81.8	J	100.0
93	03-Apr-08	MW-12S	86.6	J	100.0
94	28-Oct-08	MW-12S	85.2	J	100.0
95	08-Apr-09	MW-12S	109		100.0
96	Apr-02	MW-12D	ND		500
97	Oct-02	MW-12D	ND		500
98	Apr-03	MW-12D	ND		500
99	Oct-03	MW-12D	ND		500

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
100	15-Apr-04	MW-12D	ND		500
101	14-Oct-04	MW-12D	ND		500
102	05-Apr-05	MW-12D	ND		500
103	27-Oct-05	MW-12D	ND		500
104	21-Apr-06	MW-12D	ND		500
105	12-Oct-06	MW-12D	ND		500
106	26-Apr-07	MW-12D	ND		100
107	10-Oct-07	MW-12D	47.4	J	100.0
108	03-Apr-08	MW-12D	36.7	J	100.0
109	28-Oct-08	MW-12D	30.9	J	100.0
110	08-Apr-09	MW-12D	33.6	J	100.0
111	15-Apr-04	MW-13S	ND		500
112	14-Oct-04	MW-13S	ND		500
113	05-Apr-05	MW-13S	ND		500
114	27-Oct-05	MW-13S	ND		500
115	15-Apr-04	MW-13D	ND		500
116	14-Oct-04	MW-13D	ND		500
117	05-Apr-05	MW-13D	ND		500
118	27-Oct-05	MW-13D	ND		500
119	15-Apr-04	MW-14	ND		500
120	14-Oct-04	MW-14	ND		500
121	05-Apr-05	MW-14	ND		500
122	27-Oct-05	MW-14	ND		500

Number of Data:	122
Number of Truncated Data:	91
Percentage of Truncated Data:	75%
Non-Parametric Prediction Limit:	**869**

- All concentrations in micrograms per liter (ug/L).

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.08.01**
Sample Date: **8-Apr-09**

Analyte: **Beryllium**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Jul-93	IRL-1S	3		1
2	Aug-93	IRL-1S	1		1
3	Sep-93	IRL-1S	1		1
4	Sep-93	IRL-1S	2		1
5	Apr-94	IRL-1S	ND		1
6	Oct-94	IRL-1S	ND		2
7	Apr-95	IRL-1S	ND		2
8	Oct-95	IRL-1S	ND		2
9	Apr-96	IRL-1S	ND		2
10	Oct-96	IRL-1S	ND		2
11	Apr-97	IRL-1S	3		2
12	Oct-97	IRL-1S	3		2
13	Apr-98	IRL-1S	ND		2
14	Oct-98	IRL-1S	2		2
15	Mar-99	IRL-1S	ND		2
16	Oct-99	IRL-1S	ND		2
17	Apr-00	IRL-1S	ND		2
18	Oct-00	IRL-1S	ND		2
19	Apr-01	IRL-1S	ND		2
20	Oct-01	IRL-1S	ND		2
21	Apr-02	IRL-1S	ND		2
22	Oct-02	IRL-1S	ND		2
23	Apr-03	IRL-1S	ND		2
24	Oct-03	IRL-1S	ND		2
25	15-Apr-04	IRL-1S	ND		2
26	14-Oct-04	IRL-1S	ND		2
27	05-Apr-05	IRL-1S	ND		2
28	27-Oct-05	IRL-1S	ND		2
29	21-Apr-06	IRL-1S	ND		2
30	12-Oct-06	IRL-1S	ND		2
31	26-Apr-07	IRL-1S	ND		1.0
32	10-Oct-07	IRL-1S	0.1	J	1.0
33	02-Apr-08	IRL-1S	0.4	J	1.0
34	28-Oct-08	IRL-1S	0.5	J	1.0
35	08-Apr-09	IRL-1S	0.6	J	1.0
36	Jul-93	IRL-1D	1		1
37	Aug-93	IRL-1D	1		1
38	Sep-93	IRL-1D	ND		1
39	Sep-93	IRL-1D	3		1
40	Apr-94	IRL-1D	ND		1
41	Oct-94	IRL-1D	ND		2
42	Apr-95	IRL-1D	ND		2
43	Oct-95	IRL-1D	ND		2
44	Apr-96	IRL-1D	ND		2

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
45	27-Oct-05	IRL-1D	6		2
46	21-Apr-06	IRL-1D	ND		2
47	12-Oct-06	IRL-1D	ND		2
48	26-Apr-07	IRL-1D	ND		1.0
49	10-Oct-07	IRL-1D	ND		1.0
50	02-Apr-08	IRL-1D	0.1	J	1.0
51	28-Oct-08	IRL-1D	0.1	J	1.0
52	08-Apr-09	IRL-1D	0.1	J	1.0
53	Oct-02	LST-5S	ND		2
54	Apr-03	LST-5S	ND		2
55	Oct-03	LST-5S	ND		2
56	15-Apr-04	LST-5S	ND		2
57	14-Oct-04	LST-5S	ND		2
58	05-Apr-05	LST-5S	ND		2
59	27-Oct-05	LST-5S	ND		2
60	21-Apr-06	LST-5S	ND		2
61	12-Oct-06	LST-5S	ND		2
62	26-Apr-07	LST-5S	ND		1.0
63	10-Oct-07	LST-5S	ND		1.0
64	03-Apr-08	LST-5S	ND		1.0
65	28-Oct-08	LST-5S	0.1	J	1.0
66	08-Apr-09	LST-5S	0.2	J	1.0
67	Jul-99	MW-7	5		2
68	Aug-99	MW-7	ND		2
69	Oct-99	MW-7	ND		2
70	Nov-99	MW-7	ND		2
71	Apr-00	MW-7	ND		2
72	Oct-00	MW-7	ND		2
73	Apr-01	MW-7	ND		2
74	Oct-01	MW-7	ND		2
75	Apr-02	MW-7	ND		2
76	Oct-02	MW-7	ND		2
77	Apr-03	MW-7	ND		2
78	Oct-03	MW-7	ND		2
79	15-Apr-04	MW-7	ND		2
80	14-Oct-04	MW-7	ND		2
81	Apr-02	MW-12S	ND		2
82	Oct-02	MW-12S	ND		2
83	Apr-03	MW-12S	ND		2
84	Oct-03	MW-12S	ND		2
85	15-Apr-04	MW-12S	ND		2
86	14-Oct-04	MW-12S	ND		2
87	05-Apr-05	MW-12S	ND		2
88	27-Oct-05	MW-12S	ND		2
89	21-Apr-06	MW-12S	ND		2
90	12-Oct-06	MW-12S	ND		2
91	26-Apr-07	MW-12S	ND		1.0
92	10-Oct-07	MW-12S	0.1	J	1.0
93	03-Apr-08	MW-12S	0.3	J	1.0
94	28-Oct-08	MW-12S	0.9	J	1.0
95	08-Apr-09	MW-12S	0.6	J	1.0
96	Apr-02	MW-12D	ND		2
97	Oct-02	MW-12D	ND		2
98	Apr-03	MW-12D	ND		2
99	Oct-03	MW-12D	ND		2

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
100	15-Apr-04	MW-12D	ND		2
101	14-Oct-04	MW-12D	ND		2
102	05-Apr-05	MW-12D	ND		2
103	27-Oct-05	MW-12D	ND		2
104	21-Apr-06	MW-12D	ND		2
105	12-Oct-06	MW-12D	ND		2
106	26-Apr-07	MW-12D	ND		1.0
107	10-Oct-07	MW-12D	ND		1.0
108	03-Apr-08	MW-12D	ND		1.0
109	28-Oct-08	MW-12D	0.1	J	1.0
110	08-Apr-09	MW-12D	0.1	J	1.0
111	15-Apr-04	MW-13S	ND		2
112	14-Oct-04	MW-13S	ND		2
113	05-Apr-05	MW-13S	ND		2
114	27-Oct-05	MW-13S	ND		2
115	15-Apr-04	MW-13D	ND		2
116	14-Oct-04	MW-13D	ND		2
117	05-Apr-05	MW-13D	ND		2
118	27-Oct-05	MW-13D	ND		2
119	15-Apr-04	MW-14	ND		2
120	14-Oct-04	MW-14	ND		2
121	05-Apr-05	MW-14	ND		2
122	27-Oct-05	MW-14	ND		2

Number of Data:	122
Number of Truncated Data:	95
Percentage of Truncated Data:	78%

Non-Parametric Prediction Limit: **6**

- All concentrations in micrograms per liter (ug/L).

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.08.01**
Sample Date: **8-Apr-09**

Analyte: **Zinc**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Jul-93	IRL-1S	42	B	10
2	Aug-93	IRL-1S	37		10
3	Sep-93	IRL-1S	31		10
4	Sep-93	IRL-1S	73		10
5	Apr-94	IRL-1S	36	B	10
6	Oct-94	IRL-1S	ND		50
7	Apr-95	IRL-1S	ND		50
8	Oct-95	IRL-1S	ND		50
9	Apr-96	IRL-1S	ND		50
10	Oct-96	IRL-1S	ND		50
11	Apr-97	IRL-1S	ND		50
12	Oct-97	IRL-1S	110		50
13	Apr-98	IRL-1S	ND		50
14	Oct-98	IRL-1S	ND		50
15	Mar-99	IRL-1S	ND		50
16	Oct-99	IRL-1S	ND		50
17	Apr-00	IRL-1S	90		50
18	Oct-00	IRL-1S	ND		50
19	Apr-01	IRL-1S	ND		50
20	Oct-01	IRL-1S	ND		50
21	Apr-02	IRL-1S	ND		50
22	Oct-02	IRL-1S	ND		50
23	Apr-03	IRL-1S	ND		50
24	Oct-03	IRL-1S	ND		50
25	15-Apr-04	IRL-1S	ND		50
26	14-Oct-04	IRL-1S	ND		50
27	05-Apr-05	IRL-1S	ND		50
28	27-Oct-05	IRL-1S	ND		50
29	21-Apr-06	IRL-1S	ND		50
30	12-Oct-06	IRL-1S	ND		50
31	26-Apr-07	IRL-1S	ND		10
32	10-Oct-07	IRL-1S	7.5	B	10.0
33	02-Apr-08	IRL-1S	5.5	B	10.0
34	28-Oct-08	IRL-1S	6.8	J	10.0
35	08-Apr-09	IRL-1S	9.5	J	10.0
36	1-Jul-93	IRL-1D	41	B	10
37	1-Aug-93	IRL-1D	18		10
38	1-Sep-93	IRL-1D	20		10
39	1-Sep-93	IRL-1D	88		10
40	1-Apr-94	IRL-1D	19	B	10
41	1-Oct-94	IRL-1D	ND		50
42	1-Apr-95	IRL-1D	ND		50
43	1-Oct-95	IRL-1D	ND		50
44	1-Apr-96	IRL-1D	ND		50
45	27-Oct-05	IRL-1D	192		50

46	21-Apr-06	IRL-1D	ND		50
47	12-Oct-06	IRL-1D	ND		50
48	26-Apr-07	IRL-1D	ND		10
49	10-Oct-07	IRL-1D	5.3	B	10.0
50	02-Apr-08	IRL-1D	14	B	10.0
51	28-Oct-08	IRL-1D	6.6	J	10.0
52	08-Apr-09	IRL-1D	13		10.0
53	Oct-02	LST-5S	ND		50
54	Apr-03	LST-5S	82		50
55	Oct-03	LST-5S	ND		50
56	15-Apr-04	LST-5S	ND		50
57	14-Oct-04	LST-5S	ND		50
58	05-Apr-05	LST-5S	55		50
59	27-Oct-05	LST-5S	ND		50
60	21-Apr-06	LST-5S	ND		50
61	12-Oct-06	LST-5S	ND		50
62	26-Apr-07	LST-5S	22		10
63	10-Oct-07	LST-5S	17	B	10.0
64	03-Apr-08	LST-5S	25	B	10.0
65	28-Oct-08	LST-5S	18		10.0
66	08-Apr-09	LST-5S	29		10.0
67	Jul-99	MW-7	113		50
68	Aug-99	MW-7	ND		50
69	Oct-99	MW-7	ND		50
70	Nov-99	MW-7	ND		50
71	Apr-00	MW-7	ND		50
72	Oct-00	MW-7	ND		50
73	Apr-01	MW-7	ND		50
74	Oct-01	MW-7	ND		50
75	Apr-02	MW-7	ND		50
76	Oct-02	MW-7	ND		50
77	Apr-03	MW-7	ND		50
78	Oct-03	MW-7	ND		50
79	15-Apr-04	MW-7	ND		50
80	14-Oct-04	MW-7	72		50
81	Apr-02	MW-12S	ND		50
82	Oct-02	MW-12S	ND		50
83	Apr-03	MW-12S	ND		50
84	Oct-03	MW-12S	11		50
85	15-Apr-04	MW-12S	ND		50
86	14-Oct-04	MW-12S	ND		50
87	05-Apr-05	MW-12S	ND		50
88	27-Oct-05	MW-12S	ND		50
89	21-Apr-06	MW-12S	ND		50
90	12-Oct-06	MW-12S	ND		50
91	26-Apr-07	MW-12S	16		10
92	10-Oct-07	MW-12S	22	B	10.0
93	03-Apr-08	MW-12S	26		10.0
94	28-Oct-08	MW-12S	20		10.0
95	08-Apr-09	MW-12S	23		10.0
96	Apr-02	MW-12D	ND		50
97	Oct-02	MW-12D	ND		50
98	Apr-03	MW-12D	ND		50
99	Oct-03	MW-12D	ND		50
100	15-Apr-04	MW-12D	ND		50
101	14-Oct-04	MW-12D	ND		50

102	05-Apr-05	MW-12D	ND		50
103	27-Oct-05	MW-12D	ND		50
104	21-Apr-06	MW-12D	ND		50
105	12-Oct-06	MW-12D	ND		50
106	26-Apr-07	MW-12D	ND		10
107	10-Oct-07	MW-12D	2.1	B	10.0
108	03-Apr-08	MW-12D	1.9	B	10.0
109	28-Oct-08	MW-12D	15		10.0
110	08-Apr-09	MW-12D	1.3	B	10.0
111	15-Apr-04	MW-13S	ND		50
112	14-Oct-04	MW-13S	ND		50
113	05-Apr-05	MW-13S	ND		50
114	27-Oct-05	MW-13S	ND		50
115	15-Apr-04	MW-13D	ND		50
116	14-Oct-04	MW-13D	ND		50
117	05-Apr-05	MW-13D	ND		50
118	27-Oct-05	MW-13D	ND		50
119	15-Apr-04	MW-14	ND		50
120	14-Oct-04	MW-14	ND		50
121	05-Apr-05	MW-14	ND		50
122	27-Oct-05	MW-14	ND		50

Number of Data:	108
Number of Truncated Data:	82
Percentage of Truncated Data:	76%

Non-Parametric Prediction Limit: 192

- All concentrations in micrograms per liter (ug/L).
- Blank qualified data not used in statistical calculations.