Prepared for:

Coastal Regional Solid Waste Management Authority
P.O. Box 128
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JEI Project Number 618.01, Task 22

THE COASTAL ENVIRONMENTAL PARTNERSHIP
COASTAL REGIONAL SOLID WASTE MANAGEMENT AUTHORITY

FIRST SEMIANNUAL GROUNDWATER MONITORING REPORT OF 2008

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

July 2008

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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

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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 Regional Landfills	7400 Old Hwy 70 West New Bern, NC 28562	25-04 & 25-09	.1600	April 2-3, 2008 May 14-15, 2008 June 4, 2008

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 — Facility Representative Name (Print)

Project Consultant — Title

(336) 323-0092 — (Area Code) Telephone Number

Signature

7-31-08 — Date

Affix NC Licensed/Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 2097 GEOLOGIST JEREMEY JOHN KERLY

Revised 10/2006

First Semiannual Groundwater Monitoring Report of 2008
Coastal Regional Solid Waste Management Authority Landfills
Craven County, North Carolina

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1.0 INTRODUCTION

1.1 Site Information

The Tuscarora Regional Landfill is owned and operated by the Coastal Regional Solid Waste Management Authority (CRSWMA) and is currently operating under North Carolina Solid Waste Permit Nos. 25-04 and 25-09. The 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 Regional Landfill consists of three waste cells - the 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 CRSWMA 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 Regional Landfill 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 Interim Regional and Long-Term Regional 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. 2 & 3.

2.1 Closed Interim Regional Landfill Monitoring Program

Groundwater monitoring at the Closed 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 Long-Term Regional Landfill Monitoring Program

Groundwater monitoring at the 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 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 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 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	Date Added	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 Regional Landfill on a semiannual basis and the laboratory results are included in this report. The following constituents are required for laboratory leachate analysis:

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

3.0 FIRST SEMIANNUAL SAMPLING EVENT OF 2008

3.1 Field Work

On April 2-3, 2008 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 Interim Regional Landfill, Long-Term Regional Landfill, and Leachate Storage Lagoon areas.

Four surface monitoring points and one leachate monitoring point were also sampled during the April 2008 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. On May 14-15, 2008 and June 4, 2008 personnel from JEI resampled select monitoring wells from the Long-Term Regional Landfill and Leachate Storage Lagoon areas including all four surface water monitoring points for organic constituents detected during the April 2008 sampling event.

Monitoring wells were purged and sampled using reusable bailers during the April 2008 event and disposable bailers were used during the May and June 2008 events. 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 main sampling event and the resampling events, 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 2008 groundwater, surface water, and leachate samples were submitted to Environment 1, Incorporated of Greenville, North Carolina and the May 2008 and June 2008 resamples were submitted to Pace Analytical Services, 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 resamples were analyzed for select Appendix I organic constituents. JEI requested a Level II data report for the final laboratory

reports. The samples were received by the laboratory on April 3, 2008, May 16, 2008, and June 5, 2008 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, Incorporated personnel as part of the April 2008 sampling, and by JEI personnel as part of the May 2008 and June 2008 resampling events. 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 data package, it was determined that a resample event was required for the following monitoring wells and surface monitoring points: MW-8, MW-10, MW-12S, LST-1D, LST-4S, LST-5S, SWPT-1, SWPT-2, UD-1, and UD-2.

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 were similar to previous events.

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 upper and lower aquifers are shown on Drawing Nos. 1 and 2, and were interpreted from the April 2008 water level measurements. Groundwater at the site flows predominantly from the northwest to the southeast for both aquifers.

Horizontal groundwater gradients were estimated based on April 2008 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 0.0037 to 0.0079 ft/ft (Table 4) for the shallow aquifer and 0.00128 to 0.00241 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 0.012 to 0.026 ft/day (Table 4) for the uppermost aquifer range and 0.028 to 0.052 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 2008 sampling event were received April 28, 2008 from Environment 1, Incorporated and are found in Appendix 2. Results from the May and June 2008 resampling events were received from Pace on June 4, 5, and 25, 2008. There were no statistically significant increases of organic or inorganic constituents detected during the sampling and resampling events.

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 Interim Regional Landfill and the Long-Term Regional Landfill. Background data and statistical methods used to evaluate the data from the Interim Regional Landfill and the 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 2008 statistical background calculations are provided below in the following table. Detailed results of statistical analyses can be found in Appendix 1. 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
Arsenic	N/A	Non-Parametric Prediction Interval	52	None
Barium	N/A	Non-Parametric Prediction Interval	869	None
Beryllium	N/A	Non-Parametric Prediction Interval	6	None
Lead	N/A	Non-Parametric Prediction Interval	129	None
Zinc	N/A	Non-Parametric Prediction Interval	192	None

1. Concentrations are in micrograms per liter (µg/L)
2. N/A = Not Applicable

Background concentrations for inorganic constituents were determined using statistical procedures as discussed in Section 5.1. None of the inorganic constituents were detected at levels in downgradient wells that represent statistically significant increases over background values. 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 Standards

5.3.1 Closed 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 2008 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	IRL-1S	IRL-1D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	MW-A	Blanks
Antimony	1.4	0.5 B	ND	ND	ND	ND	ND	ND	ND	0.1 J
Arsenic	50	0.8 J	0.8 J	0.4 J	0.4 J	1.7 J	0.4 J	2.2 J	1.2 J	ND
Barium	2,000	72.9 J	33.4 J	74.7 J	64.2 J	140	40.2 J	69.5 J	33.8 J	ND
Beryllium	4	0.4 J	0.1 J	0.1 J	0.1 J	0.2 J	0.1 J	ND	0.2 J	ND
Cadmium	1.75	0.2 J	0.4 J	0.2 J	0.7 J	0.5 J	0.1 J	0.1 J	0.1 J	ND
Cobalt	70	0.9 J	0.1 J	0.3 J	0.3 J	1.3 J	0.1 J	0.4 J	1.6 J	ND
Copper	1,000	0.8 B	0.4 B	0.6 B	0.5 B	0.8 B	0.2 B	0.4 B	0.4 B	0.2 J
Chromium	50	1.6 J	ND	0.7 J	0.5 J	ND	0.5 J	ND	0.3 J	ND
Lead	15	1.4 J	0.1 J	0.1 J	0.3 J	0.1 J	ND	0.1 J	0.3 J	ND
Nickel	100	1.6 J	1.4 B	5.4 J	3.9 J	2.0 J	2.5 J	5.3 J	2.1 J	0.3 J
Selenium	50	ND	ND	1.0 J	0.9 J	5.2 J	ND	6.2 J	0.7 J	ND
Silver	17.5	0.1 B	0.1 B	0.1 B	ND	0.1 B	ND	ND	0.1 B	0.1 J
Thallium	0.28	0.1 J	0.2 J	0.1 J	ND	0.1 J	ND	ND	0.1 J	ND
Vanadium	3.5	2.0 J	0.3 J	1.6 J	1.1 J	0.3 J	1.0 J	1.2 J	1.1 J	ND
Zinc	1,050	5.5 B	14 B	3.3 B	2.1 B	4.4 B	1.6 B	37	11 B	6.3 J
Acetone	700	3.50 B	6.60 B	4.90 B	4.90 B	4.00 B	3.60 B	3.90 B	4.20 B	1.50 J

* Concentrations are in micrograms per liter (µg/L).

The inorganic and organic analytical results from the April 2008 groundwater sampling event at the Closed 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 2. There were no statistically significant increases during the April 2008 sampling event. None of the detected inorganic or organic constituents exceeded the NC 2L or Groundwater Protection Standards.

5.3.2 Long-Term Regional Landfill

Background concentrations were determined as discussed in Section 5.2 and are detailed in the Appendix 2. The following inorganic and organic constituents were detected during the April 2008 sampling event and May 2008 resampling 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. Concentrations in parentheses represent the May 2008 resampling.

Constituent	NC2L/ GWPS	MW-7	MW-8	MW-10	MW-11S	MW-11D	MW-12S	MW-12D	MW-13S	MW-13D	MW-14R	Blanks
Antimony	1.4	0.1 J	ND	ND	ND	0.5 J	ND	0.5 J	0.1 J	ND	ND	ND
Arsenic	50	1.0 B	1.3 J	4.1 J	0.2 B	ND	1.4 J	ND	1.3 J	ND	0.2 B	0.2 J
Barium	2,000	67.3 J	43.6 J	40.1 J	45.8 J	44 J	88.6 J	36.7 J	43.0 J	35.0 J	44.9 J	0.4 J
Beryllium	4	ND	0.3 J	0.2 J	1.5	0.1 J	0.3 J	ND	0.3 J	ND	0.2 J	ND
Cadmium	1.75	0.2 J	0.1 J	0.2 J	0.2 J	0.3 J	0.4 J	0.1 J	0.1 J	ND	0.1 J	ND
Cobalt	70	1.8 J	0.4 J	0.7 J	3.1 J	0.1 J	4.6 J	0.1 J	0.3 J	0.1 J	0.9 J	ND
Copper	1,000	0.8 B	0.6 B	0.7 B	0.6 B	0.3 B	0.7 B	0.3 B	0.6 B	0.1 B	1.2 J	0.2 J
Chromium	50	0.4 J	1.0 J	0.4 J	0.5 J	ND	ND	ND	0.3 J	ND	ND	ND
Lead	15	0.5 B	1.4 J	0.9 J	1.4 J	0.1 B	0.1 B	0.1 B	0.5 B	ND	0.3 B	0.1 J
Nickel	100	4.0 J	0.8 B	1.4 B	4.8 J	2.4 J	4.3 J	2.0 J	0.7 B	1.6 J	1.4 B	0.3 J
Selenium	50	0.7 B	0.2 B	0.7 B	0.3 B	ND	3.1 B	ND	0.3 B	ND	0.2 B	1.5 J
Silver	17.5	ND	0.1 J	ND	ND	0.1 J	ND	0.1 J	ND	ND	ND	ND
Thallium	0.28	0.1 J	ND	ND	ND	0.1 J	ND	0.1 J	ND	ND	ND	ND
Vanadium	3.5	1.7 J	3.6 J	2.1 J	1.9 J	0.2 B	0.3 B	0.3 B	1.1 J	0.2 B	0.3 B	0.1 J
Zinc	1,050	15	3.7 B	7.8 B	8.7 B	4.7 B	26	1.9 B	4.7 B	2.1 B	4.7 B	2.2 J
Acetone	700	4.30 B	2.30 B	2.30 B	2.20 B	2.00 B	5.20 B	4.50 B	5.00 B	3.80 B	4.40 B	2.10 J
2-Butanone	4,200	ND	1.50 J (ND)	1.40 J (ND)	ND	ND	0.90 J (ND)	ND	ND	ND	ND	ND (ND)

* Concentrations are in micrograms per liter (µg/L).

The inorganic and organic analytical results from the April 2008 groundwater sampling event and May 2008 resampling event at the 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 2. There were no statistically significant increases during the April 2008 sampling or May 2008 resampling events. None of the detected inorganic or organic constituents exceeded 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 2008 sampling event and May 2008 resampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be J-flagged and the detection is considered to be estimated. Concentrations with a "B" are considered to be B-flagged

and the detection is considered to be attributed to lab or field contamination. Concentrations with parentheses represent the re-sampling events in May and June 2008.

Constituent	NC2L/ GWPS	LST-1S	LST-1D	LST-2S	LST-3S	LST-4S	LST-5S	LST-5D	LST-6S	Blanks
Antimony	1.4	ND	ND	ND	ND	ND	0.1 B	ND	0.5 B	0.1 J
Arsenic	50	0.6 J	0.4 J	0.3 J	1.7 J	11	1.2 J	0.4 J	0.5 J	ND
Barium	2,000	66.0 J	38.9 J	36.8 J	119	58.3 J	27.9 J	58.4 J	43.8 J	ND
Beryllium	4	0.4 J	0.1 J	0.2 J	1.2	0.4 J	ND	0.2 J	0.2 J	ND
Cadmium	1.75	0.1 J	ND	0.1 J	0.3 J	0.2 J	0.1 J	0.1 J	0.4 J	ND
Cobalt	70	0.4 J	0.4 J	0.4 J	2.8 J	2.3 J	0.5 J	0.2 J	0.6 J	ND
Copper	1,000	0.5 B	0.2 B	0.5 B	1.6 J	1.1 J	0.7 B	0.3 B	0.8 B	0.2 J
Chromium	50	ND	ND	1.2 J	1.5 J	2.1 J	0.5 J	0.4 J	2.7 J	ND
Lead	15	0.6 J	0.2 J	1.1 J	13	5.0 J	0.8 J	0.2 J	2.1 J	ND
Nickel	100	0.6 B	2.4 J	0.5 B	3.5 J	2.5 J	2.1 J	3.4 J	1.0 B	0.3 J
Selenium	50	1.7 J	ND	0.2 J	0.9 J	ND	0.9 J	ND	0.2 J	ND
Silver	17.5	0.1 B	ND	ND	0.1 B	ND	0.1 B	ND	0.1 B	0.1 J
Thallium	0.28	0.1 J	ND	0.1 J	0.1 J	0.1 J	0.2 J	0.1 J	0.1 J	ND
Vanadium	3.5	0.8 J	0.6 J	2.4 J	2.5 J	9.5 J	2.0 J	0.8 J	4.6 J	ND
Zinc	1,050	3.1 B	1.3 B	3.5 B	24 B	13 B	25 B	4.4 B	15 B	6.3 J
2-Butanone	4,200	ND	0.90 J (ND)	ND	ND	ND	ND	ND	ND	ND (ND)
Acetone	700	2.40 B	1.60 B	2.00 B	1.90 B	2.30 B	2.20 B	2.00 B	2.20 B	1.50 J
Bromodichloro methane	0.56	ND	ND	ND	ND	ND	1.40 J (ND)	ND	ND	ND (ND)
Chloromethane	2.6	ND	ND	ND	ND	0.20 J (ND)	ND	ND	ND	ND (ND)

* Concentrations are in micrograms per liter (µg/L).

The inorganic and organic analytical results from the April 2008 sampling event and the May and June 2008 resampling events 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 2 of this report. There were no statistically significant increases during the resampling event. None of the detected inorganic or organic constituents exceeded the NC 2L or Groundwater Protection Standards.

5.3.4 Surface Water

The following inorganic and organic constituents were detected during the April 2008 sampling event and May 2008 resampling 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. Concentrations with parentheses represent the re-sampling event in May 2008.

Constituent	NC2B/National Criteria EPA	SWPT-1	SWPT-2	UD-1	UD-2	Blanks
Antimony	6.0*	0.3 B	0.4 B	0.1 B	-	0.1 J
Antimony	6.0*	-	-	-	0.2 J	ND
Arsenic	50	0.8 J	14	4.0 J	-	ND
Arsenic	50	-	-	-	2.0 J	0.2 J
Barium	100.0*	30.7 J	72.4 J	94.6 J	-	ND
Barium	100.0*	-	-	-	71.1 J	0.4 J
Beryllium	6.5	ND	ND	ND	-	ND
Beryllium	6.5	-	-	-	ND	ND
Cadmium	2	0.1 J	0.1 J	0.1 J	-	ND
Cadmium	2	-	-	-	0.1 J	ND
Chromium	50	1.3 J	12	0.8 J	-	ND
Chromium	50	-	-	-	0.5 J	ND
Cobalt	2.5	0.6 J	3.2 J	3.0 J	-	ND
Cobalt	2.5	-	-	-	1.0 J	ND
Copper	7	1.0 B	2.8 J	1.7 J	-	0.2 J
Copper	7	-	-	-	0.7 B	0.2 J
Lead	25	1.0 J	0.8 J	0.3 B	-	0.1 J
Lead	25	-	-	-	0.1 B	0.1 J
Nickel	88	5.2 J	16 J	9.6 J	-	0.3 J
Nickel	88	-	-	-	8.4 J	0.3 J
Selenium	5	0.5 J	7.2 J	ND	-	ND
Selenium	5	-	-	-	4.5 B	1.5 J
Vanadium	25.0*	2.1 J	2.6 J	1.7 J	-	ND
Vanadium	25.0*	-	-	-	0.8 J	0.1 J
Zinc	50	35	9.0 B	9.8 B	-	6.3 J
Zinc	50	-	-	-	2.1 B	2.2 J
Acetone	2,000	2.90 B	9.20 J (ND)	5.40 B	-	1.50 J (ND)
Acetone	2,000	-	-	-	5.60 B	2.10 J
2-Butanone	160,000	1.50 J (ND)	2.20 J (ND)	1.40 J (ND)	-	ND (ND)
2-Butanone	160,000	-	-	-	2.50 J (ND)	ND (ND)
Chloromethane	1.0*	ND	0.30 J (ND)	0.20 J (ND)	-	ND (ND)
Chloromethane	1.0*	-	-	-	0.30 J (ND)	ND (ND)
1,4-Dichlorobenzene	100	ND	0.40 J (ND)	ND	-	ND (ND)
1,4-Dichlorobenzene	100	-	-	-	ND	ND

1.) Concentrations are in micrograms per liter (µg/L).
2.) * = NC 2B or National Criteria per EPA not established. Laboratory reporting limit is substituted.

The analytical results from the surface water April 2008 sampling event and May 2008 resampling 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 2 of this report. No inorganic or organic constituents were detected above the North Carolina 2B Surface Water Standards or National Criteria per EPA. The May 2008 resampling event determined the Tuscarora Landfill is not impacting the surface water.

5.3.5 Leachate

The following inorganic and organic constituents were detected in leachate during the April 2008 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	6.2	ND
Arsenic	45	0.2 J
Barium	838	0.4 J
Beryllium	0.1 J	ND
Cadmium	4	ND
Chromium	61	ND
Cobalt	13	ND
Copper	12	0.2 J
Lead	0.7 J	0.1 J
Nickel	77	0.3 J
Selenium	0.6 B	1.5 J
Silver	0.7 J	ND
Vanadium	14.9 J	0.1 J
Zinc	23	2.2 J
Acetone	148.00	2.10 J
Benzene	2.60	ND
Chlorobenzene	1.30 J	ND
Chloroethane	0.40 J	ND
Cis-1,2-Dichloroethylene	2.00 J	ND

Constituent	Leachate	Blanks
1,2-Dichloroethane	0.30 J	ND
2-Butanone	81.90 J	ND
Styrene	1.70	ND
1,2-Dichlorobenzene	1.10 J	ND
1,4-Dichlorobenzene	14.90	ND
Trichloroethylene	0.20 J	ND
Ethylbenzene	160.00	ND
Toluene	20.10	ND
4-Methyl-2-Pentanone	130.00	ND
Xylenes	97.20	ND
* Concentrations are in micrograms per liter (µg/L).		

The analytical results from the April 2008 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 2 of this report.

6.0 CONCLUSION

Based on the analytical results from the April 2008 sampling event and May 2008 resampling event, no inorganic or organic constituents were considered to be detected at statistically significant levels above calculated background concentrations at the Leachate Storage Lagoon Area, Interim Regional Landfill, and 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 2008 indicate that the Coastal Regional Solid Waste Management Authority's Tuscarora Interim Regional Landfill and Long-Term Regional Landfill shall remain in the Detection Monitoring Program. The next semiannual monitoring event is scheduled for October 2008.

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TABLE 1

SUMMARY OF GROUNDWATER ELEVATIONS
TUSCARORA INTERIM REGIONAL LANDFILL

	Background										
Well No.	**IRL-1S**	**IRL-1D**	**IRL-2DA**	**IRL-3S**	**IRL-3D**	**IRL-4S**	**IRL-4D**	**IRL-5S**	**IRL-5D**	**MW-A**	**PZ-Z**
Well TOC Elev.	50.56	50.19	51.58	49.02	48.93	48.34	48.35	48.78	48.66	46.04	49.52
Well Depth	17.73	45.20	30.95	16.40	39.22	14.99	34.64	14.62	35.42	20.40	-
Jul-93	46.57	36.02	-	38.68	34.26	43.13	34.24	40.19	34.73	-	-
Aug-93	44.94	35.46	-	38.57	33.68	42.02	33.54	39.58	34.13	-	-
Sep-93	44.29	34.70	-	38.42	32.97	41.77	33.01	39.50	33.39	-	-
Sep-93	45.07	34.42	-	38.85	32.58	41.33	32.69	39.51	33.07	-	-
Apr-94	45.55	38.93	-	37.74	37.27	39.48	37.33	37.95	37.79	-	-
Oct-94	44.90	35.97	-	37.84	34.38	38.54	34.39	37.52	34.86	-	-
Apr-95	45.50	38.73	-	38.02	37.15	38.82	37.16	37.56	37.60	-	-
Oct-95	45.12	35.41	-	37.11	34.06	38.79	34.05	37.41	34.44	-	-
Apr-96	46.60	40.25	-	38.98	38.82	38.58	38.83	37.51	39.28	-	-
Oct-96	46.12	-	-	37.88	39.01	38.52	39.06	37.29	-	-	-
Dec-96	47.26	40.19	-	38.12	38.73	37.94	38.85	37.28	39.26	-	-
Apr-97	45.35	-	-	37.71	37.50	38.82	37.54	37.30	-	-	-
Mar-97	46.65	40.46	-	37.67	39.00	38.70	39.03	37.40	39.48	-	-
Oct-97	43.40	-	-	37.68	-	38.18	32.92	37.04	-	-	-
Apr-98	46.18	-	-	38.05	38.57	38.51	38.62	37.52	-	-	-
Oct-98	44.11	36.69	-	37.52	35.32	37.78	35.38	37.23	35.79	-	-
Mar-99	46.10	-	-	38.35	37.95	38.35	37.99	38.18	38.39	-	-
Jul-99	43.89	36.25	-	38.31	35.06	39.37	35.10	38.92	35.47	-	-
Aug-99	43.27	34.79	-	38.18	33.34	39.37	33.41	38.96	33.75	-	-
Oct-99	47.38	40.16	-	41.56	38.75	40.85	38.80	40.21	39.20	-	-
Nov-99	45.52	39.56	-	38.70	38.16	39.21	38.23	39.29	38.65	-	-
Apr-00	45.71	39.77	-	39.54	38.35	39.61	38.45	39.34	38.84	-	-
Oct-00	44.52	38.90	-	39.76	37.43	39.46	37.52	39.45	37.94	-	-
Apr-01	46.00	39.96	40.19	40.15	38.62	40.11	38.69	39.59	39.06	40.98	40.93
Oct-01	43.36	36.31	37.28	38.61	35.03	38.97	35.08	39.89	35.46	38.76	38.56
Apr-02	44.88	38.85	39.20	39.02	37.53	39.66	37.60	39.42	37.99	39.69	41.43
Oct-02	44.93	34.93	35.38	39.22	33.76	40.23	33.87	39.79	34.21	39.78	37.70
Apr-03	46.28	40.03	40.35	39.75	38.65	42.03	38.73	40.62	39.16	40.41	40.63
Oct-03	46.72	40.36	40.67	40.21	38.97	41.68	39.03	40.83	39.46	40.93	41.70
15-Apr-04	47.23	39.69	40.05	40.72	38.33	41.40	38.44	40.54	38.83	40.94	41.25
14-Oct-04	44.14	39.23	38.60	40.21	37.88	40.27	37.96	40.10	38.41	39.98	40.74
5-Apr-05	44.81	-	40.33	40.21	38.56	40.13	38.66	39.92	39.12	37.79	41.27
27-Oct-05	46.74	-	41.01	40.88	39.18	41.16	39.31	40.44	39.70	40.67	42.03
21-Apr-06	44.90	39.71	39.89	40.41	38.23	40.31	38.35	40.07	38.77	40.15	41.10
12-Oct-06	45.45	39.71	40.00	39.80	38.28	40.86	38.37	40.18	38.79	40.58	41.01
26-Apr-07	45.01	39.44	39.85	39.85	38.13	40.32	38.22	40.08	38.66	40.29	40.80
10-Oct-07	40.44	33.90	34.20	39.19	32.54	39.06	32.65	39.05	33.02	38.21	36.30
2-Apr-08	45.39	38.21	38.64	40.08	37.08	39.79	37.17	39.54	37.49	40.03	38.67

NOTES:
1. All elevations are referenced to mean sea level.
2. - = No data available
3. Elevations are measured in feet.

TABLE 2

SUMMARY OF GROUNDWATER ELEVATIONS
TUSCARORA LONG-TERM REGIONAL LANDFILL

	Background									
Well No.	**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	-	-	46.76	46.16	44.60	38.94	36.60	-	-	-
Aug-99	-	-	45.10	44.41	43.13	39.19	34.87	-	-	-
Oct-99	-	-	46.94	46.08	43.34	40.79	40.34	-	-	-
Nov-99	-	-	46.19	44.13	42.34	38.85	39.71	-	-	-
Apr-00	-	-	46.96	45.66	42.96	39.04	39.93	-	-	-
Oct-00	-	-	45.79	43.94	42.30	38.74	39.05	-	-	-
Apr-01	-	-	47.33	45.62	43.60	39.37	40.16	-	-	-
Oct-01	-	-	44.81	42.99	41.57	38.92	35.41	-	-	-
Apr-02	43.69	40.78	43.86	44.74	43.10	39.39	39.09	-	-	-
Oct-02	45.15	36.77	45.18	44.19	41.28	39.49	35.26	-	-	-
Apr-03	45.77	42.00	47.26	45.74	43.27	40.40	40.24	-	-	-
Oct-03	46.32	42.32	47.98	46.34	42.64	41.67	40.44	-	-	-
15-Apr-04	46.79	41.70	47.78	46.47	43.40	41.57	38.78	43.27	38.93	-
14-Oct-04	45.16	41.09	46.69	45.04	43.09	40.29	39.53	41.28	38.41	-
5-Apr-05	44.54	41.89	47.05	44.88	43.29	40.28	40.18	43.29	39.19	-
27-Oct-05	45.51	42.62	47.16	46.12	42.63	41.93	40.81	44.51	39.82	-
21-Apr-06	45.43	41.59	47.12	46.02	43.53	40.37	39.89	43.17	38.82	-
12-Oct-06	45.70	41.72	47.20	46.27	43.05	40.85	39.87	44.03	38.79	-
26-Apr-07	45.52	41.49	47.06	45.66	43.34	41.06	39.74	43.01	38.59	-
11-Oct-07	42.18	35.60	43.67	43.94	41.35	39.98	34.08	41.19	33.02	39.25
3-Apr-08	44.74	39.14	45.99	45.68	42.42	38.85	38.47	44.00	37.32	42.10

NOTES:
1. All elevations are referenced to mean sea level.
2. - = No data available
3. Elevations are measured in feet.

TABLE 3

SUMMARY OF GROUNDWATER ELEVATIONS
LEACHATE STORAGE LAGOON AREA

	Background											
Well No.	**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	-	46.38	-	46.48	-	41.05	48.06	-
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	-	46.05	-	45.97	-	39.51	45.89	-
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	-	45.03	-	45.06	-	34.83	44.09	-
Apr-98	47.20	46.67	40.47	46.47	-	46.54	-	46.56	-	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
5-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
3-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

NOTES:
1. All elevations are referenced to mean sea level.
2. - = No data available
3. Elevations are measured in feet.

TABLE 4
ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES FOR THE SHALLOW AQUIFER
TUSCARORA REGIONAL LANDFILLS

			April 2008				
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	382	E	45 42	0.0079	5.67E-01	0.17	0.026
i_2	1160	SE	46 39	0.0060	5.67E-01	0.17	0.020
i_3	1632	S-SE	46 40	0.0037	5.67E-01	0.17	0.012

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
TUSCARORA REGIONAL LANDFILLS

			April 2008				
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	1169	E-SE	39 37.5	0.00128	5.39E+00	0.25	0.028
i_5	267	E-SE	38.5 38	0.00187	5.39E+00	0.25	0.040
i_6	415	W-SW	38.5 37.5	0.00241	5.39E+00	0.25	0.052

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 [NC 2L/GWPS]	Date	DL	RL	Concentrations (ug/L)																													
				Background																													
				IRL-1S		IRL-1D		IRL-2S		IRL-2SA		IRL-2D		IRL-3S		IRL-3D		IRL-4S		IRL-4D		IRL-5S		IRL-5D		IRL-6S		IRL-6D		MW-A		MW-B		Blanks	
Antimony	10-Oct-07	0.05	6.0	0.1	B	0.1	B	-		-		-		0.1	B	0.5	B	0.1	B	0.1	B	0.1	B	-		-		-		0.1	B	-		0.1	J
[1,4]	2-Apr-08	0.08	6.0	0.5	B	ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		0.1	J
Arsenic	Jul-93	-	5	11		8		ND		-		ND		ND		ND		ND		22		ND		34		11		ND		-		-		ND	
[50]	Aug-93	-	5	6		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		6		ND		-		-		ND	
	Sep-93	-	5	ND		ND		ND		-		ND		ND		ND		ND		6		ND		ND		ND		ND		-		-		ND	
	Sep-93	-	5	6		10		ND		-		ND		ND		ND		ND		168		ND		ND		ND		ND		-		-		ND	
	Apr-94	-	5	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-94	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-95	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-95	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-96	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-96	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-97	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Oct-97	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-98	-	10	ND		-		ND		-		-		ND		ND		ND		ND		10		-		14		-		-		-		ND	
	Oct-98	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Mar-99	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-99	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-00	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-00	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-01	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-01	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-02	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-02	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Apr-03	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-03	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	15-Apr-04	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	14-Oct-04	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	5-Apr-05	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	5-Oct-05	-	10	ND		52		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	21-Apr-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	12-Oct-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	26-Apr-07	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	10-Oct-07	0.47	10.0	3.0	J	ND		-		-		-		2.3	J	ND		1.6	J	0.7	J	1.2	J	-		-		-		2.0	J	-		ND	
	2-Apr-08	0.07	10.0	0.8	J	0.8	J	-		-		-		0.4	J	0.4	J	1.7	J	0.4	J	2.2	J	-		-		-		1.2	J	-		ND	
Barium	Jul-93	-	50	268		343		302		-		188		296		189		202		580		280		365		785		182		-		-		ND	
[2000]	Aug-93	-	50	122		252		109		-		210		248		110		110		125		294		116		96		54		-		-		ND	
	Sep-93	-	50	113		105		107		-		125		159		166		91		215		181		80		70		ND		-		-		ND	
	Sep-93	-	50	109		212		152		-		204		200		145		143		-		250		137		75		87		-		-		ND	
	Apr-94	-	50	73		131		97		-		113		83		86		103		65		309		73		ND		ND		-		-		ND	
	Oct-94	-	500	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-95	-	500	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-95	-	500	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-96	-	500	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-96	-	500	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-97	-	500	ND		-		ND		-		-		ND		ND		ND		ND		986		-		ND		-		-		-		ND	
	Oct-97	-	500	ND		-		ND		-		-		ND		ND		ND		ND		1084		-		ND		-		-		-		ND	
	Apr-98	-	500	ND		-		ND		-		-		ND		657		ND		515		971		-		ND		-		-		-		ND	
	Oct-98	-	500	ND		-		ND		-		-		ND		ND		ND		ND		898		-		-		-		-		-		ND	
	Mar-99	-	500	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-99	-	500	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-00	-	500	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-00	-	500	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-01	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-01	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-02	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-02	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Apr-03	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-03	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	15-Apr-04	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	14-Oct-04	-	500	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	5-Apr-05	-	500	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	5-Oct-05	-	500	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	21-Apr-06	-	500	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	12-Oct-06	-	500	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	26-Apr-07	-	100	ND		ND		-		-		-		ND		ND		113		ND		ND		-		-		-		ND		-		ND	
	10-Oct-07	0.04	100.0	44.8	J	56.4	J	-		-		-		69.9	J	67.2	J	133		39	J	96.9	J	-		-		-		28.8	J	-		0.2	J
	2-Apr-08	0.11	100.0	72.9	J	33.4	J	-		-		-		74.7	J	64.2	J	140		40.2	J	69.5	J	-		-		-		33.8	J	-		ND	

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Concentrations (ug/L)																				
				Background		IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	Blanks
				IRL-1S	IRL-1D														
Beryllium [4]	Jul-93	-	1	3	1	ND	-	ND	ND	ND	2	ND	ND	8	4	ND	-	-	ND
	Aug-93	-	1	1	1	ND	-	1	ND	1	ND	1	ND	1	ND	ND	-	-	ND
	Sep-93	-	1	1	ND	ND	-	ND	ND	ND	ND	3	ND	ND	ND	ND	-	-	ND
	Sep-93	-	1	2	3	ND	-	ND	ND	2	ND	ND	ND	1	ND	ND	-	-	ND
	Apr-94	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-94	-	2	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-95	-	2	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-95	-	2	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	2	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	2	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	2	3	-	ND	-	-	ND	ND	ND	ND	3	-	ND	-	-	-	ND
	Oct-97	-	2	3	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	2	ND	-	ND	-	-	ND	ND	ND	2.5	ND	-	2	-	-	-	ND
	Oct-98	-	2	2	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	2	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	2	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	2	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-00	-	2	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	2	ND	-	-	6	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	14-Oct-04	-	2	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	5-Apr-05	-	2	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	2	ND	6	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	2	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	2	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	1.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.08	1.0	0.1 J	ND	-	-	-	ND	0.3 J	0.1 J	0.1 J	ND	-	-	-	ND	-	ND
	2-Apr-08	0.06	1.0	0.4 J	0.1 J	-	-	-	0.1 J	0.1 J	0.2 J	0.1 J	ND	-	-	-	0.2 J	-	ND
Cadmium [1.75]	Jul-93	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Aug-93	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Sep-93	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Sep-93	-	1	ND	ND	ND	-	ND	ND	ND	ND	10	ND	ND	ND	ND	-	-	ND
	Apr-94	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-94	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-95	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-95	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	1	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-97	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-98	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	1	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	1	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	1	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-00	-	1	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	1	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	1	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	1	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	1	1	-	-	ND	-	ND	ND	1	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	1	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	1	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	1	ND	-	-	3	-	1	ND	ND	ND	ND	-	-	-	1	ND	ND
	14-Oct-04	-	1	ND	-	-	2	-	ND	ND	ND	ND	1	-	-	-	ND	ND	ND
	5-Apr-05	-	1	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	1	ND	4	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	1	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	1	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	1.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.06	1.0	0.3 B	0.4 B	-	-	-	0.6 J	0.1 B	0.4 B	0.1 B	0.4 B	-	-	-	0.1 B	-	0.1 J
	2-Apr-08	0.04	1.0	0.2 J	0.4 J	-	-	-	0.2 J	0.7 J	0.5 J	0.1 J	0.1 J	-	-	-	0.1 J	-	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Concentrations (ug/L)																													
				Background																													
				IRL-1S		IRL-1D		IRL-2S		IRL-2SA		IRL-2D		IRL-3S		IRL-3D		IRL-4S		IRL-4D		IRL-5S		IRL-5D		IRL-6S		IRL-6D		MW-A		MW-B		Blanks	
Chromium [50]	Jul-93	-	5	36		18		ND		-		ND		ND		16		ND		49		ND		90		44		6		-		-		ND	
	Aug-93	-	5	14		8		ND		-		7		ND		6		ND		6		ND		18		ND		ND		-		-		ND	
	Sep-93	-	5	11		11		ND		-		ND		ND		10		ND		15		ND		11		7		ND		-		-		ND	
	Sep-93	-	5	19		43		ND		-		6		ND		22		ND		20		ND		21		6		ND		-		-		ND	
	Apr-94	-	5	10		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-94	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-95	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-95	-	10	13		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-96	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-96	-	10	39		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-97	-	10	23		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Oct-97	-	10	50		-		ND		-		-		ND		ND		18		ND		ND		-		ND		-		-		-		ND	
	Apr-98	-	10	18		-		ND		-		-		22		ND		14		ND		ND		-		25		-		-		-		ND	
	Oct-98	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Mar-99	-	10	58		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-99	-	10	21		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-00	-	5	87		-		-		-		-		19		ND		18		ND		ND		-		-		-		-		-		ND	
	Oct-00	-	10	21		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-01	-	10	11		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-01	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-02	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		12		ND		ND	
	Oct-02	-	10	15		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Apr-03	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-03	-	10	12		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	15-Apr-04	-	10	13		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		10		ND		ND	
	14-Oct-04	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	5-Apr-05	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	5-Oct-05	-	10	ND		29		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	21-Apr-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	12-Oct-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	26-Apr-07	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	10-Oct-07	0.24	10.0	1.6	B	1.2	B	-		-		-		2.0	B	2.3	B	1.3	B	2.1	B	1.4	B	-		-		-		1.3	B	-		1.2	J
	2-Apr-08	0.11	10.0	1.6	J	ND		-		-		-		0.7	J	0.5	J	ND		0.5	J	ND		-		-		-		0.3	J	-		ND	
Cobalt [70]	Jul-93	-	20	32		41		27		-		20		21		31		ND		93		29		118		45		23		-		-		ND	
	Aug-93	-	20	26		27		23		-		40		37		32		27		33		50		30		22		25		-		-		ND	
	Sep-93	-	20	22		21		ND		-		21		23		25		ND		38		36		32		ND		ND		-		-		ND	
	Sep-93	-	20	ND		ND		ND		-		22		ND		ND		31		53		26		21		ND		ND		-		-		ND	
	Apr-94	-	10	27	B	22	B	27	B	-		41	B	35	B	39	B	27	B	41	B	53	B	34	B	20	B	ND		-		-		18	
	Oct-94	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-95	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		37		-		-		ND	
	Oct-95	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Apr-96	-	10	ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND		ND		-		-		ND	
	Oct-96	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-97	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Oct-97	-	10	20		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Apr-98	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		ND		-		-		-		ND	
	Oct-98	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Mar-99	-	10	ND		-		ND		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-99	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-00	-	10	16		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-00	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-01	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Oct-01	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		-		-		ND	
	Apr-02	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-02	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Apr-03	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	Oct-03	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	15-Apr-04	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	14-Oct-04	-	10	ND		-		-		ND		-		ND		ND		ND		ND		ND		-		-		-		ND		ND		ND	
	5-Apr-05	-	10	ND		-		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	5-Oct-05	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	21-Apr-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	12-Oct-06	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	26-Apr-07	-	10	ND		ND		-		-		-		ND		ND		ND		ND		ND		-		-		-		ND		-		ND	
	10-Oct-07	0.41	10.0	0.6	J	ND		-		-		-		ND		ND		1.3	J	ND		ND		-		-		-		ND		-		ND	
	2-Apr-08	0.03	10.0	0.9	J	0.1	J	-		-		-		0.3	J	0.3	J	1.3	J	0.1	J	0.4	J	-		-		-		1.6	J	-		ND	

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background IRL-1S	Background IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	Blanks
		Concentrations (ug/L)																	
Copper [1000]	Jul-93	-	10	38 B	25 B	22 B	-	29 B	30 B	29 B	24 B	63 B	23 B	54 B	55 B	22 B	-	-	17
	Aug-93	-	10	32 B	26 B	27 B	-	24 B	24 B	26 B	24 B	20 B	19 B	23 B	25 B	17 B	-	-	19
	Sep-93	-	10	22 B	24 B	27 B	-	22 B	19 B	24 B	22 B	29 B	34 B	26 B	25 B	27 B	-	-	11
	Sep-93	-	10	89 B	101 B	58 B	-	79 B	39 B	69 B	65 B	ND	53 B	62 B	53 B	54 B	-	-	39
	Apr-94	-	10	26 B	22 B	26 B	-	29 B	28 B	29 B	28 B	28 B	33 B	24 B	24 B	ND	-	-	21
	Oct-94	-	200	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-95	-	200	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	24	-	-	ND
	Oct-95	-	200	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	200	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	200	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	200	55	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-97	-	200	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	200	ND	-	11	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-98	-	200	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	200	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	200	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	200	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-00	-	200	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	14-Oct-04	-	200	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	5-Apr-05	-	200	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	200	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	200	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	200	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	10	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.20	10.0	0.6 B	1.0 B	-	-	-	0.4 B	0.7 B	0.9 B	0.5 B	0.7 B	-	-	-	1.0 B	-	0.4 J
	2-Apr-08	0.05	10.0	0.8 B	0.4 B	-	-	-	0.6 B	0.5 B	0.8 B	0.2 B	0.4 B	-	-	-	0.4 B	-	0.2 J
Lead [15]	Jul-93	-	5	32	6	ND	-	ND	12	7	ND	30	ND	30	65	ND	-	-	ND
	Aug-93	-	5	7	5	6	-	10	ND	ND	7	ND	ND	12	8	5	-	-	ND
	Sep-93	-	5	14	9	ND	-	ND	ND	7	5	12	ND	ND	9	ND	-	-	ND
	Sep-93	-	5	13	22	ND	-	ND	ND	8	ND	21	ND	ND	7	ND	-	-	ND
	Apr-94	-	5	11	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-94	-	10	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-95	-	10	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-95	-	10	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	10	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	10	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	10	22	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-97	-	10	ND	-	11	-	-	ND	ND	22	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	10	12	-	ND	-	-	16	ND	ND	ND	ND	-	20	-	-	-	ND
	Oct-98	-	10	14	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	10	21	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	10	12	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	10	38	-	-	-	-	ND	ND	14	ND	ND	-	-	-	-	-	ND
	Oct-00	-	10	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	14-Oct-04	-	10	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	5-Apr-05	-	10	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	10	ND	31	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	10	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	10	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	10	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.07	10.0	0.4 B	0.1 B	-	-	-	0.1 B	0.1 B	0.2 B	0.1 B	0.1 B	-	-	-	0.3 B	-	0.1 J
	2-Apr-08	0.04	10.0	1.4 J	0.1 J	-	-	-	0.1 J	0.3 J	0.1 J	ND	0.1 J	-	-	-	0.3 J	-	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background IRL-1S	Background IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	Blanks
		Concentrations (ug/L)																	
Nickel [100]	Jul-93	-	10	45	30	15	-	21	23	53	26	133	51	144	54	35	-	-	ND
	Aug-93	-	10	25 B	16 B	16 B	-	36 B	31 B	28 B	99	62	60	42 B	213	35 B	-	-	11
	Sep-93	-	10	25 B	28 B	33 B	-	22 B	20 B	28 B	27 B	53 B	48 B	42 B	36 B	24 B	-	-	17
	Sep-93	-	10	24	32	16	-	22	17	22	11	ND	20	21	ND	ND	-	-	ND
	Apr-94	-	10	34 B	38 B	36 B	-	54 B	53 B	57 B	45 B	40 B	50 B	27 B	ND	ND	-	-	20
	Oct-94	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	64	ND	ND	ND	-	-	ND
	Apr-95	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	17	-	-	ND
	Oct-95	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-97	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-98	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	50	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	50	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-00	-	50	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	14-Oct-04	-	50	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	5-Apr-05	-	50	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	50	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	50	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	50	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	50	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.66	50.0	1.5 J	0.9 J	-	-	-	3.3 J	2.7 J	2.3 J	2.1 J	6.1 J	-	-	-	1.0 J	-	ND
	2-Apr-08	0.06	50.0	1.6 J	1.4 B	-	-	-	5.4 J	3.9 J	2.0 J	2.5 J	5.3 J	-	-	-	2.1 J	-	0.3 J
Selenium [50]	10-Oct-07	0.35	10.0	1.2 B	1.0 B	-	-	-	8.0 J	1.7 B	3.5 B	1.2 B	4.5 B	-	-	-	1.6 B	-	0.9 J
	2-Apr-08	0.14	10.0	ND	ND	-	-	-	1.0 J	0.9 J	5.2 J	ND	6.2 J	-	-	-	0.7 J	-	ND
Silver [17.5]	2-Apr-08	0.04	10.0	0.1 B	0.1 B	-	-	-	0.1 B	ND	0.1 B	ND	ND	-	-	-	0.1 B	-	0.1 J
Thallium [0.28]	2-Apr-08	0.04	5.0	0.1 J	0.2 J	-	-	-	0.1 J	ND	0.1 J	ND	ND	-	-	-	0.1 J	-	ND
Vanadium [3.5]	Jul-93	-	2000	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Aug-93	-	2000	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Sep-93	-	2000	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Sep-93	-	2000	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-94	-	25	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-94	-	40	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-95	-	40	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-95	-	40	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	40	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	40	ND	-	ND	-	-	48	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	40	48	-	ND	-	-	48	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-97	-	40	56	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-98	-	40	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Oct-98	-	40	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Mar-99	-	40	63	-	ND	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-99	-	40	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-00	-	40	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-00	-	40	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-01	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Oct-01	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	-	-	ND
	Apr-02	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-02	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Apr-03	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	Oct-03	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	15-Apr-04	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	14-Oct-04	-	40	ND	-	-	ND	-	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND
	5-Apr-05	-	40	ND	-	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	5-Oct-05	-	40	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	21-Apr-06	-	40	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	12-Oct-06	-	40	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	26-Apr-07	-	25	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	10-Oct-07	0.42	25.0	0.6 J	ND	-	-	-	2.5 J	1.2 J	ND	0.8 J	1.2 J	-	-	-	ND	-	ND
	2-Apr-08	0.07	25.0	2.0 J	0.3 J	-	-	-	1.6 J	1.1 J	0.3 J	1.0 J	1.2 J	-	-	-	1.1 J	-	ND

TABLE 6

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA INTERIM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background IRL-1S	Background IRL-1D	IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B	Blanks
				Concentrations (ug/L)															
Zinc [1050]	Jul-93	-	10	42 B	41 B	10 B	-	15 B	11 B	43 B	14 B	293	ND	301	ND	25 B	-	-	10
	Aug-93	-	10	37	18	11	-	14	ND	ND	16	25	ND	64	12	22	-	-	ND
	Sep-93	-	10	31	20	ND	-	ND	ND	13	ND	57	ND	12	ND	ND	-	-	ND
	Sep-93	-	10	73	88	17	-	27	22	26	14	41	11	29	12	24	-	-	ND
	Apr-94	-	10	36 B	19 B	42 B	-	21 B	155	24 B	25 B	30 B	48 B	22 B	34 B	ND	-	-	20
	Oct-94	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	97	ND	ND	ND	-	-	ND
	Apr-95	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	803	ND	ND	25	-	-	ND
	Oct-95	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Apr-96	-	50	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND
	Oct-96	-	50	ND	-	ND	-	-	ND	ND	ND	ND	ND	-	ND	-	-	-	ND
	Apr-97	-	50	ND	-	ND	-	-	ND	ND	ND	ND	1425	-	ND	-	-	-	ND
	Oct-97	-	50	110	-	ND	-	-	ND	ND	ND	ND	1240	-	ND	-	-	-	ND
	Apr-98	-	50	ND	-	ND	-	-	ND	ND	ND	ND	6340	-	ND	-	-	-	ND
	Oct-98	-	50	ND	-	ND	-	-	ND	ND	ND	ND	54	-	-	-	-	-	ND
	Mar-99	-	50	ND	-	ND	-	-	ND	ND	ND	ND	1608	-	-	-	-	-	ND
	Oct-99	-	50	ND	-	-	-	-	ND	ND	ND	ND	65	-	-	-	-	-	ND
	Apr-00	-	50	90	-	-	-	-	ND	ND	ND	ND	596	-	-	-	-	-	ND
	Oct-00	-	50	ND	-	-	-	-	ND	ND	ND	ND	74	-	-	-	-	-	ND
	Apr-01	-	50	ND	-	-	ND	-	ND	ND	ND	ND	1204	-	-	-	-	-	ND
	Oct-01	-	50	ND	-	-	ND	-	ND	ND	ND	ND	362	-	-	-	-	-	ND
	Apr-02	-	50	ND	-	-	ND	-	ND	ND	ND	ND	124	-	-	-	ND	ND	ND
	Oct-02	-	50	ND	-	-	ND	-	ND	ND	ND	ND	131	-	-	-	ND	ND	ND
	Apr-03	-	50	ND	-	-	ND	-	ND	ND	ND	ND	112	-	-	-	ND	ND	ND
	Oct-03	-	50	ND	-	-	ND	-	ND	ND	ND	ND	277	-	-	-	ND	ND	ND
	15-Apr-04	-	50	ND	-	-	ND	-	ND	ND	ND	ND	364	-	-	-	ND	ND	ND
	14-Oct-04	-	50	ND	-	-	ND	-	ND	ND	ND	ND	63	-	-	-	ND	ND	ND
	5-Apr-05	-	50	ND	-	-	-	-	ND	ND	ND	ND	132	-	-	-	-	-	ND
	5-Oct-05	-	50	ND	192	-	-	-	ND	ND	ND	ND	280	-	-	-	ND	-	ND
	21-Apr-06	-	50	ND	ND	-	-	-	ND	ND	ND	ND	76	-	-	-	ND	-	ND
	12-Oct-06	-	50	ND	ND	-	-	-	ND	ND	ND	ND	172	-	-	-	ND	-	ND
	26-Apr-07	-	10	ND	ND	-	-	-	ND	ND	ND	ND	30	-	-	-	ND	-	ND
	10-Oct-07	0.20	10.0	7.5 B	5.3 B	-	-	-	3.8 B	3.0 B	7.4 B	6.8 B	55	-	-	-	5.2 B	-	6.6
	2-Apr-08	0.04	10.0	5.5 B	14 B	-	-	-	3.3 B	2.1 B	4.4 B	1.6 B	37	-	-	-	11 B	-	6.3 J
1,1-Dichloroethylene [7]	10-Oct-07	0.14	5.0	ND	ND	-	-	-	ND	ND	ND	ND	2.80 J	-	-	-	3.10 J	-	ND
	4-Dec-07	0.56	1.0	-	-	-	-	-	-	-	-	-	ND	-	-	-	ND	-	ND
	2-Apr-08	0.14	5.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
2-Butanone [4200]	10-Oct-07	0.85	100.0	2.70 J	3.30 J	-	-	-	4.00 J	4.10 J	3.00 J	4.40 J	2.70 J	-	-	-	3.90 J	-	ND
	4-Dec-07	0.96	5.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	2-Apr-08	0.85	100.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
Acetone [700]	10-Oct-07	1.21	100.0	2.20 J	2.70 J	-	-	-	7.40 J	3.40 J	2.60 J	4.90 J	ND	-	-	-	ND	-	ND
	4-Dec-07	2.2	25.0	ND	ND	-	-	-	ND	ND	ND	ND	-	-	-	-	-	-	ND
	2-Apr-08	1.21	100.0	3.50 B	6.60 B	-	-	-	4.90 B	4.90 B	4.00 B	3.60 B	3.90 B	-	-	-	4.20 B	-	1.50 J
Chloromethane [2.6]	10-Oct-07	0.18	1.0	0.50 J	0.60 J	-	-	-	0.80 J	0.70 J	0.50 J	0.90 J	0.50 J	-	-	-	0.80 J	-	ND
	4-Dec-07	0.11	1.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND
	2-Apr-08	0.18	1.0	ND	ND	-	-	-	ND	ND	ND	ND	ND	-	-	-	ND	-	ND

Notes:
1. All concentrations are in micrograms per liter (ug/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. - = Not available
11. DL = Laboratory detection limit.
12. J = Estimated value between the DL and the RL

TABLE 7

SUMMARY OF FIELD PARAMETERS
TUSCARORA INTERIM REGIONAL LANDFILL

Field Parameters	Date	Background		IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B
		IRL-1S	IRL-1D													
Conductivity [uMhos]	Jun-93	1000	480	30	-	580	430	520	370	600	800	590	310	460	-	-
	Aug-93	59	240	110	-	360	370	300	240	330	600	290	110	260	-	-
	Sep-93	75	300	150	-	530	420	450	250	460	880	400	150	400	-	-
	Sep-93	74	280	150	-	520	360	440	270	460	860	360	130	390	-	-
	Apr-94	76	350	140	-	570	360	620	290	560	990	460	77	460	-	-
	Oct-94	130	280	130	-	820	570	820	270	730	1000	82	82	420	-	-
	Apr-95	67	360	160	-	560	240	670	290	520	1900	490	69	450	-	-
	Oct-95	65	270	260	-	660	260	700	330	520	1300	480	75	450	-	-
	Apr-96	79	360	340	-	580	700	320	290	520	1500	450	77	440	-	-
	Oct-96	63	-	-	-	-	410	530	250	400	1000	-	87	-	-	-
	Apr-97	80	-	640	-	-	330	690	270	530	1800	-	-	-	-	-
	Oct-97	84	-	630	-	-	720	270	270	490	1200	-	-	-	-	-
	Apr-98	73	-	700	-	-	360	770	240	520	1400	-	110	-	-	-
	Oct-98	74	-	600	-	-	480	750	230	490	1200	-	-	-	-	-
	Mar-99	77	-	810	-	-	880	760	760	520	1200	-	-	-	-	-
	Oct-99	74	-	-	-	-	960	710	490	490	800	-	-	-	-	-
	Apr-00	74	-	-	-	-	1100	1400	170	500	900	-	-	-	-	-
	Oct-00	76	-	-	-	-	1100	720	230	500	900	-	-	-	-	-
	Apr-01	67	-	-	64	-	1100	710	190	470	840	-	-	-	-	-
	Oct-01	74	-	-	170	-	1000	710	200	500	1700	-	-	-	-	-
	Apr-02	68	-	-	120	-	950	710	200	450	1700	-	-	-	90	120
	Oct-02	19	-	-	448	-	970	830	192	550	1848	-	-	-	98	132
	Apr-03	100	-	-	329	-	1082	804	215	486	1024	-	-	-	86	157
	Oct-03	96	-	-	182	-	1110	849	205	506	1393	-	-	-	81	180
	15-Apr-04	64	-	-	120	-	700	600	170	360	990	-	-	-	56	100
	14-Oct-04	99	-	-	183	-	775	712	239	482	1188	-	-	-	86	123
	5-Apr-05	96	-	-	-	-	1033	942	287	601	1491	-	-	-	89	-
	27-Oct-05	105	195	-	-	-	876	775	250	502	1323	-	-	-	91	-
	21-Apr-06	104	231	-	-	-	927	736	271	553	1424	-	-	-	79	-
	12-Oct-06	101	164	-	-	-	784	672	278	515	126	-	-	-	87	-
	26-Apr-07	103	155	-	-	-	850	721	287	536	1287	-	-	-	75	-
	10-Oct-07	105	192	-	-	-	850	702	354	550	1570	-	-	-	98	-
	4-Dec-07	109.2	357	-	-	-	963	1052	379	610	1829	-	-	-	108.7	-
	2-Apr-08	109	169	-	-	-	1096	713	253	540	1272	-	-	-	86	-
pH [units]	Jun-93	5.3	6.3	6.1	-	6.2	5.4	6.3	5.7	6.1	6	6.4	5.8	6.2	-	-
	Aug-93	5.5	6.5	6.3	-	6.8	6	6.8	6.4	6.9	6.2	6.8	6.3	7	-	-
	Sep-93	5.9	6.6	5.7	-	6.5	5.9	6.5	6.7	7	6.1	6.6	6.5	6.7	-	-
	Sep-93	6.1	6.5	5.8	-	6.1	5.9	6.5	5.7	6.3	6.4	6.9	6.6	6.6	-	-
	Apr-94	5.9	6.1	5.4	-	6.4	5.7	6.5	6.2	6.7	6.4	6.8	6.4	6.7	-	-
	Oct-94	5.2	6.4	5.2	-	6.7	5.7	6.7	6	6.8	6.2	7	5.5	6.8	-	-
	Apr-95	5.7	6.1	5.5	-	6.4	6	6.2	6.2	6.6	6.2	3.8	6.2	6.6	-	-
	Oct-95	5	6.4	5.6	-	6.7	5.4	6.6	5.9	6.8	6.2	6.9	5.3	7	-	-
	Apr-96	5	6.3	5.8	-	6.6	6.7	6	6.1	6.7	6.4	7	5.5	6.6	-	-
	Oct-96	5.2	-	-	-	-	6	6	6.4	6.4	5.8	-	6	-	-	-
	Apr-97	6.1	-	6.3	-	-	6.2	6.5	6.1	6.6	6.2	-	-	-	-	-
	Oct-97	5.3	-	5.8	-	-	5.9	5.6	5.6	6.1	5.8	-	-	-	-	-
	Apr-98	5.8	-	6.5	-	-	5.4	6.4	5.6	6.8	6.1	-	5.2	-	-	-
	Oct-98	5.5	-	6.1	-	-	5.6	6.3	5.7	6.7	6	-	-	-	-	-
	Mar-99	5.2	-	6.3	-	-	5.7	6.5	6.0	6.7	6	-	-	-	-	-
	Oct-99	4.9	-	-	-	-	5.9	6.4	6.8	6.8	5.7	-	-	-	-	-
	Apr-00	5.2	-	-	-	-	5.8	6.4	5.7	6.9	5.8	-	-	-	-	-
	Oct-00	4.8	-	-	-	-	5.7	6.4	5.5	6.6	5.2	-	-	-	-	-
	Apr-01	4.9	-	-	4.8	-	5.6	6.5	5.4	6.6	5.5	-	-	-	-	-
	Oct-01	5	-	-	4.9	-	5.8	6.6	5.6	6.9	6.1	-	-	-	-	-
	Apr-02	4.7	-	-	4.3	-	5.7	6.3	5.3	6.4	6.0	-	-	-	5.2	4.5
	Oct-02	5.1	-	-	4.1	-	6.0	6.4	5.3	7.0	6.1	-	-	-	5.2	4.7
	Apr-03	5.1	-	-	4.3	-	6.1	6.5	5.3	6.8	5.8	-	-	-	5.2	4.7
	Oct-03	4.8	-	-	4.3	-	5.8	6.3	5.1	6.7	5.9	-	-	-	5.0	4.8
	15-Apr-04	5.3	-	-	4.4	-	6.4	5.6	5.8	6.8	6.4	-	-	-	5.4	5.8
	14-Oct-04	4.9	-	-	4.4	-	6.1	6.5	5.3	6.9	6.1	-	-	-	4.9	4.8
	5-Apr-05	5.1	-	-	-	-	6.3	6.7	5.2	7.0	6.1	-	-	-	5.1	-
	27-Oct-05	4.9	6.6	-	-	-	6	6.5	5.1	6.9	6.2	-	-	-	5.1	-
	21-Apr-06	5.0	6.3	-	-	-	6.2	7.0	5.4	7.9	6.0	-	-	-	5.0	-
	12-Oct-06	5.0	6.1	-	-	-	6.2	6.6	5.1	6.8	6.1	-	-	-	5.2	-
	26-Apr-07	4.9	6.1	-	-	-	6.2	6.7	5.4	6.9	6.1	-	-	-	5.0	-
	10-Oct-07	5.2	6.2	-	-	-	6.2	6.8	5.8	7.0	6.4	-	-	-	5.3	-
	4-Dec-07	6.60	6.29	-	-	-	7.08	6.60	6.64	7.39	6.26	-	-	-	6.61	-
	8-Apr-08	4.9	6.7	-	-	-	5.6	6.8	5.2	6.8	6.0	-	-	-	5.0	-

TABLE 7

SUMMARY OF FIELD PARAMETERS
TUSCARORA INTERIM REGIONAL LANDFILL

Field Parameters	Date	Background		IRL-2S	IRL-2SA	IRL-2D	IRL-3S	IRL-3D	IRL-4S	IRL-4D	IRL-5S	IRL-5D	IRL-6S	IRL-6D	MW-A	MW-B
		IRL-1S	IRL-1D													
Temperature	Jun-93	22	20	23	-	20	23	22	23	21	23	21	22	21	-	-
[°C]	Aug-93	23	20	22	-	21	22	22	23	20	24	21	23	20	-	-
	Sep-93	23	20	24	-	20	25	20	24	20	25	20	24	21	-	-
	Sep-93	23	21	24	-	21	24	21	23	20	24	22	24	21	-	-
	Apr-94	18	18	17	-	17	16	16	15	16	16	16	15	15	-	-
	Oct-94	21	18	21	-	20	21	19	21	19	21	20	21	20	-	-
	Apr-95	15	15	15	-	17	16	16	16	16	16	16	15	16	-	-
	Oct-95	22	20	22	-	20	22	20	22	22	22	21	22	20	-	-
	Apr-96	12	13	13	-	14	13	13	13	13	13	14	12	12	-	-
	Oct-96	20	-	-	-	-	22	22	22	22	22	-	22	-	-	-
	Apr-97	13	-	14	-	-	15	14	15	15	14	-	-	-	-	-
	Oct-97	18	-	21	-	-	17	19	19	18	20	-	-	-	-	-
	Apr-98	15	-	16	-	-	15	16	15	17	15	-	15	-	-	-
	Oct-98	19	-	21	-	-	21	19	21	20	21	-	-	-	-	-
	Mar-99	12	-	16	-	-	17	17	17	18	17	-	-	-	-	-
	Oct-99	21	-	-	-	-	20	20	21	21	21	-	-	-	-	-
	Apr-00	15	-	-	-	-	15	17	19	18	15	-	-	-	-	-
	Oct-00	18	-	-	-	-	18	20	21	20	16	-	-	-	-	-
	Apr-01	15	-	-	15	-	18	17	16	15	15	-	-	-	-	-
	Oct-01	19	-	-	20	-	20	20	21	21	21	-	-	-	-	-
	Apr-02	15	-	-	16	-	15	15	16	17	17	-	-	-	17	16
	Oct-02	24	-	-	26	-	23	22	24	23	24	-	-	-	25	25
	Apr-03	15	-	-	17	-	16	16	15	16	17	-	-	-	16	16
	Oct-03	20	-	-	21	-	21	20	21	22	21	-	-	-	21	21
	15-Apr-04	13	-	-	14	-	13	13	14	14	15	-	-	-	13	13
	14-Oct-04	20	-	-	21	-	21	21	22	22	22	-	-	-	21	21
	5-Apr-05	15	-	-	-	-	15	15	15	15	15	-	-	-	15	-
	27-Oct-05	20	17	-	-	-	22	22	23	23	23	-	-	-	21	-
	21-Apr-06	20	18	-	-	-	14	16	15	15	18	-	-	-	18	-
	12-Oct-06	20	18	-	-	-	22	19	23	21	23	-	-	-	21	-
	26-Apr-07	16	17	-	-	-	17	18	16	18	17	-	-	-	17	-
	10-Oct-07	19	18	-	-	-	22	19	23	20	24	-	-	-	20	-
	4-Dec-07	16.7	16.7	-	-	-	18.2	16.8	18.6	18.8	18.7	-	-	-	16.9	-
	2-Apr-08	15	17	-	-	-	17	17	16	19	16	-	-	-	16	-
Turbidity	Jun-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
[NTU]	Aug-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-98	-	-	130	-	-	60	180	220	190	650	-	-	-	-	-
	Mar-99	650	-	290	-	-	85	180	180	270	95	-	-	-	-	-
	Oct-99	600	-	-	-	-	10	23	17	17	5.9	-	-	-	-	-
	Apr-00	170	-	-	-	-	18	40	33	40	13	-	-	-	-	-
	Oct-00	700	-	-	-	-	31	90	7.1	34	21	-	-	-	-	-
	Apr-01	140	-	-	50	-	21	60	12	27	10	-	-	-	-	-
	Oct-01	106	-	-	68	-	74	139	34	18	26	-	-	-	-	-
	Apr-02	90	-	-	12	-	40	35	5.3	25	19	-	-	-	140	5.9
	Oct-02	280	-	-	19	-	45	100	9.2	38	100	-	-	-	75	4.0
	Apr-03	90	-	-	6.9	-	45	110	9.4	39	27	-	-	-	110	8.8
	Oct-03	65	-	-	13	-	31	30	19	60	55	-	-	-	160	40
	15-Apr-04	200	-	-	100	-	45	35	37	32	36	-	-	-	110	13
	14-Oct-04	75	-	-	13	-	85	80	8.9	240	80	-	-	-	95	5.9
	5-Apr-05	100	-	-	-	-	40	18	13	25	32	-	-	-	75	-
	27-Oct-05	90	>1000	-	-	-	22	29	14	36	19	-	-	-	85	-
	21-Apr-06	8.9	14	-	-	-	5.5	32	7.3	53	25	-	-	-	4.1	-
	12-Oct-06	5.1	40	-	-	-	21	140	1.6	37	170	-	-	-	20	-
	26-Apr-07	7.0	4.0	-	-	-	22	160	200	200	90	-	-	-	25	-
	10-Oct-07	11	10	-	-	-	58	65	12	45	110	-	-	-	22	-
	4-Dec-07	79.4	14.97	-	-	-	15.00	525	47.5	64.6	9.42	-	-	-	73.3	-
	2-Apr-08	40	9.5	-	-	-	3.5	28	7.7	55	11	-	-	-	20	-

Notes:
1. - = Not available
2. Monitoring Wells IRL-6S and IRL-6D were abandoned prior to the October 1998 sampling event.

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background MW-12S	Background MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	Blanks
		Concentrations (µg/L)														
Antimony [1.4]	Jul-99	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Aug-99	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	30	-	-	ND	ND	40	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	30	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-02	-	30	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	30	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	30	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	30	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	6.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.05	6.0	ND	ND	0.1 B	ND	-	ND	ND	ND	ND	ND	-	0.1 B	0.1 J
	3-Apr-08	0.44	6.0	ND	0.5 J	0.1 J	ND	-	ND	ND	0.5 J	0.1 J	ND	-	ND	ND
Arsenic [50]	Jul-99	-	10	-	-	37	ND	ND	ND	ND	ND	-	-	-	-	ND
	Aug-99	-	10	-	-	13	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-02	-	10	ND	ND	10	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.47	10.0	6.6 J	ND	3.5 J	4.3 J	-	1.8 J	0.5 J	ND	9.4 J	ND	-	1.0 J	ND
	3-Apr-08	0.57	10.0	1.4 J	ND	1.0 B	1.3 J	-	4.1 J	0.2 B	ND	1.3 J	ND	-	0.2 B	0.2 J
Barium [2000]	Jul-99	-	500	-	-	869	ND	ND	ND	ND	ND	-	-	-	-	ND
	Aug-99	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	500	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-02	-	500	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	500	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	500	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	500	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	100	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.04	100.0	81.8 J	47.4 J	63.3 J	32.7 J	-	44.8 J	45.7 J	40.7 J	42.2 J	46.4 J	-	42.8 J	0.2 J
	3-Apr-08	0.11	100.0	88.6 J	36.7 J	67.3 J	43.6 J	-	40.1 J	45.8 J	44 J	43.0 J	35.0 J	-	44.9 J	0.4 J

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background MW-12S	Background MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	Blanks
		Concentrations (µg/L)														
Beryllium [4]	Jul-99	-	2	-	-	5	ND	ND	ND	ND	ND	-	-	-		ND
	Aug-99	-	2	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-99	-	2	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Nov-99	-	2	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-00	-	2	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-00	-	2	-	-	ND	ND	6	ND	ND	ND	-	-	-		ND
	Apr-01	-	2	-	-	ND	ND	5	ND	ND	ND	-	-	-		ND
	Oct-01	-	2	-	-	ND	2	9	ND	ND	ND	-	-	-		ND
	Apr-02	-	2	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-02	-	2	ND	ND	ND	ND	3	ND	ND	ND	-	-	-		ND
	Apr-03	-	2	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-03	-	2	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	15-Apr-04	-	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
	14-Oct-04	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	5-Apr-05	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	27-Oct-05	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	21-Apr-06	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	12-Oct-06	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	11-Oct-07	0.08	1.0	0.1 J	ND	0.2 J	0.2 J	-	0.2 J	0.1 J	0.1 J	0.1 J	ND	-	0.1 J	ND
	3-Apr-08	0.06	1.0	0.3 J	ND	ND	0.3 J	-	0.2 J	1.5	0.1 J	0.3 J	ND	-	0.2 J	ND
Cadmium [1.75]	Jul-99	-	1	-	-	1	ND	ND	ND	ND	ND	-	-	-		ND
	Aug-99	-	1	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-99	-	1	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Nov-99	-	1	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-00	-	1	-	-	ND	ND	ND	1	ND	ND	-	-	-		ND
	Oct-00	-	1	-	-	ND	ND	2	ND	ND	ND	-	-	-		ND
	Apr-01	-	1	-	-	ND	ND	3	ND	ND	ND	-	-	-		ND
	Oct-01	-	1	-	-	ND	ND	2	ND	ND	ND	-	-	-		ND
	Apr-02	-	1	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-02	-	1	ND	ND	1	ND	2	ND	ND	ND	-	-	-		ND
	Apr-03	-	1	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-03	-	1	ND	ND	ND	ND	ND	1	ND	ND	-	-	-		ND
	15-Apr-04	-	1	ND	2	ND	ND	ND	3	3	ND	ND	ND	ND		ND
	14-Oct-04	-	1	ND	ND	ND	ND	-	ND	ND	ND	ND	1	ND		ND
	5-Apr-05	-	1	ND	ND	1	ND	-	ND	ND	ND	ND	ND	ND		ND
	27-Oct-05	-	1	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	21-Apr-06	-	1	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	12-Oct-06	-	1	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	11-Oct-07	0.06	1.0	0.2 B	0.1 B	0.6 J	0.1 B	-	0.1 B	0.5 B	0.1 B	0.1 B	0.1 B	-	0.9 J	0.1 J
	3-Apr-08	0.05	1.0	0.4 J	0.1 J	0.2 J	0.1 J	-	0.2 J	0.2 J	0.3 J	0.1 J	ND	-	0.1 J	ND
Chromium [50]	Jul-99	-	10	-	-	112	35	ND	ND	ND	ND	-	-	-	-	ND
	Aug-99	-	10	-	-	29	38	10	ND	23	ND	-	-	-	-	ND
	Oct-99	-	1	-	-	14	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	10	-	-	22	36	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	10	-	-	11	43	37	ND	24	ND	-	-	-	-	ND
	Oct-00	-	10	-	-	16	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	10	-	-	11	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	10	-	-	38	65	ND	ND	39	ND	-	-	-	-	ND
	Apr-02	-	10	ND	ND	43	12	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	10	ND	ND	15	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	10	ND	ND	18	ND	ND	ND	ND	ND	17	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	11-Oct-07	0.24	10.0	ND	ND	4.8 B	1.1 B	-	0.3 B	ND	ND	0.5 B	ND	-	ND	1.2 J
	3-Apr-08	0.11	10.0	ND	ND	0.4 J	1.0 J	-	0.4 J	0.5 J	ND	0.3 J	ND	-	ND	ND

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Background MW-12S	Background MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	Blanks
		Concentrations (ug/L)														
Cobalt	Jul-99	-	10	-	-	13	24	ND	ND	ND	ND	-	-	-	-	ND
[70]	Aug-99	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	10	-	-	ND	ND	12	ND	ND	ND	-	-	-	-	ND
	Apr-02	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.41	10.0	1.4 J	ND	0.7 J	ND	-	ND	1.0 J	ND	ND	ND	-	2.7 J	ND
	3-Apr-08	0.03	10.0	4.6 J	0.1 J	1.8 J	0.4 J	-	0.7 J	3.1 J	0.1 J	0.3 J	0.1 J	-	0.9 J	ND
Copper	Jul-99	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
[1000]	Aug-99	-	10	-	-	10	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	200	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-02	-	200	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	200	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	200	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	200	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.20	10.0	0.9 B	ND	1.2 B	0.5 B	-	0.3 B	0.4 B	0.2 B	0.6 B	0.2 B	-	3.3 J	0.4 J
	3-Apr-08	0.05	10.0	0.7 B	0.3 B	0.8 B	0.6 B	-	0.7 B	0.6 B	0.3 B	0.6 B	0.1 B	-	1.2 J	0.2 J
Lead	Jul-99	-	10	-	-	129	ND	ND	ND	ND	ND	-	-	-	-	ND
[15]	Aug-99	-	10	-	-	18	14	ND	ND	17	ND	-	-	-	-	ND
	Oct-99	-	10	-	-	12	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	10	-	-	ND	14	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	10	-	-	ND	17	14	ND	15	ND	-	-	-	-	ND
	Oct-00	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	10	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	10	-	-	16	19	ND	ND	18	ND	-	-	-	-	ND
	Apr-02	-	10	ND	ND	21	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	10	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.07	10.0	0.2 B	ND	3.0 J	1.6 J	-	0.3 B	0.1 B	ND	1.1 J	0.1 B	-	0.3 B	0.1 J
	3-Apr-08	0.32	10.0	0.1 B	0.1 B	0.5 B	1.4 J	-	0.9 J	1.4 J	0.1 B	0.5 B	ND	-	0.3 B	0.1 J
Nickel	11-Oct-07	0.66	50.0	2.0 J	1.6 J	2.3 J	ND	-	0.7 J	1.8 J	1.8 J	0.8 J	1.2 J	-	3.6 J	ND
[100]	3-Apr-08	0.06	50.0	4.3 J	2.0 J	4.0 J	0.8 B	-	1.4 B	4.8 J	2.4 J	0.7 B	1.6 J	-	1.4 B	0.3 J

TABLE 8

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Constituent [NC 2L/GWPS]	Date	DL	RL	Concentrations (µg/L) Background MW-12S	Background MW-12D	MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R	Blanks
Selenium	11-Oct-07	0.35	10.0	2.6 B	ND	1.4 B	ND	-	0.4 B	0.8 B	ND	ND	ND	-	ND	0.9 J
[50]	3-Apr-08	0.51	10.0	3.1 B	ND	0.7 B	0.2 B	-	0.7 B	0.3 B	ND	0.3 B	ND	-	0.2 B	1.5 J
Silver	3-Apr-08	0.04	10.0	ND	0.1 J	ND	0.1 J	-	ND	ND	0.1 J	ND	ND	-	ND	ND
[17.5]																
Thallium	11-Oct-07	0.07	5.0	0.2 J	ND	0.1 J	ND	-	0.1 J	ND	ND	0.1 J	0.1 J	-	ND	ND
[0.28]	3-Apr-08	0.63	5.0	ND	0.1 J	0.1 J	ND	-	ND	ND	0.1 J	ND	ND	-	ND	ND
Vanadium	Jul-99	-	40	-	-	167	52	ND	ND	ND	ND	-	-	-	-	ND
[3.5]	Aug-99	-	40	-	-	41	47	ND	ND	ND	ND	-	-	-	-	ND
	Oct-99	-	40	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Nov-99	-	40	-	-	ND	47	ND	ND	ND	ND	-	-	-	-	ND
	Apr-00	-	40	-	-	ND	57	43	ND	ND	ND	-	-	-	-	ND
	Oct-00	-	40	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-01	-	40	-	-	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-01	-	40	-	-	55	83	ND	ND	64	ND	-	-	-	-	ND
	Apr-02	-	40	ND	ND	67	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-02	-	40	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Apr-03	-	40	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	Oct-03	-	40	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	ND
	15-Apr-04	-	40	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND
	14-Oct-04	-	40	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	5-Apr-05	-	40	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	27-Oct-05	-	40	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	21-Apr-06	-	40	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	-	ND
	12-Oct-06	-	40	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	26-Apr-07	-	25	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	-	ND
	11-Oct-07	0.42	25.0	0.9 J	ND	8.6 J	3.8 J	-	0.6 J	ND	ND	2.7 J	ND	-	ND	ND
	3-Apr-08	0.07	25.0	0.3 B	0.3 B	1.7 J	3.6 J	-	2.1 J	1.9 J	0.2 B	1.1 J	0.2 B	-	0.3 B	0.1 J
Zinc	Jul-99	-	50	-	-	113	ND	ND	ND	ND	ND	-	-	-		ND
[1050]	Aug-99	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-99	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Nov-99	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-00	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-00	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-01	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-01	-	50	-	-	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-02	-	50	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-02	-	50	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Apr-03	-	50	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	Oct-03	-	50	11	ND	ND	ND	ND	ND	ND	ND	-	-	-		ND
	15-Apr-04	-	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
	14-Oct-04	-	50	ND	ND	72	ND	-	ND	ND	ND	ND	ND	ND		ND
	5-Apr-05	-	50	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	27-Oct-05	-	50	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	21-Apr-06	-	50	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND		ND
	12-Oct-06	-	50	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-		ND
	26-Apr-07	-	10	ND	ND	13	ND	-	ND	ND	ND	ND	ND	-		ND
	11-Oct-07	0.20	10.0	22 B	2.1 B	28 B	4.9 B	-	4.7 B	5.4 B	2.5 B	6.1 B	3.4 B	-	14 B	6.6 J
	3-Apr-08	0.04	10.0	26	1.9 B	15	3.7 B	-	7.8 B	8.7 B	4.7 B	4.7 B	2.1 B	-	5.7 B	2.2 J
Acetone	11-Oct-07	1.21	100.0	ND	ND	1.40 J	ND	-	1.40 J	ND	ND	ND	ND	-	ND	ND
[700]	4-Dec-07	2.2	25.0	-	-	ND	-	-	ND	-	-	-	-	-	-	4.3 J
	3-Apr-08	1.21	100.0	5.20 B	4.50 B	4.30 B	2.30 B	-	2.50 B	2.20 B	2.00 B	5.00 B	3.80 B	-	4.40 B	2.10 J
2-Butanone	3-Apr-08	0.85	100.0	0.90 J	ND	ND	1.50 J	-	1.40 J	ND	ND	ND	ND	-	ND	ND
[4200]	15-May-08	0.96	100	ND	-	-	ND	-	ND	-	-	-	-	-	-	ND
Chloromethane	11-Oct-07	0.18	1.0	0.90 J	0.70 J	0.80 J	0.80 J	-	0.90 J	0.80 J	0.90 J	0.90 J	0.70 J	-	0.90 J	ND
[2.6]	4-Dec-07	0.11	1.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	ND	ND
	3-Apr-08	0.18	1.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	ND	ND
Methylene Chloride	11-Oct-07	0.14	1.0	ND	ND	ND	ND	-	ND	0.20 B	ND	ND	ND	-	ND	0.20 J
[4.6]	3-Apr-08	0.14	1.0	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	-	ND	ND

Notes:
1. All concentrations are in micrograms per liter (µg/L)
2. RL = Laboratory reporting limit (NC SWSL or lower from October 2007 to present).
3. ND = Not detected above laboratory reporting limit.
4. B = Blank-qualified data; result is expected to be biased high based on concentrations in the blanks
5. NC 2L = North Carolina 2L Groundwater Standards.
6. GWPS = Groundwater Protection Standards.
7. When the NC 2L has not been established, the GWPS will be used.
8. Shaded values are above the NC 2L Groundwater Standards or Groundwater Protection Standards.
9. - = Not available
10. DL = Laboratory detection limit.
11. J = Estimated value between the DL and the RL

TABLE 9

SUMMARY OF FIELD PARAMETERS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Field Parameters	Date	Background		MW-7	MW-8	MW-9	MW-10	MW-11S	MW-11D	MW-13S	MW-13D	MW-14	MW-14R
		MW-12S	MW-12D										
Conductivity [uMhos]	Jul-99	-	-	180	110	320	150	200	440	-	-	-	-
	Aug-99	-	-	210	100	580	200	170	450	-	-	-	-
	Oct-99	-	-	140	89	2000	150	200	420	-	-	-	-
	Nov-99	-	-	140	91	1600	150	270	430	-	-	-	-
	Apr-00	-	-	150	88	1800	140	270	420	-	-	-	-
	Oct-00	-	-	140	92	1200	130	30	410	-	-	-	-
	Apr-01	-	-	140	88	1300	120	290	390	-	-	-	-
	Oct-01	-	-	140	98	1200	120	250	410	-	-	-	-
	Apr-02	160	460	140	82	1600	110	290	370	-	-	-	-
	Oct-02	153	478	356	93	1650	132	288	500	-	-	-	-
	Apr-03	164	448	482	169	1857	167	406	440	-	-	-	-
	Oct-03	146	434	373	76	1497	144	411	426	-	-	-	-
	15-Apr-04	170	300	220	57	960	87	290	300	79	280	56	-
	14-Oct-04	189	405	272	70	-	121	344	406	127	391	79	-
	5-Apr-05	146	489	299	67	-	140	417	496	99	475	95	-
	27-Oct-05	144	419	234	63	-	125	353	430	114	396	138	-
	21-Apr-06	184	465	216	64	-	147	406	469	121	434	69	-
	12-Oct-06	182	448	245	59	-	130	358	448	109	416	-	-
	26-Apr-07	192	452	210	69	-	143	310	448	103	415	-	-
	11-Oct-07	187	454	273	80	-	128	229	439	119	409	-	78
	4-Dec-07	159.2	501	340	83.5	-	128.9	232	497	146.4	482	-	73.1
	3-Apr-08	155	481	453	64	-	131	409	443	124	402	-	71
	15-May-08	164.2	-	-	67.4	-	129.8	-	-	-	-	-	-
pH [units]	Jul-99	-	-	5.7	5.4	5.1	5.6	6.0	7.0	-	-	-	-
	Aug-99	-	-	5.4	5.0	4.2	5.0	5.6	6.4	-	-	-	-
	Oct-99	-	-	5.3	4.8	5.8	5.4	5.1	6.8	-	-	-	-
	Nov-99	-	-	5.2	4.8	5.6	5.3	5.2	6.7	-	-	-	-
	Apr-00	-	-	5.0	5.0	6.0	5.3	5.4	7.2	-	-	-	-
	Oct-00	-	-	5.0	4.8	5.3	5.3	4.8	6.3	-	-	-	-
	Apr-01	-	-	4.7	4.8	4.7	4.9	4.4	6.3	-	-	-	-
	Oct-01	-	-	5.1	5.0	4.4	5.2	5.0	6.6	-	-	-	-
	Apr-02	5.4	6.3	4.7	4.7	5.2	5.2	4.9	6.4	-	-	-	-
	Oct-02	4.9	7.1	5.9	4.9	5.0	5.5	4.9	7.2	-	-	-	-
	Apr-03	5.1	7.1	5.9	4.6	6.2	5.5	4.5	7.0	-	-	-	-
	Oct-03	4.6	6.7	6.0	4.6	5.9	5.1	3.9	6.9	-	-	-	-
	Oct-03	6.6	7.3	7.0	6.7	6.7	6.4	5.2	7.2	6.8	7.2	8.0	-
	14-Oct-04	5.4	7.0	10.0	5.0	-	5.3	4.7	6.8	4.9	6.7	5.3	-
	5-Apr-05	5.1	7.0	5.9	5.1	-	5.3	4.5	6.8	5.2	7.1	4.8	-
	27-Oct-05	5.1	6.9	5.8	5.1	-	5.1	4.1	6.9	4.9	7.1	4.8	-
	21-Apr-06	5.3	7.0	5.9	5.0	-	5.2	4.0	7.1	5.1	7.2	4.9	-
	12-Oct-06	5.3	7.0	6.0	4.8	-	5.2	4.2	7.0	5.1	7.1	-	-
	26-Apr-07	5.4	7.1	6.1	5.0	-	5.3	4.6	7.1	4.9	7.2	-	-
	11-Oct-07	5.3	7.0	5.8	5.3	-	5.1	5.1	7.1	5.1	7.2	-	5.3
	4-Dec-07	5.46	6.01	6.20	6.55	-	6.22	4.53	5.82	5.17	5.98	-	5.95
	3-Apr-08	4.9	6.8	6.1	4.9	-	5.3	3.7	6.7	4.9	7.1	-	4.8
	15-May-08	5.66	-	-	5.80	-	5.69	-	-	-	-	-	-

TABLE 9

SUMMARY OF FIELD PARAMETERS
TUSCARORA LONG-TERM REGIONAL LANDFILL

Temperature [°C]	Jul-99	-	-	20	23	21	23	20	24	-	-	-	-
	Aug-99	-	-	23	23	23	24	23	20	-	-	-	-
	Oct-99	-	-	20	21	20	21	20	21	-	-	-	-
	Nov-99	-	-	17	18	18	18	17	17	-	-	-	-
	Apr-00	-	-	15	15	15	14	14	17	-	-	-	-
	Oct-00	-	-	20	20	20	19	20	20	-	-	-	-
	Apr-01	-	-	17	15	14	14	14	14	-	-	-	-
	Oct-01	-	-	20	21	20	21	21	19	-	-	-	-
	Apr-02	17	17	17	18	17	17	17	16	-	-	-	-
	Oct-02	25	22	25	26	24	24	24	23	-	-	-	-
	Apr-03	16	18	15	15	16	16	15	15	-	-	-	-
	Oct-03	20	19	20	19	20	20	21	21	-	-	-	-
	15-Apr-04	15	17	15	16	14	14	14	12	15	14	15	-
	14-Oct-04	21	20	21	21	-	21	22	21	21	22	21	-
	5-Apr-05	15	15	16	15	-	14	15	15	14	14	13	-
	27-Oct-05	21	21	21	21	-	21	21	22	20	21	21	-
	21-Apr-06	17	18	18	17	-	16	15	17	16	17	17	-
	12-Oct-06	22	19	22	23	-	22	23	19	21	19	-	-
	26-Apr-07	17	18	17	17	-	15	16	18	4.9	7.2	-	-
	11-Oct-07	21	19	22	22	-	21	21	18	20	18	-	22
	4-Dec-07	18.2	18.9	17.4	18.5	-	16.7	13.8	17.9	16.0	17.1	-	16.9
	3-Apr-08	16	18	15	15	-	14	15	17	16	17	-	15
	15-May-08	17.4	-	-	17.8	-	17.1	-	-	-	-	-	-
Turbidity [NTU]	Jul-99	-	-	450	650	18	3	75	70	-	-	-	-
	Aug-99	-	-	95	500	50	100	330	120	-	-	-	-
	Oct-99	-	-	250	110	100	31	15	26	-	-	-	-
	Nov-99	-	-	110	290	150	100	75	130	-	-	-	-
	Apr-00	-	-	50	500	140	37	22	25	-	-	-	-
	Oct-00	-	-	70	110	17	16	33	31	-	-	-	-
	Apr-01	-	-	80	70	14	12	32	34	-	-	-	-
	Oct-01	-	-	60	290	5	10	20	70	-	-	-	-
	Apr-02	14	24	35	32	25	11	24	8	-	-	-	-
	Oct-02	3.0	14	22	8.3	23	10	6.2	50	-	-	-	-
	Apr-03	60	120	33	120	24	22	12	21	-	-	-	-
	Oct-03	18	22	55	27	65	25	19	26	-	-	-	-
	15-Apr-04	70	29	65	400	40	32	37	21	220	65	75	-
	14-Oct-04	39	26	38	40	-	60	140	39	45	30	37	-
	5-Apr-05	39	32	70	170	-	65	27	12	190	38	100	-
	27-Oct-05	19	39	200	110	-	37	55	25	26	50	26	-
	21-Apr-06	5.9	17	56	4.8	-	4.2	1.6	37	3.7	132	1.5	-
	12-Oct-06	19	160	50	24	-	34	3.0	60	19	70	-	-
	26-Apr-07	200	130	95	12	-	50	6.6	90	2.5	110	-	-
	11-Oct-07	80	90	90	45	-	8.0	7.1	60	40	80	-	4.4
	4-Dec-07	53.1	50.4	90.3	811.0	-	31.4	34.3	9.86	46.1	17.85	-	28.8
	3-Apr-08	35	6.4	13	50	-	75	7.2	65	26	33	-	5.2
	15-May-08	26.1	-	-	630	-	31.6	-	-	-	-	-	-

Notes:
1. - = Not available

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent [NC 2L/GWP STD]	Date	DL	RL	Background LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D	Blanks
		Concentrations (ug/L)														
Antimony [1.4]	Jul-93	-	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Aug-93	-	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sep-93	-	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sep-93	-	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-94	-	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND
	Oct-94	-	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	30	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	30	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	30	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	30	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-98	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	30	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	6.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.05	6.0	0.2 B	0.1 B	0.1 B	0.1 B	-	0.1 B	-	0.5 B	-	0.1 B	0.1 B	-	0.1 J
	3-Apr-08	0.08	6.0	0.1 B	ND	ND	ND	-	ND	-	ND	-	ND	0.5 B	-	0.1 J
Arsenic [50]	Jul-93	-	5	ND	9	ND	ND	ND	ND	ND	16	ND	5	ND	27	ND
	Aug-93	-	5	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	6	ND
	Sep-93	-	5	ND	ND	ND	5	153	ND	ND	17	ND	ND	ND	ND	ND
	Sep-93	-	5	ND	ND	ND	ND	8	ND	ND	37	ND	ND	ND	ND	ND
	Apr-94	-	5	ND	ND	ND	ND	ND	ND	ND	9	ND	ND	ND	ND	ND
	Oct-94	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	10	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	10	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	10	ND	ND	ND	ND	ND	ND	-	18	-	ND	ND	-	ND
	Apr-98	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.47	10.0	2.4 J	1.0 J	ND	3.0 J	-	1.7 J	-	13	-	ND	1.0 J	-	ND
	4-Dec-07	2.7	5.0	-	-	-	-	-	-	-	9.5	-	-	-	-	ND
	3-Apr-08	0.07	10.0	1.2 J	0.6 J	0.4 J	0.3 J	-	1.7 J	-	11	-	0.4 J	0.5 J	-	ND
Barium [2000]	Jul-93	-	50	272	424	260	151	152	128	160	208	204	351	126	-	ND
	Aug-93	-	50	196	216	144	133	128	240	242	126	256	292	68	112	ND
	Sep-93	-	50	92	71	212	75	460	79	104	194	94	120	61	62	ND
	Sep-93	-	50	113	194	120	94	121	121	170	155	132	184	74	77	ND
	Apr-94	-	50	ND	84	69	ND	94	ND	52	80	ND	62	90	ND	ND
	Oct-94	-	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	500	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	500	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	500	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	500	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-98	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	500	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	100	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.04	100.0	30.9 J	63.7 J	37.3 J	42 J	-	91.5 J	-	184	-	51.8 J	34 J	-	0.2 J
	3-Apr-08	0.11	100.0	27.9 J	66.0 J	38.9 J	36.8 J	-	119	-	58.3 J	-	58.4 J	43.8 J	-	ND

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent [NC 2L/GWP STD]	Date	DL	RL	Background LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D	Blanks
		Concentrations (ug/L)														
Beryllium [4]	Jul-93	-	1	3	4	ND	2	ND	2	ND	4	3	3	ND	4	ND
	Aug-93	-	1	2	2	ND	2	ND	4	ND	3	ND	ND	ND	2	ND
	Sep-93	-	1	1	ND	ND	2	25	2	ND	4	ND	ND	ND	ND	ND
	Sep-93	-	1	2	3	ND	ND	1	2	1	4	ND	ND	ND	ND	ND
	Apr-94	-	1	ND	ND	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND
	Oct-94	-	2	ND	ND	ND	ND	ND	2	ND	2	ND	ND	ND	ND	ND
	Apr-95	-	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	2	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	2	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	2	ND	ND	ND	ND	ND	ND	-	3	-	ND	ND	-	ND
	Apr-97	-	2	ND	3	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	2	3	ND	ND	2	ND	ND	-	3	-	ND	ND	-	ND
	Apr-98	-	2	ND	ND	ND	2.1	-	ND	-	3.2	-	ND	ND	-	ND
	Oct-98	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	2	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.08	1.0	ND	0.5 J	0.1 J	0.3 J	-	0.5 J	-	1.6	-	0.1 J	0.1 J	-	ND
	3-Apr-08	0.06	1.0	ND	0.4 J	0.1 J	0.2 J	-	1.2	-	0.4 J	-	0.2 J	0.2 J	-	ND
Cadmium [1.75]	Jul-93	-	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND
	Aug-93	-	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sep-93	-	1	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND
	Sep-93	-	1	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-94	-	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-94	-	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	1	ND	ND	ND	ND	ND	1	ND	1	ND	ND	ND	ND	ND
	Oct-95	-	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	1	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	1	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	1	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	1	1	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-98	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	1	2	ND	ND	ND	-	ND	-	ND	-	1	ND	-	ND
	Apr-03	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	1	ND	ND	ND	ND	-	ND	-	ND	-	5	2	-	ND
	15-Apr-04	-	1	ND	5	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	1	1	ND	2	ND	-	ND	-	ND	-	1	1	-	ND
	5-Apr-05	-	1	ND	1	1	ND	-	1	-	1	-	ND	2	-	ND
	27-Oct-05	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	1	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.06	1.0	0.4 B	0.5 B	0.1 B	0.5 B	-	0.5 B	-	0.5 B	-	0.2 B	1.1	-	0.1 J
	3-Apr-08	0.04	1.0	0.1 J	0.1 J	ND	0.1 J	-	0.3 J	-	0.2 J	-	0.1 J	0.4 J	-	ND
Chromium [50]	Jul-93	-	5	36	72	14	32	8	7	ND	ND	26	8	ND	35	ND
	Aug-93	-	5	18	17	ND	16	ND	23	ND	ND	ND	ND	ND	11	ND
	Sep-93	-	5	19	12	ND	17	136	9	ND	ND	ND	ND	ND	6	ND
	Sep-93	-	5	19	29	ND	8	9	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-94	-	5	ND	9	34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-94	-	10	ND	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	10	ND	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	10	ND	13	ND	ND	ND	ND	-	27	-	ND	10	-	ND
	Apr-97	-	10	16	32	ND	ND	ND	ND	-	20	-	10	14	-	ND
	Oct-97	-	10	15	ND	ND	16	ND	ND	-	32	-	21	33	-	ND
	Apr-98	-	10	32	ND	ND	12	-	ND	-	26	-	ND	23	-	ND
	Oct-98	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	10	17	11	ND	18	-	ND	-	34	-	ND	10	-	ND
	Oct-99	-	10	ND	10	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	5	28	170	ND	18	-	ND	-	51	-	10	40	-	ND
	Oct-00	-	10	ND	ND	ND	11	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	10	ND	ND	ND	18	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	10	20	ND	ND	19	-	ND	-	40	-	ND	ND	-	ND
	Oct-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	10	14	ND	ND	ND	-	ND	-	ND	-	ND	10	-	ND
	Oct-03	-	10	14	ND	ND	17	-	ND	-	19	-	ND	ND	-	ND
	15-Apr-04	-	10	11	20	ND	22	-	ND	-	ND	-	11	13	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	17	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.24	10.0	3.2 B	1.1 B	1.2 B	1.4 B	-	1.6 B	-	2 B	-	1.4 B	2.2 B	-	1.2 J
	3-Apr-08	0.11	10.0	0.5 J	ND	ND	1.2 J	-	1.5 J	-	2.1 J	-	0.4 J	2.7 J	-	ND

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent [NC 2L/GWP STD]	Date	DL	RL	Background LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D	Blanks
		Concentrations (µg/L)														
Cobalt [70]	Jul-93	-	20	29	36	28	2	25	71	24	258	28	21	ND	52	ND
	Aug-93	-	20	ND	ND	ND	ND	ND	62	ND	117	ND	ND	24	42	ND
	Sep-93	-	20	ND	ND	ND	ND	186	83	ND	205	ND	ND	ND	ND	ND
	Sep-93	-	20	ND	ND	ND	ND	ND	61	ND	188	ND	ND	ND	ND	ND
	Apr-94	-	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	-	10	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND
	Apr-95	-	10	ND	ND	ND	ND	ND	53	ND	14	ND	ND	ND	ND	ND
	Oct-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	10	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	10	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	10	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-98	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	10	ND	ND	ND	ND	-	13	-	ND	-	ND	ND	-	ND
	Mar-99	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	10	ND	ND	ND	ND	-	11	-	ND	-	ND	ND	-	ND
	Oct-00	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.41	10.0	0.5 J	0.5 J	ND	0.5 J	-	5.8 J	-	20	-	ND	ND	-	ND
	3-Apr-08	0.03	10.0	0.5 J	0.4 J	0.4 J	0.4 J	-	2.8 J	-	2.3 J	-	0.2 J	0.6 J	-	ND
Copper [1000]	Jul-93	-	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	-	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	-	10	18 B	24	12	ND	195	16 B	14 B	11 B	13 B	14 B	14 B	ND	11
	Sep-93	-	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	-	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	-	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	200	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	200	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Apr-97	-	200	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	200	ND	ND	ND	ND	ND	ND	-	ND	-	17	ND	-	ND
	Apr-98	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-98	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-99	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-00	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-02	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	200	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.20	10.0	1.1 B	0.6 B	0.9 B	0.8 B	-	0.7 B	-	0.7 B	-	0.3 B	1.0 B	-	0.4 J
	3-Apr-08	0.05	10.0	0.7 B	0.5 B	0.2 B	0.5 B	-	1.6 J	-	1.1 J	-	0.3 B	0.8 B	-	0.2 J
Lead [15]	Jul-93	-	5	34	67	ND	7	ND	ND	ND	ND	8	23	ND	13	ND
	Aug-93	-	5	33	21	ND	15	ND	17	ND	ND	ND	ND	12	7	ND
	Sep-93	-	5	17	ND	ND	13	102	ND	ND	ND	ND	ND	5	ND	ND
	Sep-93	-	5	ND	16	ND	10	5	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-94	-	5	ND	12	47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-94	-	10	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	10	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	10	ND	ND	ND	ND	ND	ND	-	14	-	ND	ND	-	ND
	Apr-97	-	10	10	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	ND
	Oct-97	-	10	15	ND	ND	20	ND	ND	-	43	-	ND	33	-	ND
	Apr-98	-	10	17	ND	ND	ND	-	22	-	20	-	ND	ND	-	ND
	Oct-98	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	10	ND	ND	ND	ND	-	ND	-	12	-	ND	ND	-	ND
	Oct-99	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	10	11	23	ND	ND	-	18	-	20	-	10	15	-	ND
	Oct-00	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	10	ND	ND	ND	ND	-	ND	-	14	-	ND	ND	-	ND
	Oct-02	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-03	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	12-Oct-06	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	10-Oct-07	0.07	10.0	1.6 J	1.0 J	0.1 B	0.8 J	-	1.0 J	-	0.6 J	-	0.1 B	1.8 J	-	0.1 J
	3-Apr-08	0.04	10.0	0.8 J	0.6 J	0.2 J	1.1 J	-	13	-	5.0 J	-	0.2 J	2.1 J	-	ND

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent [NC 2L/GWP STD]	Date	DL	RL	Background LST-5S		LST-1S		LST-1D		LST-2S		LST-2D		LST-3S		LST-3D		LST-4S		LST-4D		LST-5D		LST-6S		LST-6D		Blanks	
		Concentrations (µg/L)																											
Nickel [100]	Jul-93	-	10	35		52		36		18		28		63		17		253		47		ND		23		80		ND	
	Aug-93	-	10	39	B	46		21		41	B	44	B	103		38	B	164		39	B	37	B	26	B	40	B	11	
	Sep-93	-	10	20	B	23		51		23	B	240		89		20	B	212		15	B	20	B	12	B	15	B	17	
	Sep-93	-	10	19		ND		ND		12		15		60		16		194		14		13		49		17		ND	
	Apr-94	-	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	-	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	-	50	ND		ND		ND		ND		ND		61		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	-	50	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	-	50	ND		ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	-	50	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Apr-97	-	50	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Oct-97	-	50	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Apr-98	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-98	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Mar-99	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-99	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-00	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-00	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-01	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-01	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-02	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-02	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-03	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-03	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	15-Apr-04	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	14-Oct-04	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	5-Apr-05	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	27-Oct-05	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	21-Apr-06	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	12-Oct-06	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	26-Apr-07	-	50	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	10-Oct-07	0.66	50.0	1.6	J	1.2	J	1.9	J	1.3	J	-		7.4	J	-		25.5	J	-		2.2	J	1	J	-		ND	
	3-Apr-08	0.06	50.0	2.1	J	0.6	B	2.4	J	0.5	B	-		3.5	J	-		2.5	J	-		3.4	J	1.0	B	-		0.3	J
Selenium [50]	Jul-93	-	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		49		ND		ND		ND	
	Aug-93	-	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	-	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	-	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	-	10	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	-	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	-	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	-	20	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	-	20	ND		ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	-	20	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Apr-97	-	20	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Oct-97	-	20	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Apr-98	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-98	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Mar-99	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-99	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-00	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-00	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-01	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-01	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-02	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-02	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-02	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	5-Apr-05	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	27-Oct-05	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	21-Apr-06	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	12-Oct-06	-	20	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	26-Apr-07	-	10	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	10-Oct-07	0.35	10.0	1.4	B	3.4	B	1.1	B	1.4	B	-		1.3	B	-		1.3	B	-		1.1	B	1.0	B	-		0.9	J
	3-Apr-08	0.14	10.0	0.9	J	1.7	J	ND		0.2	J	-		0.9	J	-		ND		-		ND		0.2	J	-		ND	
Silver [17.5]	3-Apr-08	0.04	10.0	0.1	B	0.1	B	ND		ND		-		0.1	B	-		ND		-		ND		0.1	B	-		0.1	J
Thallium [0.28]	10-Oct-07	0.07	5.0	ND		0.2	J	0.2	J	0.1	J	-		ND		-		ND		-		ND		ND		-		ND	
	3-Apr-08	0.04	5.0	0.2	J	0.1	J	ND		0.1	J	-		0.1	J	-		0.1	J	-		0.1	J	0.1	J	-		ND	
Vanadium [3.5]	Jul-93	-	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Aug-93	-	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	-	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Sep-93	-	2000	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-94	-	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-94	-	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-95	-	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-95	-	40	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
	Apr-96	-	40	ND		ND		ND		ND		-		ND		ND		ND		ND		ND		ND		ND		ND	
	Oct-96	-	40	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Apr-97	-	40	ND		ND		ND		ND		ND		ND		-		ND		-		ND		ND		-		ND	
	Oct-97	-	40	ND		ND		ND		ND		ND		ND		-		50		-		ND		48		-		ND	
	Apr-98	-	40	43		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-98	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Mar-99	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-99	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-00	-	40	40		ND		ND		ND		-		ND		-		64		-		ND		50		-		ND	
	Oct-00	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-01	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-01	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-02	-	40	ND		ND		ND		ND		-		ND		-		55		-		ND		ND		-		ND	
	Oct-02	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Apr-03	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	Oct-03	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	15-Apr-04	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	14-Oct-04	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	5-Apr-05	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	27-Oct-05	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	21-Apr-06	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	12-Oct-06	-	40	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	26-Apr-07	-	25	ND		ND		ND		ND		-		ND		-		ND		-		ND		ND		-		ND	
	10-Oct-07	0.42	25.0	4.0	J	0.5	J	ND		1.3	J	-		0.9	J	-		3.2	J	-		ND		3.1	J	-		ND	
	3-Apr-08	0.07	25.0	2.0	J	0.8	J	0.6	J	2.4	J	-		2.5	J	-		9.5	J	-		0.8	J	4.6	J	-		ND	

TABLE 10

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS
LEACHATE STORAGE LAGOON AREA

Constituent [NC 2L/GWP STD]	Date	DL	RL	Background LST-5S	LST-1S	LST-1D	LST-2S	LST-2D	LST-3S	LST-3D	LST-4S	LST-4D	LST-5D	LST-6S	LST-6D	Blanks
		Concentrations (ug/L)														
Zinc [1050]	Jul-93	-	10	71	102	26	24 B	26 B	132	30 B	797	54	84	36 B	257	10
	Aug-93	-	10	45	36	17	31	20	182	67	294	20	23	43	116	ND
	Sep-93	-	10	13	12	30	23	660	135	22	404	10	ND	19	33	ND
	Sep-93	-	10	43	37	25	42	63	130	36	555	18	14	19	29	ND
	Apr-94	-	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	-	50	800	ND	ND	ND	ND	88	ND	69	ND	ND	ND	ND	ND
	Apr-95	-	50	ND	ND	ND	ND	ND	128	ND	ND	ND	ND	ND	ND	ND
	Oct-95	-	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Apr-96	-	50	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND
	Oct-96	-	50	ND	ND	ND	ND	ND	ND	-	67	-	ND	ND	-	ND
	Apr-97	-	50	ND	ND	ND	ND	ND	ND	-	51	-	ND	ND	-	ND
	Oct-97	-	50	91	ND	ND	ND	ND	ND	-	129	-	ND	ND	-	ND
	Apr-98	-	50	ND	ND	ND	ND	-	ND	-	62	-	ND	ND	-	ND
	Oct-98	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Mar-99	-	50	54	ND	ND	ND	-	ND	-	60	-	ND	ND	-	ND
	Oct-99	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-00	-	50	161	ND	ND	ND	-	52	-	67	-	ND	ND	-	ND
	Oct-00	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-01	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Oct-01	-	50	62	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-02	-	50	105	ND	ND	ND	-	ND	-	77	-	ND	ND	-	ND
	Oct-02	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	Apr-03	-	50	82	ND	ND	ND	-	ND	-	ND	-	ND	148	-	ND
	Oct-03	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-Apr-04	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	14-Oct-04	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	5-Apr-05	-	50	55	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	27-Oct-05	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	21-Apr-06	-	50	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	16-Oct-06	-	50	ND	ND	ND	ND	-	68	-	ND	-	ND	ND	-	ND
	26-Apr-07	-	10	22	ND	ND	ND	-	17	-	ND	-	ND	11	-	ND
	10-Oct-07	0.20	10.0	17 B	3.8 B	4.9 B	7.7 B	-	30 B	-	53	-	1.8 B	7.7 B	-	6.6 J
	3-Apr-08	0.04	10.0	25 B	3.1 B	1.3 B	3.5 B	-	24 B	-	13 B	-	4.4 B	15 B	-	6.3 J
2-Butanone [4200]	10-Oct-07	0.85	100.0	3.90 J	4.60 J	4.00 J	3.70 J	-	3.80 J	-	4.50 J	-	4.10 J	2.90 J	-	ND
	4-Dec-07	0.96	5.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	3-Apr-08	0.85	100.0	ND	ND	0.90 J	ND	-	ND	-	ND	-	ND	ND	-	ND
	15-May-08	0.96	100	-	-	ND	-	-	-	-	-	-	-	-	-	ND
Acetone [700]	10-Oct-07	1.21	100.0	3.20 J	3.50 J	3.10 J	3.30 J	-	2.90 J	-	3.40 J	-	3.50 J	2.50 J	-	ND
	4-Dec-07	2.20	25.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	4.6 J
	2-Apr-08	1.21	100.0	2.20 B	2.40 B	1.60 B	2.00 B	-	1.90 B	-	2.30 B	-	2.00 B	2.20 B	-	1.60 J
Bromomethane [1]	10-Oct-07	0.26	10.0	ND	0.30 J	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	4-Dec-07	0.29	5.0	-	ND	-	-	-	-	-	-	-	-	-	-	ND
	2-Apr-08	0.26	10.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
Bromodichloromethane [0.56]	3-Apr-08	0.13	10.0	1.40 J	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	4-Jun-08	0.13	10.0	ND	-	-	-	-	-	-	-	-	-	-	-	ND
Chloromethane [2.6]	10-Oct-07	0.18	1.0	ND	1.00	0.80 J	0.70 J	-	0.90 J	-	0.90 J	-	0.70 J	0.60 J	-	ND
	4-Dec-07	0.11	1.0	-	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND
	3-Apr-08	0.18	1.0	ND	ND	ND	ND	-	ND	-	0.20 J	-	ND	ND	-	ND
	15-May-08	0.11	1.0	-	-	-	-	-	-	-	ND	-	-	-	-	ND
Methylene Chloride [4.6]	10-Oct-07	0.14	1.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	0.20 J
	3-Apr-08	0.14	1.0	ND	ND	ND	ND	-	ND	-	ND	-	ND	ND	-	ND

Notes:
1. All concentrations are in ug/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. - = Not available
11. DL = Laboratory detection limit.
12. J = Estimated value between the DL and the RL

TABLE 11

SUMMARY OF FIELD PARAMETERS
LEACHATE STORAGE LAGOON AREA

Field Parameters	Date	Background 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 [uMhos]	Jul-93	110	80	490	73	460	190	430	390	650	560	60	480
	Aug-93	140	110	400	81	400	210	360	280	520	500	62	270
	Sep-93	100	96	440	60	-	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	-
	Apr-96	120	73	460	54	450	61	370	91	340	490	60	470
	Oct-96	120	63	380	52	-	56	-	98	-	410	52	-
	Apr-97	140	65	500	72	-	90	-	110	-	490	55	-
	Oct-97	120	61	440	72	-	66	-	110	-	460	73	-
	Apr-98	-	60	60	84	-	49	-	-	-	500	40	-
	Oct-98	130	64	440	77	-	78	-	78	-	420	87	-
	Mar-99	160	62	480	75	-	46	-	81	-	500	46	-
	Oct-99	210	56	450	77	-	32	-	49	-	460	46	-
	Apr-00	160	53	440	66	-	62	-	81	-	460	34	-
	Oct-00	160	53	460	68	-	53	-	83	-	470	83	-
	Apr-01	140	49	430	66	-	---	-	71	-	450	59	-
	Oct-01	130	51	450	70	-	49	-	61	-	-	62	-
	Apr-02	160	59	420	62	-	52	-	79	-	430	38	-
	Oct-02	38	71	296	65	-	64	-	11	-	35	60	-
	Apr-03	272	65	466	80	-	81	-	72	-	484	70	-
	Oct-03	196	73	449	95	-	114	-	77	-	479	52	-
	15-Apr-04	150	58	330	54	-	41	-	40	-	340	48	-
	14-Oct-04	126	73	436	87	-	50	-	55	-	464	49	-
	5-Apr-05	148	538	81	91	-	65	-	61	-	561	40	-
	27-Oct-05	212	81	468	88	-	72	-	49	-	485	60	-
	21-Apr-06	150	96	508	100	-	77	-	76	-	525	42	-
	12-Oct-06	134	87	489	94	-	48	-	52	-	489	50	-
	26-Apr-07	176	93	488	95	-	47	-	64	-	509	43	-
	10-Oct-07	190	95	494	100	-	90	-	199	-	531	40	-
	4-Dec-07	229	89.8	54.5	103.0	-	333	-	163.5	-	619	46.5	-
	3-Apr-08	271	86	476	85	-	130	-	46	-	518	44	-
	15-May-08	-	-	442	-	-	-	-	68.7	-	-	-	-
	4-Jun-08	222	-	-	-	-	-	-	-	-	-	-	-
pH [units]	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
	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	-	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	-	4.6	-	4.4	-	5.8	4.8	-
	Apr-97	5.7	5.3	6.1	5.2	-	5.0	-	5.2	-	6.4	5.7	-
	Oct-97	5.1	5.8	6.1	6.9	-	4.9	-	4.7	-	5.8	4.7	-
	Apr-98	-	4.8	4.8	4.8	-	4.6	-	-	-	7.0	4.7	-
	Oct-98	6.2	4.9	6.5	-	-	4.1	-	4.9	-	6.9	4.8	-
	Mar-99	5.8	5.0	6.6	5.0	-	4.5	-	4.8	-	6.8	4.9	-
	Oct-99	5.8	5.0	6.8	4.8	-	4.6	-	4.6	-	6.8	5.0	-
	Apr-00	5.6	5.2	6.4	5.0	-	5.4	-	5.4	-	6.5	5.0	-
	Oct-00	5.2	4.8	6.6	4.8	-	4.4	-	4.1	-	6.7	4.5	-
	Apr-02	5.2	4.7	6.3	4.7	-	4.9	-	4.4	-	6.5	4.6	-
	Oct-02	5.2	5.0	6.0	5.2	-	4.7	-	4.4	-	6.8	4.8	-
	Apr-02	6.1	5.0	6.5	5.0	-	4.7	-	4.8	-	6.7	4.9	-
	Oct-02	5.9	5.1	7.0	5.0	-	4.6	-	4.7	-	7.0	4.8	-
	Apr-03	6.1	5.0	6.9	5.0	-	4.5	-	4.4	-	6.9	4.8	-
	Oct-03	6.4	4.6	6.7	4.4	-	3.4	-	3.9	-	6.7	4.4	-
	15-Apr-04	6.6	6.0	7.2	5.6	-	5.4	-	5.2	-	7.0	5.6	-
	14-Oct-04	6.7	4.7	6.7	4.8	-	4.7	-	4.5	-	6.8	5.1	-
	5-Apr-05	6.5	7.0	5.0	5.3	-	4.9	-	4.6	-	6.9	4.9	-
	27-Oct-05	6.5	4.8	6.8	4.9	-	4.3	-	4.6	-	6.9	4.8	-
	21-Apr-06	6.6	4.8	7.0	4.9	-	4.5	-	5.1	-	7.0	5.1	-
	12-Oct-06	6.5	4.8	7.0	4.8	-	4.7	-	5.0	-	6.9	5.0	-
	26-Apr-07	6.7	4.8	7.1	4.9	-	4.8	-	5.3	-	7.0	5.0	-
	10-Oct-07	6.1	4.8	7.1	5.0	-	4.5	-	4.6	-	7.0	4.9	-
	4-Dec-07	7.13	5.81	6.88	5.30	-	3.97	-	4.05	-	7.12	4.95	-
	3-Apr-08	6.1	4.9	6.8	5.2	-	5.5	-	6.3	-	6.9	5.2	-
	15-May-08	-	-	6.72	-	-	-	-	7.39	-	-	-	-
	4-Jun-08	6.13	-	-	-	-	-	-	-	-	-	-	-

TABLE 11

SUMMARY OF FIELD PARAMETERS
LEACHATE STORAGE LAGOON AREA

Field Parameters	Date	Background 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 [°C]	Jun-93	23	25	21	26	22	27	19	23	20	18	23	24
	Aug-93	25	24	21	25	24	24	19	22	20	20	24	19
	Sep-93	24	25	19	25	-	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	-	14	12	14
	Oct-96	21	20	20	21	-	22	-	21	-	21	22	-
	Apr-97	15	14	15	14	-	13	-	13	-	16	13	-
	Oct-97	21	20	17	21	-	20	-	19	-	17	18	-
	Apr-98	-	15	15	15	-	15	-	-	-	17	15	-
	Oct-98	21	20	18	21	-	18	-	19	-	19	20	-
	Mar-99	15	13	16	13	-	13	-	15	-	18	15	-
	Oct-99	21	20	20	21	-	20	-	20	-	20	19	-
	Apr-00	15	15	17	15	-	15	-	14	-	19	14	-
	Oct-00	20	19	20	20	-	19	-	19	-	20	20	-
	Apr-02	16	15	15	16	-	15	-	14	-	16	15	-
	Oct-02	21	20	20	21	-	20	-	20	-	21	21	-
	Apr-02	18	16	16	18	-	18	-	16	-	16	18	-
	Oct-02	26	24	24	27	-	25	-	25	-	22	21	-
	Apr-03	16	15	15	15	-	15	-	15	-	16	15	-
	Oct-03	20	20	18	20	-	19	-	20	-	20	20	-
	15-Apr-04	13	13	13	14	-	12	-	14	-	13	13	-
	14-Oct-04	22	21	21	21	-	21	-	21	-	21	21	-
	5-Apr-05	16	15	15	16	-	15	-	15	-	16	15	-
	27-Oct-05	22	21	21	21	-	21	-	20	-	22	20	-
	21-Apr-06	18	17	18	17	-	17	-	17	-	18	18	-
	12-Oct-06	23	21	19	22	-	21	-	21	-	19	22	-
	26-Apr-07	17	16	18	16	-	16	-	16	-	18	17	-
	10-Oct-07	22	22	19	22	-	20	-	20	-	20	22	-
	4-Dec-07	18.5	17.1	17.2	17.3	-	15.5	-	16.9	-	17.7	17.3	-
	3-Apr-08	15	15	17	15	-	14	-	14	-	18	15	-
	15-May-08	-	-	17.9	-	-	-	-	17.9	-	-	-	-
	4-Jun-08	20.3	-	-	-	-	-	-	-	-	-	-	-
Turbidity [NTU]	Jun-93	-	-	-	-	-	-	-	-	-	-	-	-
	Aug-93	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-96	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-98	150	330	170	270	-	55	-	360	-	140	270	-
	Mar-99	210	150	38	190	-	15	-	400	-	75	---	-
	Oct-99	35	89	22	45	-	39	-	65	-	18	32	-
	Apr-00	80	110	14	110	-	18	-	180	-	24	80	-
	Oct-00	32	70	55	120	-	12	-	70	-	22	28	-
	Apr-02	26	36	24	38	-	13	-	27	-	33	26	-
	Oct-02	206	86	60	166	-	20	-	188	-	51	85	-
	Apr-02	70	27	25	130	-	22	-	57	-	23	35	-
	Oct-02	38	7.5	27	85	-	28	-	11	-	35	21	-
	Apr-03	85	33	22	55	-	12	-	45	-	30	22	-
	Oct-03	250	70	26	240	-	16	-	340	-	100	36	-
	15-Apr-04	45	250	20	270	-	60	-	70	-	55	40	-
	14-Oct-04	100	75	25	110	-	9.3	-	140	-	80	95	-
	5-Apr-05	160	32	60	220	-	31	-	100	-	22	80	-
	27-Oct-05	180	32	25	100	-	36	-	75	-	27	90	-
	21-Apr-06	14	<1.43	40	5.8	-	1.7	-	7.7	-	75	45	-
	12-Oct-06	25	12	50	<1.54	-	310	-	10	-	60	70	-
	26-Apr-07	9.6	<1.42	190	<1.42	-	3.2	-	3.5	-	75	21	-
	10-Oct-07	45	7.1	50	7.5	-	9.5	-	13	-	70	40	-
	4-Dec-07	72.1	29.6	3.17	62.9	-	91.0	-	124	-	19.56	885	-
	3-Apr-08	11	14	42	23	-	230	-	220	-	95	65	-
	15-May-08	-	-	42.9	-	-	-	-	64.3	-	-	-	-
	4-Jun-08	212	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. - = not available

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)											
		DL	RL	Upstream SWPT-1		SWPT-2		UD-1		UD-2		Blanks	
Antimony	11-Oct-07	0.05	6.0	0.1	B	0.7	J	-		-		0.1	J
[-]	3-Apr-08	0.44	6.0	0.3	B	0.4	B	0.1	B	-		0.1	J
	3-Apr-08	0.08	6.0	-		-		-		0.2	J	ND	
Arsenic	Jul-93	-	5	ND		ND		ND		-		ND	
[50]	Aug-93	-	5	-		-		-		-		ND	
	Sep-93	-	5	-		-		-		-		ND	
	Sep-93	-	5	-		-		-		-		ND	
	Apr-94	-	5	7		ND		ND		-		ND	
	Oct-94	-	10	ND		ND		ND		-		ND	
	Apr-95	-	10	ND		ND		ND		-		ND	
	Oct-95	-	10	ND		ND		ND		-		ND	
	Apr-96	-	10	ND		ND		ND		-		ND	
	Oct-96	-	10	ND		ND		ND		-		ND	
	Apr-97	-	10	-		-		ND		-		ND	
	Oct-97	-	10	-		-		ND		-		ND	
	Apr-98	-	10	-		-		ND		-		ND	
	Oct-98	-	10	-		ND		-		-		ND	
	Mar-99	-	10	ND		ND		ND		-		ND	
	Jul-99	-	10	-		-		-		ND		ND	
	Aug-99	-	10	-		-		-		ND		ND	
	Oct-99	-	10	ND		ND		ND		ND		ND	
	Nov-99	-	10	-		-		-		ND		ND	
	Apr-00	-	10	ND		ND		ND		-		ND	
	Oct-00	-	10	ND		ND		ND		ND		ND	
	Apr-01	-	10	-		-		ND		-		ND	
	Oct-01	-	10	ND		ND		ND		ND		ND	
	Apr-02	-	10	-		ND		ND		ND		ND	
	Oct-02	-	10	ND		ND		ND		ND		ND	
	Apr-03	-	10	ND		ND		ND		ND		ND	
	Oct-03	-	10	ND		ND		ND		15		ND	
	15-Apr-04	-	10	ND		ND		ND		ND		ND	
	14-Oct-04	-	10	ND		ND		ND		ND		ND	
	5-Apr-05	-	10	ND		ND		ND		ND		ND	
	27-Oct-05	-	10	ND		ND		ND		ND		ND	
	21-Apr-06	-	10	ND		ND		ND		ND		ND	
	12-Oct-06	-	10	ND		ND		ND		ND		ND	
	26-Apr-07	-	10	ND		ND		ND		ND		ND	
	11-Oct-07	0.47	10.0	1.4	J	13		-		-		ND	
	3-Apr-08	0.57	10.0	0.8	J	14		4.0	J	-		ND	
	3-Apr-08	0.07	10.0	-		-		-		2.0	J	0.2	J
Barium	Jul-93	-	50	ND		140		71		-		ND	
[-]	Aug-93	-	50	-		-		-		-		ND	
	Sep-93	-	50	-		-		-		-		ND	
	Sep-93	-	50	-		-		-		-		ND	
	Apr-94	-	50	ND		ND		ND		-		ND	
	Oct-94	-	500	ND		ND		ND		-		ND	
	Apr-95	-	500	ND		ND		ND		-		ND	
	Oct-95	-	500	ND		ND		ND		-		ND	
	Apr-96	-	500	ND		ND		ND		-		ND	
	Oct-96	-	500	ND		ND		ND		-		ND	
	Apr-97	-	500	-		-		ND		-		ND	
	Oct-97	-	500	-		-		ND		-		ND	
	Apr-98	-	500	-		-		ND		-		ND	
	Oct-98	-	500	-		ND		-		-		ND	
	Mar-99	-	500	ND		ND		ND		-		ND	
	Jul-99	-	500	-		-		-		ND		ND	
	Aug-99	-	500	-		-		-		ND		ND	
	Oct-99	-	500	ND		ND		ND		ND		ND	
	Nov-99	-	500	-		-		-		ND		ND	
	Apr-00	-	500	ND		ND		ND		-		ND	
	Oct-00	-	500	ND		ND		ND		ND		ND	
	Apr-01	-	500	-		-		ND		-		ND	
	Oct-01	-	500	ND		ND		ND		ND		ND	
	Apr-02	-	500	-		ND		ND		ND		ND	
	Oct-02	-	500	ND		ND		ND		ND		ND	
	Apr-03	-	500	ND		ND		ND		ND		ND	
	Oct-03	-	500	ND		ND		ND		ND		ND	
	15-Apr-04	-	500	ND		ND		ND		ND		ND	
	14-Oct-04	-	500	ND		ND		ND		ND		ND	
	5-Apr-05	-	500	ND		ND		ND		ND		ND	
	27-Oct-05	-	500	ND		ND		ND		ND		ND	
	21-Apr-06	-	500	ND		ND		ND		ND		ND	
	12-Oct-06	-	500	ND		ND		ND		ND		ND	
	26-Apr-07	-	100	ND		ND		ND		ND		ND	
	11-Oct-07	0.04	100.0	47.4	J	187		-		-		0.2	J
	3-Apr-08	0.11	100.0	30.7	J	72.4	J	94.6	J	-		ND	
	3-Apr-08	0.11	100.0	-		-		-		71.1	J	0.4	J

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)						
		DL	RL	Upstream SWPT-1	SWPT-2	UD-1	UD-2	Blanks
Beryllium	Jul-93	-	1	ND	ND	ND	-	ND
[6.5]	Aug-93	-	1	-	-	-	-	ND
	Sep-93	-	1	-	-	-	-	ND
	Sep-93	-	1	-	-	-	-	ND
	Apr-94	-	1	ND	ND	64	-	ND
	Oct-94	-	2	ND	ND	ND	-	ND
	Apr-95	-	2	ND	ND	ND	-	ND
	Oct-95	-	2	ND	ND	ND	-	ND
	Apr-96	-	2	ND	ND	ND	-	ND
	Oct-96	-	2	ND	ND	ND	-	ND
	Apr-97	-	2	-	-	ND	-	ND
	Oct-97	-	2	-	-	ND	-	ND
	Apr-98	-	2	-	-	ND	-	ND
	Oct-98	-	2	-	ND	-	-	ND
	Mar-99	-	2	ND	ND	ND	-	ND
	Jul-99	-	2	-	-	-	ND	ND
	Aug-99	-	2	-	-	-	ND	ND
	Oct-99	-	2	ND	ND	ND	ND	ND
	Nov-99	-	2	-	-	-	ND	ND
	Apr-00	-	2	ND	ND	ND	-	ND
	Oct-00	-	2	ND	ND	ND	ND	ND
	Apr-01	-	2	-	-	ND	-	ND
	Oct-01	-	2	ND	ND	ND	ND	ND
	Apr-02	-	2	-	ND	ND	ND	ND
	Oct-02	-	2	ND	ND	ND	ND	ND
	Apr-03	-	2	ND	ND	ND	ND	ND
	Oct-03	-	2	ND	ND	ND	ND	ND
	15-Apr-04	-	2	ND	ND	ND	ND	ND
	14-Oct-04	-	2	ND	ND	ND	ND	ND
	5-Apr-05	-	2	ND	ND	ND	ND	ND
	27-Oct-05	-	2	ND	ND	ND	ND	ND
	21-Apr-06	-	2	ND	ND	ND	ND	ND
	12-Oct-06	-	2	ND	ND	ND	ND	ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	ND
	11-Oct-07	0.08	1.0	ND	0.4 J	-	-	ND
	3-Apr-08	0.06	1.0	ND	ND	ND	-	ND
	3-Apr-08	0.06	1.0	-	-	-	ND	ND
Cadmium	Jul-93	-	1	ND	ND	ND	-	ND
[2]	Aug-93	-	1	-	-	-	-	ND
	Sep-93	-	1	-	-	-	-	ND
	Sep-93	-	1	-	-	-	-	ND
	Apr-94	-	1	ND	ND	ND	-	ND
	Oct-94	-	1	ND	ND	ND	-	ND
	Apr-95	-	1	ND	ND	ND	-	ND
	Oct-95	-	1	ND	ND	ND	-	ND
	Apr-96	-	1	ND	ND	ND	-	ND
	Oct-96	-	1	ND	ND	ND	-	ND
	Apr-97	-	1	-	-	ND	-	ND
	Oct-97	-	1	-	-	ND	-	ND
	Apr-98	-	1	-	-	ND	-	ND
	Oct-98	-	1	-	ND	-	-	ND
	Mar-99	-	1	ND	ND	ND	-	ND
	Jul-99	-	1	-	-	-	ND	ND
	Aug-99	-	1	-	-	-	ND	ND
	Oct-99	-	1	ND	ND	ND	ND	ND
	Nov-99	-	1	-	-	-	ND	ND
	Apr-00	-	1	ND	ND	ND	-	ND
	Oct-00	-	1	ND	ND	ND	ND	ND
	Apr-01	-	1	-	-	ND	-	ND
	Oct-01	-	1	ND	ND	ND	ND	ND
	Apr-02	-	1	-	ND	ND	ND	ND
	Oct-02	-	1	ND	ND	ND	ND	ND
	Apr-03	-	1	2	ND	ND	ND	ND
	Oct-03	-	1	ND	ND	ND	ND	ND
	15-Apr-04	-	1	ND	ND	ND	ND	ND
	14-Oct-04	-	1	ND	2	ND	ND	ND
	5-Apr-05	-	1	ND	ND	ND	ND	ND
	27-Oct-05	-	1	ND	ND	ND	ND	ND
	21-Apr-06	-	1	ND	ND	2 (ND)	4 (ND)	ND
	12-Oct-06	-	1	ND	ND	ND	ND	ND
	26-Apr-07	-	1.0	ND	ND	ND	ND	ND
	11-Oct-07	0.06	1.0	0.1 B	0.2 B	-	-	0.1 J
	3-Apr-08	0.05	1.0	0.1 J	0.1 J	0.1 J	-	ND
	3-Apr-08	0.04	1.0	-	-	-	0.1 J	ND

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (ug/L)										
		DL	RL	Upstream SWPT-1		SWPT-2		UD-1		UD-2		Blanks
Chromium	Jul-93	-	5	ND		ND		ND		-		ND
[50]	Aug-93	-	5	-		-		-		-		ND
	Sep-93	-	5	-		-		-		-		ND
	Sep-93	-	5	-		-		-		-		ND
	Apr-94	-	5	ND		ND		ND		-		ND
	Oct-94	-	10	ND		ND		ND		-		ND
	Apr-95	-	10	ND		ND		ND		-		ND
	Oct-95	-	10	ND		ND		ND		-		ND
	Apr-96	-	10	ND		ND		ND		-		ND
	Oct-96	-	10	ND		ND		ND		-		ND
	Apr-97	-	10	-		-		ND		-		ND
	Oct-97	-	10	-		-		ND		-		ND
	Apr-98	-	10	-		-		18		-		ND
	Oct-98	-	10	-		ND		-		-		ND
	Mar-99	-	10	ND		ND		ND		-		ND
	Jul-99	-	10	-		-		-		12		ND
	Aug-99	-	10	-		-		-		13		ND
	Oct-99	-	10	ND		ND		ND		ND		ND
	Nov-99	-	10	-		-		-		ND		ND
	Apr-00	-	5	ND		28		ND		-		ND
	Oct-00	-	10	ND		16		ND		ND		ND
	Apr-01	-	10	-		-		ND		-		ND
	Oct-01	-	10	ND		ND		ND		ND		ND
	Apr-02	-	10	-		ND		ND		ND		ND
	Oct-02	-	10	ND		ND		ND		ND		ND
	Apr-03	-	10	ND		ND		ND		ND		ND
	Oct-03	-	10	ND		ND		ND		20		ND
	15-Apr-04	-	10	ND		ND		ND		22		ND
	14-Oct-04	-	10	ND		ND		ND		ND		ND
	5-Apr-05	-	10	ND		ND		ND		ND		ND
	27-Oct-05	-	10	ND		ND		ND		ND		ND
	21-Apr-06	-	10	ND		ND		ND		ND		ND
	12-Oct-06	-	10	ND		ND		ND		ND		ND
	26-Apr-07	-	10	ND		ND		ND		ND		ND
	11-Oct-07	0.24	10.0	1.7	B	12		-		-		1.2 J
	3-Apr-08	0.11	10.0	1.3	J	12		0.8	J	-		ND
	3-Apr-08	0.11	10.0	-		-		-		0.5	J	ND
Cobalt	Jul-93	-	20	ND		ND		28		-		ND
[2.5]	Aug-93	-	20	-		-		-		-		ND
	Sep-93	-	20	-		-		-		-		ND
	Sep-93	-	20	-		-		-		-		ND
	Apr-94	-	10	34	B	45	B	46	B	-		18
	Oct-94	-	10	ND		ND		ND		-		ND
	Apr-95	-	10	ND		ND		ND		-		ND
	Oct-95	-	10	ND		ND		ND		-		ND
	Apr-96	-	10	ND		ND		ND		-		ND
	Oct-96	-	10	ND		ND		ND		-		ND
	Apr-97	-	10	-		-		ND		-		ND
	Oct-97	-	10	-		-		ND		-		ND
	Apr-98	-	10	-		-		ND		-		ND
	Oct-98	-	10	-		ND		-		-		ND
	Mar-99	-	10	ND		ND		ND		-		ND
	Jul-99	-	10	-		-		-		ND		ND
	Aug-99	-	10	-		-		-		ND		ND
	Oct-99	-	10	ND		ND		ND		ND		ND
	Nov-99	-	10	-		-		-		ND		ND
	Apr-00	-	10	ND		12		ND		-		ND
	Oct-00	-	10	ND		ND		ND		ND		ND
	Apr-01	-	10	-		-		ND		-		ND
	Oct-01	-	10	10		ND		ND		ND		ND
	Apr-02	-	10	-		ND		ND		ND		ND
	Oct-02	-	10	ND		ND		ND		ND		ND
	Apr-03	-	10	ND		ND		ND		ND		ND
	Oct-03	-	10	ND		ND		ND		14		ND
	15-Apr-04	-	10	ND		ND		ND		ND		ND
	14-Oct-04	-	10	ND		ND		ND		ND		ND
	5-Apr-05	-	10	ND		ND		ND		ND		ND
	27-Oct-05	-	10	ND		ND		ND		ND		ND
	21-Apr-06	-	10	ND		ND		ND		ND		ND
	12-Oct-06	-	10	ND		ND		ND		ND		ND
	26-Apr-07	-	10	ND		ND		ND		ND		ND
	11-Oct-07	0.41	10.0	1.5	J	3.4	J	-		-		ND
	3-Apr-08	0.03	10.0	0.6	J	3.2	J	3.0	J	-		ND
	3-Apr-08	0.03	10.0	-		-		-		1.0	J	ND

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)											
		DL	RL	Upstream SWPT-1		SWPT-2		UD-1		UD-2		Blanks	
Copper	Jul-93	-	10	15	B	13	B	10	B	-		17	
[7]	Aug-93	-	10	-		-		-		-		19	
	Sep-93	-	10	-		-		-		-		11	
	Sep-93	-	10	-		-		-		-		39	
	Apr-94	-	10	28	B	40	B	43	B	-		21	
	Oct-94	-	200	ND		ND		ND		-		ND	
	Apr-95	-	200	ND		ND		ND		-		ND	
	Oct-95	-	200	ND		ND		ND		-		ND	
	Apr-96	-	200	ND		ND		ND		-		ND	
	Oct-96	-	200	ND		ND		ND		-		ND	
	Apr-97	-	200	-		-		ND		-		ND	
	Oct-97	-	200	-		-		ND		-		ND	
	Apr-98	-	200	-		-		ND		-		ND	
	Oct-98	-	200	-		ND		-		-		ND	
	Mar-99	-	200	ND		ND		15		-		ND	
	Jul-99	-	200	-		-		-		ND		ND	
	Aug-99	-	200	-		-		-		11		ND	
	Oct-99	-	200	ND		ND		ND		ND		ND	
	Nov-99	-	200	-		-		-		ND		ND	
	Apr-00	-	200	ND		ND		ND		-		ND	
	Oct-00	-	200	ND		ND		ND		ND		ND	
	Apr-01	-	200	-		-		ND		-		ND	
	Oct-01	-	200	ND		ND		ND		ND		ND	
	Apr-02	-	200	-		ND		ND		ND		ND	
	Oct-02	-	200	ND		ND		ND		ND		ND	
	Apr-03	-	200	ND		ND		ND		ND		ND	
	Oct-03	-	200	ND		ND		ND		ND		ND	
	15-Apr-04	-	200	ND		ND		ND		ND		ND	
	14-Oct-04	-	200	ND		ND		ND		ND		ND	
	5-Apr-05	-	200	ND		ND		ND		ND		ND	
	27-Oct-05	-	200	ND		ND		ND		ND		ND	
	21-Apr-06	-	200	ND		ND		ND		ND		ND	
	12-Oct-06	-	200	ND		ND		ND		ND		ND	
	26-Apr-07	-	10	ND		ND		ND		ND		ND	
	11-Oct-07	0.20	10.0	0.7	B	3.9	J	-		-		0.4	J
	3-Apr-08	0.05	10.0	1.0	B	2.8	J	1.7	J	-		0.2	J
	3-Apr-08	0.05	10.0	-		-		-		0.7	B	0.2	J
Lead	Jul-93	-	5	ND		ND		ND		-		ND	
[25]	Aug-93	-	5	-		-		-		-		ND	
	Sep-93	-	5	-		-		-		-		ND	
	Sep-93	-	5	-		-		-		-		ND	
	Apr-94	-	5	ND		5		ND		-		ND	
	Oct-94	-	10	ND		ND		ND		-		ND	
	Apr-95	-	10	ND		ND		ND		-		ND	
	Oct-95	-	10	ND		ND		ND		-		ND	
	Apr-96	-	10	ND		ND		ND		-		ND	
	Oct-96	-	10	ND		ND		ND		-		ND	
	Apr-97	-	10	-		-		ND		-		ND	
	Oct-97	-	10	-		-		ND		-		ND	
	Apr-98	-	10	-		-		11		-		ND	
	Oct-98	-	10	-		ND		-		-		ND	
	Mar-99	-	10	ND		ND		ND		-		ND	
	Jul-99	-	10	-		-		-		ND		ND	
	Aug-99	-	10	-		-		-		ND		ND	
	Oct-99	-	10	ND		ND		ND		ND		ND	
	Nov-99	-	10	-		-		-		ND		ND	
	Apr-00	-	10	ND		ND		ND		-		ND	
	Oct-00	-	10	ND		ND		ND		ND		ND	
	Apr-01	-	10	-		-		ND		-		ND	
	Oct-01	-	10	ND		ND		ND		ND		ND	
	Apr-02	-	10	-		ND		ND		ND		ND	
	Oct-02	-	10	ND		ND		ND		ND		ND	
	Apr-03	-	10	ND		ND		ND		ND		ND	
	Oct-03	-	10	ND		ND		ND		15		ND	
	15-Apr-04	-	10	ND		ND		ND		12		ND	
	14-Oct-04	-	10	ND		ND		ND		ND		ND	
	5-Apr-05	-	10	ND		ND		ND		ND		ND	
	27-Oct-05	-	10	ND		ND		ND		ND		ND	
	21-Apr-06	-	10	ND		ND		ND		ND		ND	
	12-Oct-06	-	10	ND		ND		ND		ND		ND	
	26-Apr-07	-	10	ND		ND		ND		ND		ND	
	11-Oct-07	0.07	10.0	1.1	J	8.6	J	-		-		0.1	J
	3-Apr-08	0.32	10.0	1.0	J	0.8	J	0.3	B	-		0.1	J
	3-Apr-08	0.04	10.0	-		-		-		0.1	B	0.1	J

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)											
		DL	RL	Upstream SWPT-1		SWPT-2		UD-1		UD-2		Blanks	
Nickel	Jul-93	-	10	20		20		24		-		ND	
[88]	Aug-93	-	10	-		-		-		-		11	
	Sep-93	-	10	-		-		-		-		17	
	Sep-93	-	10	-		-		-		-		ND	
	Apr-94	-	10	37	B	51	B	57	B	-		20	
	Oct-94	-	50	ND		ND		ND		-		ND	
	Apr-95	-	50	ND		ND		ND		-		ND	
	Oct-95	-	50	ND		ND		ND		-		ND	
	Apr-96	-	50	ND		ND		ND		-		ND	
	Oct-96	-	50	ND		ND		ND		-		ND	
	Apr-97	-	50	-		-		ND		-		ND	
	Oct-97	-	50	-		-		ND		-		ND	
	Apr-98	-	50	-		-		ND		-		ND	
	Oct-98	-	50	-		ND		-		-		ND	
	Mar-99	-	50	ND		ND		ND		-		ND	
	Jul-99	-	50	-		-		-		ND		ND	
	Aug-99	-	50	-		-		-		ND		ND	
	Oct-99	-	50	ND		ND		ND		ND		ND	
	Nov-99	-	50	-		-		-		ND		ND	
	Apr-00	-	50	ND		ND		ND		-		ND	
	Oct-00	-	50	ND		ND		ND		ND		ND	
	Apr-01	-	50	-		-		ND		-		ND	
	Oct-01	-	50	ND		ND		ND		ND		ND	
	Apr-02	-	50	-		ND		ND		ND		ND	
	Oct-02	-	50	ND		ND		ND		ND		ND	
	Apr-03	-	50	ND		ND		ND		ND		ND	
	Oct-03	-	50	ND		ND		ND		ND		ND	
	15-Apr-04	-	50	ND		ND		ND		ND		ND	
	14-Oct-04	-	50	ND		ND		ND		ND		ND	
	5-Apr-05	-	50	ND		ND		ND		ND		ND	
	27-Oct-05	-	50	ND		ND		ND		ND		ND	
	21-Apr-06	-	50	ND		ND		ND		ND		ND	
	12-Oct-06	-	50	ND		ND		ND		ND		ND	
	26-Apr-07	-	50	ND		ND		ND		ND		ND	
	11-Oct-07	0.66	50.0	3.4	J	15.2	J	-		-		ND	
	3-Apr-08	0.06	50.0	5.2	J	16	J	9.6	J	-		0.3	J
	3-Apr-08	0.06	50.0	-		-		-		8.4	J	0.3	J
Selenium	11-Oct-07	0.35	10.0	0.5	B	19		-		-		0.9	J
[5]	4-Dec-07	3.8	10.0	-		ND		-		-		ND	
	3-Apr-08	0.51	10.0	0.5	J	7.2	J	ND		-		ND	
	3-Apr-08	0.14	10.0	-		-		-		4.5	B	1.5	J
Thallium	11-Oct-07	0.07	5.0	ND		0.1	J	-		-		ND	
[-]	3-Apr-08	0.63	5.0	ND		ND		ND		-		ND	
	3-Apr-08	0.04	5.0	-		-		-		ND		ND	
Vanadium	10-Oct-07	0.42	25.0	2.5	J	16.5	J	-		-		ND	
[-]	3-Apr-08	0.07	25.0	2.1	J	2.6	J	1.7	J	-		ND	
	3-Apr-08	0.07	25.0	-		-		-		0.8	J	0.1	J
Zinc	Jul-93	-	10	11	B	23	B	11	B	-		10	
[50]	Aug-93	-	10	-		-		-		-		ND	
	Sep-93	-	10	-		-		-		-		ND	
	Sep-93	-	10	-		-		-		-		ND	
	Apr-94	-	10	36	B	98	B	65	B	-		20	
	Oct-94	-	50	ND		ND		ND		-		ND	
	Apr-95	-	50	ND		ND		ND		-		ND	
	Oct-95	-	50	ND		ND		ND		-		ND	
	Apr-96	-	50	ND		ND		ND		-		ND	
	Oct-96	-	50	ND		ND		ND		-		ND	
	Apr-97	-	50	-		-		ND		-		ND	
	Oct-97	-	50	-		-		ND		-		ND	
	Apr-98	-	50	-		-		ND		-		ND	
	Oct-98	-	50	-		ND		-		-		ND	
	18-Mar-99	-	50	ND		ND		ND		-		ND	
	Jul-99	-	50	-		-		-		ND		ND	
	Aug-99	-	50	-		-		-		ND		ND	
	Oct-99	-	50	ND		ND		ND		ND		ND	
	Nov-99	-	50	-		-		-		ND		ND	
	Apr-00	-	50	ND		ND		ND		-		ND	
	Oct-00	-	50	ND		ND		ND		ND		ND	
	Apr-01	-	50	-		-		ND		-		ND	
	Oct-01	-	50	ND		ND		ND		ND		ND	
	2-Apr-02	-	50	-		ND		ND		ND		ND	
	2-Oct-02	-	50	ND		ND		ND		ND		ND	
	3-Apr-03	-	50	ND		ND		ND		ND		ND	
	3-Oct-03	-	50	ND		ND		ND		81		ND	
	15-Apr-04	-	50	ND		ND		ND		ND		ND	
	14-Oct-04	-	50	ND		ND		ND		ND		ND	
	5-Apr-05	-	50	ND		ND		ND		ND		ND	
	27-Oct-05	-	50	ND		ND		ND		ND		ND	
	21-Apr-06	-	50	100 (ND)		ND		ND		ND		ND	
	12-Oct-06	-	50	ND		ND		ND		ND		ND	
	26-Apr-07	-	10	45		ND		17		19		ND	
	11-Oct-07	0.20	10.0	44		22	B	-		-		6.6	J
	3-Apr-08	0.04	10.0	35		9.0	B	9.8	B	-		6.3	J
	3-Apr-08	0.04	10.0	-		-				2.1	B	2.2	J

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)											
		DL	RL	Upstream SWPT-1		SWPT-2		UD-1		UD-2		Blanks	
Acetone	Jul-93	-	-	ND		ND		ND		-		-	
[2000]	Aug-93	-	-	-		-		-		-		-	
	Sep-93	-	-	-		-		-		-		-	
	Sep-93	-	-	-		-		-		-		-	
	Apr-94	-	-	ND		ND		ND		-		-	
	Oct-94	-	-	ND		ND		ND		-		-	
	Apr-95	-	-	ND		ND		ND		-		-	
	Oct-95	-	-	ND		ND		ND		-		-	
	Apr-96	-	-	ND		ND		ND		-		-	
	Oct-96	-	-	ND		ND		ND		-		-	
	Apr-97	-	-	-		-		ND		-		-	
	Oct-97	-	-	-		-		ND		-		-	
	Apr-98	-	-	-		-		ND		-		-	
	Oct-98	-	-	-		ND		-		-		-	
	18-Mar-99	-	-	-		-		-		-		-	
	Jul-99	-	-	-		-		-		ND		-	
	Aug-99	-	-	-		-		-		ND		-	
	Oct-99	-	-	ND		172		ND		ND		-	
	Nov-99	-	-	-		-		-		ND		-	
	Apr-00	-	-	ND		ND		ND		-		-	
	Oct-00	-	-	ND		ND		ND		ND		-	
	Apr-01	-	-	-		-		ND		-		-	
	Oct-01	-	100	ND		ND		ND		ND		ND	
	2-Apr-02	-	100	-		ND		ND		ND		ND	
	2-Oct-02	-	100	ND		ND		ND		ND		ND	
	3-Apr-03	-	100	ND		ND		ND		ND		ND	
	3-Oct-03	-	100	ND		ND		ND		ND		ND	
	15-Apr-04	-	100	ND		ND		ND		ND		ND	
	14-Oct-04	-	100	ND		ND		ND		ND		ND	
	5-Apr-05	-	100	ND		ND		ND		ND		ND	
	27-Oct-05	-	100	ND		ND		ND		ND		ND	
	21-Apr-06	-	100	ND		ND		ND		ND		ND	
	12-Oct-06	-	100	ND		ND		ND		ND		ND	
	26-Apr-07	-	100	ND		ND		ND		ND		ND	
	11-Oct-07	1.21	100.0	1.40	J	6.40	J	-		-		ND	
	4-Dec-07	2.2	25.0	ND		ND		-		-		4.3	J
	3-Apr-08	1.21	100.0	2.90	B	9.20	J	5.40	B	-		1.50	J
	3-Apr-08	1.21	100.0	-		-		-		5.60	B	2.10	J
	14-May-08	20.0	100	-		ND		-		-		ND	
2-Butanone	Jul-93	-	-	ND		ND		ND		-		-	
[160000]	Aug-93	-	-	-		-		-		-		-	
	Sep-93	-	-	-		-		-		-		-	
	Sep-93	-	-	-		-		-		-		-	
	Apr-94	-	-	ND		ND		ND		-		-	
	Oct-94	-	-	ND		ND		ND		-		-	
	Apr-95	-	-	ND		ND		ND		-		-	
	Oct-95	-	-	ND		ND		ND		-		-	
	Apr-96	-	-	ND		ND		ND		-		-	
	Oct-96	-	-	ND		ND		ND		-		-	
	Apr-97	-	-	-		-		ND		-		-	
	Oct-97	-	-	-		-		ND		-		-	
	Apr-98	-	-	-		-		ND		-		-	
	Oct-98	-	-	-		ND		-		-		-	
	18-Mar-99	-	-	-		-		-		-		-	
	Jul-99	-	-	-		-		-		ND		-	
	Aug-99	-	-	-		-		-		ND		-	
	Oct-99	-	-	ND		137		ND		ND		-	
	Nov-99	-	-	-		-		-		ND		-	
	Apr-00	-	-	ND		ND		ND		-		-	
	Oct-00	-	-	ND		ND		ND		ND		-	
	Apr-01	-	-	-		-		ND		-		-	
	Oct-01	-	100	ND		ND		ND		ND		ND	
	2-Apr-02	-	100	-		ND		ND		ND		ND	
	2-Oct-02	-	100	ND		ND		ND		ND		ND	
	3-Apr-03	-	100	ND		ND		ND		ND		ND	
	3-Oct-03	-	100	ND		ND		ND		ND		ND	
	15-Apr-04	-	100	ND		ND		ND		ND		ND	
	14-Oct-04	-	100	ND		ND		ND		ND		ND	
	5-Apr-05	-	100	ND		ND		ND		ND		ND	
	27-Oct-05	-	100	ND		ND		ND		ND		ND	
	21-Apr-06	-	100	ND		ND		ND		ND		ND	
	12-Oct-06	-	100	ND		ND		ND		ND		ND	
	26-Apr-07	-	100	ND		ND		ND		ND		ND	
	11-Oct-07	0.85	100.0	ND		1.50	J	-		-		ND	
	4-Dec-07	0.96	5.0	-		ND		-		-		ND	
	3-Apr-08	0.85	100.0	1.50	J	2.20	J	1.40	J	-		ND	
	3-Apr-08	0.85	100.0	-		-		-		2.50	J	ND	
	14-May-08	0.96	100.0	ND		ND		ND		ND		ND	

TABLE 12

SUMMARY OF HISTORICAL SURFACE WATER CONSTITUENTS

Constituent [NC 2B or EPA National Criteria]	Date	Concentrations (µg/L)						
		DL	RL	Upstream SWPT-1	SWPT-2	UD-1	UD-2	Blanks
Carbon Disulfide	11-Oct-07	0.14	100.0	ND	0.30 J	-	-	ND
[-]	4-Dec-07	1.2	2.0	-	ND	-	-	ND
	3-Apr-08	0.14	100.0	ND	ND	ND	-	ND
	3-Apr-08	0.14	100.0	-	-	-	ND	ND
Chloromethane	11-Oct-07	0.18	1.0	0.80 J	1.10	-	-	ND
[-]	4-Dec-07	0.11	1.0	ND	ND	-	-	ND
	3-Apr-08	0.18	1.0	ND	0.30 J	0.20 J	-	ND
	3-Apr-08	0.18	1.0	-	-	-	0.30 J	ND
	14-May-08	0.11	1.0	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3-Apr-08	0.21	1.0	ND	0.40 J	ND	-	ND
[100]	3-Apr-08	0.21	1.0	-	-	-	ND	ND
	14-May-08	0.33	1.0	-	ND	-	-	ND
Methylene Chloride	11-Oct-07	0.14	1.0	ND	ND	-	-	0.20 J
[-]	3-Apr-08	0.14	1.0	ND	ND	ND	-	ND
	3-Apr-08	0.14	1.0	-	-	-	ND	ND
Toluene	Jul-93	-	-	ND	ND	ND	-	-
[11]	Aug-93	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-
	Sep-93	-	-	-	-	-	-	-
	Apr-94	-	-	ND	ND	ND	-	-
	Oct-94	-	-	12	ND	33	-	-
	Apr-95	-	-	ND	ND	ND	-	-
	Oct-95	-	-	ND	ND	ND	-	-
	Apr-96	-	-	ND	ND	ND	-	-
	Oct-96	-	-	ND	11	ND	-	-
	Apr-97	-	-	-	-	ND	-	-
	Oct-97	-	-	-	-	ND	-	-
	Apr-98	-	-	-	-	ND	-	-
	Oct-98	-	-	-	ND	-	-	-
	18-Mar-99	-	-	-	-	-	-	-
	Jul-99	-	-	-	-	-	ND	-
	Aug-99	-	-	-	-	-	ND	-
	Oct-99	-	-	ND	ND	ND	ND	-
	Nov-99	-	-	-	-	-	ND	-
	Apr-00	-	-	ND	ND	ND	-	-
	Oct-00	-	-	ND	ND	ND	ND	-
	Apr-01	-	-	-	-	ND	-	-
	Oct-01	-	5	ND	ND	ND	ND	ND
	2-Apr-02	-	5	-	ND	ND	ND	ND
	2-Oct-02	-	5	ND	ND	ND	ND	ND
	3-Apr-03	-	5	ND	ND	ND	ND	ND
	3-Oct-03	-	5	ND	ND	ND	ND	ND
	15-Apr-04	-	5	ND	ND	ND	ND	ND
	14-Oct-04	-	5	ND	ND	ND	ND	ND
	5-Apr-05	-	5	ND	ND	ND	ND	ND
	27-Oct-05	-	5	ND	ND	ND	ND	ND
	21-Apr-06	-	5	ND	ND	ND	ND	ND
	12-Oct-06	-	5	ND	ND	ND	ND	ND
	26-Apr-07	-	5	ND	ND	ND	ND	ND
	11-Oct-07	0.13	1.0	ND	ND	-	-	ND
	3-Apr-08	0.13	1.0	ND	ND	ND	-	ND
	3-Apr-08	0.13	1.0	-	-	-	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 or EPA National Criteria.
8. SMPT-1 and SMPT-2 were not sampled during the April and October 1997 events due to dry conditions.
9. SMPT-2 was not sampled during the April 1998 event due to dry conditions.
10. SMPT-1 and UD-1 were not sampled during the October 1998 event due to dry conditions.
11. SMPT-1 and SMPT-2 were not sampled during the April 2001 event due to dry conditions.
12. UD-1 and UD-2 were not sampled during the October 2007 event due to dry conditions.
13. - = not available
14. ( ) = resample event results
15. DL = Laboratory detection limit.
16. J = Concentrations detected between the DL and RL and are considered estimated.
17. Surface waters are classified as Aquatic life, nutrient sensitive, and swamp waters (Jumping Run).

TABLE 13

SUMMARY OF FIELD PARAMETERS
SURFACE WATER

Field Parameters	Date	Upstream SWPT-1	SWPT-2	UD-1	UD-2
Conductivity [uMhos]	Jul-93	80	340	50	-
	Apr-94	310	450	610	-
	Oct-94	490	500	1100	-
	Apr-95	500	380	480	-
	Oct-95	480	910	500	-
	Apr-96	400	560	390	-
	Oct-96	460	920	260	-
	Apr-97	-	-	840	-
	Oct-97	-	-	1900	-
	Apr-98	-	-	420	-
	Oct-98	-	680	-	-
	Jul-99	-	-	-	160
	Aug-99	-	-	-	1300
	Oct-99	450	880	320	980
	Nov-99	-	-	-	780
	Apr-00	420	3000	470	-
	Oct-00	110	1100	480	790
	Apr-01	-	-	380	-
	Oct-01	320	320	870	630
	2-Apr-02	-	1800	510	640
	2-Oct-02	1000	1700	620	778
	3-Apr-03	601	1048	1181	894
	3-Oct-03	741	974	481	1331
	15-Apr-04	340	380	120	690
	14-Oct-04	255	363	375	329
	5-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	-	-
	4-Dec-07	2140	3630	-	-
	3-Apr-08	643	1836	1647	1220
	14-May-08	2890	1198	1191	1458
pH [units]	Jun-93	5.9	6.3	6.3	-
	Apr-94	6.7	7.0	7.2	-
	Oct-94	7.2	7.3	7.6	-
	Apr-95	7.2	7.1	7.3	-
	Oct-95	7.1	7.5	7.4	-
	Apr-96	7.1	6.0	7.1	-
	Oct-96	6.1	6.8	6.8	-
	Apr-97	-	-	6.3	-
	Oct-97	-	-	7.1	-
	Apr-98	-	-	7.0	-
	Oct-98	-	6.1	-	-
	Jul-99	-	-	-	7.0
	Aug-99	-	-	-	6.2
	Oct-99	7.4	7.2	7.1	7.1
	Nov-99	-	-	-	6.6
	Apr-00	6.9	8.1	6.6	-
	Oct-00	7.0	7.6	6.6	6.4
	Apr-02	-	-	6.5	-
	Oct-02	7.0	7.3	7.4	5.2
	2-Apr-02	-	7.4	7.4	6.2
	2-Oct-02	7.5	7.9	7.0	6.2
	3-Apr-03	7.2	7.3	7.5	6.2
	3-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
	5-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	-	-
	4-Dec-07	8.09	7.48	-	-
	3-Apr-08	7.7	6.6	7.4	6.6
	14-May-08	7.74	7.84	8.07	7.41

TABLE 13

SUMMARY OF FIELD PARAMETERS
SURFACE WATER

Field Parameters	Date	Upstream SWPT-1	SWPT-2	UD-1	UD-2
Temperature [°C]	Jun-93	17	15	15	-
	Apr-94	23	20	23	-
	Oct-94	17	16	18	-
	Apr-95	20	22	18	-
	Oct-95	19	19	22	-
	Apr-96	11	10	11	-
	Oct-96	21	21	23	-
	Apr-97	-	-	15	-
	Oct-97	-	-	15	-
	Apr-98	-	-	19	-
	Oct-98	-	20	-	-
	Jul-99	-	-	-	24
	Aug-99	-	-	-	23
	Oct-99	21	18	18	19
	Nov-99	-	-	-	14
	Apr-00	11	15	19	-
	Oct-00	13	13	15	15
	Apr-02	-	-	20	-
	Oct-02	16	16	18	18
	2-Apr-02	-	16	20	18
	2-Oct-02	25	22	22	22
	3-Apr-03	20	19	17	24
	3-Oct-03	17	15	15	15
	15-Apr-04	13	12	13	13
	14-Oct-04	20	20	19	19
	5-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	-	-
	4-Dec-07	8.5	8.1	-	-
	3-Apr-08	14	13	14	15
	14-May-08	23.5	28.9	22.6	22.6
Turbidity [NTU]	Jun-93	-	-	-	-
	Apr-94	-	-	-	-
	Oct-94	-	-	-	-
	Apr-95	-	-	-	-
	Oct-95	-	-	-	-
	Apr-96	-	-	-	-
	Oct-96	-	-	-	-
	Apr-97	-	-	-	-
	Oct-97	-	-	-	-
	Apr-98	-	-	-	-
	Oct-98	-	38	-	-
	Jul-99	-	-	-	-
	Aug-99	-	-	-	300
	Oct-99	160	120	65	70
	Nov-99	-	-	-	21
	Apr-00	14	310	25	-
	Oct-00	100	120	46	11
	Apr-02	-	-	26	-
	Oct-02	70	60	4.2	60
	2-Apr-02	-	21	8.6	140
	2-Oct-02	28	32	25	130
	3-Apr-03	33	60	35	170
	3-Oct-03	26	14	27	39
	15-Apr-04	28	55	50	330
	14-Oct-04	180	90	80	110
	5-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	-	-
	4-Dec-07	10.49	21.2	-	-
	3-Apr-08	40	65	28	40
	14-May-08	43.2	45.5	11.64	79.0

Notes:
1. - = Not available

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)			
				Leachate		Blanks	
Antimony	Oct-99	-	30	47		ND	
	Apr-00	-	30	ND		ND	
	Oct-00	-	30	ND		ND	
	Apr-01	-	30	ND		ND	
	Oct-01	-	30	ND		ND	
	Apr-02	-	30	ND		ND	
	Apr-03	-	30	ND		ND	
	5-Apr-05	-	30	ND		ND	
	15-Dec-05	-	30	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	6.0	7		ND	
	11-Oct-07	0.05	6.0	4.0	J	0.1	J
	3-Apr-08	0.08	6.0	6.2		ND	
Arsenic	Oct-99	-	10	ND		ND	
	Apr-00	-	10	ND		ND	
	Oct-00	-	10	ND		ND	
	Apr-01	-	10	ND		ND	
	Oct-01	-	10	12		ND	
	Apr-02	-	10	27		ND	
	Apr-03	-	10	55		ND	
	5-Apr-05	-	10	74		ND	
	15-Dec-05	-	10	52		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	14		ND	
	11-Oct-07	0.47	10.0	59		ND	
	3-Apr-08	0.07	10.0	45		0.2	J
Barium	Oct-99	-	500	ND		ND	
	Apr-00	-	500	ND		ND	
	Oct-00	-	500	ND		ND	
	Apr-01	-	500	ND		ND	
	Oct-01	-	500	537		ND	
	Apr-02	-	500	1358		ND	
	Apr-03	-	500	794		ND	
	5-Apr-05	-	500	542		ND	
	15-Dec-05	-	500	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	100	112		ND	
	11-Oct-07	0.04	100.0	754		0.2	J
	3-Apr-08	0.11	100.0	838		0.4	J

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)	
				Leachate	Blanks
Beryllium	Oct-99	-	2	ND	ND
	Apr-00	-	2	ND	ND
	Oct-00	-	2	ND	ND
	Apr-01	-	2	ND	ND
	Oct-01	-	2	ND	ND
	Apr-02	-	2	ND	ND
	Apr-03	-	2	ND	ND
	5-Apr-05	-	2	ND	ND
	15-Dec-05	-	2	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	1.0	ND	ND
	11-Oct-07	0.08	1.0	0.1 J	ND
	3-Apr-08	0.06	1.0	0.1 J	ND
Cadmium	Oct-99	-	1	ND	ND
	Apr-00	-	1	ND	ND
	Oct-00	-	1	ND	ND
	Apr-01	-	1	ND	ND
	Oct-01	-	1	ND	ND
	Apr-02	-	1	2	ND
	Apr-03	-	1	ND	ND
	5-Apr-05	-	1	ND	ND
	15-Dec-05	-	1	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	1.0	ND	ND
	11-Oct-07	0.06	1.0	2	0.1 J
	3-Apr-08	0.04	1.0	4	ND
Chromium	Oct-99	-	10	ND	ND
	Apr-00	-	10	ND	ND
	Oct-00	-	10	ND	ND
	Apr-01	-	10	20	ND
	Oct-01	-	10	37	ND
	Apr-02	-	10	158	ND
	Apr-03	-	10	50	ND
	5-Apr-05	-	10	48	ND
	15-Dec-05	-	10	36	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	10	ND	ND
	11-Oct-07	0.24	10.0	81	1.2 J
	3-Apr-08	0.11	10.0	61	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)			
				Leachate		Blanks	
Cobalt	Oct-99	-	10	ND		ND	
	Apr-00	-	10	ND		ND	
	Oct-00	-	10	ND		ND	
	Apr-01	-	10	ND		ND	
	Oct-01	-	10	ND		ND	
	Apr-02	-	10	ND		ND	
	Apr-03	-	10	23		ND	
	5-Apr-05	-	10	15		ND	
	15-Dec-05	-	10	22		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	ND		ND	
	11-Oct-07	0.41	10.0	14		ND	
	3-Apr-08	0.03	10.0	13		ND	
Copper	Oct-99	-	200	ND		ND	
	Apr-00	-	200	ND		ND	
	Oct-00	-	200	ND		ND	
	Apr-01	-	200	-		ND	
	Oct-01	-	200	ND		ND	
	Apr-02	-	200	ND		ND	
	Apr-03	-	200	ND		ND	
	5-Apr-05	-	200	ND		ND	
	15-Dec-05	-	200	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	ND		ND	
	11-Oct-07	0.20	10.0	9.4	J	0.4	J
	3-Apr-08	0.05	10.0	12		0.2	J
Lead	Oct-99	-	10	ND		ND	
	Apr-00	-	10	ND		ND	
	Oct-00	-	10	ND		ND	
	Apr-01	-	10	ND		ND	
	Oct-01	-	10	ND		ND	
	Apr-02	-	10	30		ND	
	Apr-03	-	10	ND		ND	
	5-Apr-05	-	10	11		ND	
	15-Dec-05	-	10	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	ND		ND	
	11-Oct-07	0.07	10.0	1.4	J	0.1	J
	3-Apr-08	0.04	10.0	0.7	J	0.1	J

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)			
				Leachate		Blanks	
Nickel	Oct-99	-	50	ND		ND	
	Apr-00	-	50	ND		ND	
	Oct-00	-	50	ND		ND	
	Apr-01	-	50	ND		ND	
	Oct-01	-	50	77		ND	
	Apr-02	-	50	394		ND	
	Apr-03	-	50	141		ND	
	5-Apr-05	-	50	112		ND	
	15-Dec-05	-	50	84		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	50	ND		ND	
	11-Oct-07	0.66	50.0	77		ND	
	3-Apr-08	0.06	50.0	77		0.3	J
Selenium	Oct-99	-	20	ND		ND	
	Apr-00	-	20	ND		ND	
	Oct-00	-	10	ND		ND	
	Apr-01	-	20	ND		ND	
	Oct-01	-	20	ND		ND	
	Apr-02	-	20	ND		ND	
	Apr-03	-	20	ND		ND	
	5-Apr-05	-	20	20		ND	
	15-Dec-05	-	20	33		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	20		ND	
	11-Oct-07	0.35	10.0	51		0.9	J
	3-Apr-08	0.14	10.0	0.6	B	1.5	J
Silver	Oct-99		10	ND		ND	
	Apr-00		10	ND		ND	
	Oct-00		10	ND		ND	
	Apr-01		10	ND		ND	
	Oct-01		10	ND		ND	
	Apr-02		10	ND		ND	
	Apr-03		10	ND		ND	
	5-Apr-05		10	ND		ND	
	15-Dec-05		10	ND		ND	
	21-Apr-06		-	-		ND	
	12-Oct-06		-	-		ND	
	26-Apr-07		10	ND		ND	
	11-Oct-07		10	ND		ND	
	3-Apr-08	0.04	10.0	0.7	J	ND	

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)			
				Leachate		Blanks	
Vanadium	Oct-99	-	40	ND		ND	
	Apr-00	-	40	ND		ND	
	Oct-00	-	40	ND		ND	
	Apr-01	-	40	ND		ND	
	Oct-01	-	40	ND		ND	
	Apr-02	-	40	ND		ND	
	Apr-03	-	40	ND		ND	
	5-Apr-05	-	40	ND		ND	
	15-Dec-05	-	40	51		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	25	ND		ND	
	11-Oct-07	0.42	25.0	17.6	J	ND	
	3-Apr-08	0.07	25.0	14.9	J	0.1	J
Zinc	Oct-99	-	50	ND		ND	
	Apr-00	-	50	ND		ND	
	Oct-00	-	50	ND		ND	
	Apr-01	-	50	60		ND	
	Oct-01	-	50	101		ND	
	Apr-02	-	50	298		ND	
	Apr-03	-	50	691		ND	
	5-Apr-05	-	50	721		ND	
	15-Dec-05	-	50	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	10	22		ND	
	11-Oct-07	0.20	10.0	42		6.6	J
	3-Apr-08	0.04	10.0	23		2.2	J
Acetone	Oct-99	-	-	ND		ND	
	Apr-00	-	-	3829		ND	
	Oct-00	-	-	ND		ND	
	Apr-01	-	-	ND		ND	
	Oct-01	-	100	-		ND	
	Apr-02	-	100	9690		ND	
	Apr-03	-	500	1090		ND	
	5-Apr-05	-	500	4570		ND	
	15-Dec-05	-	500	ND		ND	
	21-Apr-06	-	-	-		ND	
	12-Oct-06	-	-	-		ND	
	26-Apr-07	-	100	ND		ND	
	11-Oct-07	1.21	100.0	81.70	J	ND	
	3-Apr-08	1.21	100.0	148.00		2.10	J

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)		
				Leachate		Blanks
Benzene	Oct-99	-	-	ND		ND
	Apr-00	-	-	ND		ND
	Oct-00	-	-	ND		ND
	Apr-01	-	-	12		ND
	Oct-01	-	5	-		ND
	Apr-02	-	5	-		ND
	Apr-03	-	25	ND		ND
	5-Apr-05	-	25	7.3		ND
	15-Dec-05	-	25	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	3.00	ND		ND
	11-Oct-07	0.16	1.0	3.90		ND
	3-Apr-08	0.16	1.0	2.60		ND
Chlorobenzene	11-Oct-07	0.13	3.0	1.80	J	ND
	3-Apr-08	0.13	3.0	1.30	J	ND
Chloroethane	Oct-99	-	-	ND		ND
	Apr-00	-	-	ND		ND
	Oct-00	-	-	ND		ND
	Apr-01	-	-	19		ND
	Oct-01	-	10	-		ND
	Apr-02	-	10	-		ND
	Apr-03	-	50	ND		ND
	5-Apr-05	-	50	ND		ND
	15-Dec-05	-	50	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	5.00	ND		ND
	11-Oct-07	0.29	10.0	0.50	J	ND
	3-Apr-08	0.29	10.0	0.40	J	ND
Chloromethane	11-Oct-07	0.18	1.0	2.40		ND
	3-Apr-08	0.18	1.0	ND		ND
Cis-1,2-Dichloroethylene	11-Oct-07	0.14	5.0	2.00	J	ND
	3-Apr-08	0.14	5.0	2.00	J	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)		
				Leachate		Blanks
1,1-Dichloroethane	Oct-99	-	-	ND		ND
	Apr-00	-	-	15		ND
	Oct-00	-	-	ND		ND
	Apr-01	-	-	ND		ND
	Oct-01	-	5	-		ND
	Apr-02	-	5	-		ND
	Apr-03	-	25	ND		ND
	5-Apr-05	-	25	ND		ND
	15-Dec-05	-	25	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	5.00	ND		ND
	11-Oct-07	0.16	5.0	0.30	J	ND
	3-Apr-08	0.14	5.0	ND		ND
1,2-Dichloroethane	11-Oct-07	0.12	1.0	0.40	J	ND
	3-Apr-08	0.12	1.0	0.30	J	ND
1,2-Dichloropropane	11-Oct-07	0.17	1.0	0.30	J	ND
	3-Apr-08	0.17	1.0	ND		ND
2-Butanone	Oct-99	-	-	ND		ND
	Apr-00	-	-	5343		ND
	Oct-00	-	-	ND		ND
	Apr-01	-	-	ND		ND
	Oct-01	-	100	ND		ND
	Apr-02	-	100	5640		ND
	Apr-03	-	500	861		ND
	5-Apr-05	-	500	1580		ND
	15-Dec-05	-	500	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	100.00	ND		ND
	11-Oct-07	0.85	100.0	45.10	J	ND
	3-Apr-08	0.85	100.0	81.90	J	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)		
				Leachate		Blanks
2-Hexanone	5-Apr-05	-	50	67.1		ND
	15-Dec-05	-	250	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	50.00	ND		ND
	11-Oct-07	1.00	50.0	ND		ND
	3-Apr-08	1.00	50.0	ND		ND
Styrene	5-Apr-05	-	10	33.2		ND
	15-Dec-05	-	50	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	10.00	ND		ND
	11-Oct-07	0.16	1.0	2.10		ND
	3-Apr-08	0.16	1.0	1.70		ND
1,2-Dichlorobenzene	11-Oct-07	0.13	5.0	1.10	J	ND
	3-Apr-08	0.13	5.0	1.10	J	ND
1,4-Dichlorobenzene	5-Apr-05	-	5	12.5		ND
	15-Dec-05	-	25	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	3.00	13.40		ND
	11-Oct-07	0.21	1.0	15.70		ND
	3-Apr-08	0.21	1.0	14.90		ND
Trichloroethylene	Oct-99	-	-	ND		ND
	Apr-00	-	-	5.6		ND
	Oct-00	-	-	ND		ND
	Apr-01	-	-	ND		ND
	Oct-01	-	5	-		ND
	Apr-02	-	5	-		ND
	Apr-03	-	25	ND		ND
	5-Apr-05	-	25	ND		ND
	15-Dec-05	-	25	ND		ND
	21-Apr-06	-	-	-		ND
	12-Oct-06	-	-	-		ND
	26-Apr-07	-	3.00	ND		ND
	11-Oct-07	0.13	1.0	0.30	J	ND
	3-Apr-08	0.13	1.0	0.20	J	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)	
				Leachate	Blanks
Tetrachloroethylene	Oct-99	-	-	ND	ND
	Apr-00	-	-	22	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	ND	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	ND	ND
	Apr-03	-	25	ND	ND
	5-Apr-05	-	25	ND	ND
	15-Dec-05	-	25	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	3.00	ND	ND
	11-Oct-07	0.16	1.0	ND	ND
	3-Apr-08	0.16	1.0	ND	ND
Ethylbenzene	Oct-99	-	-	ND	ND
	Apr-00	-	-	ND	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	66	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	93.8	ND
	Apr-03	-	25	128	ND
	5-Apr-05	-	25	176	ND
	15-Dec-05	-	25	126	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	9.50	ND
	11-Oct-07	0.16	1.0	179.00	ND
	3-Apr-08	0.16	1.0	160.00	ND
Methylene Chloride	Oct-99	-	-	32	ND
	Apr-00	-	-	234	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	69	ND
	Oct-01	-	10	-	ND
	Apr-02	-	10	-	ND
	Apr-03	-	50	ND	ND
	5-Apr-05	-	50	ND	ND
	15-Dec-05	-	50	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	ND	ND
	11-Oct-07	0.14	1.0	0.30 B	0.20 J
	3-Apr-08	0.14	1.0	ND	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)	
				Leachate	Blanks
Toluene	Oct-99	-	-	9	ND
	Apr-00	-	-	16	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	251	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	148	ND
	Apr-03	-	25	125	ND
	5-Apr-05	-	25	108	ND
	15-Dec-05	-	25	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	5.60	ND
	11-Oct-07	0.13	1.0	22.80	ND
	3-Apr-08	0.13	1.0	20.10	ND
1,1,1-Trichloroethane	Oct-99	-	-	75	ND
	Apr-00	-	-	29	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	ND	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	-	ND
	Apr-03	-	25	ND	ND
	5-Apr-05	-	25	ND	ND
	15-Dec-05	-	25	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	ND	ND
	11-Oct-07	0.11	1.0	ND	ND
	3-Apr-08	0.11	1.0	ND	ND
1,2,3-Trichloropropane	11-Oct-07	0.06	1.0	0.10 J	ND
	3-Apr-08	0.06	1.0	ND	ND
1,1,2,2-Tetrachloroethane	11-Oct-07	0.16	3.0	0.30 J	ND
	3-Apr-08	0.16	3.0	ND	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)	
				Leachate	Blanks
Trichlorofluoromethane	Oct-99	-	-	220	ND
	Apr-00	-	-	37	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	10	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	-	ND
	Apr-03	-	25	ND	ND
	5-Apr-05	-	25	ND	ND
	15-Dec-05	-	25	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	ND	ND
	11-Oct-07	0.13	1.0	ND	ND
	3-Apr-08	0.13	1.0	ND	ND
Vinyl Chloride	Oct-99	-	-	ND	ND
	Apr-00	-	-	ND	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	36	ND
	Oct-01	-	10	-	ND
	Apr-02	-	10	-	ND
	Apr-03	-	50	ND	ND
	5-Apr-05	-	50	ND	ND
	15-Dec-05	-	50	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	5.00	ND	ND
	11-Oct-07	0.34	1.0	1.10	ND
	3-Apr-08	0.34	1.0	ND	ND
4-Methyl-2-Pentanone	Oct-99	-	-	ND	ND
	Apr-00	-	-	116	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	471	ND
	Oct-01	-	50	-	ND
	Apr-02	-	50	-	ND
	Apr-03	-	500	923	ND
	5-Apr-05	-	500	2530	ND
	15-Dec-05	-	500	ND	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	100.00	ND	ND
	11-Oct-07	0.68	100.0	51.50 J	ND
	3-Apr-08	0.68	100.0	130.00	ND

TABLE 14

SUMMARY OF HISTORICAL CONSISTUENTS
LEACHATE

Constituent	Date	DL	RL	Concentration (ug/L)	
				Leachate	Blanks
Xylenes (total)	Oct-99	-	-	ND	ND
	Apr-00	-	-	ND	ND
	Oct-00	-	-	ND	ND
	Apr-01	-	-	52	ND
	Oct-01	-	5	-	ND
	Apr-02	-	5	60.6	ND
	Apr-03	-	25	102	ND
	5-Apr-05	-	25	147	ND
	15-Dec-05	-	25	189	ND
	21-Apr-06	-	-	-	ND
	12-Oct-06	-	-	-	ND
	26-Apr-07	-	4.00	37.20	ND
	11-Oct-07	0.48	5.0	158.00	ND
	3-Apr-08	0.48	5.0	97.20	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. - = Not available

Figure

Figure No. 1 Site Location Map

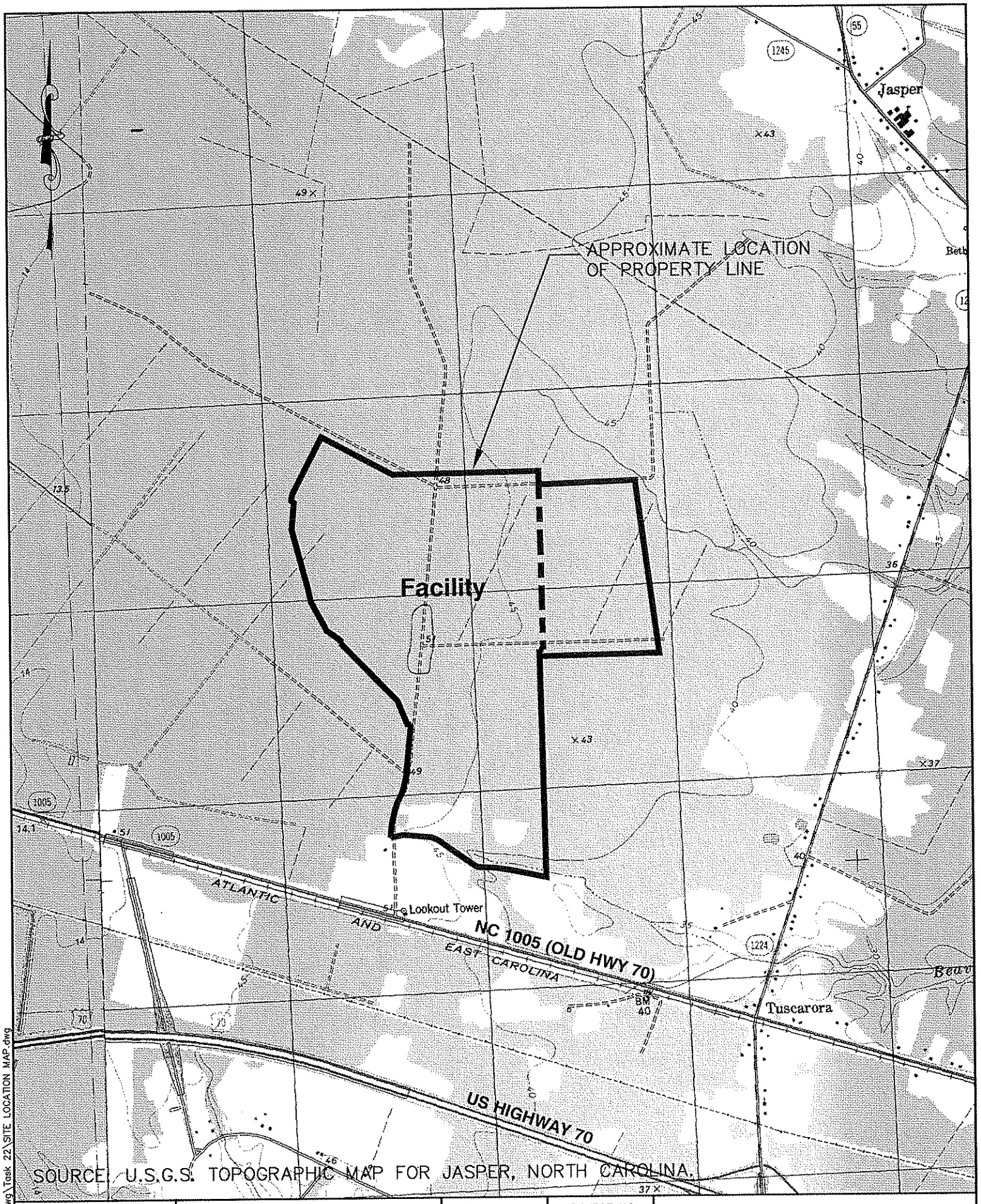

FIGURE NO. 1	JOYCE ENGINEERING, INC. 2211 WEST MEADOWVIEW ROAD GREENSBORO, N.C. 27407 PHONE: (336) 323-0092	SCALE 1"=2000'	PROJECT NO. 618.01.22	CRSWMA: TUSCARORA LANDFILL SITE LOCATION MAP

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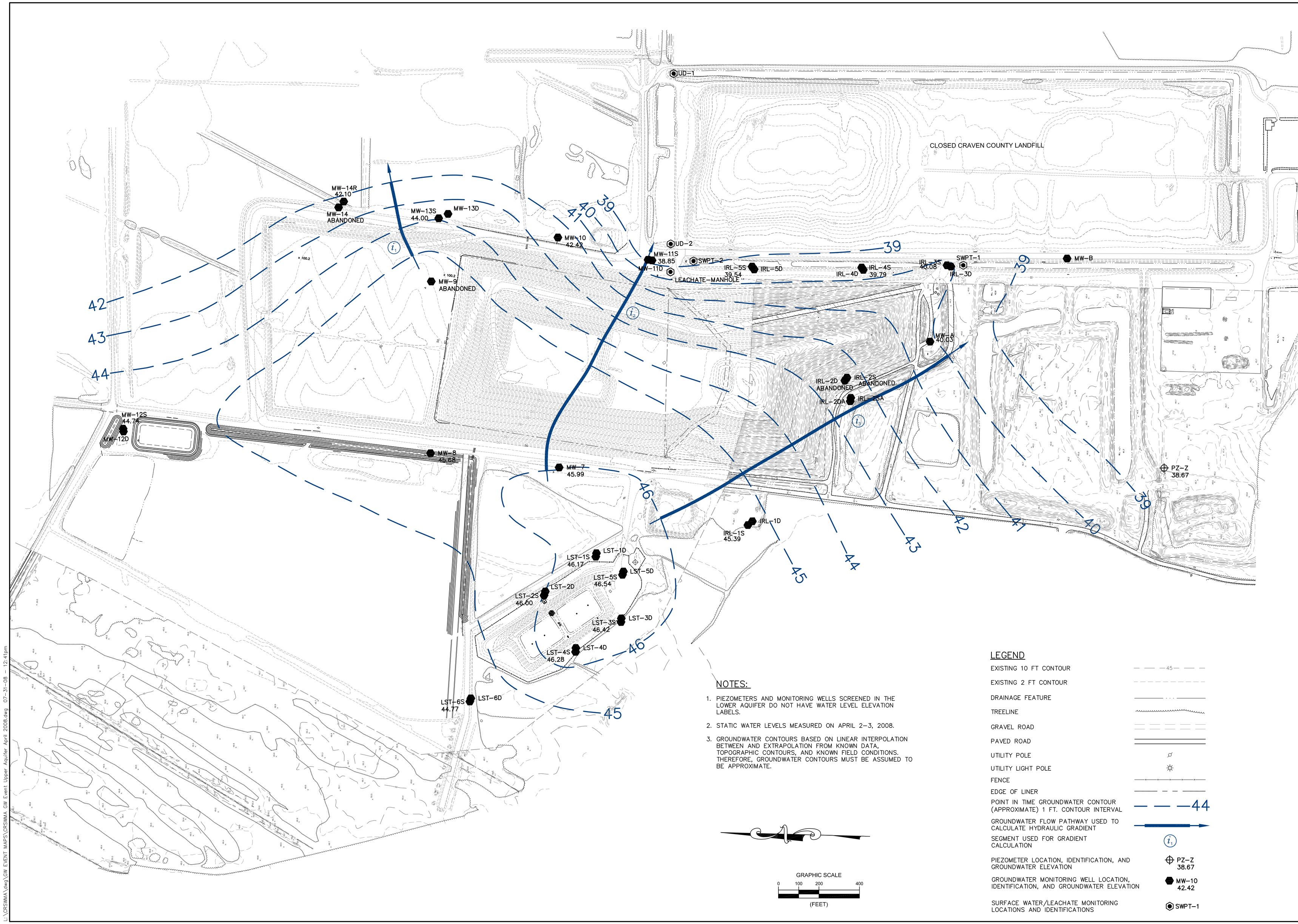
Drawings

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 2–3, 2008.
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.

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	
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 38.67
GROUNDWATER MONITORING WELL LOCATION, IDENTIFICATION, AND GROUNDWATER ELEVATION	MW-10 42.42
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 VB
APPROVED VB
DATE 06/26/08

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

CRSWMA: TUSCARORA LANDFILL

SHALLOW AQUIFER GROUNDWATER SURFACE CONTOUR MAP
APRIL 2–3, 2008

PROJECT NO.
618.01.22

SCALE
1"=200'

DRAWING NO.
1

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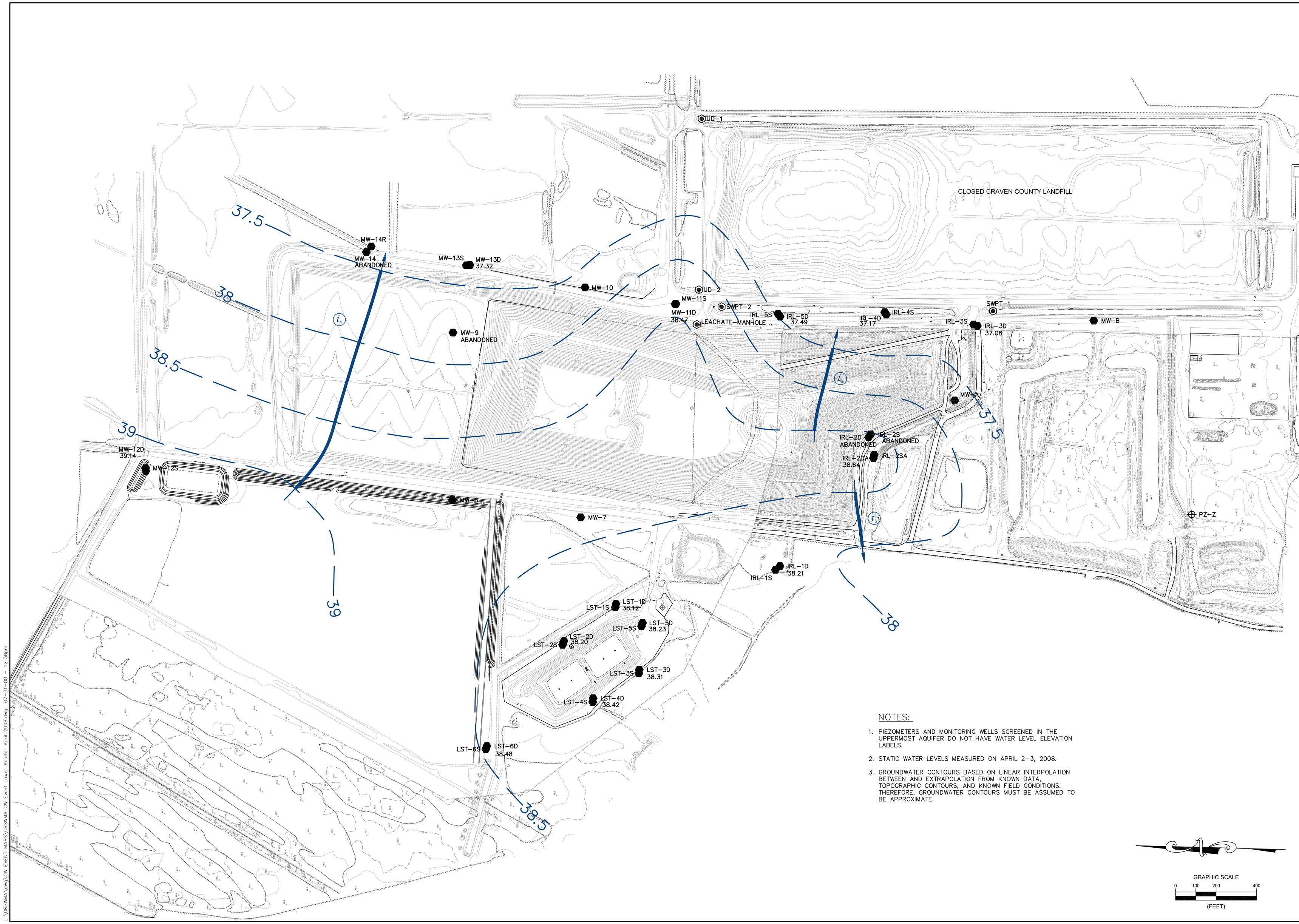

NOTES:

1. PIEZOMETERS AND MONITORING WELLS SCREENED IN THE UPPERMOST AQUIFER DO NOT HAVE WATER LEVEL ELEVATION LABELS.
2. STATIC WATER LEVELS MEASURED ON APRIL 2–3, 2008.
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.

GRAPHIC SCALE
0 100 200 400
(FEET)

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED JJK
DRAWN CADD/JJK
CHECKED VB
APPROVED VB
DATE 06/27/08

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JOYCE ENGINEERING, INC.
2211 WEST MEADOWVIEW ROAD
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CRSWMA: TUSCARORA REGIONAL LANDFILL

DEEP AQUIFER GROUNDWATER
SURFACE CONTOUR MAP
APRIL 2–3, 2008

PROJECT NO.
618.01.22

SCALE
1"=200'

DRAWING NO.
2

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Appendices

Appendix I	Statistical Analyses Worksheets
Appendix II	Laboratory Analytical Reports and Field Data

Appendix I Statistical Analyses Worksheets

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.01.22**
Sample Date: **3-Apr-08**

Analyte: **Arsenic**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Jul-93	IRL-1S	11		5
2	Aug-93	IRL-1S	6		5
3	Sep-93	IRL-1S	ND		5
4	Sep-93	IRL-1S	6		5
5	Apr-94	IRL-1S	ND		5
6	Oct-94	IRL-1S	ND		10
7	Apr-95	IRL-1S	ND		10
8	Oct-95	IRL-1S	ND		10
9	Apr-96	IRL-1S	ND		10
10	Oct-96	IRL-1S	ND		10
11	Apr-97	IRL-1S	ND		10
12	Oct-97	IRL-1S	ND		10
13	Apr-98	IRL-1S	ND		10
14	Oct-98	IRL-1S	ND		10
15	Mar-99	IRL-1S	ND		10
16	Oct-99	IRL-1S	ND		10
17	Apr-00	IRL-1S	ND		10
18	Oct-00	IRL-1S	ND		10
19	Apr-01	IRL-1S	ND		10
20	Oct-01	IRL-1S	ND		10
21	Apr-02	IRL-1S	ND		10
22	Oct-02	IRL-1S	ND		10
23	Apr-03	IRL-1S	ND		10
24	Oct-03	IRL-1S	ND		10
25	15-Apr-04	IRL-1S	ND		10
26	14-Oct-04	IRL-1S	ND		10
27	5-Apr-05	IRL-1S	ND		10
28	5-Oct-05	IRL-1S	ND		10
29	21-Apr-06	IRL-1S	ND		10
30	12-Oct-06	IRL-1S	ND		10
31	26-Apr-07	IRL-1S	ND		10
32	10-Oct-07	IRL-1S	3.0	J	10
33	2-Apr-08	IRL-1S	0.8	J	10.0
34	Jul-93	IRL-1D	8		5
35	Aug-93	IRL-1D	ND		5
36	Sep-93	IRL-1D	ND		5
37	Sep-93	IRL-1D	10		5
38	Apr-94	IRL-1D	ND		5
39	Oct-94	IRL-1D	ND		10
40	Apr-95	IRL-1D	ND		10
41	Oct-95	IRL-1D	ND		10

42	Apr-96	IRL-1D	ND		10
43	5-Oct-05	IRL-1D	52		10
44	21-Apr-06	IRL-1D	ND		10
45	12-Oct-06	IRL-1D	ND		10
46	26-Apr-07	IRL-1D	ND		10
47	10-Oct-07	IRL-1D	ND		10
48	2-Apr-08	IRL-1D	0.8	J	10.0
49	Oct-02	LST-5S	ND		10
50	Apr-03	LST-5S	ND		10
51	Oct-03	LST-5S	ND		10
52	15-Apr-04	LST-5S	ND		10
53	14-Oct-04	LST-5S	ND		10
54	5-Apr-05	LST-5S	ND		10
55	27-Oct-05	LST-5S	ND		10
56	21-Apr-06	LST-5S	ND		10
57	12-Oct-06	LST-5S	ND		10
58	26-Apr-07	LST-5S	ND		10
59	10-Oct-07	LST-5S	ND		10.0
60	3-Apr-08	LST-5S	1.2	J	10.0
61	Jul-99	MW-7	37		10
62	Aug-99	MW-7	13		10
63	Oct-99	MW-7	ND		10
64	Nov-99	MW-7	ND		10
65	Apr-00	MW-7	ND		10
66	Oct-00	MW-7	ND		10
67	Apr-01	MW-7	ND		10
68	Oct-01	MW-7	ND		10
69	Apr-02	MW-7	10		10
70	Oct-02	MW-7	ND		10
71	Apr-03	MW-7	ND		10
72	Oct-03	MW-7	ND		10
73	15-Apr-04	MW-7	ND		10
74	14-Oct-04	MW-7	ND		10
75	Apr-02	MW-12S	ND		10
76	Oct-02	MW-12S	ND		10
77	Apr-03	MW-12S	ND		10
78	Oct-03	MW-12S	ND		10
79	15-Apr-04	MW-12S	ND		10
80	14-Oct-04	MW-12S	ND		10
81	5-Apr-05	MW-12S	ND		10
82	27-Oct-05	MW-12S	ND		10
83	21-Apr-06	MW-12S	ND		10
84	12-Oct-06	MW-12S	ND		10
85	26-Apr-07	MW-12S	ND		10
86	10-Oct-07	MW-12S	6.6	J	10.0
87	3-Apr-08	MW-12S	1.4	J	10.0
88	Apr-02	MW-12D	ND		10
89	Oct-02	MW-12D	ND		10
90	Apr-03	MW-12D	ND		10
91	Oct-03	MW-12D	ND		10
92	15-Apr-04	MW-12D	ND		10
93	14-Oct-04	MW-12D	ND		10
94	5-Apr-05	MW-12D	ND		10
95	27-Oct-05	MW-12D	ND		10

96	21-Apr-06	MW-12D	ND	10
97	12-Oct-06	MW-12D	ND	10
98	26-Apr-07	MW-12D	ND	10
99	10-Oct-07	MW-12D	ND	10.0
100	3-Apr-08	MW-12D	ND	10.0
101	15-Apr-04	MW-13S	ND	10
102	14-Oct-04	MW-13S	ND	10
103	5-Apr-05	MW-13S	ND	10
104	27-Oct-05	MW-13S	ND	10
105	15-Apr-04	MW-13D	ND	10
106	14-Oct-04	MW-13D	ND	10
107	5-Apr-05	MW-13D	ND	10
108	27-Oct-05	MW-13D	ND	10
109	15-Apr-04	MW-14	ND	10
110	14-Oct-04	MW-14	ND	10
111	5-Apr-05	MW-14	ND	10
112	27-Oct-05	MW-14	ND	10

Number of Data:	112
Number of Truncated Data:	97
Percentage of Truncated Data:	87%
Non-Parametric Prediction Limit:	**52**

- All concentrations in micrograms per liter.

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.01.22**
Sample Date: **3-Apr-08**

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	5-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	2-Apr-08	IRL-1S	72.9	J	100.0
34	Jul-93	IRL-1D	343		50
35	Aug-93	IRL-1D	252		50
36	Sep-93	IRL-1D	105		50
37	Sep-93	IRL-1D	212		50
38	Apr-94	IRL-1D	131		50
39	Oct-94	IRL-1D	ND		500
40	Apr-95	IRL-1D	ND		500
41	Oct-95	IRL-1D	ND		500
42	Apr-96	IRL-1D	ND		500

43	27-Oct-05	IRL-1D	ND		500
44	21-Apr-06	IRL-1D	ND		500
45	12-Oct-06	IRL-1D	ND		500
46	26-Apr-07	IRL-1D	ND		100
47	10-Oct-07	IRL-1D	56.4	J	100.0
48	2-Apr-08	IRL-1D	33.4	J	100.0
49	Oct-02	LST-5S	ND		500
50	Apr-03	LST-5S	ND		500
51	Oct-03	LST-5S	ND		500
52	15-Apr-04	LST-5S	ND		500
53	14-Oct-04	LST-5S	ND		500
54	5-Apr-05	LST-5S	ND		500
55	27-Oct-05	LST-5S	ND		500
56	21-Apr-06	LST-5S	ND		500
57	12-Oct-06	LST-5S	ND		500
58	26-Apr-07	LST-5S	ND		100
59	10-Oct-07	LST-5S	30.9	J	100.0
60	3-Apr-08	LST-5S	27.9	J	100.0
61	Jul-99	MW-7	869		500
62	Aug-99	MW-7	ND		500
63	Oct-99	MW-7	ND		500
64	Nov-99	MW-7	ND		500
65	Apr-00	MW-7	ND		500
66	Oct-00	MW-7	ND		500
67	Apr-01	MW-7	ND		500
68	Oct-01	MW-7	ND		500
69	Apr-02	MW-7	ND		500
70	Oct-02	MW-7	ND		500
71	Apr-03	MW-7	ND		500
72	Oct-03	MW-7	ND		500
73	15-Apr-04	MW-7	ND		500
74	14-Oct-04	MW-7	ND		500
75	Apr-02	MW-12S	ND		500
76	Oct-02	MW-12S	ND		500
77	Apr-03	MW-12S	ND		500
78	Oct-03	MW-12S	ND		500
79	15-Apr-04	MW-12S	ND		500
80	14-Oct-04	MW-12S	ND		500
81	5-Apr-05	MW-12S	ND		500
82	27-Oct-05	MW-12S	ND		500
83	21-Apr-06	MW-12S	ND		500
84	12-Oct-06	MW-12S	ND		500
85	26-Apr-07	MW-12S	ND		100
86	10-Oct-07	MW-12S	81.8	J	100.0
87	3-Apr-08	MW-12S	86.6	J	100.0
88	Apr-02	MW-12D	ND		500
89	Oct-02	MW-12D	ND		500
90	Apr-03	MW-12D	ND		500
91	Oct-03	MW-12D	ND		500
92	15-Apr-04	MW-12D	ND		500
93	14-Oct-04	MW-12D	ND		500
94	5-Apr-05	MW-12D	ND		500

95	27-Oct-05	MW-12D	ND		500
96	21-Apr-06	MW-12D	ND		500
97	12-Oct-06	MW-12D	ND		500
98	26-Apr-07	MW-12D	ND		100
99	10-Oct-07	MW-12D	47.4	J	100.0
100	3-Apr-08	MW-12D	36.7	J	100.0
101	15-Apr-04	MW-13S	ND		500
102	14-Oct-04	MW-13S	ND		500
103	5-Apr-05	MW-13S	ND		500
104	27-Oct-05	MW-13S	ND		500
105	15-Apr-04	MW-13D	ND		500
106	14-Oct-04	MW-13D	ND		500
107	5-Apr-05	MW-13D	ND		500
108	27-Oct-05	MW-13D	ND		500
109	15-Apr-04	MW-14	ND		500
110	14-Oct-04	MW-14	ND		500
111	5-Apr-05	MW-14	ND		500
112	27-Oct-05	MW-14	ND		500

Number of Data:	112
Number of Truncated Data:	91
Percentage of Truncated Data:	81%
Non-Parametric Prediction Limit:	**869**

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

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.01.22**
Sample Date: **3-Apr-08**

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	5-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	2-Apr-08	IRL-1S	0.4	J	1.0
34	Jul-93	IRL-1D	1		1
35	Aug-93	IRL-1D	1		1
36	Sep-93	IRL-1D	ND		1
37	Sep-93	IRL-1D	3		1
38	Apr-94	IRL-1D	ND		1
39	Oct-94	IRL-1D	ND		2
40	Apr-95	IRL-1D	ND		2
41	Oct-95	IRL-1D	ND		2
42	Apr-96	IRL-1D	ND		2

43	27-Oct-05	IRL-1D	6		2
44	21-Apr-06	IRL-1D	ND		2
45	12-Oct-06	IRL-1D	ND		2
46	26-Apr-07	IRL-1D	ND		1.0
47	10-Oct-07	IRL-1D	ND		1.0
48	2-Apr-08	IRL-1D	0.1	J	1.0
49	Oct-02	LST-5S	ND		2
50	Apr-03	LST-5S	ND		2
51	Oct-03	LST-5S	ND		2
52	15-Apr-04	LST-5S	ND		2
53	14-Oct-04	LST-5S	ND		2
54	5-Apr-05	LST-5S	ND		2
55	27-Oct-05	LST-5S	ND		2
56	21-Apr-06	LST-5S	ND		2
57	12-Oct-06	LST-5S	ND		2
58	26-Apr-07	LST-5S	ND		1.0
59	10-Oct-07	LST-5S	ND		1.0
60	3-Apr-08	LST-5S	ND		1.0
61	Jul-99	MW-7	5		2
62	Aug-99	MW-7	ND		2
63	Oct-99	MW-7	ND		2
64	Nov-99	MW-7	ND		2
65	Apr-00	MW-7	ND		2
66	Oct-00	MW-7	ND		2
67	Apr-01	MW-7	ND		2
68	Oct-01	MW-7	ND		2
69	Apr-02	MW-7	ND		2
70	Oct-02	MW-7	ND		2
71	Apr-03	MW-7	ND		2
72	Oct-03	MW-7	ND		2
73	15-Apr-04	MW-7	ND		2
74	14-Oct-04	MW-7	ND		2
75	Apr-02	MW-12S	ND		2
76	Oct-02	MW-12S	ND		2
77	Apr-03	MW-12S	ND		2
78	Oct-03	MW-12S	ND		2
79	15-Apr-04	MW-12S	ND		2
80	14-Oct-04	MW-12S	ND		2
81	5-Apr-05	MW-12S	ND		2
82	27-Oct-05	MW-12S	ND		2
83	21-Apr-06	MW-12S	ND		2
84	12-Oct-06	MW-12S	ND		2
85	26-Apr-07	MW-12S	ND		1.0
86	10-Oct-07	MW-12S	0.1	J	1.0
87	3-Apr-08	MW-12S	0.3	J	1.0
88	Apr-02	MW-12D	ND		2
89	Oct-02	MW-12D	ND		2
90	Apr-03	MW-12D	ND		2
91	Oct-03	MW-12D	ND		2
92	15-Apr-04	MW-12D	ND		2
93	14-Oct-04	MW-12D	ND		2
94	5-Apr-05	MW-12D	ND		2

95	27-Oct-05	MW-12D	ND	2
96	21-Apr-06	MW-12D	ND	2
97	12-Oct-06	MW-12D	ND	2
98	26-Apr-07	MW-12D	ND	1.0
99	10-Oct-07	MW-12D	ND	1.0
100	3-Apr-08	MW-12D	ND	1.0
101	15-Apr-04	MW-13S	ND	2
102	14-Oct-04	MW-13S	ND	2
103	5-Apr-05	MW-13S	ND	2
104	27-Oct-05	MW-13S	ND	2
105	15-Apr-04	MW-13D	ND	2
106	14-Oct-04	MW-13D	ND	2
107	5-Apr-05	MW-13D	ND	2
108	27-Oct-05	MW-13D	ND	2
109	15-Apr-04	MW-14	ND	2
110	14-Oct-04	MW-14	ND	2
111	5-Apr-05	MW-14	ND	2
112	27-Oct-05	MW-14	ND	2

Number of Data:	112
Number of Truncated Data:	95
Percentage of Truncated Data:	85%

Non-Parametric Prediction Limit: 6

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

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.01.22**
Sample Date: **3-Apr-08**

Analyte: **Lead**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Jul-93	IRL-1S	32		5
2	Aug-93	IRL-1S	7		5
3	Sep-93	IRL-1S	14		5
4	Sep-93	IRL-1S	13		5
5	Apr-94	IRL-1S	11		5
6	Oct-94	IRL-1S	ND		10
7	Apr-95	IRL-1S	ND		10
8	Oct-95	IRL-1S	ND		10
9	Apr-96	IRL-1S	ND		10
10	Oct-96	IRL-1S	ND		10
11	Apr-97	IRL-1S	22		10
12	Oct-97	IRL-1S	ND		10
13	Apr-98	IRL-1S	12		10
14	Oct-98	IRL-1S	14		10
15	Mar-99	IRL-1S	21		10
16	Oct-99	IRL-1S	12		10
17	Apr-00	IRL-1S	38		10
18	Oct-00	IRL-1S	ND		10
19	Apr-01	IRL-1S	ND		10
20	Oct-01	IRL-1S	ND		10
21	Apr-02	IRL-1S	ND		10
22	Oct-02	IRL-1S	ND		10
23	Apr-03	IRL-1S	ND		10
24	Oct-03	IRL-1S	ND		10
25	15-Apr-04	IRL-1S	ND		10
26	14-Oct-04	IRL-1S	ND		10
27	5-Apr-05	IRL-1S	ND		10
28	27-Oct-05	IRL-1S	ND		10
29	21-Apr-06	IRL-1S	ND		10
30	12-Oct-06	IRL-1S	ND		10
31	26-Apr-07	IRL-1S	ND		10
32	10-Oct-07	IRL-1S	0.4	B	10.0
33	2-Apr-08	IRL-1S	1.4	J	10.0
34	Jul-93	IRL-1D	6		5
35	Aug-93	IRL-1D	5		5
36	Sep-93	IRL-1D	9		5
37	Sep-93	IRL-1D	22		5
38	Apr-94	IRL-1D	ND		5
39	Oct-94	IRL-1D	ND		10
40	Apr-95	IRL-1D	ND		10
41	Oct-95	IRL-1D	ND		10
42	Apr-96	IRL-1D	ND		10

43	27-Oct-05	IRL-1D	31		10
44	21-Apr-06	IRL-1D	ND		10
45	12-Oct-06	IRL-1D	ND		10
46	26-Apr-07	IRL-1D	ND		10
47	10-Oct-07	IRL-1D	0.1	B	10.0
48	2-Apr-08	IRL-1D	0.1	J	10.0
49	Oct-02	LST-5S	ND		10
50	Apr-03	LST-5S	ND		10
51	Oct-03	LST-5S	ND		10
52	15-Apr-04	LST-5S	ND		10
53	14-Oct-04	LST-5S	ND		10
54	5-Apr-05	LST-5S	ND		10
55	27-Oct-05	LST-5S	ND		10
56	21-Apr-06	LST-5S	ND		10
57	12-Oct-06	LST-5S	ND		10
58	26-Apr-07	LST-5S	ND		10
59	10-Oct-07	LST-5S	1.6	J	10.0
60	3-Apr-08	LST-5S	0.8	J	10.0
61	Jul-99	MW-7	129		10
62	Aug-99	MW-7	18		10
63	Oct-99	MW-7	12		10
64	Nov-99	MW-7	ND		10
65	Apr-00	MW-7	ND		10
66	Oct-00	MW-7	ND		10
67	Apr-01	MW-7	ND		10
68	Oct-01	MW-7	16		10
69	Apr-02	MW-7	21		10
70	Oct-02	MW-7	ND		10
71	Apr-03	MW-7	ND		10
72	Oct-03	MW-7	ND		10
73	15-Apr-04	MW-7	ND		10
74	14-Oct-04	MW-7	ND		10
75	Apr-02	MW-12S	ND		10
76	Oct-02	MW-12S	ND		10
77	Apr-03	MW-12S	ND		10
78	Oct-03	MW-12S	ND		10
79	15-Apr-04	MW-12S	ND		10
80	14-Oct-04	MW-12S	ND		10
81	5-Apr-05	MW-12S	ND		10
82	27-Oct-05	MW-12S	ND		10
83	21-Apr-06	MW-12S	ND		10
84	12-Oct-06	MW-12S	ND		10
85	26-Apr-07	MW-12S	ND		10
86	10-Oct-07	MW-12S	0.2	B	10.0
87	3-Apr-08	MW-12S	0.1	B	10.0
88	Apr-02	MW-12D	ND		10
89	Oct-02	MW-12D	ND		10
90	Apr-03	MW-12D	ND		10
91	Oct-03	MW-12D	ND		10
92	15-Apr-04	MW-12D	ND		10
93	14-Oct-04	MW-12D	ND		10
94	5-Apr-05	MW-12D	ND		10

95	27-Oct-05	MW-12D	ND		10
96	21-Apr-06	MW-12D	ND		10
97	12-Oct-06	MW-12D	ND		10
98	26-Apr-07	MW-12D	ND		10
99	10-Oct-07	MW-12D	ND		10.0
100	3-Apr-08	MW-12D	0.1	B	10.0
101	15-Apr-04	MW-13S	10		10
102	14-Oct-04	MW-13S	ND		10
103	5-Apr-05	MW-13S	ND		10
104	27-Oct-05	MW-13S	ND		10
105	15-Apr-04	MW-13D	ND		10
106	14-Oct-04	MW-13D	ND		10
107	5-Apr-05	MW-13D	ND		10
108	27-Oct-05	MW-13D	ND		10
109	15-Apr-04	MW-14	ND		10
110	14-Oct-04	MW-14	ND		10
111	5-Apr-05	MW-14	ND		10
112	27-Oct-05	MW-14	ND		10

Number of Data:	107
Number of Truncated Data:	82
Percentage of Truncated Data:	77%
Non-Parametric Prediction Limit:	**129**

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

JEI Project: **CRSWMA - Tuscarora Landfill**
Project No: **618.01.22**
Sample Date: **3-Apr-08**

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	5-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	2-Apr-08	IRL-1S	5.5	B	10.0
34	1-Jul-93	IRL-1D	41	B	10
35	1-Aug-93	IRL-1D	18		10
36	1-Sep-93	IRL-1D	20		10
37	1-Sep-93	IRL-1D	88		10
38	1-Apr-94	IRL-1D	19	B	10
39	1-Oct-94	IRL-1D	ND		50
40	1-Apr-95	IRL-1D	ND		50
41	1-Oct-95	IRL-1D	ND		50
42	1-Apr-96	IRL-1D	ND		50
43	27-Oct-05	IRL-1D	192		50
44	21-Apr-06	IRL-1D	ND		50

45	12-Oct-06	IRL-1D	ND		50
46	26-Apr-07	IRL-1D	ND		10
47	10-Oct-07	IRL-1D	5.3	B	10.0
48	2-Apr-08	IRL-1D	14	B	10.0
49	3-Oct-02	LST-5S	ND		50
50	2-Apr-03	LST-5S	82		50
51	1-Oct-03	LST-5S	ND		50
52	15-Apr-04	LST-5S	ND		50
53	14-Oct-04	LST-5S	ND		50
54	5-Apr-05	LST-5S	55		50
55	27-Oct-05	LST-5S	ND		50
56	21-Apr-06	LST-5S	ND		50
57	12-Oct-06	LST-5S	ND		50
58	26-Apr-07	LST-5S	22		10
59	10-Oct-07	LST-5S	17	B	10.0
60	3-Apr-08	LST-5S	25	B	10.0
61	1-Jul-99	MW-7	113		50
62	1-Aug-99	MW-7	ND		50
63	1-Oct-99	MW-7	ND		50
64	1-Nov-99	MW-7	ND		50
65	1-Apr-00	MW-7	ND		50
66	1-Oct-00	MW-7	ND		50
67	1-Apr-01	MW-7	ND		50
68	1-Oct-01	MW-7	ND		50
69	2-Apr-02	MW-7	ND		50
70	3-Oct-02	MW-7	ND		50
71	2-Apr-03	MW-7	ND		50
72	3-Oct-03	MW-7	ND		50
73	15-Apr-04	MW-7	ND		50
74	14-Oct-04	MW-7	72		50
75	2-Apr-02	MW-12S	ND		50
76	3-Oct-02	MW-12S	ND		50
77	3-Apr-03	MW-12S	ND		50
78	3-Oct-03	MW-12S	11		50
79	15-Apr-04	MW-12S	ND		50
80	14-Oct-04	MW-12S	ND		50
81	5-Apr-05	MW-12S	ND		50
82	27-Oct-05	MW-12S	ND		50
83	21-Apr-06	MW-12S	ND		50
84	12-Oct-06	MW-12S	ND		50
85	26-Apr-07	MW-12S	16		10
86	10-Oct-07	MW-12S	22	B	10.0
87	3-Apr-08	MW-12S	26		10.0
88	2-Apr-02	MW-12D	ND		50
89	3-Oct-02	MW-12D	ND		50
90	3-Apr-03	MW-12D	ND		50
91	3-Oct-03	MW-12D	ND		50
92	15-Apr-04	MW-12D	ND		50
93	14-Oct-04	MW-12D	ND		50
94	5-Apr-05	MW-12D	ND		50
95	27-Oct-05	MW-12D	ND		50
96	21-Apr-06	MW-12D	ND		50
97	12-Oct-06	MW-12D	ND		50

98	26-Apr-07	MW-12D	ND		10
99	10-Oct-07	MW-12D	2.1	B	10.0
100	3-Apr-08	MW-12D	1.9	B	10.0
101	15-Apr-04	MW-13S	ND		50
102	14-Oct-04	MW-13S	ND		50
103	5-Apr-05	MW-13S	ND		50
104	27-Oct-05	MW-13S	ND		50
105	15-Apr-04	MW-13D	ND		50
106	14-Oct-04	MW-13D	ND		50
107	5-Apr-05	MW-13D	ND		50
108	27-Oct-05	MW-13D	ND		50
109	15-Apr-04	MW-14	ND		50
110	14-Oct-04	MW-14	ND		50
111	5-Apr-05	MW-14	ND		50
112	27-Oct-05	MW-14	ND		50

Number of Data:	99
Number of Truncated Data:	82
Percentage of Truncated Data:	83%
Non-Parametric Prediction Limit:	**192**

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

Appendix II 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: 04/03/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 1S	Leach Stor 1D	Leach Stor 2S	Leach Stor 2D	Leach Stor 3S	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.9	6.8	5.2		5.5	04/03/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	--- U	--- U	--- U		--- U	04/08/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	0.6 J	0.4 J	0.3 J		1.7 J	04/08/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0	66.0 J	38.9 J	36.8 J		119	04/08/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.4 J	0.1 J	0.2 J		1.2	04/08/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.1 J	--- U	0.1 J		0.3 J	04/08/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	0.4 J	0.4 J	0.4 J		2.8 J	04/08/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0	0.5 J	0.2 J	0.5 J		1.6 J	04/08/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0	--- U	--- U	1.2 J		1.5 J	04/08/08	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.6 J	0.2 J	1.1 J		13	04/08/08	CMF	EPA200.8
Nickel, ug/l	0.06	50.0	0.6 J	2.4 J	0.5 J		3.5 J	04/08/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	1.7 J	--- U	0.2 J		0.3 J	04/08/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	--- U	--- U		0.1 J	04/08/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	0.1 J	--- U	0.1 J		0.1 J	04/08/08	CMF	EPA200.8
Vanadium, ug/l	0.07	25.0	0.8 J	0.6 J	2.4 J		2.5 J	04/08/08	CMF	EPA200.8
Zinc, ug/l	0.04	10.0	3.1 J	1.3 J	3.5 J		24	04/08/08	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	14	42	23		230	04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	86	476	85		130	04/03/08	RJH	SM2510B
Temperature, °C			15	17	15		14	04/03/08	RJH	SM2550B
Static Water Level, feet			4.75	12.80	5.00	12.74	5.75	04/03/08	RJH	
Well Depth, feet			15.04	34.86	14.45	33.29	17.65	04/03/08	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: 04/03/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 3D	Leach Stor 4S	Leach Stor 4D	Leach Stor 5S	Leach Stor 5D	Analysis Date	Analyst	Method Code
PH (field measurement), Units				6.3		6.1	6.9	04/03/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0		--- U				04/08/08	CMF	EPA200.8
Antimony, ug/l	0.08	6.0				0.1 J	--- U	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.07	10.0		11				04/08/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0				1.2 J	0.4 J	04/10/08	LFJ	EPA200.8
Barium, ug/l	0.11	100.0		58.3 J				04/08/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0				27.9 J	58.4 J	04/10/08	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0		0.4 J				04/08/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0				--- U	0.2 J	04/10/08	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0		0.2 J				04/08/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0				0.1 J	0.1 J	04/10/08	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0		2.3 J				04/08/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0				0.5 J	0.2 J	04/10/08	LFJ	EPA200.8
Copper, ug/l	0.05	10.0		1.1 J				04/08/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0				0.7 J	0.3 J	04/10/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0		2.1 J				04/08/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0				0.5 J	0.4 J	04/10/08	LFJ	EPA200.8
Lead, ug/l	0.04	10.0		5.0 J				04/08/08	CMF	EPA200.8
Lead, ug/l	0.04	10.0				0.8 J	0.2 J	04/10/08	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0		2.5 J				04/08/08	CMF	EPA200.8
Nickel, ug/l	0.06	50.0				2.1 J	3.4 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.14	10.0		--- U				04/08/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0				0.9 J	--- U	04/10/08	LFJ	EPA200.8
Silver, ug/l	0.04	10.0		--- U				04/08/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0				0.1 J	--- U	04/10/08	LFJ	EPA200.8
Thallium, ug/l	0.04	5.0		0.1 J				04/08/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0				0.2 J	0.1 J	04/10/08	LFJ	EPA200.8
Vanadium, ug/l	0.07	25.0		9.5 J				04/08/08	CMF	EPA200.8
Vanadium, ug/l	0.07	25.0				2.0 J	0.8 J	04/10/08	LFJ	EPA200.8
Zinc, ug/l	0.04	10.0		13				04/08/08	CMF	EPA200.8
Zinc, ug/l	0.04	10.0				25	4.4 J	04/10/08	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0		220		11	95	04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0		46		271	518	04/03/08	RJH	SM2510B
Temperature, °C				14		15	18	04/03/08	RJH	SM2550B
Static Water Level, feet			13.56	5.10	13.14	5.83	14.04	04/03/08	RJH	
Well Depth, feet			34.85	17.62	36.12	15.41	38.66	04/03/08	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: 04/03/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Leach Stor 6S	Leach Stor 6D	Trip Blank	Equipment Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.2				04/03/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	0.5 J			0.1 J	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.07	10.0	0.5 J			--- U	04/10/08	LFJ	EPA200.8
Barium, ug/l	0.11	100.0	43.8 J			--- U	04/10/08	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0	0.2 J			--- U	04/10/08	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.4 J			--- U	04/10/08	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.6 J			--- U	04/10/08	LFJ	EPA200.8
Copper, ug/l	0.05	10.0	0.8 J			0.2 J	04/10/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	2.7 J			--- U	04/10/08	LFJ	EPA200.8
Lead, ug/l	0.04	10.0	2.1 J			--- U	04/10/08	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	1.0 J			0.3 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.14	10.0	0.2 J			--- U	04/10/08	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J			0.1 J	04/10/08	LFJ	EPA200.8
Thallium, ug/l	0.04	5.0	0.1 J			--- U	04/10/08	LFJ	EPA200.8
Vanadium, ug/l	0.07	25.0	4.6 J			--- U	04/10/08	LFJ	EPA200.8
Zinc, ug/l	0.04	10.0	15			6.3 J	04/10/08	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	65				04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	44				04/03/08	RJH	SM2510B
Temperature, °C			15				04/03/08	RJH	SM2550B
Static Water Level, feet			6.46	12.69			04/03/08	RJH	
Well Depth, feet			16.44	34.37			04/03/08	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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

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	0.20 J
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	2.40 J	1.60 J	2.00 J	1.90 J	2.30 J
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	0.90 J	--- 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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Leach Stor 5S	Leach Stor 5D	Leach Stor 6S	Trip Blank	Equipment 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	2.20 J	2.00 J	2.20 J	1.60 J	1.50 J
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	1.40 J	--- 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

ANALYST: MO
DATE COLLECTED: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/22/08

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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

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	101	99.7	100
Laboratory Control std.	70-130	97.9	98.8	99.2
Method Blank	70-130	99.5	99.6	100
Leachate Storage 1S	70-130	101	98.5	97.7
Leachate Storage 1D	70-130	101	98.3	97.0
Leachate Storage 2S	70-130	96.5	98.8	99.7
Leachate Storage 3S	70-130	96.4	99.6	98.9
Leachate Storage 4S	70-130	97.7	98.9	99.3
Leachate Storage 5S	70-130	98.3	99.2	100
Leachate Storage 5D	70-130	97.8	98.4	97.4
Leachate Storage 6S	70-130	98.3	99.2	98.9
Trip Blank	70-130	97.9	99.9	99.9
Equipment Blank	70-130	99.7	98.0	96.8
Leachate Storage 1S M.S.	70-130	98.3	97.5	97.8
Leachate Storage 1S M.S.D.	70-130	98.8	97.4	98.2

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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

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	19.59	98.0	20.51	103	4.6
Benzene	20.0	--- U	20.80	104	21.74	109	4.4
Trichloroethene	20.0	--- U	20.90	105	22.12	111	5.7
Toluene	20.0	--- U	19.66	98.3	20.51	103	4.2
Chlorobenzene	20.0	--- U	19.87	99.4	20.64	103	3.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	18.79	94.0
Benzene	20.0	20.62	103
Trichloroethene	20.0	20.92	105
Toluene	20.0	19.59	98.0
Chlorobenzene	20.0	20.03	100

Environmental 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
CHLORINE NEUTRALIZED AT COLLECTION															
pH CHECK (LAB)							L2					L2	L2	L2	L2
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E	E
Leach Stor 1S	04/03/08	0930		15	7	G	G	G	G	G	G	G	G	G	G
Leach Stor 1D	04/03/08	0940		17	5	G	G	G	G	G	G	G	G		
Leach Stor 2S	04/03/08	0920		15	5	G	G	G	G	G	G	G	G		
Leach Stor 2D	04/03/08				2						G				
Leach Stor 3S	04/03/08	1015		14	5	G	G	G	G	G	G	G	G		
Leach Stor 3D	04/03/08				2						G				
Leach Stor 4S	04/03/08	1030		14	5	G	G	G	G	G	G	G	G		
Leach Stor 4D	04/03/08				1						G				
Leach Stor 5S	04/03/08	1000		15	5	G	G	G	G	G	G	G	G		
Leach Stor 5D	04/03/08	0950		18	5	G	G	G	G	G	G	G	G		
Leach Stor 6S	04/03/08	1045		15	6	G	G	G	G	G	G	G	G	G	

PARAMETERS

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

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

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

SAMPLES COLLECTED BY: (Please Print) Hagae/Fox

SAMPLES RECEIVED IN LAB AT 0.6 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hagae	04/03/08 2:50	[signature]	4/3/08 2:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

№ 163663

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
CHLORINE NEUTRALIZED AT COLLECTION															
pH CHECK (LAB)							L2					L2	L2		
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E	E
Leach Stor 6D	04/03/08				2						C				
Trip Blank					2										
Equipment Blank	04/03/08				3		C					C	C		

PARAMETERS

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

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

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

SAMPLES COLLECTED BY: (Please Print) N Page / Fox

SAMPLES RECEIVED IN LAB AT 0.6 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
N Page	04/03/08 2:50	B	4/2/08 2:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

№ 163661

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: 04/02/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Regional LF 1S	Regional LF 1D	Regional Land. 2-D-A	Regional LF 3S	Regional LF 3D	Analysis Date	Analyst	Method Code
PH (field measurement), Units			4.9	6.7		5.6	6.8	04/02/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	0.5 J	--- U		--- U	--- U	04/08/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	0.8 J	0.8 J		0.4 J	0.4 J	04/08/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0	72.9 J	33.4 J		74.7 J	64.2 J	04/08/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.4 J	0.1 J		0.1 J	0.1 J	04/08/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.2 J	0.4 J		0.2 J	0.7 J	04/08/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	0.9 J	0.1 J		0.3 J	0.3 J	04/08/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0	0.8 J	0.4 J		0.6 J	0.5 J	04/08/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0	1.6 J	--- U		0.7 J	0.5 J	04/08/08	CMF	EPA200.8
Lead, ug/l	0.04	10.0	1.4 J	0.1 J		0.1 J	0.3 J	04/08/08	CMF	EPA200.8
Nickel, ug/l	0.06	50.0	1.6 J	1.4 J		5.4 J	3.9 J	04/08/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	--- U	--- U		1.0 J	0.9 J	04/08/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	0.1 J		0.1 J	--- U	04/08/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	0.1 J	0.2 J		0.1 J	--- U	04/08/08	CMF	EPA200.8
Vanadium, ug/l	0.07	25.0	2.0 J	0.3 J		1.6 J	1.1 J	04/08/08	CMF	EPA200.8
Zinc, ug/l	0.04	10.0	5.5 J	14		3.3 J	2.1 J	04/08/08	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	40	9.5		3.5	28	04/02/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	109	169		1096	713	04/02/08	RJH	SM2510B
Temperature, °C			15	17		17	17	04/02/08	RJH	SM2550B
Static Water Level, feet			5.17	11.98	12.94	8.94	11.85	04/02/08	RJH	
Well Depth, feet			17.72	43.96	31.17	16.34	38.50	04/02/08	RJH	

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

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

ID#: 6035 A

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

DATE COLLECTED: 04/02/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Regional LF 4S	Regional LF 4D	Regional LF 5S	Regional LF 5D	MW-A	Analysis Date	Analyst	Method Code
PH (field measurement), Units			5.2	6.8	6.0		5.0	04/02/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	--- U	--- U	--- U		--- U	04/08/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	1.7 J	0.4 J	2.2 J		1.2 J	04/08/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0	140	40.2 J	69.5 J		33.8 J	04/08/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.2 J	0.1 J	--- U		0.2 J	04/08/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.5 J	0.1 J	0.1 J		0.1 J	04/08/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	1.3 J	0.1 J	0.4 J		1.6 J	04/08/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0	0.8 J	0.2 J	0.4 J		0.4 J	04/08/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0	--- U	0.5 J	--- U		0.3 J	04/08/08	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.1 J	--- U	0.1 J		0.3 J	04/08/08	CMF	EPA200.8
Nickel, ug/l	0.06	50.0	2.0 J	2.5 J	5.3 J		2.1 J	04/08/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	5.2 J	--- U	6.2 J		0.7 J	04/08/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0	0.1 J	--- U	--- U		0.1 J	04/08/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	0.1 J	--- U	--- U		0.1 J	04/08/08	CMF	EPA200.8
Vanadium, ug/l	0.07	25.0	0.3 J	1.0 J	1.2 J		1.1 J	04/08/08	CMF	EPA200.8
Zinc, ug/l	0.04	10.0	4.4 J	1.6 J	37		11	04/08/08	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	7.7	55	11		20	04/02/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	253	540	1272		86	04/02/08	RJH	SM2510B
Temperature, °C			16	19	16		16	04/02/08	RJH	SM2550B
Static Water Level, feet			8.55	11.18	9.24	11.17	6.01	04/02/08	RJH	
Well Depth, feet			14.98	34.19	14.61	35.51	20.46	04/02/08	RJH	
Zinc, Total Dissolved, ug/l					11			04/08/08	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: 04/02/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Piezometer #1	Trip Blank	Analysis Date	Analyst	Method Code
Static Water Level, feet			10.85		04/02/08	RJH	

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

Environment 1, Incorporated

Drinking Water ID: 37715
Wastewater ID: 10

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

PHONE (252) 756-6208
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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: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/23/08

Page: 1

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	--- U	--- U
7. Acetone	1.21	100.0	3.50 J	6.60 J	4.90 J	4.90 J	4.00 J
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: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/23/08

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	3.60 J	3.90 J	4.20 J	1.40 J
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: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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

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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: 04/02/08
DATE ANALYZED: 04/07/08
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REVIEWED BY: _____

VOLATILE ORGANICS
EPA METHOD 8260B
SURROGATE RECOVERY RESULTS

Sample Name	Limits (% recovery)	1,2-DCA-d4 (% recovery)	Toluene-d8 (% recovery)	4-BFB (% recovery)
Continuing Calibration std.	70-130	110	108	107
Laboratory Control std.	70-130	97.4	98.7	97.5
Method Blank	70-130	96.3	98.9	98.1
Regional Landfill 1S	70-130	103	95.0	94.3
Regional Landfill 1D	70-130	99.4	98.2	97.5
Regional Landfill 3S	70-130	98.3	98.0	97.9
Regional Landfill 3D	70-130	98.9	99.9	98.8
Regional Landfill 4S	70-130	98.9	97.6	96.4
Regional Landfill 4D	70-130	97.6	98.3	98.0
Regional Landfill 5S	70-130	100	96.4	96.1
Monitoring Well A	70-130	102	98.3	97.0
Trip Blank	70-130	99.0	100	99.6
Regional Landfill 1S M.S.	70-130	98.0	99.0	98.4
Regional Landfill 1S M.S.D.	70-130	101	96.7	96.7

Environment 1, Incorporated

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

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

CLIENT ID: 6035 A

ANALYST: MO
DATE COLLECTED: 04/02/08
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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	16.33	81.7	17.87	89.4	9.0
Benzene	20.0	--- U	19.12	95.6	19.59	98.0	2.4
Trichloroethene	20.0	--- U	19.69	98.5	20.40	102	3.5
Toluene	20.0	--- U	18.56	92.8	19.36	96.8	4.2
Chlorobenzene	20.0	--- U	19.60	98.0	20.28	101	3.4

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.37	81.9
Benzene	20.0	19.39	97.0
Trichloroethene	20.0	20.13	101
Toluene	20.0	19.51	97.6
Chlorobenzene	20.0	20.42	102

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 02 08	1200		15	7	■	■	■	■	■	■		■	■	■	■
Regional LF 1D	04 02 08	1150		17	5	■	■	■	■	■	■		■	■		
Regional Land. 2-D-A	04 02 08				1						■					
Regional LF 3S	04 02 08	0925		17	5	■	■	■	■	■	■		■	■		
Regional LF 3D	04 02 08	0935		17	5	■	■	■	■	■	■		■	■		
Regional LF 4S	04 02 08	0945		16	5	■	■	■	■	■	■		■	■		
Regional LF 4D	04 02 08	0955		19	5	■	■	■	■	■	■		■	■		
Regional LF 5S	04 02 08	1015		16	7	■	■	■	■	■	■	■	■	■	■	
Regional LF 5D	04 02 08				2						■					
MW-A	04 02 08	1220		16	5	■	■	■	■	■	■		■	■		
Piezometer #1	04 02 08				1						■					

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
☒ SOLID WASTE SECTION

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

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

SAMPLES RECEIVED IN LAB AT 1.4 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob Hogue 04	02 08	B [signature]	4/2/03 2:32
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

№ 163647

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
CHLORINE NEUTRALIZED AT COLLECTION																
pH CHECK (LAB)													<2	<2		
CONTAINER TYPE, P/G						P	P	P	P	P		P	G	G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		A	E	E	E	E
Trip Blank					2											

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 Lopez / Fox

SAMPLES RECEIVED IN LAB AT 1-4 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
H Lopez	04 02 08	[signature]	4/2/08 2:32
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

№ 163646

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: 04/03/08
DATE REPORTED : 04/24/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	SW-1	SW-2	Under Drain	Analysis Date	Analyst	Method Code
PH (field measurement), Units			7.7	6.6	7.4	04/03/08	RJH	SM4500HB
Antimony, ug/l	0.44	6.0	0.3 J	0.4 J	0.1 J	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.57	10.0	0.8 J		4.0 J	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.57	10.0		14		04/23/08	CMF	SM3113B
Barium, ug/l	0.11	100.0	30.7 J	72.4 J	94.6 J	04/10/08	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0	--- U	--- U	--- U	04/10/08	LFJ	EPA200.8
Cadmium, ug/l	0.05	1.0	0.1 J	0.1 J	0.1 J	04/10/08	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	0.6 J	3.2 J	3.0 J	04/10/08	LFJ	EPA200.8
Copper, ug/l	0.05	10.0	1.0 J	2.8 J	1.7 J	04/10/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	1.3 J	12	0.8 J	04/10/08	LFJ	EPA200.8
Lead, ug/l	0.32	10.0	1.0 J	0.8 J	0.3 J	04/10/08	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	5.2 J	16 J	9.6 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.51	10.0	0.5 J	7.2 J		04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.51	10.0			--- U	04/18/08	CMF	SM3113B
Silver, ug/l	0.04	10.0	--- U	0.1 J	--- U	04/10/08	LFJ	EPA200.8
Thallium, ug/l	0.63	5.0	--- U	--- U	--- U	04/10/08	LFJ	EPA200.8
Vanadium, ug/l	0.07	25.0	2.1 J	2.6 J	1.7 J	04/10/08	LFJ	EPA200.8
Zinc, ug/l	0.04	10.0	35	9.0 J	9.8 J	04/10/08	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	40	65	28	04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	643	1836	1647	04/03/08	RJH	SM2510B
Temperature, °C			14	13	14	04/03/08	RJH	SM2550B

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: 04/03/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/24/08

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	SW-1	SW-2	Under Drain
1. Chloromethane	0.18	1.0	--- U	0.30 J	0.20 J
2. Vinyl Chloride	0.34	1.0	--- U	--- U	--- U
3. Bromomethane	0.26	10.0	--- U	--- U	--- U
4. Chloroethane	0.29	10.0	--- U	--- U	--- U
5. Trichlorofluoromethane	0.13	1.0	--- U	--- U	--- U
6. 1,1-Dichloroethene	0.14	5.0	--- U	--- U	--- U
7. Acetone	1.21	100.0	2.90 J	9.20 J	5.40 J
8. Iodomethane	0.12	10.0	--- U	--- U	--- U
9. Carbon Disulfide	0.14	100.0	--- U	--- U	--- U
10. Methylene Chloride	0.14	1.0	--- U	--- U	--- U
11. trans-1,2-Dichloroethene	0.13	5.0	--- U	--- U	--- U
12. 1,1-Dichloroethane	0.16	5.0	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U	--- U
14. Cis-1,2-Dichloroethene	0.14	5.0	--- U	--- U	--- U
15. 2-Butanone	0.85	100.0	1.50 J	2.20 J	1.40 J
16. Bromochloromethane	0.11	3.0	--- U	--- U	--- U
17. Chloroform	0.13	5.0	--- U	--- U	--- U
18. 1,1,1-Trichloroethane	0.11	1.0	--- U	--- U	--- U
19. Carbon Tetrachloride	0.13	1.0	--- U	--- U	--- U
20. Benzene	0.16	1.0	--- U	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	--- U	--- U
25. Cis-1,3-Dichloropropene	0.17	1.0	--- U	--- U	--- U
26. 4-Methyl-2-Pentanone	0.68	100.0	--- U	--- U	--- U
27. Toluene	0.13	1.0	--- U	--- U	--- U
28. trans-1,3-Dichloropropene	0.14	1.0	--- U	--- U	--- U
29. 1,1,2-Trichloroethane	0.20	1.0	--- U	--- U	--- U
30. Tetrachloroethene	0.16	1.0	--- U	--- U	--- U
31. 2-Hexanone	1.00	50.0	--- U	--- U	--- U
32. Dibromochloromethane	0.14	3.0	--- U	--- U	--- U
33. 1,2-Dibromoethane	0.13	1.0	--- U	--- U	--- U
34. Chlorobenzene	0.13	3.0	--- U	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	--- U	--- U
37. Xylenes	0.48	5.0	--- U	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	--- U	--- U
40. Bromoform	0.11	3.0	--- U	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.16	3.0	--- U	--- U	--- U
42. 1,2,3-Trichloropropane	0.06	1.0	--- U	--- U	--- U
43. 1,4-Dichlorobenzene	0.21	1.0	--- U	0.40 J	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.26	13.0	--- U	--- U	--- U
46. Acrylonitrile	1.49	200.0	--- U	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.14	100.0	--- 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: 04/03/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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: 04/03/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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	110	108	107
Laboratory Control std.	70-130	97.4	98.7	97.5
Method Blank	70-130	96.3	98.9	98.1
Surface Water #1	70-130	99.8	101	95.3
Surface Water #2	70-130	98.6	98.9	98.0
Under Drain	70-130	98.3	99.0	97.6
Regional Landfill 1S M.S.	70-130	98.0	99.0	98.4
Regional Landfill 1S M.S.D.	70-130	101	96.7	96.7

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: 04/03/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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	16.33	81.7	17.87	89.4	9.0
Benzene	20.0	--- U	19.12	95.6	19.59	98.0	2.4
Trichloroethene	20.0	--- U	19.69	98.5	20.40	102	3.5
Toluene	20.0	--- U	18.56	92.8	19.36	96.8	4.2
Chlorobenzene	20.0	--- U	19.60	98.0	20.28	101	3.4

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.37	81.9
Benzene	20.0	19.39	97.0
Trichloroethene	20.0	20.13	101
Toluene	20.0	19.51	97.6
Chlorobenzene	20.0	20.42	102

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
- ☐ _____

							L2				L2	L2									
						P	P	P	P	P	G	G									
						A	A	A	A	A	E	E									
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									
SW-1	04 0308	1235		14	5																
SW-2	04 0308	1210		13	5																
Under Drain	04 0308	1125		14	5																

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
- ☒ SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
Y N

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

SAMPLES RECEIVED IN LAB AT 1.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Logue 04	0308 2:50	B	4/3/08 2:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

№ 163652

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: 04/03/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	MW-7	MW-8	MW-10	MW-11S	MW-11D	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.1	4.9	5.3	3.7	6.7	04/03/08	RJH	SM4500HB
Antimony, ug/l	0.44	6.0	0.1 J	--- U	--- U	--- U	0.5 J	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.57	10.0	1.0 J	1.3 J	4.1 J	0.2 J	--- U	04/10/08	LFJ	EPA200.8
Barium, ug/l	0.11	100.0	67.3 J	43.6 J	40.1 J	45.8 J	44 J	04/10/08	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0	--- U	0.3 J	0.2 J	1.5	0.1 J	04/10/08	LFJ	EPA200.8
Cadmium, ug/l	0.05	1.0	0.2 J	0.1 J	0.2 J	0.2 J	0.3 J	04/10/08	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	1.8 J	0.4 J	0.7 J	3.1 J	0.1 J	04/10/08	LFJ	EPA200.8
Copper, ug/l	0.05	10.0	0.8 J	0.6 J	0.7 J	0.6 J	0.3 J	04/10/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	0.4 J	1.0 J	0.4 J	0.5 J	--- U	04/10/08	LFJ	EPA200.8
Lead, ug/l	0.32	10.0	0.5 J	1.4 J	0.9 J	1.4 J	0.1 J	04/10/08	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	4.0 J	0.8 J	1.4 J	4.8 J	2.4 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.51	10.0	0.7 J	0.2 J	0.7 J	0.3 J	--- U	04/10/08	LFJ	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	--- U	--- U	0.1 J	04/10/08	LFJ	EPA200.8
Thallium, ug/l	0.63	5.0	0.1 J	--- U	--- U	--- U	0.1 J	04/10/08	LFJ	EPA200.8
Vanadium, ug/l	0.07	25.0	1.7 J	3.6 J	2..1J	1.9 J	0.2 J	04/10/08	LFJ	EPA200.8
Zinc, ug/l	0.04	10.0	15	3.7 J	7.8 J	8.7 J	4.7 J	04/10/08	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	13	50	75	7.2	65	04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	453	64	131	409	443	04/03/08	RJH	SM2510B
Temperature, °C			15	15	14	15	17	04/03/08	RJH	SM2550B
Static Water Level, feet			4.70	5.26	4.90	8.82	9.08	04/03/08	RJH	
Well Depth, feet			16.59	15.62	15.95	14.04	34.42	04/03/08	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 D

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

DATE COLLECTED: 04/03/08
DATE REPORTED : 04/23/08

REVIEWED BY:

PARAMETERS	MDL	SWSL	Under Drain #2	Leachate Manhole	Trip Blank	Equipment Blank	Analysis Date	Analyst	Method Code
PH (field measurement), Units			6.6	7.2			04/03/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	0.2 J	6.2		--- U	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.07	10.0	2.0 J			0.2 J	04/10/08	LFJ	EPA200.8
Arsenic, ug/l	0.07	10.0		45			04/16/08	CMF	SM3113B
Barium, ug/l	0.11	100.0	71.1 J	838		0.4 J	04/10/08	LFJ	EPA200.8
Beryllium, ug/l	0.06	1.0	--- U	0.1 J		--- U	04/10/08	LFJ	EPA200.8
Cadmium, ug/l	0.04	1.0	0.1 J	4		--- U	04/10/08	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	1.0 J	13		--- U	04/10/08	LFJ	EPA200.8
Copper, ug/l	0.05	10.0	0.7 J	12		0.2 J	04/10/08	LFJ	EPA200.8
Total Chromium, ug/l	0.11	10.0	0.5 J	61		--- U	04/10/08	LFJ	EPA200.8
Lead, ug/l	0.04	10.0	0.1 J	0.7 J		0.1 J	04/10/08	LFJ	EPA200.8
Nickel, ug/l	0.06	50.0	8.4 J	77		0.3 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.14	10.0	4.5 J			1.5 J	04/10/08	LFJ	EPA200.8
Selenium, ug/l	0.14	10.0		0.6 J			04/18/08	CMF	SM3113B
Silver, ug/l	0.04	10.0	--- U	0.7 J		--- U	04/10/08	LFJ	EPA200.8
Thallium, ug/l	0.04	5.0	--- U	--- U		--- U	04/10/08	LFJ	EPA200.8
Vanadium, ug/l	0.07	25.0	0.8 J	14.9 J		0.1 J	04/10/08	LFJ	EPA200.8
Zinc, ug/l	0.04	10.0	2.1 J	23		2.2 J	04/10/08	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	40	12			04/03/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	1220	9980			04/03/08	RJH	SM2510B
Temperature, °C			15	26			04/03/08	RJH	SM2550B

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: 04/03/08
DATE REPORTED: 04/23/08

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	04/14/08 MW-7	04/14/08 MW-8	04/14/08 MW-10	04/14/08 MW-11S	04/14/08 MW-11D
Date Analyzed:							
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	4.30 J	2.30 J	2.30 J	2.20 J	2.00 J
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	1.50 J	1.40 J	--- 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
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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: 04/03/08
DATE REPORTED: 04/23/08

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Date Analyzed: 04/14/08 Under Drain #2	04/14/08 Leachate Manhole	04/15/08 Trip Blank	04/14/08 Equipment Blank
1. Chloromethane	0.18	1.0	0.30 J	--- 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	0.40 J	--- 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	5.60 J	148.00	1.50 J	2.10 J
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	2.00 J	--- U	--- U
15. 2-Butanone	0.85	100.0	2.50 J	81.90 J	--- 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	2.60	--- U	--- U
21. 1,2-Dichloroethane	0.12	1.0	--- U	0.30 J	--- U	--- U
22. Trichloroethene	0.13	1.0	--- U	0.20 J	--- U	--- U
23. 1,2-Dichloropropane	0.17	1.0	--- U	--- U	--- U	--- U
24. Bromodichloromethane	0.13	1.0	--- U	0.20 J	--- 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	130.00	--- U	--- U
27. Toluene	0.13	1.0	--- U	20.10	--- 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	1.30 J	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.14	5.0	--- U	--- U	--- U	--- U
36. Ethylbenzene	0.16	1.0	--- U	160.00	--- U	--- U
37. Xylenes	0.48	5.0	--- U	97.20	--- U	--- U
38. Dibromomethane	0.17	10.0	--- U	--- U	--- U	--- U
39. Styrene	0.16	1.0	--- U	1.70	--- 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	14.90	--- U	--- U
44. 1,2-Dichlorobenzene	0.13	5.0	--- U	1.10 J	--- 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 D

ANALYST: MO
DATE COLLECTED: 04/03/08
DATE ANALYZED: 04/14/08
DATE REPORTED: 04/22/08

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

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C/O COASTAL PARTNERSHIP
Mr. ALLEN HARDISON
P.O. BOX 128
COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/22/08

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

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C/O COASTAL PARTNERSHIP
Mr. ALLEN HARDISON
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COVE CITY, NC 28523

CLIENT ID: 6035 D

ANALYST: MO
DATE COLLECTED: 04/03/08
DATE ANALYZED: 04/14/08
DATE REPORTED: 04/22/08

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	103	102	102
Laboratory Control std.	70-130	97.2	98.5	100
Method Blank	70-130	99.9	99.8	97.0
Monitoring Well #7	70-130	98.9	99.2	100
Monitoring Well #8	70-130	98.2	101	101
Monitoring Well #10	70-130	99.3	100	99.4
Monitoring Well #11S	70-130	98.7	99.2	98.9
Monitoring Well #11D	70-130	99.3	99.7	100
Under Drain #2	70-130	98.7	98.6	97.7
Leachate Manhole	70-130	101	94.9	94.9
Equipment Blank	70-130	100	97.7	97.7
Monitoring Well #7 M.S.	70-130	101	98.2	98.6
Monitoring Well #7 M.S.D.	70-130	98.7	98.6	99.3

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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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

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	101	99.7	100
Laboratory Control std.	70-130	97.9	98.8	99.2
Method Blank	70-130	99.5	99.6	100
Trip Blank	70-130	98.6	98.2	98.3
Leachate Storage 1S M.S.	70-130	98.3	97.5	97.8
Leachate Storage 1S M.S.D.	70-130	98.8	97.4	98.2

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: 04/03/08
DATE ANALYZED: 04/14/08
DATE REPORTED: 04/22/08

REVIEWED BY:

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

Sample Spiked: Monitoring Well #7 (6035D)	Spike Amount Ug/l	Sample Result Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)	Spike Dup. Result Ug/l	Spike Dup. Recovery (70-130%)	MS/MSD RPD (50%)
1,1-Dichloroethene	20.0	--- U	20.56	103	20.09	100	2.3
Benzene	20.0	--- U	20.90	105	21.62	108	3.4
Trichloroethene	20.0	--- U	21.19	106	21.66	108	2.2
Toluene	20.0	--- U	19.72	98.6	20.33	102	3.0
Chlorobenzene	20.0	--- U	19.60	98.0	20.61	103	5.0

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	19.11	95.6
Benzene	20.0	20.24	101
Trichloroethene	20.0	20.49	102
Toluene	20.0	19.54	97.7
Chlorobenzene	20.0	19.64	98.2

Environment 1, Incorporated

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

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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: 04/03/08
DATE ANALYZED: 04/15/08
DATE REPORTED: 04/23/08

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	19.59	98.0	20.51	103	4.6
Benzene	20.0	--- U	20.80	104	21.74	109	4.4
Trichloroethene	20.0	--- U	20.90	105	22.12	111	5.7
Toluene	20.0	--- U	19.66	98.3	20.51	103	4.2
Chlorobenzene	20.0	--- U	19.87	99.4	20.64	103	3.8

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	18.79	94.0
Benzene	20.0	20.62	103
Trichloroethene	20.0	20.92	105
Toluene	20.0	19.59	98.0
Chlorobenzene	20.0	20.03	100

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
CHLORINE NEUTRALIZED AT COLLECTION														
pH CHECK (LAB)							L2					L2	L2	L2
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E
MW-7	04 03 08	1115		15	6	G	G	G	G	G	G	G	G	G
MW-8	04 03 08	1100		15	5	G	G	G	G	G	G	G	G	
MW-10	04 03 08	1150		14	5	G	G	G	G	G	G	G	G	
MW-11S	04 03 08	1210		15	5	G	G	G	G	G	G	G	G	
MW-11D	04 03 08	1200		17	5	G	G	G	G	G	G	G	G	
Under Drain #2	04 03 08	1200		15	5	G	G	G	G	G		G	G	
Leachate Manhole	04 03 08	1225		26	6	G	G	G	G	G		G	G	G
Trip Blank	~~04 03 08~~				2							G	G	
Equipment Blank	04 03 08				3		G					G	G	

PARAMETERS

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

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

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

SAMPLES COLLECTED BY: (Please Print) Hilgne / Fot

SAMPLES RECEIVED IN LAB AT 1.2 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
[illegible] Hilgne	04 03 08 2:50	[illegible]	4/3/08 2:50
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

№ 163648

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: 04/02/08
DATE REPORTED : 04/23/08

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	4.9	7.1	4.8	04/02/08	RJH	SM4500HB
Antimony, ug/l	0.08	6.0	--- U	0.5 J	0.1 J	--- U	--- U	04/08/08	CMF	EPA200.8
Arsenic, ug/l	0.07	10.0	1.4 J	--- U	1.3 J	--- U	0.2 J	04/08/08	CMF	EPA200.8
Barium, ug/l	0.11	100.0	88.6 J	36.7 J	43.0 J	35.0 J	44.9 J	04/08/08	CMF	EPA200.8
Beryllium, ug/l	0.06	1.0	0.3 J	--- U	0.3 J	--- U	0.2 J	04/08/08	CMF	EPA200.8
Cadmium, ug/l	0.04	1.0	0.4 J	0.1 J	0.1 J	--- U	0.1 J	04/08/08	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	4.6 J	0.1 J	0.3 J	0.1 J	0.9 J	04/08/08	CMF	EPA200.8
Copper, ug/l	0.05	10.0	0.7 J	0.3 J	0.6 J	0.1 J	1.2 J	04/08/08	CMF	EPA200.8
Total Chromium, ug/l	0.11	10.0	--- U	--- U	0.3 J	--- U	--- U	04/08/08	CMF	EPA200.8
Lead, ug/l	0.04	10.0	0.1 J	0.1 J	0.5 J	--- U	0.3 J	04/08/08	CMF	EPA200.8
Nickel, ug/l	0.06	50.0	4.3 J	2.0 J	0.7 J	1.6 J	1.4 J	04/08/08	CMF	EPA200.8
Selenium, ug/l	0.14	10.0	3.1 J	--- U	0.3 J	--- U	0.2 J	04/08/08	CMF	EPA200.8
Silver, ug/l	0.04	10.0	--- U	0.1 J	--- U	--- U	--- U	04/08/08	CMF	EPA200.8
Thallium, ug/l	0.04	5.0	--- U	0.1 J	--- U	--- U	--- U	04/08/08	CMF	EPA200.8
Vanadium, ug/l	0.07	25.0	0.3 J	0.3 J	1.1 J	0.2 J	0.3 J	04/08/08	CMF	EPA200.8
Zinc, ug/l	0.04	10.0	26	1.9 J	4.7 J	2.1 J	5.7 J	04/08/08	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	35	6.4	26	33	5.2	04/02/08	MDM	SM2130B
Conductivity (at 25c), uMhos	1.0	1.0	155	481	124	402	71	04/02/08	RJH	SM2510B
Temperature, °C			16	18	16	17	15	04/02/08	RJH	SM2550B
Static Water Level, feet			7.38	12.76	2.21	8.61	4.88	04/02/08	RJH	
Well Depth, feet			17.99	36.03	17.74	34.31	17.37	04/02/08	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 E

ANALYST: MAO
DATE COLLECTED: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/23/08

REVIEWED BY:

VOLATILE ORGANICS
EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-12s	Well #12 Deep	Well #13 Shallow	Well #13 Deep	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	5.20 J	4.50 J	5.00 J	3.80 J	4.40 J
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	0.90 J	--- 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 E

ANALYST: MO
DATE COLLECTED: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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

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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: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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	110	108	107
Laboratory Control std.	70-130	97.4	98.7	97.5
Method Blank	70-130	96.3	98.9	98.1
Well #12 Shallow	70-130	96.7	98.4	98.1
Well #12 Deep	70-130	98.3	99.2	98.5
Well #13 Shallow	70-130	101	98.1	95.6
Well #13 Deep	70-130	97.6	99.7	97.9
Well #14R	70-130	108	109	107
Regional Landfill 1S M.S.	70-130	98.0	99.0	98.4
Regional Landfill 1S M.S.D.	70-130	101	96.7	96.7

Environment 1, Incorporated

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

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

CLIENT ID: 6035 E

ANALYST: MO
DATE COLLECTED: 04/02/08
DATE ANALYZED: 04/07/08
DATE REPORTED: 04/22/08

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	16.33	81.7	17.87	89.4	9.0
Benzene	20.0	--- U	19.12	95.6	19.59	98.0	2.4
Trichloroethene	20.0	--- U	19.69	98.5	20.40	102	3.5
Toluene	20.0	--- U	18.56	92.8	19.36	96.8	4.2
Chlorobenzene	20.0	--- U	19.60	98.0	20.28	101	3.4

LABORATORY CONTROL SAMPLE RESULTS

Sample Compound:	Spike Amount Ug/l	Spike Result Ug/l	Spike Recovery (70-130%)
1,1-Dichloroethene	20.0	16.37	81.9
Benzene	20.0	19.39	97.0
Trichloroethene	20.0	20.13	101
Toluene	20.0	19.51	97.6
Chlorobenzene	20.0	20.42	102

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	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2
CHLORINE NEUTRALIZED AT COLLECTION														
pH CHECK (LAB)							L2					L2	L2	L2
CONTAINER TYPE, P/G						P	P	P	P	P		G	G	G
CHEMICAL PRESERVATION						A	A	A	A	A		E	E	E
MW-12s	04/02/08	1120		16	5	☐	☐	☐	☐	☐	☐	☐	☐	
Well #12 Deep	04/02/08	1130		18	5	☐	☐	☐	☐	☐	☐	☐	☐	
Well #13 Shallow	04/02/08	1030		16	5	☐	☐	☐	☐	☐	☐	☐	☐	
Well #13 Deep	04/02/08	1045		17	5	☐	☐	☐	☐	☐	☐	☐	☐	
MW-14R	04/02/08	1100		15	6	☐	☐	☐	☐	☐	☐	☐	☐	☐

PARAMETERS

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

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

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

SAMPLES COLLECTED BY: (Please Print) H Lane / Fat

SAMPLES RECEIVED IN LAB AT 1.4 °C

RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
Bob H Lane	04/02/08	D Lull	9/2/08 2:31
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME

COMMENTS:

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.

FORM #5

№ 163887

Pace Analytical
www.pacelabs.com

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2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

Pace Analytical Services, Inc.
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

June 04, 2008

Mr. Jeremey Kerly
Joyce Engineering-NC
2211 West Meadowview Rd
Greensboro, NC 27407

RECEIVED JUN 04 2008

RE: Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Dear Mr. Kerly:
Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin

kevin.godwin@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Charlotte Certification IDs

Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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SAMPLE SUMMARY

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9219644001	**MW-8**	Water	05/15/08 09:45	05/16/08 14:28
9219644002	**MW-10**	Water	05/15/08 10:00	05/16/08 14:28
9219644003	**MW-12S**	Water	05/15/08 08:50	05/16/08 14:28
9219644004	**FIELD BLANK**	Water	05/15/08 10:05	05/16/08 14:28
9219644005	**TRIP BLANK**	Water	05/15/08 00:00	05/16/08 14:28

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SAMPLE ANALYTE COUNT

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9219644001	MW-8	EPA 8260	MCK	5
9219644002	MW-10	EPA 8260	MCK	5
9219644003	MW-12S	EPA 8260	MCK	5
9219644004	FIELD BLANK	EPA 8260	MCK	9
9219644005	TRIP BLANK	EPA 8260	MCK	9

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ANALYTICAL RESULTS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Sample: MW-8 **Lab ID: 9219644001** Collected: 05/15/08 09:45 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 13:18	78-93-3	
4-Bromofluorobenzene (S)	98	%	87-109		1		05/24/08 13:18	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 13:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 13:18	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/24/08 13:18	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Sample: MW-10 **Lab ID: 9219644002** Collected: 05/15/08 10:00 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 13:41	78-93-3	
4-Bromofluorobenzene (S)	97	%	87-109		1		05/24/08 13:41	460-00-4	
Dibromofluoromethane (S)	97	%	85-115		1		05/24/08 13:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 13:41	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/24/08 13:41	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Sample: MW-12S **Lab ID: 9219644003** Collected: 05/15/08 08:50 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 14:05	78-93-3	
4-Bromofluorobenzene (S)	98	%	87-109		1		05/24/08 14:05	460-00-4	
Dibromofluoromethane (S)	97	%	85-115		1		05/24/08 14:05	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 14:05	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/24/08 14:05	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Sample: FIELD BLANK **Lab ID: 9219644004** Collected: 05/15/08 10:05 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 14:28	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 14:28	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 14:28	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 14:28	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 14:28	106-46-7	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/24/08 14:28	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 14:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		1		05/24/08 14:28	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/24/08 14:28	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

Sample: TRIP BLANK **Lab ID: 9219644005** Collected: 05/15/08 00:00 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 11:45	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 11:45	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 11:45	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 11:45	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 11:45	106-46-7	
4-Bromofluorobenzene (S)	97	%	87-109		1		05/24/08 11:45	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 11:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 11:45	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/24/08 11:45	2037-26-5	

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QUALITY CONTROL DATA

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

QC Batch: MSV/3497 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9219644001, 9219644002, 9219644003, 9219644004, 9219644005

METHOD BLANK: 119471
Associated Lab Samples: 9219644001, 9219644002, 9219644003, 9219644004, 9219644005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	100	
Acetone	ug/L	ND	100	
Bromodichloromethane	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	95	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	96	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 119472

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.8	102	79-125	
2-Butanone (MEK)	ug/L	100	102	102	50-134	
Acetone	ug/L	100	94.6J	95	50-146	
Bromodichloromethane	ug/L	50	52.9	106	81-125	
Chloromethane	ug/L	50	45.7	91	54-139	
1,2-Dichloroethane-d4 (S)	%			95	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119473 119474

Parameter	Units	9219438006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane-d4 (S)	%						94	95	79-120			
4-Bromofluorobenzene (S)	%						98	99	87-109			
Dibromofluoromethane (S)	%						93	94	85-115			
Toluene-d8 (S)	%						99	99	70-120			

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QUALIFIERS

Project: CRSWMA-LONGTERM REG LANDFILL
Pace Project No.: 9219644

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1175396

Section A Required Client Information:

Company: Joyce Engineering, Inc.
Address: 2211 W. Meadowview Rd Suite 101
Greensboro, NC 27410
Email To: jkerly@joyceengineering.com
Phone: 336-323-0092 Fax: 336-323-0093
Requested Due Date/TAT: 2 weeks after sampling

Section B Required Project Information:

Report To: Jeremey Kerly
Copy To:
Purchase Order No.: 618.01.20
Project Name: CRSWMA - Long Term Regional Landfill
Project Number: 618.01.20

Section C Invoice Information:

Attention: Jeremey Kerly
Company Name: Joyce Engineering, Inc.
Address:
Pace Quote Reference: 92032508.285
Pace Project Manager: Kevin Godwin
Pace Profile #: 2186-2

REGULATORY AGENCY: ☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	NC App I 8260 Acetone	NC App I 8260 2-Butanone	NC App I 8260 Chloromethane	NC App I 8260 Bromodichloromethane	NC App I 8260 1,4-Dichlorobenzene	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 92196444
1	MW-8	WT	G	—	—	5/15/08	9:45	17.8	3				X							X					92196444001
2	MW-10	WT	G	—	—	5/15/08	10:00	17.1	3				X							X					002
3	MW-12S	WT	G	—	—	5/15/08	8:50	17.4	3				X							X					003
4	Field Blank	WT	G	—	—	5/15/08	10:05	—	3				X						X	X	X	X	X		004
5	Trip Blank	WT	G	—	—	—	—	—	2				X						X	X	X	X	X		005
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Carrie Mitchell / JEI	5/16/08	12:25	Dave	5-16-08	12:25
		5-16-08	14:28		5-16-08	14:28

SAMPLE CONDITIONS: Temp in °C: 4; Received on Ice (Y/N): N; Custody Sealed Cooler (Y/N): Y; Samples Intact (Y/N):

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Carrie Mitchell / Robert Winfield
SIGNATURE of SAMPLER: Carrie Mitchell
DATE Signed (MM/DD/YY): 05/15/08

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

DATE: 5/14/08

ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: MW-8 **Sampler(s):** R. Winfield/ C. Mitchell

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 5.28 feet

Depth to Bottom (DTB): 15.14 feet

Water Column Thickness (WCT): 9.86 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 1.61 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 4.82 gallons

Actual Amount Purged/Bailed : 4.82 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling : 5.29 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	13:37	18.4	5.59	71.2	48.3	RW
1.61	13:39	17.9	5.36	66.7	496	RW
3.22	13:41	17.2	5.29	65.7	716	RW
4.82	13:44	17.0	5.18	64.5	>1000	RW
	5/15/08					
Before Sampling	9:45	17.8	5.80	67.4	630	RW

Comments (weather conditions, odor, color, silt, etc.):

Sunny, 70's

5/15-Cloudy, light rain, 60's

Signature: [signature] **Date:** 5/15/08

QA/QC Sign Off: [signature] **Date:** 6/6/08

DATE: 5/14/08

ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: MW-10 **Sampler(s):** C. Mitchell/ R. Winfield

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 4.66 feet

Depth to Bottom (DTB): 16.92 feet

Water Column Thickness (WCT): 12.26 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 2.00 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 6.00 gallons

Actual Amount Purged/Bailed : 3.50 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling : 4.28 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	14:00	17.8	5.67	139.9	213	CM
2.00	14:01	16.9	5.14	121.2	254	CM
Dry @ 3.50 gal						CM
	5/15/08					
Before Sampling	10:00	17.1	5.69	129.8	31.6	CM

Comments (weather conditions, odor, color, silt, etc.):

5/14- Sunny, 70's

5/15-Cloudy, 60's

Field Blank @ 10:05

Signature: [signature] **Date:** 5/15/08

QA/QC Sign Off: [signature] **Date:** 6/6/08

DATE: 5/14/08

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: MW-12S **Sampler(s):** R. Winfield/ C. Mitchell

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 7.28 feet

Depth to Bottom (DTB): 18.02 feet

Water Column Thickness (WCT): 10.74 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 1.75 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 5.25 gallons

Actual Amount Purged/Bailed : 5.25 gallons

Purged with: Disposable bailer

Sampled with: Disposable bailer

Depth to Water before Sampling : 7.88 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	12:15	18.4	4.86	181.9	13.96	RW
1.75	12:18	17.9	4.82	157.1	51.0	RW
3.50	12:20	17.7	4.81	166.8	303	RW
5.25	12:23	17.9	5.14	195.6	420	RW
	5/15/08					
Before Sampling	8:50	17.4	5.66	164.2	26.1	RW

Comments (weather conditions, odor, color, silt, etc.):

5/14-Sunny, 70's

5/15-Cloudy, Light rain 50's

Signature: [signature] **Date:** 5/15/08

QA/QC Sign Off: [signature] **Date:** 6/6/08

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(704)875-9092

June 05, 2008

RECEIVED JUN 10 2008

Mr. Jeremey Kerly
Joyce Engineering-NC
2211 West Meadowview Rd
Greensboro, NC 27407

RE: Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Dear Mr. Kerly:
Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin

kevin.godwin@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Charlotte Certification IDs

Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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SAMPLE SUMMARY

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9219647001	**LST-1D**	Water	05/15/08 09:15	05/16/08 14:28
9219647002	**LST-4S**	Water	05/15/08 09:30	05/16/08 14:28
9219647004	**FIELD BLANK**	Water	05/15/08 10:05	05/16/08 14:28
9219647005	**TRIP BLANK**	Water	05/15/08 00:00	05/16/08 14:28

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SAMPLE ANALYTE COUNT

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9219647001	LST-1D	EPA 8260	MCK	5
9219647002	LST-4S	EPA 8260	MCK	5
9219647004	FIELD BLANK	EPA 8260	MCK	9
9219647005	TRIP BLANK	EPA 8260	MCK	9

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Sample: LST-1D **Lab ID: 9219647001** Collected: 05/15/08 09:15 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 14:52	78-93-3	
4-Bromofluorobenzene (S)	98	%	87-109		1		05/24/08 14:52	460-00-4	
Dibromofluoromethane (S)	97	%	85-115		1		05/24/08 14:52	1868-53-7	
1,2-Dichloroethane-d4 (S)	98	%	79-120		1		05/24/08 14:52	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		05/24/08 14:52	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Sample: LST-4S **Lab ID: 9219647002** Collected: 05/15/08 09:30 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 15:15	74-87-3	
4-Bromofluorobenzene (S)	97	%	87-109		1		05/24/08 15:15	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 15:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 15:15	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/24/08 15:15	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Sample: FIELD BLANK **Lab ID: 9219647004** Collected: 05/15/08 10:05 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 14:28	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 14:28	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 14:28	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 14:28	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 14:28	106-46-7	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/24/08 14:28	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 14:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		1		05/24/08 14:28	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/24/08 14:28	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

Sample: TRIP BLANK **Lab ID: 9219647005** Collected: 05/15/08 00:00 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 11:45	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 11:45	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 11:45	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 11:45	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 11:45	106-46-7	
4-Bromofluorobenzene (S)	97	%	87-109		1		05/24/08 11:45	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 11:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 11:45	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/24/08 11:45	2037-26-5	

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QUALITY CONTROL DATA

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

QC Batch: MSV/3497 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9219647001, 9219647002

METHOD BLANK: 119471
Associated Lab Samples: 9219647001, 9219647002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
2-Butanone (MEK)	ug/L	ND	100	
Chloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	95	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	96	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 119472

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	100	102	102	50-134	
Chloromethane	ug/L	50	45.7	91	54-139	
1,2-Dichloroethane-d4 (S)	%			95	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119473 119474

Parameter	Units	9219438006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane-d4 (S)	%						94	95	79-120			
4-Bromofluorobenzene (S)	%						98	99	87-109			
Dibromofluoromethane (S)	%						93	94	85-115			
Toluene-d8 (S)	%						99	99	70-120			

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QUALITY CONTROL DATA

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

QC Batch: MSV/3534 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9219647004, 9219647005

METHOD BLANK: 120168
Associated Lab Samples: 9219647004, 9219647005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	100	
Acetone	ug/L	ND	100	
Bromodichloromethane	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	95	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	96	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 120169

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.8	102	79-125	
2-Butanone (MEK)	ug/L	100	102	102	50-134	
Acetone	ug/L	100	94.6J	95	50-146	
Bromodichloromethane	ug/L	50	52.9	106	81-125	
Chloromethane	ug/L	50	45.7	91	54-139	
1,2-Dichloroethane-d4 (S)	%			95	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

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QUALIFIERS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9219647

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1175376

Section A Required Client Information:

Company: Joyce Engineering, Inc.
Address: 2211 W. Meadowview Rd Suite 101
Greensboro, NC 27410
Email To: jkeely@joyceengineering.com
Phone: 336-323-0092 Fax: 336-323-0093
Requested Due Date/TAT: 2 weeks after sampling

Section B Required Project Information:

Report To: Jeremy Keely
Copy To:
Purchase Order No.: 618.01.20
Project Name: CRSWMA - Leachate Storage Lagoon
Project Number: 618.01.20

Section C Invoice Information:

Attention: Jeremy Keely
Company Name: Joyce Engineering, Inc.
Address:
Pace Quote Reference: 93032508.285
Pace Project Manager: Kevin Godwin
Pace Profile #: 2186-3

REGULATORY AGENCY: ☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	NC Appt 8260 2-Butanone	NC Appt 8260 Chloromethane	NC Appt 8260 Bromodichloromethane	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	LST-1D	WT	G	—	—	5/15/08	9:45	3	18.8				X						X				92191647001
2	LST-4S	"	"			5/15/08	9:30	3	17.9				X							X			002
3	LST-5S	"	"			5/15/08	9:05	3	18.8				X								X		003
4																							004
5																							005
6																							
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* Report Trip Blank & Field Blank from	Carrie Murchison / JEI	5/16/08	12:25	Pace	5-17-08	12:25				
Long Term Regional Landfill Report on this		5-16-08	14:25	Ann F. Waters	5/16/08	14:25	3.1	yes no	yes	
report.										

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Carrie Murchison / Robert Winfield

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 05/15/08

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

DATE: 5/14/08

JOYCE ENGINEERING, INC

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: LST-1D **Sampler(s):** R. Winfield/ C. Mitchell

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 12.52 feet

Depth to Bottom (DTB): 36.01 feet

Water Column Thickness (WCT): 11.49 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 3.83 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 11.49 gallons

Actual Amount Purged/Bailed : 11.49 gallons

Purged with: Disposable Bailer

Sampled with: Diposable Bailer

Depth to Water before Sampling : 12.47 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	12:52	17.5	6.60	449	92	RW
3.83	12:56	17.7	6.96	447	439	RW
7.66	13:01	17.8	7.03	443	773	RW
11.49	13:07	17.9	7.09	441	752	RW
	5/15/08					
Before Sampling	9:15	17.9	6.72	442	42.9	RW

Comments (weather conditions, odor, color, silt, etc.):

Sunny, 70's

5/15 Cloudy, light rain, 60's

Signature: [signature] **Date:** 5/15/08

QA/QC Sign Off: [signature] **Date:** 6/6/08

DATE: 5/14/08

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: LST-4S **Sampler(s):** C. Mitchell/ R. Winfield

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 5.39 feet

Depth to Bottom (DTB): 18.18 feet

Water Column Thickness (WCT): 12.79 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 2.08 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 6.24 gallons

Actual Amount Purged/Bailed : 6.24 gallons

Purged with: Disposable Bailer

Sampled with: Disposable Bailer

Depth to Water before Sampling : 5.36 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	13:19	17.0	7.51	66.3	363	CM
2.08	13:21	16.7	6.53	61.9	317	CM
4.16	13:23	16.5	5.86	60.0	323	CM
6.24	13:25	16.5	5.55	61.6	643	CM
	5/15/08					
Before Sampling	9:30	17.9	7.39	68.7	64.3	CM

Comments (weather conditions, odor, color, silt, etc.):

5/14-Sunny 70's

5/15-Rain, cloudy 60's

Signature: [signature] **Date:** 5/15/08

QA/QC Sign Off: [signature] **Date:** 6/6/08

DATE: 5/14/08

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: LST-5S **Sampler(s):** R. Winfield/ C. Mitchell

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 5.95 feet

Depth to Bottom (DTB): 16.75 feet

Water Column Thickness (WCT): 10.8 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 1.76 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 5.28 gallons

Actual Amount Purged/Bailed : 5.28 gallons

Purged with: Disposable Bailers

Sampled with: Disposable Bailers

Depth to Water before Sampling : 5.81 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	12:35	18.2	5.79	204	215	CM
1.76	12:38	18.4	5.84	224	248	CM
3.52	12:40	18.0	5.86	224	346	CM
5.28	12:42	17.9	5.99	219	819	CM
	5/15/08					
Before Sampling	9:05	18.8	6.61	194	56.5	CM

Comments (weather conditions, odor, color, silt, etc.):

5/14-Sunny, 70's

5/15-Cloudy, light rain – 50's

Signature: Carie [illegible] **Date:** 5/15/08

QA/QC Sign Off: [illegible] **Date:** 6/6/08

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(704)875-9092

June 25, 2008

Mr. Jeremey Kerly
Joyce Engineering-NC
2211 West Meadowview Rd
Greensboro, NC 27407

RE: Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Dear Mr. Kerly:
Enclosed are the analytical results for sample(s) received by the laboratory on June 05, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin

kevin.godwin@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Charlotte Certification IDs

Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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SAMPLE SUMMARY

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9220887001	**LST-5S**	Water	06/04/08 08:25	06/05/08 12:58
9220887002	**FIELD BLANK**	Water	06/04/08 08:35	06/05/08 12:58
9220887003	**TRIP BLANK**	Water	06/04/08 00:00	06/05/08 12:58

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SAMPLE ANALYTE COUNT

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9220887001	**LST-5S**	EPA 8260	MCK	5
9220887002	**FIELD BLANK**	EPA 8260	MCK	5
9220887003	**TRIP BLANK**	EPA 8260	MCK	5

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Sample: LST-5S **Lab ID: 9220887001** Collected: 06/04/08 08:25 Received: 06/05/08 12:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Bromodichloromethane	ND	ug/L	1.0	0.18	1		06/06/08 18:33	75-27-4	
4-Bromofluorobenzene (S)	98	%	87-109		1		06/06/08 18:33	460-00-4	
Dibromofluoromethane (S)	95	%	85-115		1		06/06/08 18:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		1		06/06/08 18:33	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		06/06/08 18:33	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Sample: FIELD BLANK **Lab ID: 9220887002** Collected: 06/04/08 08:35 Received: 06/05/08 12:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Bromodichloromethane	ND	ug/L	1.0	0.18	1		06/06/08 13:04	75-27-4	
4-Bromofluorobenzene (S)	99	%	87-109		1		06/06/08 13:04	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		06/06/08 13:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		1		06/06/08 13:04	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		06/06/08 13:04	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

Sample: TRIP BLANK **Lab ID: 9220887003** Collected: 06/04/08 00:00 Received: 06/05/08 12:58 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Bromodichloromethane	ND	ug/L	1.0	0.18	1		06/06/08 12:41	75-27-4	
4-Bromofluorobenzene (S)	98	%	87-109		1		06/06/08 12:41	460-00-4	
Dibromofluoromethane (S)	95	%	85-115		1		06/06/08 12:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	95	%	79-120		1		06/06/08 12:41	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		06/06/08 12:41	2037-26-5	

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QUALITY CONTROL DATA

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

QC Batch: MSV/3655 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9220887001, 9220887002, 9220887003

METHOD BLANK: 124931
Associated Lab Samples: 9220887001, 9220887002, 9220887003

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Bromodichloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	96	79-120	
4-Bromofluorobenzene (S)	%	100	87-109	
Dibromofluoromethane (S)	%	94	85-115	
Toluene-d8 (S)	%	99	70-120	

LABORATORY CONTROL SAMPLE: 124932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromodichloromethane	ug/L	50	53.8	108	81-125	
1,2-Dichloroethane-d4 (S)	%			98	79-120	
4-Bromofluorobenzene (S)	%			100	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			98	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 124933 124934

Parameter	Units	9220893004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane-d4 (S)	%						97	95	79-120			
4-Bromofluorobenzene (S)	%						98	97	87-109			
Dibromofluoromethane (S)	%						95	98	85-115			
Toluene-d8 (S)	%						100	100	70-120			

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QUALIFIERS

Project: CRSWMA-LEACHATE STORAGE LAGOON
Pace Project No.: 9220887

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1171243

Section A Required Client Information:

Company: Joyce Engineering, Inc.
Address: 2211 W. Meadowview Rd Ste 101
Greensboro, NC 27407
Email To: jkerly@joyceengineering.com
Phone: 336-323-0092 Fax: 336-323-0093
Requested Due Date/TAT: 10

Section B Required Project Information:

Report To: Jeremey Kerly
Copy To:
Purchase Order No.:
Project Name: CRSWMA
Project Number: 618.01.20

Section C Invoice Information:

Attention: Lecia Jones
Company Name: Joyce Engineering, Inc
Address: 11604 Ownby Ln, Richmond VA 23236
Pace Quote Reference:
Pace Project Manager: Kevin Godwin
Pace Profile #: 2186-3

REGULATORY AGENCY: ☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	2-Butanone	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	LST-SS	WT	G			6/4/08	825	20s	3				X					X			92208871001
2	Field Blank	WT	G			6/4/08	835	-	3				X					X			002
3	Trip Blank	WT	-			—	—	-	2				X					X			003
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

92208871

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Carrie Mitchell / JEI	6/5/08	10:17	[signature] / JEI	6/5/08	10:17				
	[signature]	6/5/08	12:58	[signature]	6/5/08	12:58	5.9	4	N	4

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Carrie Mitchell
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/4/08

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

DATE: 6/3/08

JOYCE ENGINEERING, INC.

GROUND WATER SAMPLING LOG

Project Name: CRSWMA **Project No./Task No.:** 618.01.20

Well ID: LST-5S **Sampler(s):** C. Mitchell

Well Location:

Well Diameter: 2 inches

Initial Depth to Water (DTW): 5.96 feet

Depth to Bottom (DTB): 15.41 feet

Water Column Thickness (WCT): 9.45 feet [DTB-DTW]

Calculation for One Well Volume (WV):

For 2" Well: WCT X 0.163 = 1.54 gallons

For 4" Well: WCT X 0.653 = gallons

For THREE Well Volumes: WV X 3 = 4.62 gallons

Actual Amount Purged/Bailed : 4.62 gallons

Purged with: Disposable Bailers

Sampled with: Disposable Bailers

Depth to Water before Sampling : 5.88 feet

Gallons	Time	Temp(°C)	pH	Cond. (µS)	Turb.(ntu)	Initials
0	15:33	20.3	7.23	229	84.9	CM
1.54	15:36	19.7	5.87	192	277	CM
3.08	15:39	19.4	5.84	213	645	CM
4.62	15:43	19.3	5.87	213	OR (>1000)	CM
	6/4/08					
Before Sampling	8:25	20.3	6.13	222	212	CM

Comments (weather conditions, odor, color, silt, etc.):

6/3-Sunny, 80's

6/4-Sunny, 60's

Field Blank @8:35

Signature: **Date:** 6/4/08

QA/QC Sign Off: **Date:** 6/20/08

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June 04, 2008

RECEIVED JUN 04 2008

Mr. Jeremey Kerly
Joyce Engineering-NC
2211 West Meadowview Rd
Greensboro, NC 27407

RE: Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Dear Mr. Kerly:
Enclosed are the analytical results for sample(s) received by the laboratory on May 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kevin Godwin

kevin.godwin@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Charlotte Certification IDs

Florida/NELAP Certification Number: E87627
Kansas Certification Number: E-10364
Louisiana/LELAP Certification Number: 04034
North Carolina Drinking Water Certification Number: 37706
North Carolina Wastewater Certification Number: 12
North Carolina Field Services Certification Number: 5342
South Carolina Certification Number: 990060001
South Carolina Bioassay Certification Number: 990060003
Tennessee Certification Number: 04010
Virginia Certification Number: 00213

Asheville Certification IDs

Florida/NELAP Certification Number: E87648
Louisiana/LELAP Certification Number: 03095
New Jersey Certification Number: NC011
North Carolina Drinking Water Certification Number: 37712
North Carolina Wastewater Certification Number: 40
North Carolina Bioassay Certification Number: 9
Pennsylvania Certification Number: 68-03578
South Carolina Certification Number: 99030001
South Carolina Bioassay Certification Number: 99030002
Tennessee Certification Number: 2980
Virginia Certification Number: 00072

Eden Certification IDs

North Carolina Drinking Water Certification Number: 37738
Virginia Drinking Water Certification Number: 00424
North Carolina Wastewater Certification Number: 633

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SAMPLE SUMMARY

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9219646001	**SWPT-1**	Water	05/14/08 14:30	05/16/08 14:28
9219646002	**SWPT-2**	Water	05/14/08 14:50	05/16/08 14:28
9219646003	**UNDER DRAIN**	Water	05/14/08 15:10	05/16/08 14:28
9219646004	**UNDER DRAIN 2**	Water	05/14/08 15:25	05/16/08 14:28
9219646005	**FIELD BLANK**	Water	05/15/08 10:05	05/16/08 14:28
9219646006	**TRIP BLANK**	Water	05/15/08 00:00	05/16/08 14:28

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SAMPLE ANALYTE COUNT

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Lab ID	Sample ID	Method	Analysts	Analytes Reported
9219646001	SWPT-1	EPA 8260	MCK	5
9219646002	SWPT-2	EPA 8260	MCK	8
9219646003	UNDER DRAIN	EPA 8260	MCK	6
9219646004	UNDER DRAIN 2	EPA 8260	MCK	6
9219646005	FIELD BLANK	EPA 8260	MCK	9
9219646006	TRIP BLANK	EPA 8260	MCK	9

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ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: SWPT-1 **Lab ID: 9219646001** Collected: 05/14/08 14:30 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/25/08 13:28	78-93-3	
4-Bromofluorobenzene (S)	98	%	87-109		1		05/25/08 13:28	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/25/08 13:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		05/25/08 13:28	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/25/08 13:28	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: SWPT-2 **Lab ID: 9219646002** Collected: 05/14/08 14:50 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/25/08 13:51	67-64-1	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/25/08 13:51	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/25/08 13:51	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/25/08 13:51	106-46-7	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/25/08 13:51	460-00-4	
Dibromofluoromethane (S)	95	%	85-115		1		05/25/08 13:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	92	%	79-120		1		05/25/08 13:51	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/25/08 13:51	2037-26-5	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: UNDER DRAIN **Lab ID: 9219646003** Collected: 05/14/08 15:10 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/25/08 14:15	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/25/08 14:15	74-87-3	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/25/08 14:15	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/25/08 14:15	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	79-120		1		05/25/08 14:15	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/25/08 14:15	2037-26-5	

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(704)875-9092

ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: UNDER DRAIN 2 **Lab ID: 9219646004** Collected: 05/14/08 15:25 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/25/08 14:38	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/25/08 14:38	74-87-3	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/25/08 14:38	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/25/08 14:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/25/08 14:38	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/25/08 14:38	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: FIELD BLANK **Lab ID: 9219646005** Collected: 05/15/08 10:05 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 14:28	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 14:28	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 14:28	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 14:28	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 14:28	106-46-7	
4-Bromofluorobenzene (S)	99	%	87-109		1		05/24/08 14:28	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 14:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	97	%	79-120		1		05/24/08 14:28	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		05/24/08 14:28	2037-26-5	

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ANALYTICAL RESULTS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

Sample: TRIP BLANK **Lab ID: 9219646006** Collected: 05/15/08 00:00 Received: 05/16/08 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	20.0	1		05/24/08 11:45	67-64-1	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		05/24/08 11:45	75-27-4	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		05/24/08 11:45	78-93-3	
Chloromethane	ND	ug/L	1.0	0.11	1		05/24/08 11:45	74-87-3	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		05/24/08 11:45	106-46-7	
4-Bromofluorobenzene (S)	97	%	87-109		1		05/24/08 11:45	460-00-4	
Dibromofluoromethane (S)	96	%	85-115		1		05/24/08 11:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	96	%	79-120		1		05/24/08 11:45	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		05/24/08 11:45	2037-26-5	

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QUALITY CONTROL DATA

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

QC Batch: MSV/3511 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9219646001, 9219646002, 9219646003, 9219646004

METHOD BLANK: 119694
Associated Lab Samples: 9219646001, 9219646002, 9219646003, 9219646004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	100	
Acetone	ug/L	ND	100	
Chloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	95	79-120	
4-Bromofluorobenzene (S)	%	100	87-109	
Dibromofluoromethane (S)	%	95	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 119695

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	51.8	104	79-125	
2-Butanone (MEK)	ug/L	100	105	105	50-134	
Acetone	ug/L	100	95.7J	96	50-146	
Chloromethane	ug/L	50	44.0	88	54-139	
1,2-Dichloroethane-d4 (S)	%			96	79-120	
4-Bromofluorobenzene (S)	%			100	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119696 119697

Parameter	Units	9220068004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane-d4 (S)	%						100	100	79-120			
4-Bromofluorobenzene (S)	%						97	99	87-109			
Dibromofluoromethane (S)	%						97	96	85-115			
Toluene-d8 (S)	%						100	99	70-120			

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QUALITY CONTROL DATA

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

QC Batch: MSV/3534 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9219646005, 9219646006

METHOD BLANK: 120168
Associated Lab Samples: 9219646005, 9219646006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	100	
Acetone	ug/L	ND	100	
Bromodichloromethane	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
1,2-Dichloroethane-d4 (S)	%	95	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	96	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 120169

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.8	102	79-125	
2-Butanone (MEK)	ug/L	100	102	102	50-134	
Acetone	ug/L	100	94.6J	95	50-146	
Bromodichloromethane	ug/L	50	52.9	106	81-125	
Chloromethane	ug/L	50	45.7	91	54-139	
1,2-Dichloroethane-d4 (S)	%			95	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			100	70-120	

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QUALIFIERS

Project: CRSWMA-SURFACE WATER
Pace Project No.: 9219646

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1175394

Section A Required Client Information:

Company: Joyce Engineering, Inc.
Address: 2311 W. Meadowview Rd Suite 101, Greensboro, NC 27410
Email To: jkerly@joyceengineering.com
Phone: 336-323-0092 Fax: 336-323-0093
Requested Due Date/TAT: 2 weeks after sampling

Section B Required Project Information:

Report To: Jeremey Kerly
Copy To:
Purchase Order No.: 618.01.20
Project Name: CRS WMA - Surface Water
Project Number: 618.01.20

Section C Invoice Information:

Attention: Jeremey Kerly
Company Name: Joyce Engineering, Inc.
Address:
Pace Quote Reference: 92032508.285
Pace Project Manager: Kevin Godwin
Pace Profile #: 2186-4

REGULATORY AGENCY: ☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

Matrix Codes: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	NC App I 8260 Acetone	NC App I 8260 2-Butanone	NC App I 8260 Chloromethane	NC App I 8260 1,1-Dichloroethane	Residual Chlorine (Y/N)	Pace Project No./Lab I.D. 92196416
1	SWPT-1	WT	G	—	—	5/14/08	14:30	22.5	3				X							X			N	92196416001
2	SWPT-2	"	"	—	—	5/14/08	14:50	22.9	3				X						X	X	X	X	N	002
3	Under Drain	"	"	—	—	5/14/08	15:10	22.4	3				X							X	X		N	003
4	Under Drain 2	"	"	—	—	5/14/08	15:25	22.4	3				X							X	X		N	004
5																								005
6																								006
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
→ Report Trip Blank & Field Blank	Carrie Mitchell / JEI	5/16/08	12:25	Pace	5/16/08	12:25				
from Long Term Regional Landfill		5-16-08	14:28	Everett Waters	5/16/08	14:28	2.5 yes	no	yes	
report on this report.										

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Carrie Mitchell / Robert Winfield
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 05/15/08

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

DATE: 5/14/08

ENGINEERING, INC.

SURFACE WATER MONITORING LOG

Project Name: CRSWMA **Project/Task No.:** 618.01.20

Surface Point ID: SWPT-1 **Sampler(s):** C. Mitchell/ R. Winfield

Location:

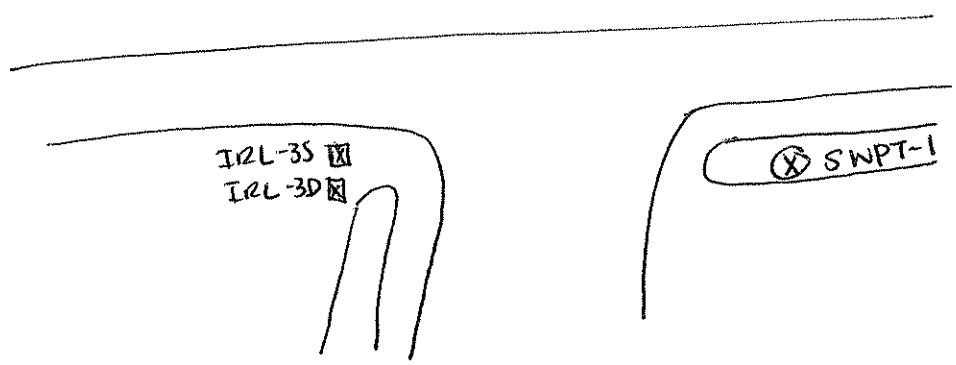
Field Parameters:

Time of Sampling:	14:30	
pH:	7.74	
Temperature :	23.5	(°C)
Conductivity :	2.89	(mS)
Turbidity :	43.2	(ntu)

Comments/Sample Description(weather conditions, odor, color, silt, etc.):

Sunny, 70's

Sketch of Sample Location (include flow direction, drainage pathways, etc.):



Signature: Carrie L Wood **Date:** 5/14/08

QA/QC Sign Off: [illegible] **Date:** 5/30/08

DATE: 5/14/08

ENGINEERING, INC.

SURFACE WATER MONITORING LOG

Project Name: CRSWMA **Project/Task No.:** 618.01.20

Surface Point ID: SWPT-2 **Sampler(s):** R. Winfield/ C. Mitchell

Location:

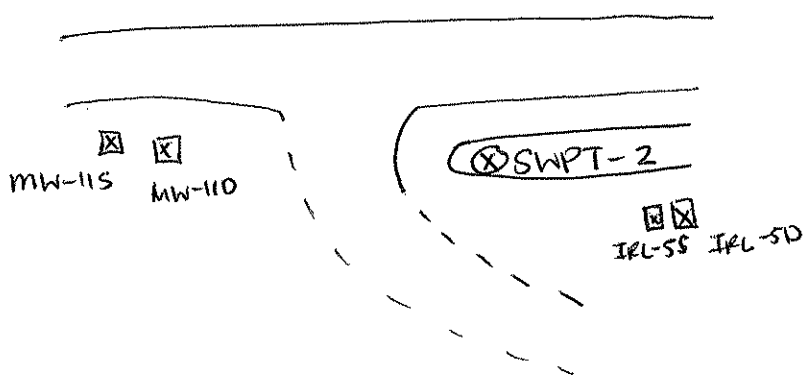
Field Parameters:

Time of Sampling:	14:50	
pH:	7.84	
Temperature :	28.9	(°C)
Conductivity :	1198	(µS)
Turbidity :	45.5	(ntu)

Comments/Sample Description(weather conditions, odor, color, silt, etc.):

Sunny 70's

Sketch of Sample Location (include flow direction, drainage pathways, etc.):



Signature: Cari Lucas **Date:** 5/14/08

QA/QC Sign Off: [illegible] **Date:** 5/30/08

DATE: 5/14/08

ENGINEERING, INC.

SURFACE WATER MONITORING LOG

Project Name: CRSWMA **Project/Task No.:** 618.01.20

Surface Point ID: Under Drain **Sampler(s):** R. Winfield/ C. Mitchell

Location:

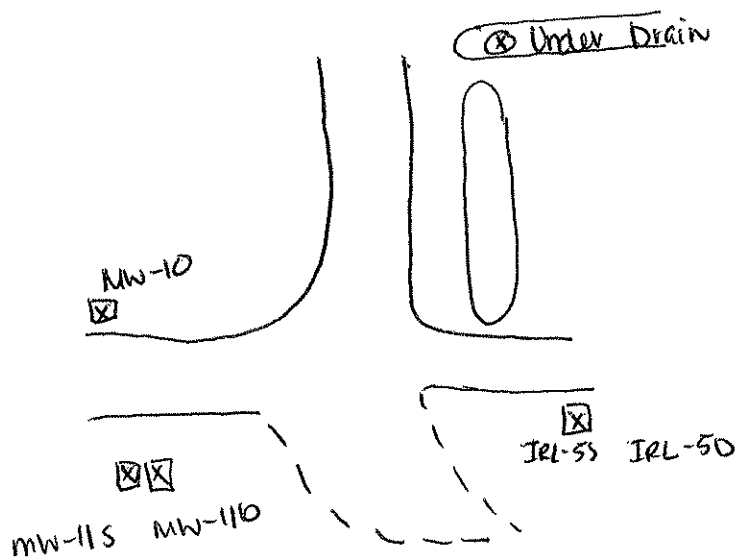
Field Parameters:

Time of Sampling:	15:10	
pH:	8.07	
Temperature :	22.6	**(°C)**
Conductivity :	1191	**(µS)**
Turbidity :	11.64	**(ntu)**

Comments/Sample Description(weather conditions, odor, color, silt, etc.):

Sunny 70's

Sketch of Sample Location (include flow direction, drainage pathways, etc.):



Signature: Carrie Lewis **Date:** 5/14/08

QA/QC Sign Off: [illegible] **Date:** 5/30/08

DATE: 5/14/08

ENGINEERING, INC.

SURFACE WATER MONITORING LOG

Project Name: CRSWMA **Project/Task No.:** 618.01.20

Surface Point ID: Under Drain #2 **Sampler(s):** R. Winfield/ C. Mitchell

Location:

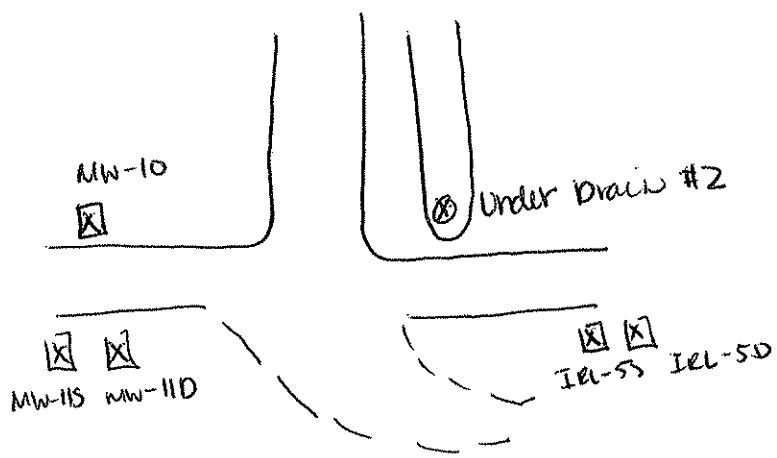
Field Parameters:

Time of Sampling:	15:25	
pH:	7.41	
Temperature :	22.6	(°C)
Conductivity :	1458	(µS)
Turbidity :	79.0	(ntu)

Comments/Sample Description(weather conditions, odor, color, silt, etc.):

Sunny 70's

Sketch of Sample Location (include flow direction, drainage pathways, etc.):



Signature: Carrie Nuttall **Date:** 5/14/08

QA/QC Sign Off: [illegible] **Date:** 5/30/08