Prepared for:

Wilkes County Department of Solid Waste
9219 Elkin Highway
Roaring River, North Carolina 28669

JEI Project Number 356.08, Task 34

SECOND SEMIANNUAL GROUNDWATER MONITORING REPORT OF 2008

ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA
PERMIT NO. 97-04

June 2009

Prepared by:

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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

E-mail: jkerly@joyceengineering.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Wilkes County - Roaring River Landfill	NC Highway 268 East Roaring River, NC 28669	97-04	.1600	December 30, 2008 March 12, 2009

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

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

Signature 6-4-09 Date

Affix NC Licensed/ Professional Geologist Seal

NORTH CAROLINA LICENSED SEAL 2097 GEOLOGIST JEREMEY JOHN KERLY

Revised 10/2006

Second Semiannual Groundwater Monitoring Report of 2008
Roaring River Landfill
Wilkes County, North Carolina

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1.0 INTRODUCTION

1.1 Site Information

The Wilkes County Roaring River Landfill is owned and operated by Wilkes County under Permit No. 97-04. The landfill property is located near the town of Roaring River, North Carolina. The site is located on a group of knolls rising over 150 feet above the floodplain of the Yadkin River. The property boundary and disposal area are indicated on an enlarged portion of the USGS 7 ½ minute topographic map for Ronda, North Carolina (Figure No. 1). The landfill facility boundary includes most of the area between the disposal cells and the Yadkin River.

The approximately 145-acre site was originally investigated for suitability as a solid waste management facility in 1989 by Westinghouse Environmental and Geotechnical Services, Inc. (Westinghouse). Additional site characterization work was performed at the site in 1990 and 1991 by Municipal Engineering Services, P.A., during preparation of the Construction Plan Application for the Phase 1 cell, in accordance with expected revisions to the North Carolina Solid Waste Management Rules (NCSWMR), in response to Subtitle D regulations. Further site characterization work was performed in 1994, as part of the Transition Plan for the facility.

Wilkes County submitted a Design Hydrogeologic Report in 1991 to North Carolina Department of Environment and Natural Resources (NCDENR) and the facility began accepting waste in the Subtitle D lined Phase 1 in 1993. This cell, which occupies approximately 11.7 acres of the facility, reached final capacity in 1999. A site investigation and Design Hydrogeologic Report for the 7.3 acre Phase 2 was completed in December 1998. The Phase 2 disposal area reached final capacity in July 2006. A Design Hydrogeologic Report for the 6.6 acre Phase 3 was completed in May 2004 and construction was completed January 2006. Phase 4 of the waste disposal unit will be a vertical expansion of the Phase 3 area, as agreed upon in a December 10, 2002, site meeting with Sherri Coghill of the NCDENR. A leachate lagoon is located southwest of the approximately 12-acre lined area.

1.2 Site Geology

The site is located at the boundary of the Inner Piedmont Belt and Blue Ridge Belt in the Brevard Fault Zone. In the vicinity of the site, the Brevard Zone is a five-mile wide, east-northeast trending fault zone with a complex structural and metamorphic history. Finely interlayered gneiss and schist within the zone are amphibolite facies, with peak metamorphism as high as the kyanite zone for pelitic assemblages. Typically, the more highly-strained and faulted parts of the zone have experienced retrograde metamorphism to greenschist facies. Rocks in the Brevard Zone have undergone various degrees of both ductile and brittle deformation. Espenshade and others mapped four continuous faults that either bound the zone or separate rock units consistently over long distances. These faults contain both mylonitic and cataclastic rock, and exhibit the greatest degree of retrograde metamorphism. Two of these faults cross on or near the site. Bedrock at the site and in the Brevard Zone generally is more highly fractured than rock typical of most Piedmont and Mountain sites.

1.3 Regulatory Status

The Roaring River Landfill is currently in the detection monitoring program. The facility currently monitors groundwater for the NC Appendix I constituents and leachate for parameters listed under Section 2.2 Leachate Monitoring Program. Statistical analyses of the laboratory data has been prepared in accordance with the required compliance demonstration Rule .1632(g), (h), and (i) of the North Carolina Division of Waste Management, Solid Waste Section.

2.0 FACILITY MONITORING PROGRAM

2.1 Groundwater Monitoring Program

Eleven active groundwater monitoring wells comprise the monitoring network at the Roaring River Landfill. The current compliance network consists of the following monitoring wells: MW-2R (facility background well), MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12S, MW-12D, MW-17, and MW-18.

Monitoring Well	Date Installed	Classification	Monitoring Program	Total Depth from TOC (ft)	Lithology of Screened Interval
MW-2	1/03/91	Abandoned	-	81.50	Saprolite
MW-2R	4/08/02	Background	Detection	116.00	Bedrock
MW-5	8/12/93	Compliance	Detection	38.11	Saprolite
MW-6	8/13/93	Compliance	Detection	37.60	Saprolite
MW-7	8/11/93	Compliance	Detection	41.77	Saprolite
MW-8	8/11/93	Compliance	Detection	58.50	Bedrock
MW-9	8/12/93	Compliance	Detection	37.57	Saprolite
MW-10	9/02/98	Compliance	Detection	76.75	Bedrock
MW-11S	9/03/98	Abandoned	-	42.00	Bedrock
MW-11D	9/03/98	Abandoned	-	100.00	Bedrock
MW-12S	3/07/00	Compliance	Detection	104.00	Partially Weathered Rock
MW-12D	3/07/00	Compliance	Detection	134.00	Partially Weathered Rock
MW-17	8/26/03	Background	Detection	24.63	Saprolite
MW-18	8/26/03	Background	Detection	46.85	Saprolite

Monitoring well MW-2R is the upgradient background monitoring well for the facility. This well replaced former background monitoring well MW-2 which had been dry for several events, as requested in correspondence from the Section, dated December 13, 2001. Well MW-2R was sampled for the first time on April 23, 2002, just after the first semiannual event. Monitoring wells MW-5, -6, -7, -8, -9, and -10 are monitored to detect potential releases from Cell 1. Monitoring wells MW-12S and -12D were installed in March 2000 to be incorporated into the monitoring network to effectively monitor Cell 2, while monitoring wells MW-11S and MW-11D were abandoned for Phase 2 construction. Wells MW-17 and MW-18 were installed during the Design Hydrogeologic Investigation for Phases 3 and 4 and were incorporated into the facility network after the June 2006 approval of the revised Groundwater Monitoring Plan.

2.2 Leachate Monitoring Program

One leachate monitoring point is sampled on a semiannual basis at the Roaring River Landfill and the laboratory results are included. The following constituents are required for laboratory leachate analysis:

- North Carolina Appendix I Metals (plus Manganese, Molybdenum, and Mercury)
- North Carolina Appendix I 8260 Volatiles
- Biochemical Oxygen Demand
- Oil & Grease
- Cyanide
- Total Suspended Solids

3.0 SECOND SEMIANNUAL SAMPLING EVENT OF 2008

3.1 Field Work

On December 30, 2008, Research and Analytical Laboratories, Inc. (RAL) personnel visited Roaring River Landfill to purge and sample monitoring wells MW-2R, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12S, MW-12D, MW-17 and MW-18. Monitoring wells MW-5, MW-6, MW-7, MW-8, MW-10 and MW-12S were either dry, the bailer was unable to reach the water column, or there was not enough groundwater to purge and sample. RAL performed a resampling event on March 12, 2009 for monitoring well MW-18.

Monitoring wells were purged and sampled using bailers. Measurements of temperature, pH, and specific conductivity were recorded in a field log. Turbidity information was based on visual observation. Prior to sampling, laboratory-supplied containers were prepared with the following information:

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

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. A field log is provided in Appendix 2.

Leachate samples were collected from the leachate lagoon. Prepared sampling containers were filled, placed in a cooler, and chilled on ice. At the time of sampling, leachate was measured for temperature, pH, and specific conductivity.

3.2 Laboratory Analysis and JEI Quality Control

The December 2008 groundwater and leachate samples were analyzed by Research and Analytical Laboratories, Inc. of Kernersville, North Carolina under chain-of-custody control for analysis. As presented earlier, the groundwater was analyzed for NC Appendix I constituents. The leachate was analyzed for NC Appendix I constituents, as well as mercury, manganese, molybdenum, Biochemical Oxygen Demand (BOD), oil & grease, cyanide, and Total Suspend Solids (TSS). The sampled were received by the laboratory on December 31, 2008, in good condition, properly preserved, and within analysis hold times.

In addition to samples collected for compliance monitoring at the Roaring River Landfill, a Field Blank was collected by RAL personnel as part of the December 2008 sampling event. Also, a Trip Blank that was prepared by the laboratory accompanied the volatile sampling containers to and from the laboratory. The Field and Trip Blanks was analyzed for the NC Appendix I metals and list of volatile organic compounds.

Upon receipt of the laboratory data package, 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 Matrix Spike, Matrix Spike Duplicate, and Laboratory Control Samples,
- Blank qualified data (B-flags),
- Detections above the NC 2L Groundwater Standards or Groundwater Water Protection Standards (GWPS); and
- Detections that are above historical levels.

Lead and vanadium detected in monitoring well MW-18 were at concentrations above the NC 2L/GWPS. Therefore, a resampling event was requested.

4.0 HYDROGEOLOGICAL CONDITIONS

Surface water at the site flows to the south-southwest in three site drainages to the Yadkin River, which border the southeastern facility boundary. Regional groundwater flow in the vicinity of the facility is also generally to the south-southwest and discharges to the Yadkin River. Groundwater beneath the site flows in two interconnected aquifers, a surficial aquifer and a fractured bedrock aquifer. Most of the groundwater flowing in these aquifers discharges either to the alluvial sediment of the Yadkin River floodplain, or to the lowermost reaches of the three site surface drainages before reaching the river.

Depth to groundwater was measured in the compliance monitoring wells at the site prior to sampling. The groundwater elevations were calculated relative to the surveyed measuring point (top of casing) for each monitoring well. The historical groundwater elevations are summarized

in Table 1. The groundwater elevation contours shown on Drawing No. 1 are based on data from the December 2008 sampling event.

Estimated horizontal groundwater gradients from the December 2008 groundwater levels are presented in Table 2. The average horizontal gradient is approximately 0.073 ft/ft.

Hydraulic conductivities (K) were based on slug test values from the *Design Hydrogeologic Report* submitted in April 2004. An effective porosity of 16% was used to estimate average linear groundwater flow velocities. Linear groundwater flow velocities for wells screened in saprolite were computed using the following modified Darcy equation:

$$V = Ki/n_e$$

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

Based on calculations from the most recent sampling event, the average estimated linear groundwater flow velocity for the site is approximately 0.25 ft/day (Table 2). This falls within the range of historical estimates for groundwater flow velocities at this site. The linear velocity equation and resulting rates make the simplified assumptions of a homogeneous and isotropic aquifer. This equation can over-estimate velocities when applied to heterogeneous and/or anisotropic conditions such as are believed to exist at this site. The regolith and fractured bedrock common in Piedmont terrain are characteristically heterogeneous. Site boring logs record that regolith sampled at the site commonly exhibits relict foliation. These structures can result in locally anisotropic groundwater flow directions. Although the regolith and bedrock are hydraulically connected, the effective porosity generally decreases with depth into the underlying fractured bedrock.

5.0 DATA ANALYSIS AND STATISTICAL RESULTS

Results from the December 2008 sampling event were received from RAL and are found in Appendix 2. There were no statistically significant increases of organic or inorganic constituents detected during the sampling events.

Statistical comparisons of baseline monitoring data to compliance data are part of the required compliance demonstration (Rule .1632(g), (h), and (i)). Background data and statistical methods used to evaluate the data from the Subtitle D Landfill are discussed below.

5.1 Statistical Methods

The data were evaluated using 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 the *Statistical Analyses* section, and are discussed in Section 5.0 of this report. Detailed results of each statistical analysis are also presented in the *Statistical Analyses* section. To clearly document these tests, individual tests are presented on each page. Background data are

determined by tests for normality, outliers, Aitchison's adjustment, and/or parametric tolerance interval, as appropriate based on the data. For each set of data, all 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 limit of detection (DL) and limit of quantitation (QL) are known and background data are censored as follows. When less than or equal to 15% or greater than 90% of the background data values are less than the DL, any data reported less than the DL will be treated as one-half the DL.

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-Wilk statistic (W). 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-Wilk 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 DL and/or QL 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 DL and/or QL 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 DL 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 DL 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 December 2008 statistical background calculations are provided below in the following table. Detailed results of statistical analyses can be found in Appendix 1. Monitoring well MW-2R is designated as the background well for the facility. All available data from previous background well MW-2 and data from replacement well MW-2R have been included in the background data pool for the facility. Background data has also been included from MW-17 and MW-18 into the data pool beginning with the April 2004 sampling event and ending with the October 2005 sampling event.

Constituent	Data Distribution	Statistical Method used to Establish Background	Background Concentration	Noted Increased
Barium	N/A	Non-Parametric Prediction Interval	850	None
Beryllium	N/A	Non-Parametric Prediction Interval	28	None
Chromium	N/A	Non-Parametric Prediction Interval	406	None
Cobalt	N/A	Non-Parametric Prediction Interval	174	None
Copper	N/A	Non-Parametric Prediction Interval	282	None
Lead	N/A	Non-Parametric Prediction Interval	106	None
Vanadium	N/A	Non-Parametric Prediction Interval	205	None
Zinc	N/A	Non-Parametric Prediction Interval	995	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**. There were no statistically significant increases above background levels in any downgradient monitoring wells.

5.3 Analytical Results for Groundwater and Comparison to Standards

The following inorganic constituents were detected in groundwater during the December 2008 sampling and March 2009 resampling events. 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. Detections above the NC 2L Groundwater Standards (NC 2L) or Groundwater Protection Standards (GWPS) are highlighted.

Constituent	NC 2L /GWPS	Background	Downgradient				Blanks
		MW-2R	MW-9	MW-12D	MW-17	MW-18	
Barium	2,000	12.9 J	430 (448)	11.2 J	86.5 J	601	1.2 J
Beryllium	4	0.6 J	0.4 J (1.6)	ND	0.3 J	3.0	ND
Cadmium	1.75	1.7 B	1.7 B (1.3 B)	1.2 B	0.5 B	0.3 B	0.6 J
Chromium	50	2.3 J	3.6 J (5.4 J)	1.5 J	2.3 J	14.0	ND
Cobalt	70	2.4 J	4.3 J (7.1 J)	ND	2.0 J	16.8	ND
Copper	1,000	5.9 J	3.3 J (3.1 J)	5.2 J	3.2 J	29.9	ND
Lead	15	5.2 J	4.4 J (6.0 J)	3.8 J	ND	26.8	ND
Lead Resample	15	NS	NS	NS	NS	20.8 B	5.2 J
Nickel	100	2.2 B	5.3 J (7.6 J)	2.3 B	2.0 B	16.9 J	0.7 J
Thallium	0.28	ND	5.0 B (4.5 B)	ND	ND	ND	2.4 J
Vanadium	3.5	4.7 J	7.0 J (3.5 J)	9.6 J	4.9 J	32.1	ND
Vanadium Resample	3.5	NS	NS	NS	NS	20.4 J	ND
Zinc	1,050	ND	94.6 (82.6)	19.6	25.8	163	ND

1. ND = Not detected above laboratory detection limits.
2. NS = Monitoring well not sampled.
3. Parentheses indicate duplicate data.

Lead was detected above the NC 2L and vanadium was detected above the GWPS in monitoring well MW-18. The March 2009 resampling event did not confirm these detections. In general, the inorganic results are consistent with historical data. Historical inorganic groundwater data can be found in Table 3 and field parameters can be found in Table 4. 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.

The following organic constituents were detected during the December 2008 sampling event. All concentrations are reported in micrograms per liter (µg/L). Concentrations with a "J" are considered to be to be estimated. Concentrations with a "B" are considered to be attributed to lab or field contamination.

Constituent	NC 2L /GWPS	Background	Downgradient				Blanks
		MW-2R	MW-9	MW-12D	MW-17	MW-18	
Carbon Disulfide	700	ND	2.0 J (0.5 J)	1.0 J	0.7 J	ND	ND
Toluene	1000	1.0 B	1.0 B (0.6 B)	1.1 B	1.0 B	1.0 B	1.1 B

*ND = Not detected above laboratory detection limits.

There were no detections above the NC 2L or GWPS for organic compounds in any compliance monitoring wells. In general, the organic results are consistent with historical data. Historical organic groundwater data can be found in Table 3 and field parameters can be found in Table 4. 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.

5.4 Analytical Results for Leachate

The following inorganic and organic constituents were detected in leachate during the December 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
Barium	80.0 J	1.2 J
Chromium	7.4 J	ND
Cobalt	20.4	ND
Copper	16.2	ND
Lead	3.0 J	ND
Manganese	628	NA
Nickel	41.3 J	0.7 J
Vanadium	9.8 J	ND
Zinc	44.5	ND
Benzene	0.3 J	ND
Toluene	1.3 B	1.1 B
Biochemical Oxygen Demand	27800	NA
Total Suspended Solids	84000	NA

1. ND = Not detected above laboratory detection limits.
2. NA = Not available.

The analytical results from the December 2008 leachate sampling event at the Roaring River Landfill are summarized in the Table 5. Leachate field parameters can be found in Table 6. 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.

6.0 CONCLUSION

Two inorganic constituents (lead and vanadium) were detected above NC 2L and GWPS during the December 2008 sampling event at the Roaring River Landfill. The March 2009 resampling event did <u>not</u> confirm the detections. There were no statistically significant increases of quantified detections in downgradient monitoring wells. Based on analytical results from the December 2008 sampling event, Roaring River Landfill will remain in Detection Monitoring. The next scheduled semiannual sampling event is scheduled for the second quarter 2009.

7.0 REFERENCES

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TABLE 1

SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS

Location	Background		Downgradient									
	MW-2	MW-2R	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-12S	MW-12D	MW-17	MW-18
TOC Elevation	1115.00	1118.10	996.15	981.01	984.08	984.46	971.89	1024.10	1052.79	1052.89	986.68	1026.49
Well Depth	81.50	116.00	38.11	37.60	41.77	58.50	37.57	76.75	104.00	134.00	24.63	46.85
Oct-94	1042.13	NI	966.74	949.27	947.37	948.60	943.17	NI	NI	NI	NI	NI
Apr-95	1042.19	NI	966.73	949.01	946.65	948.07	943.08	NI	NI	NI	NI	NI
Oct-95	1041.70	NI	967.05	948.73	946.67	947.85	943.24	NI	NI	NI	NI	NI
Apr-96	1043.10	NI	968.15	950.20	947.21	948.46	943.34	NI	NI	NI	NI	NI
Nov-96	1040.56	NI	967.40	949.28	946.75	947.96	943.36	NI	NI	NI	NI	NI
Mar-97	1041.55	NI	968.14	951.06	947.61	948.99	944.23	NI	NI	NI	NI	NI
Sep-97	1039.38	NI	966.55	948.88	947.07	951.62	943.81	NI	NI	NI	NI	NI
Mar-98	1037.72	NI	969.55	949.61	946.98	948.34	944.19	NI	NI	NI	NI	NI
Sep-98	1042.12	NI	967.92	950.09	947.36	948.57	943.43	956.95	NI	NI	NI	NI
Oct-98	1040.53	NI	967.13	948.76	946.77	947.98	943.37	956.08	NI	NI	NI	NI
Nov-98	1039.10	NI	966.53	947.76	946.33	947.68	943.64	955.13	NI	NI	NI	NI
Dec-98	1038.41	NI	966.20	947.24	946.08	947.35	942.29	954.56	NI	NI	NI	NI
Feb-99	1036.80	NI	968.43	947.79	946.31	947.61	943.77	953.18	NI	NI	NI	NI
Apr-99	Dry	NI	967.89	948.44	946.36	947.61	943.34	952.93	NI	NI	NI	NI
Sep-99	Dry	NI	965.54	946.43	945.33	946.50	942.86	NA	NI	NI	NI	NI
Apr-00	Dry	NI	965.71	945.72	945.34	947.85	943.31	951.29	958.39	958.38	NI	NI
Sep-00	Dry	NI	964.15	945.49	945.20	946.52	943.43	949.79	956.37	956.58	NI	NI
Mar-01	Dry	NI	964.30	944.87	944.86	946.21	943.49	948.39	954.38	954.56	NI	NI
Oct-01	Dry	NI	960.32	944.79	944.15	945.46	943.49	947.56	954.05	953.23	NI	NI
Apr-02	Dry	1018.99	961.64	946.59	944.28	945.71	943.38	947.40	952.78	949.37	NI	NI
Nov-02	AB	1032.21	961.81	946.92	943.07	946.25	943.90	947.40	949.98	946.52	NI	NI
May-03	AB	1037.34	964.50	951.47	946.87	948.19	944.07	947.43	951.89	944.49	NI	NI
Nov-03	AB	1041.84	962.60	950.27	946.77	948.05	943.42	948.66	955.89	954.78	NS	NS
Apr-04	AB	1041.41	963.52	948.59	946.70	947.51	943.88	948.54	954.92	954.11	967.57	995.90
Oct-04	AB	1041.53	962.11	947.33	945.43	945.76	943.68	950.62	954.06	954.41	967.30	995.49
May-05	AB	1041.82	963.19	949.53	946.57	946.85	943.96	948.89	954.14	954.73	967.46	987.81
Oct-05	AB	1042.35	960.87	945.83	945.05	945.27	943.51	948.62	954.36	953.60	967.19	993.87
29-Jun-06	AB	1030.65	958.18	943.61	944.08	944.52	946.31	948.21	952.45	952.55	963.04	991.49
07-Dec-06	AB	1039.79	959.85	Dry	944.43	944.76	943.76	Dry	951.34	951.34	Dry	992.24
28-Jun-07	AB	1040.52	959.61	Dry	944.40	944.82	942.93	947.61	951.35	951.38	966.53	979.73
19-Dec-07	AB	1038.71	958.68	Dry	942.46	942.74	941.34	947.61	949.72	930.89	966.68	979.73
28-Apr-08	AB	1067.25	959.42	Dry	942.67	943.02	941.66	947.42	949.95	949.97	966.79	993.45
30-Dec-08	AB	1037.69	958.27	Dry	942.39	NS	942.20	947.41	950.11	944.41	967.03	990.66

Notes:

1. Dry = Monitoring well was considered to be dry and no water level measured.
2. AB = Monitoring well was abandoned.
3. NI = Monitoring well was not installed.
4. NS = Monitoring well was not sampled.
5. NA = Not available.

TABLE 2

ESTIMATED HYDRAULIC GRADIENTS AND AVERAGE LINEAR VELOCITIES

GRADIENT CALCULATION SEGMENT	FLOW LINE LENGTH (feet)	FLOW DIRECTION	December 2008				
			GROUNDWATER ELEVATION (feet)	HORIZONTAL GRADIENT i (ft/ft)	HYDRAULIC CONDUCTIVITY K (ft/day)	EFFECTIVE POROSITY n	LINEAR VELOCITY V (ft/day)
i_1	845	W-SW	1030 970	0.071	5.5E-01	0.16	0.25
i_2	1132	S-SW	1020 950	0.062	5.5E-01	0.16	0.21
i_3	939	S-SE	1030 950	0.085	5.5E-01	0.16	0.29
			Average	0.073		Average	0.25

Notes:

1. Linear flow velocities in plain type = Ki/n_e.
2. Effective porosity is based on average specific yields calculated using the Johnson (1967) textural classification triangle from the Design Hydrogeologic Report and Groundwater Monitoring Plan prepared by Joyce Engineering, Inc. in April 2004.
3. Hydraulic conductivity is based on a geomean of individual well slug tests performed for wells at the site.
4. Gradient calculation segments were obtained from Drawing No. 1.

TABLE 3

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS

Constituent	Date	DL	RL	Concentration in (µg/L) Background MW-2	MW-2R	Downgradient MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-12S	MW-12D	MW-17	MW-18	Blanks
Antimony	28-Jun-07	1.2	6.0	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	2.4 B (2.9 B)	ND	Dry	4.5
GWPS = 1.4 µg/L (10/23/07)	19-Dec-07	1.2	6.0	AB	2.0 J	Dry	Dry	Dry	ND	ND (1.2 J)	Dry	Dry	3.1 J	ND	Dry	ND
	28-Apr-08	1.2	6.0	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	1.3 J	ND	ND	ND
	30-Dec-08	1.2	6.0	AB	ND	Dry	Dry	Dry	NS	ND (ND)	Dry	NS	ND	ND	ND	ND
Barium	Apr-94	NR	250	398	NI	ND	444	3480	ND	1600	NI	NI	NI	NI	NI	NA
	Oct-94	NR	500	850	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-95	NR	500	730	NI	ND	ND	701	ND	516	NI	NI	NI	NI	NI	NA
	Oct-95	NR	500	ND	NI	ND	ND	1630	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-96	NR	500	ND	NI	ND	ND	1650	ND	ND	NI	NI	NI	NI	NI	NA
	Nov-96	NR	500	ND	NI	ND	ND	1660	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-97	NR	500	ND	NI	ND	ND	1440	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-97	NR	500	ND	NI	ND	ND	745	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	500	508	NI	ND	ND	937	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	500	ND	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	500	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	500	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	500	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-00	NR	500	NS	NI	ND	665	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Mar-01	NR	500	NS	NI	ND	ND	ND	ND	ND	NS	ND (ND)	ND	NI	NI	ND
	Jun-01	NR	500	NS	NI	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	500	NS	NI	ND	ND	526	ND	ND	NS	ND	ND	NI	NI	ND
	Apr-02	NR	500	AB	ND	ND	ND	554	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	500	AB	ND	ND	ND	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	500	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Nov-03	NR	500	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	500	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	500	AB	ND	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	500	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	500	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	500	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	500	AB	ND	Dry	Dry	563	ND	ND	NS	Dry	ND	ND	649	ND
	07-Dec-06	NR	100	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	1.1	100	AB	11.2 B	139	Dry	560	9.8 B	58.4 J	Dry	Dry	12.3 B (16.5 B)	118	Dry	5.1
NC 2L = 2,000 µg/L (10/23/07)	19-Dec-07	1.1	100	AB	7.6 B	Dry	Dry	Dry	9.8 B	60.5 (60.3 B) B	Dry	Dry	3.0 B	104 B	Dry	24.9 J
	28-Apr-08	1.1	100	AB	11.7 B	221	Dry	Dry	6.6 (13.5 B) B	47.5 B	Dry	Dry	7.6 B	90.1 B	204	53.2 J
	30-Dec-08	1.1	100	AB	12.9 J	Dry	Dry	Dry	NS	430 (448)	Dry	NS	11.2 J	86.5 J	601	1.2 J
Beryllium	Apr-94	NR	5	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	AB
	Oct-94	NR	2	28	NI	ND	ND	6	ND	4	NI	NI	NI	NI	NI	AB
	Apr-95	NR	2	6	NI	3	2	2	ND	6	NI	NI	NI	NI	NI	AB
	Oct-95	NR	2	2	NI	4	2	4	ND	2	NI	NI	NI	NI	NI	AB
	Apr-96	NR	2	ND	NI	5	3	5	3	3	NI	NI	NI	NI	NI	AB
	Nov-96	NR	2	4	NI	4	ND	4	ND	3	NI	NI	NI	NI	NI	ND
	Mar-97	NR	2	ND	NI	3	ND	3	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-97	NR	2	13	NI	4	ND	4	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	2	8	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	2	4	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	2	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	2	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	2	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-00	NR	2	NS	NI	ND	ND	ND	ND	ND	ND	ND	7 (ND)	NI	NI	ND
	Mar-01	NR	2	NS	NI	ND	NS	ND	ND	ND	NS	ND (ND)	ND	NI	NI	ND
	Oct-01	NR	2	NS	NI	ND	NS	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Apr-02	NR	2	AB	ND	ND	NS	ND	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	2	AB	ND	ND	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	2	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Nov-03	NR	2	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	2	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	2	AB	ND	ND	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	2	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	2	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	2	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	2	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	5	ND
	07-Dec-06	NR	1	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.2	1.0	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	ND	Dry	ND
GWPS = 4 µg/L (10/23/07)	19-Dec-07	0.2	1.0	AB	ND	Dry	Dry	Dry	ND	0.3 (ND) J	Dry	Dry	ND	ND	Dry	ND
	28-Apr-08	0.2	1.0	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	ND	0.3 J	1.5	ND
	30-Dec-08	0.2	1.0	AB	0.6 J	Dry	Dry	Dry	NS	0.4 (1.6) J	Dry	NS	ND	0.3 J	3.0	ND
Cadmium	Apr-94	NR	2	2	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Oct-94	NR	1	2	NI	ND	1	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-95	NR	1	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Oct-95	NR	1	2	NI	1	1	ND	ND	1	NI	NI	NI	NI	NI	NA
	Apr-96	NR	1	12	NI	1	2	4	ND	3	NI	NI	NI	NI	NI	NA
	Nov-96	NR	1	17	NI	3	2	9	ND	7	NI	NI	NI	NI	NI	ND
	Mar-97	NR	1	18	NI	2	8	12	ND	5	NI	NI	NI	NI	NI	ND
	Sep-97	NR	1	13	NI	12	ND	3	1	1	NI	NI	NI	NI	NI	ND
	Mar-98	NR	1	2	NI	ND	ND	ND	3	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	1	2	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	1	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	1	NS	NI	3.7	ND	ND	ND	ND	NS	NS	NS	NI	NI	ND
	Apr-00	NR	1	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-00	NR	1	NS	NI	ND	2	ND	ND	3	2	4	4 (ND)	NI	NI	ND
	Mar-01	NR	1	NS	NI	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Oct-01	NR	1	NS	NI	3	ND	2	ND	2	NS	1	1	NI	NI	ND
	Apr-02	NR	1	AB	2	ND	ND	ND	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	1	AB	ND	ND	ND	NS	ND	ND	NS	NS	3	NI	NI	ND
	May-03	NR	1	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Nov-03	NR	1	AB	ND	ND	ND	ND	ND	ND	NS	ND	24	NS	NS	ND
	Jan-04	NR	1	AB	NS	NS	NS	NS	NS	NS	NS	NS	ND	NS	NS	ND
	Apr-04	NR	1	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	1	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	1	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	1	AB	1	ND	ND	ND	ND	ND	NS	ND	1	ND	ND	ND
	Oct-05	NR	1	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	1	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	6	ND
	07-Dec-06	NR	1	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.2	1.0	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND (0.3 J)	ND	Dry	ND
NC 2L = 1.75 µg/L (10/23/07)	19-Dec-07	0.2	1.0	AB	0.2 J	Dry	Dry	Dry	1.4	ND (1.3)	Dry	Dry	1.2	0.6 J	Dry	ND
	28-Apr-08	0.2	1.0	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	0.5 J	ND	0.2 J	ND
	30-Dec-08	0.2	1.0	AB	1.7 B	Dry	Dry	Dry	NS	1.7 (1.3 B) B	Dry	NS	1.2 B	0.5 B	0.3 B	0.6 J

TABLE 3

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS

Constituent	Date	DL	RL	Background: MW-2	Background: MW-2R	Downgradient: MW-5	Downgradient: MW-6	Downgradient: MW-7	Downgradient: MW-8	Downgradient: MW-9	Downgradient: MW-10	Downgradient: MW-12S	Downgradient: MW-12D	Downgradient: MW-17	Downgradient: MW-18	Blanks
		Concentration in (µg/L)														
Chromium	Apr-94	NR	20	48	NI	ND	ND	ND	ND	57	NI	NI	NI	NI	NI	NA
	Oct-94	NR	10	406	NI	ND	ND	25	ND	26	NI	NI	NI	NI	NI	NA
	Apr-95	NR	10	248	NI	14	10	18	ND	64	NI	NI	NI	NI	NI	NA
	Oct-95	NR	10	10	NI	22	141	34	ND	34	NI	NI	NI	NI	NI	NA
	Apr-96	NR	10	160	NI	20	23	32	ND	32	NI	NI	NI	NI	NI	NA
	Nov-96	NR	10	175	NI	27	17	40	ND	46	NI	NI	NI	NI	NI	ND
	Mar-97	NR	10	116	NI	10	46	35	11	23	NI	NI	NI	NI	NI	ND
	Sep-97	NR	10	127	NI	37	ND	14	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	10	40	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	10	42	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	10	NS	NI	ND	ND	ND	ND	11	NS	NI	NI	NI	NI	ND
	Sep-99	NR	10	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	10	NS	NI	ND	14	ND	ND	ND	14	23	32 (58)	NI	NI	ND
	Sep-00	NR	10	NS	NI	ND	15	ND	ND	11	13	19	32 (26)	NI	NI	ND
	Jun-01	NR	10	NS	NI	NS	NS	NS	NS	NS	NS	NS	15	NI	NI	NA
	Oct-01	NR	10	NS	NI	ND	NS	ND	ND	ND	NS	16	42	NI	NI	ND
	Apr-02	NR	10	AB	ND	ND	NS	10	ND	21	NS	NS	14 (14)	NI	NI	ND
	Nov-02	NR	10	AB	ND	ND	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	10	AB	ND	13	17	ND	ND	ND	NS	34	ND	NI	NI	ND
	Nov-03	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	10	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	10	AB	ND	ND	ND	ND	ND	ND	12	ND	ND	ND	ND	ND
	May-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	10	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	23	ND
	07-Dec-06	NR	10	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.70	10.0	AB	1.1 B	2.9 B	Dry	2.7 B	2.9 B	1.3 B	Dry	Dry	3.0 B (3.4 B)	5.0 B	Dry	5.2
NC 2L = 50 µg/L (10/23/07)	19-Dec-07	0.7	10.0	AB	ND	Dry	Dry	Dry	ND	1.6 (1.8 J) J	Dry	Dry	0.8 J	2.2 J	Dry	ND
	28-Apr-08	0.7	10.0	AB	ND	14	Dry	Dry	ND (ND)	1.0 B	Dry	Dry	1.4 B	2.6 B	7.0 B	2.0 J
	30-Dec-08	0.7	10.0	AB	2.3 J	Dry	Dry	Dry	NS	3.6 (5.4 J) J	Dry	NS	1.5 J	2.3 J	14.0	ND
Cobalt	Apr-94	NR	50	68	NI	ND	ND	ND	ND	220	NI	NI	NI	NI	NI	NA
	Oct-94	NR	10	174	NI	ND	ND	ND	ND	32	NI	NI	NI	NI	NI	NA
	Apr-95	NR	10	148	NI	ND	ND	ND	ND	78	NI	NI	NI	NI	NI	NA
	Oct-95	NR	10	ND	NI	20	74	21	ND	53	NI	NI	NI	NI	NI	NA
	Apr-96	NR	10	78	NI	27	14	20	ND	48	NI	NI	NI	NI	NI	NA
	Nov-96	NR	10	93	NI	23	11	23	ND	67	NI	NI	NI	NI	NI	ND
	Mar-97	NR	10	60	NI	ND	24	23	ND	26	NI	NI	NI	NI	NI	ND
	Sep-97	NR	10	77	NI	24	ND	ND	ND	10	NI	NI	NI	NI	NI	ND
	Mar-98	NR	10	66	NI	11	ND	11	ND	14	NI	NI	NI	NI	NI	ND
	Sep-98	NR	10	57	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	10	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	10	NS	NI	ND	ND	ND	ND	ND	NS	NS	NS	NI	NI	ND
	Apr-00	NR	10	NS	NI	23	14	ND	ND	16	16	61	12 (21)	NI	NI	ND
	Sep-00	NR	10	NS	NI	21	15	ND	ND	17	12	57	ND (ND)	NI	NI	ND
	Mar-01	NR	10	NS	NI	14	NS	ND	ND	11	NS	34 (47)	ND	NI	NI	ND
	Jun-01	NR	10	NS	NI	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	10	NS	NI	ND	NS	ND	ND	ND	NS	49	ND	NI	NI	ND
	Apr-02	NR	10	AB	ND	ND	NS	ND	ND	12	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	10	AB	ND	13	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	10	AB	13	15	16	ND	ND	10	NS	68	ND	NI	NI	ND
	Nov-03	NR	10	AB	ND	ND	17	ND	ND	ND	NS	20	ND	NS	NS	ND
	Apr-04	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	10	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	10	AB	ND	ND	ND	ND	ND	ND	10	ND	ND	ND	ND	ND
	May-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	10	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	18	ND
	07-Dec-06	NR	10	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.7	10.0	AB	ND	20.1	Dry	5.0 J	ND	1.3 J	Dry	Dry	1.0 J (1.8 J)	2.7 J	Dry	ND
GWPS = 70 µg/L (10/23/07)	19-Dec-07	0.7	10.0	AB	ND	Dry	Dry	Dry	ND	2.8 (2.8 J) J	Dry	Dry	ND	1.3 J	Dry	ND
	28-Apr-08	0.7	10.0	AB	1.0 J	28.9	Dry	Dry	0.9 (ND) J	1.9 J	Dry	Dry	ND	1.6 J	8.3 J	ND
	30-Dec-08	0.7	10.0	AB	2.4 J	Dry	Dry	Dry	NS	4.3 (7.1 J) J	Dry	NS	ND	2.0 J	16.8	ND
Copper	Apr-94	NR	10	85	NI	ND	28	31	ND	80	NI	NI	NI	NI	NI	NA
	Oct-94	NR	200	282	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-95	NR	200	208	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Oct-95	NR	200	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-96	NR	200	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Nov-96	NR	200	225	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-97	NR	200	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-97	NR	200	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	200	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	200	ND	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	200	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	200	NS	NI	ND	ND	ND	ND	ND	NS	NS	NS	NI	NI	ND
	Apr-00	NR	200	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND (ND)	NI	NI	ND
	Sep-00	NR	200	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Mar-01	NR	200	NS	NI	ND	NS	ND	ND	ND	NS	ND (ND)	ND	NI	NI	ND
	Jun-01	NR	200	NS	NI	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	200	NS	NI	ND	NS	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Apr-02	NR	200	AB	ND	ND	NS	ND	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	200	AB	ND	ND	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	200	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Nov-03	NR	200	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	200	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	200	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	200	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	200	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	200	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	200	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	ND	ND
	07-Dec-06	NR	10	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	2.0	10.0	AB	7.6 B	9.2 B	Dry	7.6 B	9.1 B	4.7 B	Dry	Dry	15.8 B (16.3 B)	8.1 B	Dry	5.2
NC 2L = 1,000 µg/L (10/23/07)	19-Dec-07	2.0	10.0	AB	3.0 B	Dry	Dry	Dry	ND	2.1 (3.8 B) B	Dry	Dry	2.4 B	2.3 B	Dry	2.6 J
	28-Apr-08	2.0	10.0	AB	3.6 B	8.6 B	Dry	Dry	ND (4.0 B)	ND	Dry	Dry	4.4 B	3.2 B	16.8 B	5.8 J
	30-Dec-08	2.0	10.0	AB	5.9 J	Dry	Dry	Dry	NS	3.3 (3.1 J) J	Dry	NS	5.2 J	3.2 J	29.9	ND

TABLE 3

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS

Constituent	Date	DL	RL	Concentration in (µg/L) Background MW-2	Background MW-2R	Downgradient MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-12S	MW-12D	MW-17	MW-18	Blanks
Lead	Apr-94	NR	5	38	NI	15	34	39	5	116	NI	NI	NI	NI	NI	NA
	Oct-94	NR	10	106	NI	ND	ND	22	ND	24	NI	NI	NI	NI	NI	NA
	Apr-95	NR	10	82	NI	14	ND	16	ND	48	NI	NI	NI	NI	NI	NA
	Oct-95	NR	10	12	NI	28	37	33	ND	30	NI	NI	NI	NI	NI	NA
	Apr-96	NR	10	38	NI	20	24	32	ND	28	NI	NI	NI	NI	NI	NA
	Nov-96	NR	10	46	NI	27	15	35	ND	37	NI	NI	NI	NI	NI	ND
	Mar-97	NR	10	32	NI	ND	45	31	ND	18	NI	NI	NI	NI	NI	ND
	Sep-97	NR	10	43	NI	37	12	26	ND	16	NI	NI	NI	NI	NI	ND
	Mar-98	NR	10	67	NI	ND	13	ND	ND	26	NI	NI	NI	NI	NI	ND
	Sep-98	NR	10	34	NI	ND	11	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	10	NS	NI	ND	ND	ND	ND	ND	NS	NS	NS	NI	NI	ND
	Apr-00	NR	10	NS	NI	ND	17	ND	ND	ND	ND	24	14 (27)	NI	NI	ND
	Sep-00	NR	10	NS	NI	ND	27	ND	ND	10	ND	31	11 (7)	NI	NI	ND
	Mar-01	NR	10	NS	NI	ND	NS	ND	ND	ND	NS	11 (15)	ND	NI	NI	ND
	Jun-01	NR	10	NS	NI	NS	NS	NS	NS	NS	NS	NS	10	NI	NI	NA
	Oct-01	NR	10	NS	NI	ND	NS	ND	ND	ND	NS	24	ND	NI	NI	ND
	Apr-02	NR	10	AB	ND	ND	NS	ND	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	10	AB	ND	ND	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	10	AB	ND	ND	20	ND	ND	ND	NS	30	ND	NI	NI	ND
	Nov-03	NR	10	AB	ND	ND	21	ND	ND	ND	NS	11	ND	NS	NS	ND
	Apr-04	NR	10	AB	ND	ND	12	ND	ND	ND	NS	ND	ND	10	ND	ND
	May-04	NR	10	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	10	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	10	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	10	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	34	ND
	07-Dec-06	NR	10	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	2.0	10.0	AB	ND	2.0 J	Dry	4.0 J	ND	ND	Dry	Dry	ND	1.9 J	Dry	ND
NC 2L = 15 µg/L (10/23/07)	19-Dec-07	2.0	10.0	AB	ND	Dry	Dry	Dry	2.3 J	2.9 (3.7 J) J	Dry	Dry	2.7 J	2.0 J	Dry	ND
	28-Apr-08	2.0	10.0	AB	2.0 B	10.2 B	Dry	Dry	1.7 (ND) B	3.4 B	Dry	Dry	3.1 B	4.8 B	11.5 B	3.8 J
	30-Dec-08	2.0	10.0	AB	5.2 J	Dry	Dry	Dry	NS	4.4 (6.0 J) J	Dry	NS	3.8 J	ND	26.8	ND
Resample	12-Mar-09	2.0	10.0	AB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.8 B	5.2 J
Nickel	Apr-94	NR	50	53	NI	ND	ND	ND	ND	65	NI	NI	NI	NI	NI	NA
	Oct-94	NR	50	323	NI	ND	ND	57	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-95	NR	50	254	NI	ND	ND	ND	ND	94	NI	NI	NI	NI	NI	NA
	Oct-95	NR	50	ND	NI	ND	132	83	ND	58	NI	NI	NI	NI	NI	NA
	Apr-96	NR	50	150	NI	ND	ND	78	ND	56	NI	NI	NI	NI	NI	NA
	Nov-96	NR	50	180	NI	77	ND	100	ND	100	NI	NI	NI	NI	NI	ND
	Mar-97	NR	50	107	NI	ND	ND	55	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-97	NR	50	129	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	50	ND	NI	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	50	ND	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	50	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	50	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Sep-00	NR	50	NS	NI	ND	ND	ND	ND	ND	ND	ND	ND	NI	NI	ND
	Mar-01	NR	50	NS	NI	ND	NS	ND	ND	ND	NS	ND (ND)	ND	NI	NI	ND
	Jun-01	NR	50	NS	NI	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	50	NS	NI	ND	NS	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Apr-02	NR	50	AB	ND	ND	NS	ND	ND	ND	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	50	AB	ND	ND	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	50	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Nov-03	NR	50	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	50	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	50	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	50	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	50	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	50	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	50	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	ND	ND
	07-Dec-06	NR	50	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.6	50.0	AB	1.8 B	8.2 B	Dry	5.6 B	3.0 B	4.0 B	Dry	Dry	4.3 B (4.5 B)	4.6 B	Dry	5.0
NC 2L = 100 µg/L (10/23/07)	19-Dec-07	0.6	50.0	AB	1.8 J	Dry	Dry	Dry	6.0 J	4.4 (6.8 J) J	Dry	Dry	ND	1.4 J	Dry	ND
	28-Apr-08	0.6	50.0	AB	1.0 B	8.9 B	Dry	Dry	ND (0.7 B)	2.1 B	Dry	Dry	3.2 B	1.4 B	8.0 B	1.9 J
	30-Dec-08	0.6	50.0	AB	2.2 B	Dry	Dry	Dry	NS	5.3 (7.6 J) J	Dry	NS	2.3 B	2.0 B	16.9 J	0.7 J
Thallium	28-Apr-08	2.7	5.5	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	4.0 J	ND	ND	ND
GWPS = 0.28 µg/L (10/23/07)	30-Dec-08	2.7	5.5	AB	ND	Dry	Dry	Dry	NS	5.0 (4.5 B) B	Dry	NS	ND	ND	ND	2.4 J
Vanadium	Apr-94	NR	80	ND	NS	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Oct-94	NR	40	138	NS	ND	ND	ND	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-95	NR	40	205	NS	ND	ND	89	ND	89	NI	NI	NI	NI	NI	NA
	Oct-95	NR	40	ND	NS	ND	122	150	ND	ND	NI	NI	NI	NI	NI	NA
	Apr-96	NR	40	148	NS	ND	50	147	ND	ND	NI	NI	NI	NI	NI	NA
	Nov-96	NR	40	156	NS	40	ND	184	ND	59	NI	NI	NI	NI	NI	ND
	Mar-97	NR	40	101	NS	ND	97	152	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-97	NR	40	125	NS	49	ND	77	ND	ND	NI	NI	NI	NI	NI	ND
	Mar-98	NR	40	43	NS	ND	ND	42	ND	ND	NI	NI	NI	NI	NI	ND
	Sep-98	NR	40	44	NS	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Mar-99	NR	40	NS	NS	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	40	NS	NS	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	40	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND (70)	NI	NI	ND
	Sep-00	NR	40	NS	NS	ND	41	ND	ND	ND	ND	ND	77 (ND)	NI	NI	ND
	Mar-01	NR	40	NS	NS	ND	NS	ND	ND	ND	NS	ND (ND)	ND	NI	NI	ND
	Jun-01	NR	40	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	40	NS	NS	ND	NS	ND	ND	ND	NS	ND	ND	NI	NI	ND
	Apr-02	NR	40	AB	ND	ND	NS	ND	ND	ND	NS	NS	ND (40)	NI	NI	ND
	Nov-02	NR	40	AB	ND	ND	NS	NS	ND	ND	NS	NS	49	NI	NI	ND
	May-03	NR	40	AB	ND	ND	47	ND	ND	ND	NS	58	41	NI	NI	ND
	Nov-03	NR	40	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	40	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	May-04	NR	40	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	40	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	40	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Oct-05	NR	40	AB	ND	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	40	AB	ND	Dry	Dry	ND	ND	ND	NS	Dry	ND	ND	51	ND
	07-Dec-06	NR	25	AB	ND	ND	Dry	27	ND	ND	Dry	Dry	ND	Dry	ND	ND
	28-Jun-07	0.4	25.0	AB	ND	ND	Dry	17.4 J	ND	ND	Dry	Dry	27.7 (27.5)	7.6 J	Dry	ND
GWPS = 3.5 µg/L (10/23/07)	19-Dec-07	0.4	25.0	AB	2.3 J	Dry	Dry	Dry	ND	1.2 (1.8 J) J	Dry	Dry	9.0 J	3.3 J	Dry	ND
	28-Apr-08	0.4	25.0	AB	1.9 J	8.8 J	Dry	Dry	ND (ND)	0.5 J	Dry	Dry	12.5 J	5.2 J	14.2 J	ND
	30-Dec-08	0.4	25.0	AB	4.7 J	Dry	Dry	Dry	NS	7.0 (3.5 J) J	Dry	NS	9.6 J	4.9 J	32.1	ND
Resample	12-Mar-09	0.4	25.0	AB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20.4 J	ND

TABLE 3

SUMMARY OF HISTORICAL GROUNDWATER CONSTITUENTS

Constituent	Date	DL	RL	Concentration in (µg/L)												Blanks
				Background		Downgradient										
				MW-2	MW-2R	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-12S	MW-12D	MW-17	MW-18	
Zinc	Apr-94	NR	20	213	NI	54	114	597	62	678	NI	NI	NI	NI	NI	NA
	Oct-94	NR	50	995	NI	ND	93	234	ND	211	NI	NI	NI	NI	NI	NA
	Apr-95	NR	50	821	NI	106	52	160	ND	451	NI	NI	NI	NI	NI	NA
	Oct-95	NR	50	ND	NI	162	384	359	ND	306	NI	NI	NI	NI	NI	NA
	Apr-96	NR	50	622	NI	152	104	354	90	304	NI	NI	NI	NI	NI	NA
	Nov-96	NR	50	546	NI	203	110	426	136	412	NI	NI	NI	NI	NI	ND
	Mar-97	NR	50	313	NI	80	144	378	128	189	NI	NI	NI	NI	NI	ND
	Sep-97	NR	50	382	NI	309	140	246	418	187	NI	NI	NI	NI	NI	ND
	Mar-98	NR	50	267	NI	70	ND	162	246	57	NI	NI	NI	NI	NI	ND
	Sep-98	NR	50	256	NI	130	121	174	108	123	NS	NI	NI	NI	NI	ND
	Mar-99	NR	50	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Sep-99	NR	50	NS	NI	ND	ND	ND	ND	ND	NS	NI	NI	NI	NI	ND
	Apr-00	NR	50	NS	NI	ND	ND	112	ND	77	ND	55	ND (64)	NI	NI	ND
	Sep-00	NR	50	NS	NI	ND	111	ND	ND	53	ND	ND	ND	NI	NI	ND
	Mar-01	NR	50	NS	NI	ND	NS	ND	ND	ND	NS	63 (92)	ND	NI	NI	ND
	Jun-01	NR	50	NS	NI	NS	NS	NS	NS	NS	NS	NS	ND	NI	NI	NA
	Oct-01	NR	50	NS	NI	59	NS	ND	ND	ND	NS	84	ND	NI	NI	ND
	Apr-02	NR	50	AB	ND	ND	NS	141	ND	98	NS	NS	ND (ND)	NI	NI	ND
	Nov-02	NR	50	AB	ND	62	NS	NS	ND	ND	NS	NS	ND	NI	NI	ND
	May-03	NR	50	AB	ND	62	84	88	ND	71	NS	138	ND	NI	NI	ND
	Nov-03	NR	50	AB	ND	58	ND	ND	ND	ND	NS	ND	ND	NS	NS	ND
	Apr-04	NR	50	AB	ND	179	ND	73	ND	ND	NS	71	ND	ND	ND	ND
	May-04	NR	50	AB	NS	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	ND
	Oct-04	NR	50	AB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	May-05	NR	50	AB	ND	ND	ND	65	ND	ND	NS	ND	ND	ND	50	ND
	Oct-05	NR	50	AB	138	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	29-Jun-06	NR	50	AB	ND	Dry	Dry	81	ND	ND	NS	Dry	ND	ND	200	ND
	07-Dec-06	NR	10	AB	ND	ND	Dry	120	ND	43 (55)	Dry	Dry	ND	Dry	39	ND
	28-Jun-07	2.7	10.0	AB	12.4	53.6	Dry	91.8	14.9	50.8	Dry	Dry	21.4 (27.7)	43.5	Dry	ND
NC 2L = 1,050 µg/L (10/23/07)	19-Dec-07	2.7	10.0	AB	15.0 B	Dry	Dry	Dry	18.9 B	44.0 (59.0)	Dry	Dry	8.9 B	32.5	Dry	5.4 J
	28-Apr-08	2.7	10.0	AB	15.5	52.1	Dry	Dry	40.8 (43.9)	ND	Dry	Dry	7.2 J	11.4	155	ND
	30-Dec-08	2.7	10.0	AB	ND	Dry	Dry	Dry	NS	94.6 (82.6)	Dry	NS	19.6	25.8	163	ND
Benzene	28-Jun-07	0.1	1.0	AB	ND	ND	Dry	ND	ND	ND	Dry	Dry	0.6 (0.6 J) J	ND	Dry	ND
NC 2L = 1 µg/L (10/23/07)	19-Dec-07	0.1	1.0	AB	ND	Dry	Dry	Dry	ND	ND (ND)	Dry	Dry	ND	ND	Dry	ND
	28-Apr-08	0.1	1.0	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	0.64 J	ND	ND	ND
	30-Dec-08	0.1	1.0	AB	ND	Dry	Dry	Dry	NS	ND (ND)	Dry	NS	ND	ND	ND	ND
Carbon Disulfide	28-Jun-07	0.5	100	AB	ND	ND	Dry	ND	2.7 J	ND	Dry	Dry	1.1 J (3.3 J)	ND	Dry	ND
NC 2L = 700 µg/L (10/23/07)	19-Dec-07	0.5	100	AB	0.65 J	Dry	Dry	Dry	ND	ND (ND)	Dry	Dry	1.29 J	ND	Dry	ND
	28-Apr-08	0.5	100	AB	ND	ND	Dry	Dry	ND (ND)	ND	Dry	Dry	ND	ND	ND	0.54 J
	30-Dec-08	0.5	100	AB	ND	Dry	Dry	Dry	NS	2.0 (0.5 J) J	Dry	NS	1.0 J	0.7 J	ND	ND
Toluene NC 2L = 1,000 µg/L (10/23/07)	30-Dec-08	0.3	1.0	AB	1.0 B	Dry	Dry	Dry	NS	1.0 (0.6 B) B	Dry	NS	1.1 B	1.0 B	1.0 B	1.1 B

NOTES:
1. All concentrations are reported in micrograms per liter (ug/L).
2. Values in parentheses represent duplicate sample results.
3. MW = Groundwater monitoring well.
4. DL = Laboratory detection limit.
5. RL = Laboratory reporting limit (NC SWSL (or lower) June 2007 - present).
6. ND = Not detected above laboratory reporting limit.
7. NS = Not sampled.
8. January 2004 results represent a resampling event. Sample was analyzed by ENCO Laboratories.
9. May 2004 results for MW-8 were analyzed by ENCO Laboratories. Well was damaged during regular sampling event.
10. NC 2L = North Carolina 2 L Standard.
11. GWPS = Groundwater Protection Standards.
12. Detections above the NC 2L/GWPS are highlighted.
13. MW-8 was damaged prior to the April 04 sampling event and no sample could be obtained; therefore, a sample was obtained during May 04 after well repairs were made.
14. AB = Monitoring well has been abandoned.
15. NI = Monitoring well not installed.
16. NA = Not available.
17. Dry = Monitoring well considered to be dry and no sample collected (water level still measured).
18. NR = Not reported.

TABLE 4

SUMMARY OF HISTORICAL GROUNDWATER FIELD PARAMETERS

Parameter	Date	Background		Downgradient									
		MW-2	MW-2R	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-12S	MW-12D	MW-17	MW-18
pH (S.U.)	Sep-98	5.20	NI	5.10	5.70	5.90	4.90	5.30	NS	NI	NI	NI	NI
	Mar-99	NS	NI	4.06	5.04	6.08	6.01	5.41	NS	NI	NI	NI	NI
	Sep-99	NS	NI	4.64	5.37	6.61	5.89	5.01	NS	NI	NI	NI	NI
	Apr-00	NS	NI	6.04	5.21	5.09	5.63	5.44	4.99	5.67	5.76	NI	NI
	Sep-00	NS	NI	6.16	5.63	5.94	5.37	5.39	4.98	10.63	10.59	NI	NI
	Mar-01	NS	NI	4.80	NS	5.20	5.10	4.70	NS	4.50	11.70	NI	NI
	Oct-01	NS	NI	5.25	NS	5.38	5.15	5.39	NS	5.28	10.59	NI	NI
	Apr-02	AB	6.76	4.96	NS	5.09	5.33	5.02	NS	NS	11.01	NI	NI
	Nov-02	AB	6.22	5.48	NS	NS	6.03	5.82	NS	NS	10.22	NI	NI
	May-03	AB	5.43	6.11	5.93	6.11	5.82	6.42	NS	6.18	10.01	NI	NI
	Nov-03	AB	6.44	5.03	NS	5.83	5.27	5.03	NS	4.04	8.98	NS	NS
	Jan-04	AB	NS	NS	NS	NS	NS	NS	NS	NS	12.23	NS	NS
	Apr-04	AB	7.31	5.49	5.37	5.97	NS	5.36	NS	6.30	10.93	5.25	5.17
	May-04	AB	NS	NS	NS	NS	5.90	NS	NS	NS	NS	NS	NS
	Oct-04	AB	7.11	5.73	5.44	5.61	6.06	5.22	5.77	6.49	10.44	5.37	5.11
	May-05	AB	7.30	5.21	5.05	5.65	6.03	5.41	NS	6.08	10.35	5.18	4.95
	Oct-05	AB	7.00	5.93	7.10	7.22	7.43	6.02	NS	7.69	10.35	5.87	5.44
	29-Jun-06	AB	7.27	Dry	Dry	6.39	6.65	5.87	NS	Dry	9.94	5.73	5.64
	07-Dec-06	AB	6.70	5.12	Dry	5.80	6.23	4.88	Dry	Dry	6.72	Dry	6.72
	28-Jun-07	AB	6.99	6.16	Dry	5.80	5.79	5.36	Dry	Dry	9.98	5.24	Dry
	27-Dec-07	AB	6.68	Dry	Dry	Dry	5.97	5.39	Dry	Dry	8.29	5.49	Dry
	28-Apr-08	AB	6.88	5.12	Dry	Dry	5.56	5.21	Dry	Dry	10.29	4.90	4.96
	30-Dec-08	AB	6.77	Dry	Dry	Dry	NS	5.17	Dry	Dry	9.19	5.77	5.69
Resample	12-Mar-09	AB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.22
Temperature (°C)	Sep-98	20	NI	22	23	19	19	22	NS	NI	NI	NI	NI
	Mar-99	NS	NI	15.7	15.6	16.1	14.8	15.9	NS	NI	NI	NI	NI
	Sep-99	NS	NI	18	19	19	17	18	NS	NI	NI	NI	NI
	Apr-00	NS	NI	11.4	14.2	12.6	12.5	12.7	12.1	12.8	12.8	NI	NI
	Sep-00	NS	NI	16.4	19.3	17.6	17.9	17.2	17.8	18.4	17.9	NI	NI
	Mar-01	NS	NI	17	NS	17	17	16	NS	17	14	NI	NI
	Oct-01	NS	NI	20	NS	19	21	20	NS	19	19	NI	NI
	Apr-02	AB	17	16	NS	15	14	15	NS	NS	13	NI	NI
	Nov-02	AB	16	15	NS	NS	16	16	NS	NS	16	NI	NI
	May-03	AB	16	17	16	17	17	18	NS	19	17	NI	NI
	Nov-03	AB	17	17	18	17	17	17	NS	17	16	NS	NS
	Jan-04	AB	NS	NS	NS	NS	NS	NS	NS	NS	13	NS	NS
	Apr-04	AB	19	19	19	19	NS	20	NS	18	19	19	22
	May-04	AB	NS	NS	NS	NS	20	NS	NS	NS	NS	NS	NS
	Oct-04	AB	17	18	16	16	17	18	17	17	16	17	16
	May-05	AB	20	25	17	17	17	18	NS	18	18	21	21
	Oct-05	AB	13.4	14.9	14.7	16.4	16.7	16.5	NS	15.6	14.7	16.9	15.8
	29-Jun-06	AB	27.3	Dry	Dry	22.5	25.3	23.1	NS	Dry	21.4	21.9	21.7
	07-Dec-06	AB	13.0	14.1	Dry	12.8	12.2	15.0	Dry	Dry	14.1	Dry	13.0
	28-Jun-07	AB	20.9	21	Dry	19.4	20.1	20.6	Dry	Dry	22.0	20.6	Dry
	27-Dec-07	AB	9.9	Dry	Dry	Dry	11.1	12.4	Dry	Dry	12.8	11.7	Dry
	28-Apr-08	AB	16.4	16.3	Dry	Dry	15.5	15.8	Dry	Dry	15.5	15.6	16.0
	30-Dec-08	AB	10.8	Dry	Dry	Dry	NS	9.9	Dry	Dry	12.4	14.8	11.4
Resample	12-Mar-09	AB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.9
Conductivity (uohms/cm)	Sep-98	69	NI	46	23	127	69	46	NS	NI	NI	NI	NI
	Mar-99	NS	NI	292	23	50	60	44	NS	NI	NI	NI	NI
	Sep-99	NS	NI	778	96	523	499	103	NS	NI	NI	NI	NI
	Apr-00	NS	NI	807	186	623	581	296	191	293	241	NI	NI
	Sep-00	NS	NI	810	196	655	523	309	282	277	204	NI	NI
	Mar-01	NS	NI	180	NS	40	30	20	NS	1400	1700	NI	NI
	Oct-01	NS	NI	20	NS	110	40	80	NS	100	1500	NI	NI
	Apr-02	AB	30	240	NS	30	90	30	NS	NS	1900	NI	NI
	Nov-02	AB	110	180	NS	NS	160	80	NS	NS	2100	NI	NI
	May-03	AB	190	240	220	70	90	180	NS	210	1840	NI	NI
	Nov-03	AB	90	120	110	60	80	30	NS	2000	4200	NS	NS
	Jan-04	AB	NS	NS	NS	NS	NS	NS	NS	NS	1518	NS	NS
	Apr-04	AB	210	36	<30	69	NS	31	NS	178	1010	<30	<30
	May-04	AB	NS	NS	NS	NS	33	NS	NS	NS	NS	NS	NS
	Oct-04	AB	210	180	260	90	60	140	310	230	1960	120	180
	May-05	AB	105	25	25	76	39	39	NS	14	404	27	18
	Oct-05	AB	110.3	34.2	39.9	90.8	38.6	30.5	NS	193.7	327	38.9	18.9
	29-Jun-06	AB	95.7	Dry	Dry	50.8	35.8	67.6	NS	Dry	396	30.1	12.4
	07-Dec-06	AB	240	38.2	Dry	85.3	78.2	57.1	Dry	Dry	324	Dry	93.7
	28-Jun-07	AB	210	50.6	Dry	113	53.3	41.9	Dry	Dry	586	36.4	Dry
	27-Dec-07	AB	141	Dry	Dry	Dry	55.1	38.3	Dry	Dry	336	<30	Dry
	28-Apr-08	AB	177	37	Dry	Dry	54	36	Dry	Dry	465	33	<30
	30-Dec-08	AB	NS	Dry	Dry	Dry	NA	NA	Dry	Dry	NA	NA	NA
Resample	12-Mar-09	AB	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11.7

Notes:
1. MW = groundwater monitoring well
2. - = not measured or not reported
3. Jan-04 data are from a resampling event.
4. MW-8 was damaged prior to the April 04 sampling event and no sample could be obtained; therefore, a sample was obtained during May 04 after well repairs were made.
5. AB = Monitoring well abandoned.
6. Dry = Monitoring well considered to be dry and no samples collected.
7. NI = Monitoring well not installed.
8. NS = Not sampled.
9. NA = Not available.

TABLE 5

SUMMARY OF HISTORICAL LEACHATE CONSTITUENTS

Constituent	Date	Concentration in (µg/L)					
		DL	RL	Leachate		Blanks	
Antimony	28-Jun-07	1.2	6.0	ND		4.5	
	19-Dec-07	1.2	6.0	3.2	J	ND	
	28-Apr-08	1.2	6.0	2.3	J	ND	
	30-Dec-08	1.2	6.0	ND		ND	
Barium	Apr-94	NR	250	NS		NA	
	Oct-94	NR	500	NS		NA	
	Apr-95	NR	500	NS		NA	
	Oct-95	NR	500	NS		NA	
	Apr-96	NR	500	NS		NA	
	Nov-96	NR	500	NS		ND	
	Mar-97	NR	500	NS		ND	
	Sep-97	NR	500	NS		ND	
	Mar-98	NR	500	NS		ND	
	Sep-98	NR	500	NS		ND	
	Mar-99	NR	500	NS		ND	
	Sep-99	NR	500	NS		ND	
	Apr-00	NR	500	NS		ND	
	Sep-00	NR	500	NS		ND	
	Mar-01	NR	500	NS		ND	
	Jun-01	NR	500	NS		NA	
	Oct-01	NR	500	NS		ND	
	Apr-02	NR	500	NS		ND	
	Nov-02	NR	500	NS		ND	
	May-03	NR	500	NS		ND	
	Nov-03	NR	500	NS		ND	
	Apr-04	NR	500	NS		ND	
	May-04	NR	500	NS		ND	
	Oct-04	NR	500	NS		ND	
	May-05	NR	500	ND		ND	
	Oct-05	NR	500	ND		ND	
	29-Jun-06	NR	500	ND		ND	
	07-Dec-06	NR	100	103		ND	
	28-Jun-07	1.1	100	57.1	J	5.1	
	19-Dec-07	1.1	100	97.0	B	24.9	J
	28-Apr-08	1.1	100	113		33.2	J
	30-Dec-08	1.1	100	80.0	J	1.2	J
Chromium	Apr-94	NR	20	NS		NA	
	Oct-94	NR	10	NS		NA	
	Apr-95	NR	10	NS		NA	
	Oct-95	NR	10	NS		NA	
	Apr-96	NR	10	NS		NA	
	Nov-96	NR	10	NS		ND	
	Mar-97	NR	10	NS		ND	
	Sep-97	NR	10	NS		ND	
	Mar-98	NR	10	NS		ND	
	Sep-98	NR	10	NS		ND	
	Mar-99	NR	10	NS		ND	
	Sep-99	NR	10	NS		ND	
	Apr-00	NR	10	NS		ND	
	Sep-00	NR	10	NS		ND	
	Jun-01	NR	10	NS		NA	
	Oct-01	NR	10	NS		ND	
	Apr-02	NR	10	NS		ND	
	Nov-02	NR	10	NS		ND	
	May-03	NR	10	NS		ND	
	Nov-03	NR	10	NS		ND	
	Apr-04	NR	10	NS		ND	
	May-04	NR	10	NS		ND	
	Oct-04	NR	10	NS		ND	
	May-05	NR	10	ND		ND	
	Oct-05	NR	10	ND		ND	
	29-Jun-06	NR	10	ND		ND	
	07-Dec-06	NR	10	ND		ND	
	28-Jun-07	0.70	10.0	8.3	B	5.2	
	19-Dec-07	0.7	10.0	2.7	J	ND	
	28-Apr-08	0.7	10.0	6.6	B	2.0	J
	30-Dec-08	0.7	10.0	7.4	J	ND	

TABLE 5

SUMMARY OF HISTORICAL LEACHATE CONSTITUENTS

Constituent	Date	Concentration in (µg/L)			
		DL	RL	Leachate	Blanks
Cobalt	Apr-94	NR	50	NS	NA
	Oct-94	NR	10	NS	NA
	Apr-95	NR	10	NS	NA
	Oct-95	NR	10	NS	NA
	Apr-96	NR	10	NS	NA
	Nov-96	NR	10	NS	ND
	Mar-97	NR	10	NS	ND
	Sep-97	NR	10	NS	ND
	Mar-98	NR	10	NS	ND
	Sep-98	NR	10	NS	ND
	Mar-99	NR	10	NS	ND
	Sep-99	NR	10	NS	ND
	Apr-00	NR	10	NS	ND
	Sep-00	NR	10	NS	ND
	Mar-01	NR	10	NS	ND
	Jun-01	NR	10	NS	NA
	Oct-01	NR	10	NS	ND
	Apr-02	NR	10	NS	ND
	Nov-02	NR	10	NS	ND
	May-03	NR	10	NS	ND
	Nov-03	NR	10	NS	ND
	Apr-04	NR	10	NS	ND
	May-04	NR	10	NS	ND
	Oct-04	NR	10	NS	ND
	May-05	NR	10	10	ND
	Oct-05	NR	10	12	ND
	29-Jun-06	NR	10	12	ND
	07-Dec-06	NR	10	13	ND
	28-Jun-07	0.7	10.0	14.7	ND
	19-Dec-07	0.7	10.0	8.7 J	ND
	28-Apr-08	0.7	10.0	16.6	ND
	30-Dec-08	0.7	10.0	20.4	ND
Copper	Apr-94	NR	10	NS	NA
	Oct-94	NR	200	NS	NA
	Apr-95	NR	200	NS	NA
	Oct-95	NR	200	NS	NA
	Apr-96	NR	200	NS	NA
	Nov-96	NR	200	NS	ND
	Mar-97	NR	200	NS	ND
	Sep-97	NR	200	NS	ND
	Mar-98	NR	200	NS	ND
	Sep-98	NR	200	NS	ND
	Mar-99	NR	200	NS	ND
	Sep-99	NR	200	NS	ND
	Apr-00	NR	200	NS	ND
	Sep-00	NR	200	NS	ND
	Mar-01	NR	200	NS	ND
	Jun-01	NR	200	NS	NA
	Oct-01	NR	200	NS	ND
	Apr-02	NR	200	NS	ND
	Nov-02	NR	200	NS	ND
	May-03	NR	200	NS	ND
	Nov-03	NR	200	NS	ND
	Apr-04	NR	200	NS	ND
	May-04	NR	200	NS	ND
	Oct-04	NR	200	NS	ND
	May-05	NR	200	ND	ND
	Oct-05	NR	200	ND	ND
	29-Jun-06	NR	200	ND	ND
	07-Dec-06	NR	10	ND	ND
	28-Jun-07	2.0	10.0	10.1 B	5.2
	19-Dec-07	2.0	10.0	4.4 B	2.6 J
	28-Apr-08	2.0	10.0	18.2 B	5.8 J
	30-Dec-08	2.0	10.0	16.2	ND

TABLE 5

SUMMARY OF HISTORICAL LEACHATE CONSTITUENTS

Constituent	Date	Concentration in (µg/L)					
		DL	RL	Leachate		Blanks	
Lead	Apr-94	NR	5	NS		NA	
	Oct-94	NR	10	NS		NA	
	Apr-95	NR	10	NS		NA	
	Oct-95	NR	10	NS		NA	
	Apr-96	NR	10	NS		NA	
	Nov-96	NR	10	NS		ND	
	Mar-97	NR	10	NS		ND	
	Sep-97	NR	10	NS		ND	
	Mar-98	NR	10	NS		ND	
	Sep-98	NR	10	NS		ND	
	Mar-99	NR	10	NS		ND	
	Apr-00	NR	10	NS		ND	
	Sep-00	NR	10	NS		ND	
	Mar-01	NR	10	NS		ND	
	Jun-01	NR	10	NS		NA	
	Oct-01	NR	10	NS		ND	
	Apr-02	NR	10	NS		ND	
	Nov-02	NR	10	NS		ND	
	May-03	NR	10	NS		ND	
	Nov-03	NR	10	NS		ND	
	Apr-04	NR	10	NS		ND	
	May-04	NR	10	NS		ND	
	Oct-04	NR	10	NS		ND	
	May-05	NR	10	ND		ND	
	Oct-05	NR	10	ND		ND	
	29-Jun-06	NR	10	ND		ND	
	07-Dec-06	NR	10	ND		ND	
	28-Jun-07	2.0	10.0	ND		ND	
	19-Dec-07	2.0	10.0	ND		ND	
	28-Apr-08	2.0	10.0	ND		3.8	J
	30-Dec-08	2.0	10.0	3.0	J	ND	
Manganese	07-Dec-06	NR	5	848		ND	
	28-Jun-07	0.2	NR	9.9		NA	
	19-Dec-07	0.2	NR	333		NA	
	28-Apr-08	0.2	NR	362		NA	
	30-Dec-08	0.2	NR	628		NA	
Nickel	Apr-94	NR	50	NS		NA	
	Oct-94	NR	50	NS		NA	
	Apr-95	NR	50	NS		NA	
	Oct-95	NR	50	NS		NA	
	Apr-96	NR	50	NS		NA	
	Nov-96	NR	50	NS		ND	
	Mar-97	NR	50	NS		ND	
	Sep-97	NR	50	NS		ND	
	Mar-98	NR	50	NS		ND	
	Sep-98	NR	50	NS		ND	
	Sep-99	NR	50	NS		ND	
	Apr-00	NR	50	NS		ND	
	Sep-00	NR	50	NS		ND	
	Mar-01	NR	50	NS		ND	
	Jun-01	NR	50	NS		NA	
	Oct-01	NR	50	NS		ND	
	Apr-02	NR	50	NS		ND	
	Nov-02	NR	50	NS		ND	
	May-03	NR	50	NS		ND	
	Nov-03	NR	50	NS		ND	
	Apr-04	NR	50	NS		ND	
	May-04	NR	50	NS		ND	
	Oct-04	NR	50	NS		ND	
	May-05	NR	50	ND		ND	
	Oct-05	NR	50	ND		ND	
	29-Jun-06	NR	50	ND		ND	
	07-Dec-06	NR	50	ND		ND	
	28-Jun-07	0.6	50.0	60.5		5.0	
	19-Dec-07	0.6	50.0	45.9	J	ND	
	28-Apr-08	0.6	50.0	45.2		1.9	J
	30-Dec-08	0.6	50.0	41.3	J	0.7	J

TABLE 5

SUMMARY OF HISTORICAL LEACHATE CONSTITUENTS

Constituent	Date	Concentration in (µg/L)				
		DL	RL	Leachate		Blanks
Selenium	28-Apr-08	6.3	10.0	13.4		ND
	30-Dec-08	6.3	10.0	ND		ND
Silver	19-Dec-07	1.1	10.0	1.4	B	1.5 J
	28-Apr-08	1.1	10.0	ND		ND
	30-Dec-08	1.1	10.0	ND		ND
Vanadium	Apr-94	NR	80	NS		NA
	Oct-94	NR	40	NS		NA
	Apr-95	NR	40	NS		NA
	Oct-95	NR	40	NS		NA
	Apr-96	NR	40	NS		NA
	Nov-96	NR	40	NS		ND
	Mar-97	NR	40	NS		ND
	Sep-97	NR	40	NS		ND
	Mar-98	NR	40	NS		ND
	Sep-98	NR	40	NS		ND
	Mar-99	NR	40	NS		ND
	Sep-99	NR	40	NS		ND
	Apr-00	NR	40	NS		ND
	Sep-00	NR	40	NS		ND
	Mar-01	NR	40	NS		ND
	Jun-01	NR	40	NS		NA
	Oct-01	NR	40	NS		ND
	Apr-02	NR	40	NS		ND
	Nov-02	NR	40	NS		ND
	May-03	NR	40	NS		ND
	Nov-03	NR	40	NS		ND
	Apr-04	NR	40	NS		ND
	May-04	NR	40	NS		ND
	Oct-04	NR	40	NS		ND
	May-05	NR	40	ND		ND
	Oct-05	NR	40	ND		ND
	29-Jun-06	NR	40	ND		ND
	07-Dec-06	NR	25	ND		ND
	28-Jun-07	0.4	25.0	ND		ND
	19-Dec-07	0.4	25.0	0.5	J	ND
	28-Apr-08	0.4	25.0	1.8	J	ND
	30-Dec-09	0.4	25.0	9.8	J	ND
Zinc	Apr-94	NR	20	NS		NA
	Oct-94	NR	50	NS		NA
	Apr-95	NR	50	NS		NA
	Oct-95	NR	50	NS		NA
	Apr-96	NR	50	NS		NA
	Nov-96	NR	50	NS		ND
	Mar-97	NR	50	NS		ND
	Sep-97	NR	50	NS		ND
	Mar-98	NR	50	NS		ND
	Sep-98	NR	50	NS		ND
	Mar-99	NR	50	NS		ND
	Sep-99	NR	50	NS		ND
	Apr-00	NR	50	NS		ND
	Sep-00	NR	50	NS		ND
	Mar-01	NR	50	NS		ND
	Jun-01	NR	50	NS		NA
	Oct-01	NR	50	NS		ND
	Apr-02	NR	50	NS		ND
	Nov-02	NR	50	NS		ND
	May-03	NR	50	NS		ND
	Nov-03	NR	50	NS		ND
	Apr-04	NR	50	NS		ND
	May-04	NR	50	NS		ND
	Oct-04	NR	50	NS		ND
	May-05	NR	50	ND		ND
	Oct-05	NR	50	ND		ND
	29-Jun-06	NR	50	ND		ND
	07-Dec-06	NR	10	48		ND
	28-Jun-07	2.7	10.0	31.1		ND
	19-Dec-07	2.7	10.0	20.1	B	5.4 J
	28-Apr-08	2.7	10.0	134		ND
	30-Dec-08	2.7	10.0	44.5		ND

TABLE 5

SUMMARY OF HISTORICAL LEACHATE CONSTITUENTS

Constituent	Date	Concentration in (µg/L)			
		DL	RL	Leachate	Blanks
Acetone	28-Apr-08	1.2	100	21.5 J	ND
	30-Dec-08	1.2	100	ND	ND
Benzene	30-Dec-08	0.1	1.0	0.3 J	ND
Carbon Disulfide	28-Jun-07	0.5	100	ND	ND
	19-Dec-07	0.5	100	ND	ND
	28-Apr-08	0.5	100	ND	0.54 J
	30-Dec-08	0.5	100	ND	ND
Toluene	28-Apr-08	0.3	1.0	0.41 J	ND
	30-Dec-08	0.3	1.0	1.3 B	1.1 B
Xylenes, total	19-Dec-07	0.3	4.0	0.33 J	ND
	28-Apr-08	0.3	4.0	ND	ND
	30-Dec-08	0.3	4.0	ND	ND
Cyanide	28-Jun-07	5.0	10.0	6.0 J	NA
	19-Dec-07	5.0	10.0	ND	NA
	28-Apr-08	5.0	10.0	ND	NA
	30-Dec-08	5.0	10.0	ND	NA
Biochemical Oxygen Demand	07-Dec-06	NR	2000	16300	ND
	28-Jun-07	2000	NR	34600	NA
	19-Dec-07	2000	120,000	ND	NA
	28-Apr-08	2000	NR	50000	NA
	30-Dec-08	2000	NR	27800	NA
Total Suspended Solids	07-Dec-06	NR	5000	36000	ND
	28-Jun-07	5.0	NR	40	NA
	19-Dec-07	5.0	NR	32.0	NA
	28-Apr-08	5000	NR	64000	NA
	30-Dec-08	5000	NR	84000	NA
Oil & Grease	19-Dec-07	5000	NR	5800	NA
	28-Apr-08	5000	NR	ND	NA
	30-Dec-08	5000	NR	ND	NA

Notes:

1. All concentrations are reported in micrograms per liter (ug/L).
2. DL = Laboratory detection limit.
3. RL = Laboratory reporting limit (NC SWSL {or lower} June 2007 - present).
4. ND = Not detected above laboratory reporting limit.
5. NA = Not available.
6. NS = Not sampled.
7. NR = Not reported.

TABLE 6

SUMMARY OF HISTORICAL LEACHATE FIELD PARAMETERS

Parameter	Date	Leachate
pH	Sep-98	7.30
(S.U.)	Mar-99	8.05
	Sep-99	6.16
	Apr-00	5.80
	Sep-00	5.82
	Mar-01	6.47
	Oct-01	5.69
	Apr-02	6.77
	Nov-02	6.17
	May-03	6.09
	Nov-03	5.96
	Jan-04	NS
	Apr-04	7.91
	May-04	NS
	Oct-04	7.37
	May-05	8.26
	Oct-05	8.54
	29-Jun-06	8.76
	07-Dec-06	8.33
	28-Jun-07	8.47
	27-Dec-07	7.99
	28-Apr-08	8.28
	30-Dec-08	8.40
Temperature	Sep-98	23
(°C)	Mar-99	17
	Sep-99	17
	Apr-00	9.8
	Sep-00	16.3
	Mar-01	20
	Oct-01	19
	Apr-02	14
	Nov-02	15
	May-03	16
	Nov-03	18
	Jan-04	NS
	Apr-04	21
	May-04	NS
	Oct-04	16
	May-05	29
	Oct-05	14.7
	29-Jun-06	30.9
	07-Dec-06	8.6
	28-Jun-07	27.6
	27-Dec-07	6.2
	28-Apr-08	17.8
	30-Dec-08	5.3

TABLE 6

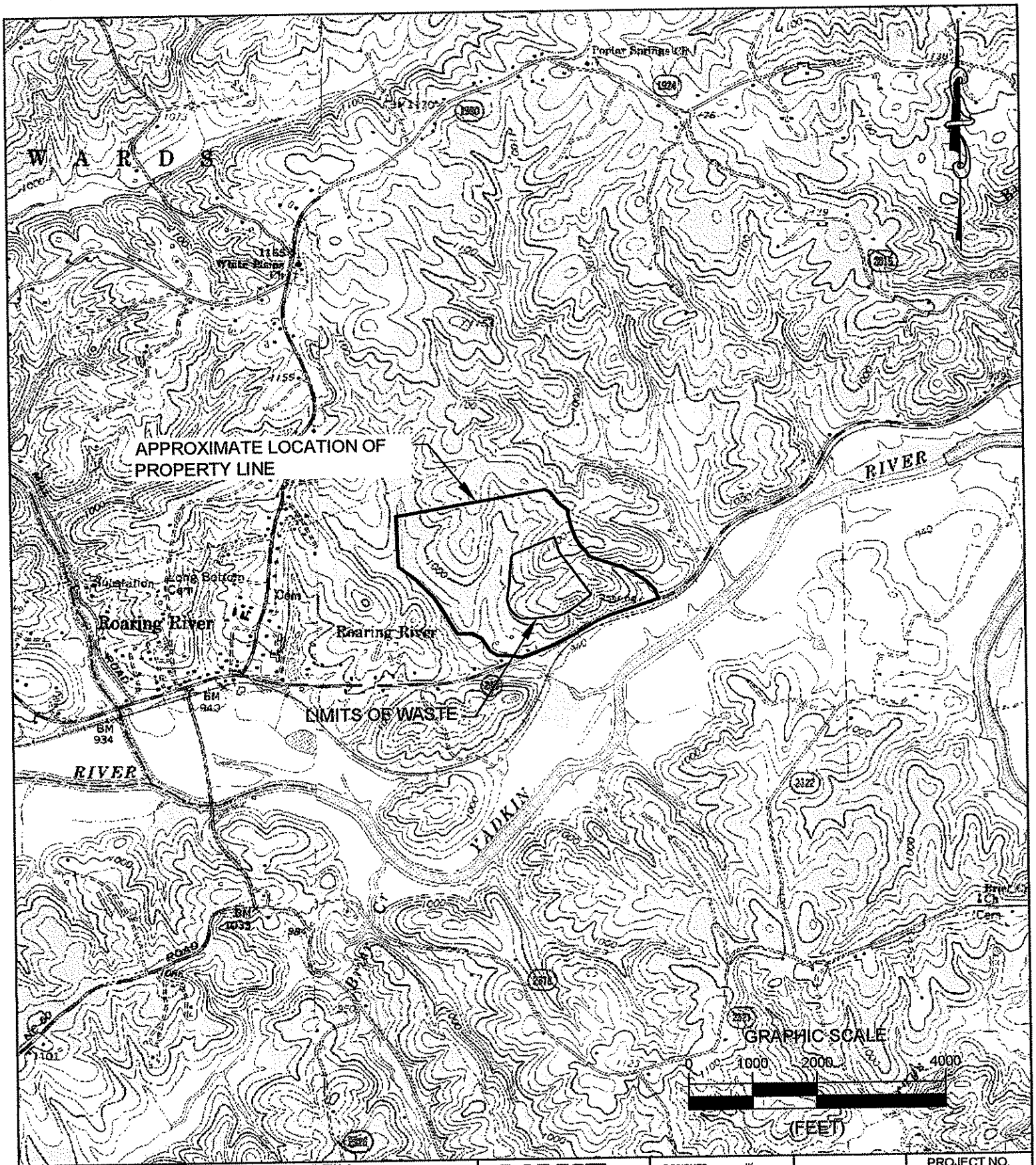
SUMMARY OF HISTORICAL LEACHATE FIELD PARAMETERS

Parameter	Date	Leachate
Conductivity	Sep-98	NS
(uohms/cm)	Mar-99	NS
	Sep-99	296
	Apr-00	347
	Sep-00	323
	Mar-01	NS
	Oct-01	260
	Apr-02	NS
	Nov-02	NS
	May-03	NS
	Nov-04	220
	Jan-04	NS
	Apr-04	2210
	May-04	NS
	Oct-04	110
	May-05	3
	Oct-05	296
	29-Jun-06	2000
	07-Dec-06	2330
	28-Jun-07	NS
	27-Dec-07	NS
	28-Apr-08	NS
	30-Dec-08	NS

Notes:
1. NA = Not available.
2. NS = Not sampled for field parameter.

Figure

Figure No. 1 Site Location Map



ROARING RIVER LINDFILL WILKES COUNTY, NORTH CAROLINA	JOYCE ENGINEERING, INC. 2211 W. MEADOWVIEW ROAD GREENSBORO, NC 27407 PHONE: (336) 323-0092	DESIGNED JK DRAWN CADD/RFB CHECKED JK APPROVED VB DATE 4/9/09	SCALE AS NOTED	PROJECT NO. 356.08.34
SITE LOCATION MAP		© 2009 Joyce Engineering, Inc. All rights reserved.		DRAWING NO. 1

H:\Dwgs\Drawings-Current\WILKES\, Site Location Map December 2008.dwg

Drawing

Drawing No. 1 Groundwater Surface Contour Map, December 30, 2008

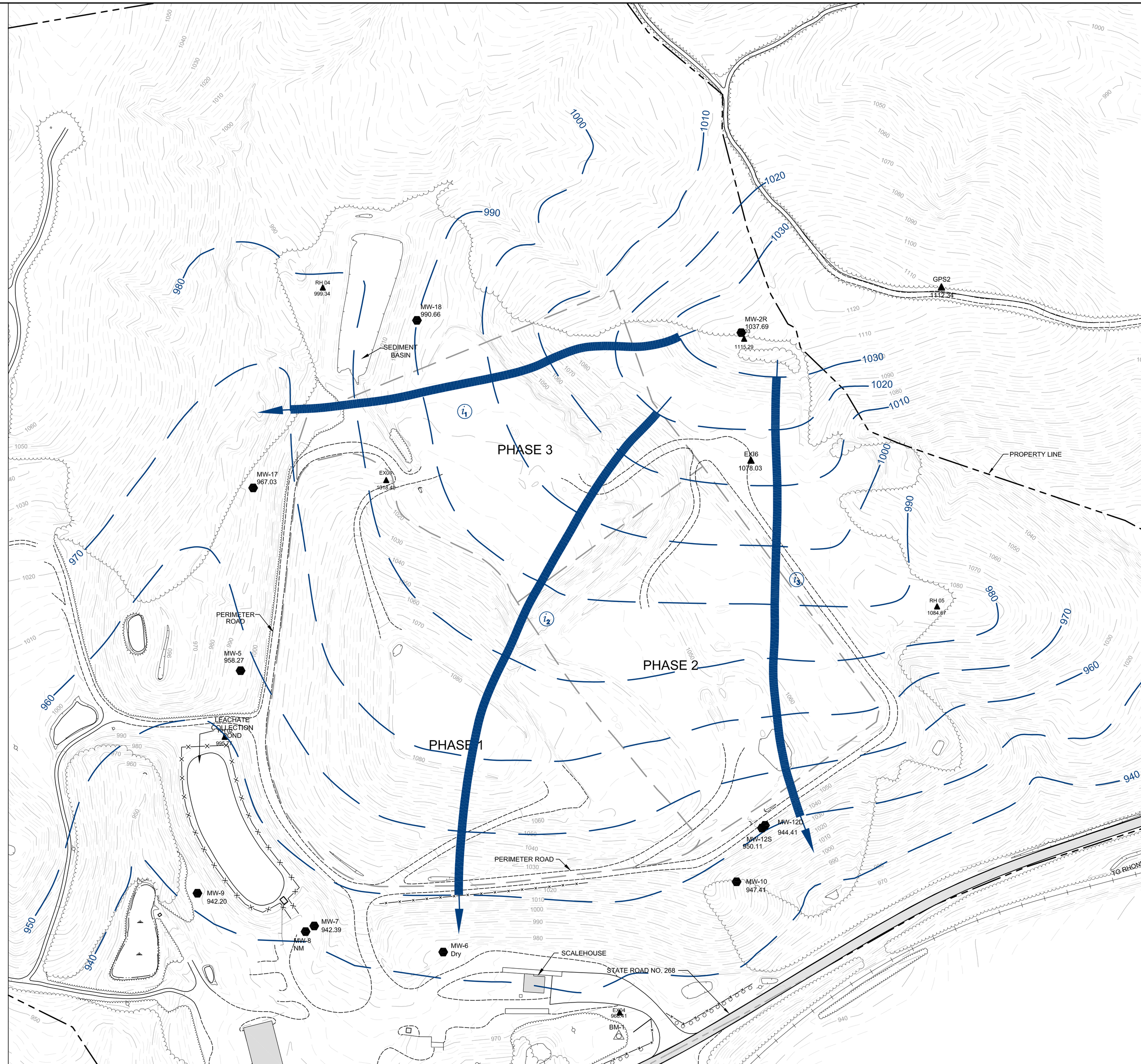
LEGEND

- 1070 — EXISTING 10' TOPOGRAPHIC CONTOUR
- EXISTING 2' TOPOGRAPHIC CONTOUR
- 970 — GROUNDWATER SURFACE CONTOUR [FEET ABOVE MEAN SEA LEVEL (AMSL)]
- PROPERTY LINE
- EXISTING ROAD
- APPROXIMATE LIMITS OF WASTE
- CENTERLINE OF STREAM
- TREELINE
- MW-9 942.20 — GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION WITH STATIC WATER LEVEL ELEVATION (FEET AMSL)
- GROUNDWATER FLOW DIRECTION WITH GRADIENT CALCULATION SEGMENT
- i_1 — SEGMENT USED FOR GRADIENT CALCULATIONS

NOTES:

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET.
2. GROUNDWATER SURFACE CONTOUR INTERVAL = 10 FEET.
3. STATIC WATER LEVELS MEASURED ON 12/30/08.
4. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATA, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
5. DIGITAL MAPPING PROVIDED BY SPATIAL DATA CONSULTANTS, INC. FLYOVER DATE: MARCH 11, 2003. GROUND CONTROL AND PROPERTY LINE TIE-IN TO NC GRID COORDINATE SYSTEM SET BY SUTTLES SURVEYING, INC.
6. GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.

GRAPHIC SCALE
0 50 100 200
(FEET)



DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED JK
DRAWN CADD/JK
CHECKED VB
APPROVED VB
DATE 04/07/09

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

WILKES COUNTY-ROARING RIVER LANDFILL
WILKES COUNTY, NORTH

GROUNDWATER SURFACE CONTOUR MAP
DECEMBER 30, 2008
PERMIT NO. 97-04

PROJECT NO. 356.08.34

SCALE AS NOTED

DRAWING NO. 1

N:\Dwgs\Drawings-Current\WILKES\GW EVENT MAPS\GW Event December 2008.dwg Layout=Layout1

Appendices

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

Appendix 1 Statistical Analyses Worksheets

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Date: **30-Dec-08**

Analyte: **Barium**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Apr-94	MW-2	398		250
2	Oct-94	MW-2	850		500
3	Apr-95	MW-2	730		500
4	Oct-95	MW-2	ND		500
5	Apr-96	MW-2	ND		500
6	Nov-96	MW-2	ND		500
7	Mar-97	MW-2	ND		500
8	Sep-97	MW-2	ND		500
9	Mar-98	MW-2	508		500
10	Sep-98	MW-2	ND		500
11	Apr-02	MW-2R	ND		500
12	Nov-02	MW-2R	ND		500
13	May-03	MW-2R	ND		500
14	Nov-03	MW-2R	ND		500
15	Apr-04	MW-2R	ND		500
16	Oct-04	MW-2R	ND		500
17	May-05	MW-2R	ND		500
18	Oct-05	MW-2R	ND		500
19	29-Jun-06	MW-2R	ND		500
20	07-Dec-06	MW-2R	ND		100
21	28-Jun-07	MW-2R	11.2	B	100
22	19-Dec-07	MW-2R	7.6	B	100
23	28-Apr-08	MW-2R	11.7	J	100
24	30-Dec-08	MW-2R	12.9	J	100
25	Apr-04	MW-17	ND		500
26	Oct-04	MW-17	ND		500
27	May-05	MW-17	ND		500
28	Oct-05	MW-17	ND		500
29	Apr-04	MW-18	ND		500
30	Oct-04	MW-18	ND		500
31	May-05	MW-18	ND		500
32	Oct-05	MW-18	ND		500

Number of Data: 30
Number of Truncated Data: 24
Percentage of Truncated Data: 80%

Non-parametric Prediction Interval: 850

- All concentrations in micrograms per liter.
- Blank qualified data not used in statistical calculations.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Sample Date: **30-Dec-08**

Analyte: **Beryllium**

Sample No.	Sample Date	Location	Concentration		Quantitation Limit (ug/L)
1	Apr-94	MW-2	ND		5
2	Oct-94	MW-2	28		2
3	Apr-95	MW-2	6		2
4	Oct-95	MW-2	2		2
5	Apr-96	MW-2	ND		2
6	Nov-96	MW-2	4		2
7	Mar-97	MW-2	ND		2
8	Sep-97	MW-2	13		2
9	Mar-98	MW-2	8		2
10	Sep-98	MW-2	4		2
11	Apr-02	MW-2R	ND		2
12	Nov-02	MW-2R	ND		2
13	May-03	MW-2R	ND		2
14	Nov-03	MW-2R	ND		2
15	Apr-04	MW-2R	ND		2
16	Oct-04	MW-2R	ND		2
17	May-05	MW-2R	ND		2
18	Oct-05	MW-2R	ND		2
19	29-Jun-06	MW-2R	ND		2
20	07-Dec-06	MW-2R	ND		1
21	28-Jun-07	MW-2R	ND		1.0
22	19-Dec-07	MW-2R	ND		1.0
23	28-Apr-08	MW-2R	ND		1.0
24	30-Dec-08	MW-2R	0.6	J	1.0
25	Apr-04	MW-17	ND		2
26	Oct-04	MW-17	ND		2
27	May-05	MW-17	ND		2
28	Oct-05	MW-17	ND		2
29	Apr-04	MW-18	ND		2
30	Oct-04	MW-18	ND		2
31	May-05	MW-18	ND		2
32	Oct-05	MW-18	ND		2

Number of Data: 32
Number of Truncated Data: 24
Percentage of Truncated Data: 75%

Non-parametric Prediction Interval: 28

- All concentrations in micrograms per liter.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Sample Date: **30-Dec-08**

Analyte: **Chromium**

Sample No.	Sample Date	Location	Concentration		Quantitation Limit (ug/L)
1	Apr-94	MW-2	48		20
2	Oct-94	MW-2	406		10
3	Apr-95	MW-2	248		10
4	Oct-95	MW-2	10		10
5	Apr-96	MW-2	160		10
6	Nov-96	MW-2	175		10
7	Mar-97	MW-2	116		10
8	Sep-97	MW-2	127		10
9	Mar-98	MW-2	40		10
10	Sep-98	MW-2	42		10
11	Apr-02	MW-2R	ND		10
12	Nov-02	MW-2R	ND		10
13	May-03	MW-2R	ND		10
14	Nov-03	MW-2R	ND		10
15	Apr-04	MW-2R	ND		10
16	Oct-04	MW-2R	ND		10
17	May-05	MW-2R	ND		10
18	Oct-05	MW-2R	ND		10
19	29-Jun-06	MW-2R	ND		10
20	07-Dec-06	MW-2R	ND		10
21	28-Jun-07	MW-2R	1.1	B	10.0
22	19-Dec-07	MW-2R	ND		10.0
23	28-Apr-08	MW-2R	ND		10.0
24	30-Dec-08	MW-2R	2.3	J	10.0
25	Apr-04	MW-17	ND		10
26	Oct-04	MW-17	ND		10
27	May-05	MW-17	ND		10
28	Oct-05	MW-17	ND		10
29	Apr-04	MW-18	ND		10
30	Oct-04	MW-18	ND		10
31	May-05	MW-18	ND		10
32	Oct-05	MW-18	ND		10

Number of Data: 31
Number of Truncated Data: 20
Percentage of Truncated Data: 65%

Non-parametric Prediction Interval: 406

- All concentrations in micrograms per liter.
- Blank qualified data not used in statistical calculations.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Date: **30-Dec-08**

Analyte: **Cobalt**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Apr-94	MW-2	68		50
2	Oct-94	MW-2	174		10
3	Apr-95	MW-2	148		10
4	Oct-95	MW-2	ND		10
5	Apr-96	MW-2	78		10
6	Nov-96	MW-2	93		10
7	Mar-97	MW-2	60		10
8	Sep-97	MW-2	77		10
9	Mar-98	MW-2	66		10
10	Sep-98	MW-2	57		10
11	Apr-02	MW-2R	ND		10
12	Nov-02	MW-2R	ND		10
13	May-03	MW-2R	13		10
14	Nov-03	MW-2R	ND		10
15	Apr-04	MW-2R	ND		10
16	Oct-04	MW-2R	ND		10
17	May-05	MW-2R	ND		10
18	Oct-05	MW-2R	ND		10
19	29-Jun-06	MW-2R	ND		10
20	07-Dec-06	MW-2R	ND		10
21	28-Jun-07	MW-2R	ND		10.0
22	19-Dec-07	MW-2R	ND		10.0
23	28-Apr-08	MW-2R	1.0	J	10.0
24	30-Dec-08	MW-2R	2.4	J	10.0
25	Apr-04	MW-17	ND		10
26	Oct-04	MW-17	ND		10
27	May-05	MW-17	ND		10
28	Oct-05	MW-17	ND		10
29	Apr-04	MW-18	ND		10
30	Oct-04	MW-18	ND		10
31	May-05	MW-18	ND		10
32	Oct-05	MW-18	ND		10

Number of Data: 32
Number of Truncated Data: 20
Percentage of Truncated Data: 63%

Non-parametric Prediction Interval: 174

- All concentrations in micrograms per liter.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Sample Date: **30-Dec-08**

Analyte: **Copper**

Sample No.	Sample Date	Location	Concentration		Quantitation Limit (ug/L)
1	Apr-94	MW-2	85		10
2	Oct-94	MW-2	282		200
3	Apr-95	MW-2	208		200
4	Oct-95	MW-2	ND		200
5	Apr-96	MW-2	ND		200
6	Nov-96	MW-2	225		200
7	Mar-97	MW-2	ND		200
8	Sep-97	MW-2	ND		200
9	Mar-98	MW-2	ND		200
10	Sep-98	MW-2	ND		200
11	Apr-02	MW-2R	ND		200
12	Nov-02	MW-2R	ND		200
13	May-03	MW-2R	ND		200
14	Nov-03	MW-2R	ND		200
15	Apr-04	MW-2R	ND		200
16	Oct-04	MW-2R	ND		200
17	May-05	MW-2R	ND		200
18	Oct-05	MW-2R	ND		200
19	29-Jun-06	MW-2R	ND		200
20	07-Dec-06	MW-2R	ND		10
21	28-Jun-07	MW-2R	7.6	B	10.0
22	19-Dec-07	MW-2R	3.0	B	10.0
23	28-Apr-08	MW-2R	3.6	B	10.0
24	30-Dec-08	MW-2R	5.9	J	10.0
25	Apr-04	MW-17	ND		200
26	Oct-04	MW-17	ND		200
27	May-05	MW-17	ND		200
28	Oct-05	MW-17	ND		200
29	Apr-04	MW-18	ND		200
30	Oct-04	MW-18	ND		200
31	May-05	MW-18	ND		200
32	Oct-05	MW-18	ND		200

Number of Data: 29
Number of Truncated Data: 24
Percentage of Truncated Data: 83%

Non-parametric Prediction Interval: 282

- All concentrations in micrograms per liter.
- Blank qualified data not used in statistical calculations.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Date: **30-Dec-08**

Analyte: **Lead**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Apr-94	MW-2	38		5
2	Oct-94	MW-2	106		10
3	Apr-95	MW-2	82		10
4	Oct-95	MW-2	12		10
5	Apr-96	MW-2	38		10
6	Nov-96	MW-2	46		10
7	Mar-97	MW-2	32		10
8	Sep-97	MW-2	43		10
9	Mar-98	MW-2	67		10
10	Sep-98	MW-2	34		10
11	Apr-02	MW-2R	ND		10
12	Nov-02	MW-2R	ND		10
13	May-03	MW-2R	ND		10
14	Nov-03	MW-2R	ND		10
15	Apr-04	MW-2R	ND		10
16	Oct-04	MW-2R	ND		10
17	May-05	MW-2R	ND		10
18	Oct-05	MW-2R	ND		10
19	29-Jun-06	MW-2R	ND		10
20	07-Dec-06	MW-2R	ND		10
21	28-Jun-07	MW-2R	ND		10
22	19-Dec-07	MW-2R	ND		10.0
23	28-Apr-08	MW-2R	2.0	B	10.0
24	30-Dec-08	MW-2R	5.2	J	10.0
25	Apr-04	MW-17	10		10
26	Oct-04	MW-17	ND		10
27	May-05	MW-17	ND		10
28	Oct-05	MW-17	ND		10
29	Apr-04	MW-18	ND		10
30	Oct-04	MW-18	ND		10
31	May-05	MW-18	ND		10
32	Oct-05	MW-18	ND		10

Number of Data: 31
Number of Truncated Data: 19
Percentage of Truncated Data: 61%

Non-parametric Prediction Interval: 106

- All concentrations in micrograms per liter.
- Blank qualified data not used in statistical calculations.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Date: **30-Dec-08**

Analyte: **Vanadium**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Apr-94	MW-2	ND		80
2	Oct-94	MW-2	138		40
3	Apr-95	MW-2	205		40
4	Oct-95	MW-2	ND		40
5	Apr-96	MW-2	148		40
6	Nov-96	MW-2	156		40
7	Mar-97	MW-2	101		40
8	Sep-97	MW-2	125		40
9	Mar-98	MW-2	43		40
10	Sep-98	MW-2	44		40
11	Apr-02	MW-2R	ND		40
12	Nov-02	MW-2R	ND		40
13	May-03	MW-2R	ND		40
14	Nov-03	MW-2R	ND		40
15	Apr-04	MW-2R	ND		40
16	Oct-04	MW-2R	ND		40
17	May-05	MW-2R	ND		40
18	Oct-05	MW-2R	ND		40
19	29-Jun-06	MW-2R	ND		40
20	07-Dec-06	MW-2R	ND		25
21	28-Jun-07	MW-2R	ND		25.0
22	19-Dec-07	MW-2R	2.3	J	25.0
23	28-Apr-08	MW-2R	1.9	J	25.0
24	30-Dec-08	MW-2R	4.7	J	25.0
25	Apr-04	MW-17	ND		40
26	Oct-04	MW-17	ND		40
27	May-05	MW-17	ND		40
28	Oct-05	MW-17	ND		40
29	Apr-04	MW-18	ND		40
30	Oct-04	MW-18	ND		40
31	May-05	MW-18	ND		40
32	Oct-05	MW-18	ND		40

Number of Data: 32
Number of Truncated Data: 21
Percentage of Truncated Data: 66%

Non-parametric Prediction Interval: 205

- All concentrations in micrograms per liter.
- ND = Non-detect

JEI Project: **Roaring River Landfill - Wilkes County**
Project No: **356.08.34**
Date: **30-Dec-08**

Analyte: **Zinc**

Sample No.	Sample Date	Location	Concentration (ug/L)		Quantitation Limit (ug/L)
1	Apr-94	MW-2	213		20
2	Oct-94	MW-2	995		50
3	Apr-95	MW-2	821		50
4	Oct-95	MW-2	ND		50
5	Apr-96	MW-2	622		50
6	Nov-96	MW-2	546		50
7	Mar-97	MW-2	313		50
8	Sep-97	MW-2	382		50
9	Mar-98	MW-2	267		50
10	Sep-98	MW-2	256		50
11	Apr-02	MW-2R	ND		50
12	Nov-02	MW-2R	ND		50
13	May-03	MW-2R	ND		50
14	Nov-03	MW-2R	ND		50
15	Apr-04	MW-2R	ND		50
16	Oct-04	MW-2R	ND		50
17	May-05	MW-2R	ND		50
18	Oct-05	MW-2R	138		50
19	29-Jun-06	MW-2R	ND		50
20	07-Dec-06	MW-2R	ND		10
21	28-Jun-07	MW-2R	12.4		10.0
22	19-Dec-07	MW-2R	15.0	B	10.0
23	28-Apr-08	MW-2R	15.5		10.0
24	30-Dec-08	MW-2R	ND		10.0
25	Apr-04	MW-17	ND		50
26	Oct-04	MW-17	ND		50
27	May-05	MW-17	ND		50
28	Oct-05	MW-17	ND		50
29	Apr-04	MW-18	ND		50
30	Oct-04	MW-18	ND		50
31	May-05	MW-18	50		50
32	Oct-05	MW-18	ND		50

Number of Data: 31
Number of Truncated Data: 18
Percentage of Truncated Data: 58%

Non-parametric Prediction Interval: 995

- All concentrations in micrograms per liter.
- Blank qualified data not used in statistical calculations.
- ND = Non-detect

Appendix 2 Laboratory Analytical Reports and Field Data

SEMI-ANNUAL GROUNDWATER MONITORING FOR SELECTED PARAMETERS AND WELLS AT WILKES COUNTY ROARING RIVER LANDFILL

Prepared for:

County of Wilkes
Wilkesboro, North Carolina

Prepared by:

Research & Analytical Laboratories, Inc.
106 Short Street
Kernersville, North Carolina 27284
336-996-2841

February 2009

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-2R	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-2R	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	108-88-3	196	Toluene	**1.0**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-2R	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-2R	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	MW-2R	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	MW-2R	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	MW-2R	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-2R	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	MW-2R	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-2R	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-2R	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-2R	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-2R	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-2R	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635442

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-2R	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/29/2009
97-04	MW-2R	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-39-3	15	Barium	**12.9**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-41-7	23	Beryllium	**0.6**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	744-43-9	34	Cadmium	**1.7**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-47-3	51	Chromium	**2.3**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-48-4	53	Cobalt	**2.4**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-50-8	54	Copper	**5.9**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7439-92-1	131	Lead	**5.2**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-02-0	152	Nickel	**2.2**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-62-2	209	Vanadium	**4.7**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	MW-2R	7440-66-6	213	Zinc	10.0	ug/L	U	1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009

RAL Sample #: 635442

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-9	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/13/2009
97-04	MW-9	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	108-88-3	196	Toluene	**1.0**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/13/2009
97-04	MW-9	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	75-15-0	35	Carbon Disulfide	**2.0**	ug/L	J	1	100	0.5	12/30/2008	N/A	01/13/2009
97-04	MW-9	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/13/2009
97-04	MW-9	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/13/2009
97-04	MW-9	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/13/2009
97-04	MW-9	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/13/2009
97-04	MW-9	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/13/2009
97-04	MW-9	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/13/2009
97-04	MW-9	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/13/2009
97-04	MW-9	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/13/2009
97-04	MW-9	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/13/2009
97-04	MW-9	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/13/2009
97-04	MW-9	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/13/2009

RAL Sample #: 635443

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-9	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/29/2009
97-04	MW-9	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-39-3	15	Barium	**430**	ug/L		1	100	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-41-7	23	Beryllium	**0.4**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	744-43-9	34	Cadmium	**1.7**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-47-3	51	Chromium	**3.6**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-48-4	53	Cobalt	**4.3**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-50-8	54	Copper	**3.3**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7439-92-1	131	Lead	**4.4**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-02-0	152	Nickel	**5.3**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-28-0	194	Thallium	**5.0**	ug/L	J	1	5.5	2.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-62-2	209	Vanadium	**7.0**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9	7440-66-6	213	Zinc	**94.6**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	02/05/2009

RAL Sample #: 635443

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-9 Dup.	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	108-88-3	196	Toluene	**0.6**	ug/L	J B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	75-15-0	35	Carbon Disulfide	**0.5**	ug/L	J	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-9 Dup.	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635447

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Wilkes County - Roaring River Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-9 Dup.	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-39-3	15	Barium	**448**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-41-7	23	Beryllium	**1.6**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	744-43-9	34	Cadmium	**1.3**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-47-3	51	Chromium	**5.4**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-48-4	53	Cobalt	**7.1**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-50-8	54	Copper	**3.1**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7439-92-1	131	Lead	**6.0**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-02-0	152	Nickel	**7.6**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-28-0	194	Thallium	**4.5**	ug/L	J	1	5.5	2.7	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-62-2	209	Vanadium	**3.5**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	02/05/2009
97-04	MW-9 Dup.	7440-66-6	213	Zinc	**82.6**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	02/05/2009

RAL Sample #: 635447

N/A = Not Applicable

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Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-12D	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-12D	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	108-88-3	196	Toluene	**1.1**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-12D	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	75-15-0	35	Carbon Disulfide	**1.0**	ug/L	J	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-12D	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	MW-12D	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	MW-12D	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	MW-12D	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-12D	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	MW-12D	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-12D	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-12D	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-12D	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-12D	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-12D	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635444

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-12D	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/28/2009
97-04	MW-12D	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-39-3	15	Barium	**11.2**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	744-43-9	34	Cadmium	**1.2**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-47-3	51	Chromium	**1.5**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-48-4	53	Cobalt	10.0	ug/L	U	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-50-8	54	Copper	**5.2**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7439-92-1	131	Lead	**3.8**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-02-0	152	Nickel	**2.3**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-62-2	209	Vanadium	**9.6**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	MW-12D	7440-66-6	213	Zinc	**19.6**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009

RAL Sample #: 635444

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-17	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-17	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	108-88-3	196	Toluene	**1.0**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-17	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	75-15-0	35	Carbon Disulfide	**0.7**	ug/L	J	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-17	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	MW-17	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	MW-17	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	MW-17	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-17	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	MW-17	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-17	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-17	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-17	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-17	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-17	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635445

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Wilkes County - Roaring River Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-17	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/28/2009
97-04	MW-17	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-39-3	15	Barium	**86.5**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-41-7	23	Beryllium	**0.3**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	744-43-9	34	Cadmium	**0.5**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-47-3	51	Chromium	**2.3**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-48-4	53	Cobalt	**2.0**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-50-8	54	Copper	**3.2**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7439-92-1	131	Lead	10.0	ug/L	U	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-02-0	152	Nickel	**2.0**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-62-2	209	Vanadium	**4.9**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	MW-17	7440-66-6	213	Zinc	**25.8**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009

RAL Sample #: 635445

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B = Lab blank contamination.

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Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-18	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-18	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	108-88-3	196	Toluene	**1.0**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-18	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-18	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	MW-18	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	MW-18	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	MW-18	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-18	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	MW-18	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-18	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	MW-18	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	MW-18	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	MW-18	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	MW-18	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635446

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U = Not detected.
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Wilkes County - Roaring River Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-18	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/28/2009
97-04	MW-18	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-39-3	15	Barium	**601**	ug/L		1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-41-7	23	Beryllium	**3.0**	ug/L		1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	744-43-9	34	Cadmium	**0.3**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-47-3	51	Chromium	**14.0**	ug/L		1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-48-4	53	Cobalt	**16.8**	ug/L		1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-50-8	54	Copper	**29.9**	ug/L		1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7439-92-1	131	Lead	**26.8**	ug/L		1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-02-0	152	Nickel	**16.9**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-62-2	209	Vanadium	**32.1**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	MW-18	7440-66-6	213	Zinc	**163**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009

RAL Sample #: 635446

N/A = Not Applicable

U = Not detected.

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B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	Field Blank	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Field Blank	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	108-88-3	196	Toluene	**1.1**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Field Blank	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Field Blank	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	Field Blank	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	Field Blank	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	Field Blank	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Field Blank	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	Field Blank	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Field Blank	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Field Blank	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Field Blank	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Field Blank	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	Field Blank	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

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97-04	Field Blank	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/28/2009
97-04	Field Blank	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-39-3	15	Barium	**1.2**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	744-43-9	34	Cadmium	**0.6**	ug/L	J	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-48-4	53	Cobalt	10.0	ug/L	U	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7439-92-1	131	Lead	10.0	ug/L	U	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-02-0	152	Nickel	**0.7**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-62-2	209	Vanadium	25.0	ug/L	U	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	Field Blank	7440-66-6	213	Zinc	10.0	ug/L	U	1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009

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Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	Travel Blank	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	108-88-3	196	Toluene	**1.0**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	Travel Blank	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

RAL Sample #: 635448

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	Travel Blank	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	01/28/2009
97-04	Travel Blank	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-39-3	15	Barium	100	ug/L	U	1	100	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-48-4	53	Cobalt	10.0	ug/L	U	1	10.0	0.7	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7439-92-1	131	Lead	10.0	ug/L	U	1	10.0	2.0	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-02-0	152	Nickel	50.0	ug/L	U	1	50.0	0.6	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-28-0	194	Thallium	**2.4**	ug/L	J	1	5.5	2.7	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-62-2	209	Vanadium	25.0	ug/L	U	1	25.0	0.4	12/30/2008	12/31/2008	02/05/2009
97-04	Travel Blank	7440-66-6	213	Zinc	10.0	ug/L	U	1	10.0	2.7	12/30/2008	12/31/2008	02/05/2009

RAL Sample #: 635448

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Research & Analytical Laboratories, Inc.
Analytical/Process Consultations

RESEARCH & ANALYTICAL LABS SIDNEY L. CHAMPION NC #34 DIRECTOR CERTIFIED ANALYSIS

Quality Control Summary Results for Project Identified as Roaring River Landfill (A Wilkes County Project, 30 December 2008)

Volatile Organics EPA Method 8260 Parameter	Method Blank (µg/L)	Matrix Spike % Recovery	Spike Diplicate % Recovery	Quality Control Limits	Analyst
Methylene Chloride	ND	N/A	N/A	N/A	SA
Trichlorofluoromethane	ND	N/A	N/A	N/A	SA
1,1-Dichloroethene	ND	**98**	**93**	61-145	SA
1,1-Dichloroethane	ND	N/A	N/A	N/A	SA
Chloroform	ND	N/A	N/A	N/A	SA
Carbon Tetrachloride	ND	N/A	N/A	N/A	SA
1,2-Dichloropropane	ND	N/A	N/A	N/A	SA
Trichloroethene	ND	**84**	**84**	71-120	SA
Dibromochloromethane	ND	N/A	N/A	N/A	SA
1,1,2-Trichloroethane	ND	N/A	N/A	N/A	SA
Tetrachloroethene	ND	N/A	N/A	N/A	SA
Chlorobenzene	ND	**79**	**80**	75-130	SA
Trans-1,2-Dichloroethene	ND	N/A	N/A	N/A	SA
1,2-Dichloroethane	ND	N/A	N/A	N/A	SA
1,1,1-Trichloroethane	ND	N/A	N/A	N/A	SA
Bromodichloromethane	ND	N/A	N/A	N/A	SA
Cis-1,3-Dichloropropene	ND	N/A	N/A	N/A	SA
Benzene	ND	**89**	**88**	76-127	SA
Trans-1,3-Dichloropropene	ND	N/A	N/A	N/A	SA
Bromoform	ND	N/A	N/A	N/A	SA
1,1,2,2-Tetrachloroethane	ND	N/A	N/A	N/A	SA
Toluene	**0.3**	**85**	**88**	76-125	SA
Ethyl Benzene	ND	N/A	N/A	N/A	SA
Chloromethane	ND	N/A	N/A	N/A	SA
Bromomethane	ND	N/A	N/A	N/A	SA
Vinyl Chloride	ND	N/A	N/A	N/A	SA
Chloroethane	ND	N/A	N/A	N/A	SA
Acetone	ND	N/A	N/A	N/A	SA
Carbon Disulfide	ND	N/A	N/A	N/A	SA
Vinyl Acetate	ND	N/A	N/A	N/A	SA
2-Butanone	ND	N/A	N/A	N/A	SA
4-Methyl-2-Pentanone	ND	N/A	N/A	N/A	SA
2-Hexanone	ND	N/A	N/A	N/A	SA
Styrene	ND	N/A	N/A	N/A	SA
Total Xylenes	ND	N/A	N/A	N/A	SA
Acrylonitrile	ND	N/A	N/A	N/A	SA
1,2-Dichlorobenzene	ND	N/A	N/A	N/A	SA
1,4-Dichlorobenzene	ND	N/A	N/A	N/A	SA
Trans-1,4-Dichloro-2-butene	ND	N/A	N/A	N/A	SA
Cis-1,2-Dichloroethene	ND	N/A	N/A	N/A	SA
Methyl Iodide	ND	N/A	N/A	N/A	SA
Bromochloromethane	ND	N/A	N/A	N/A	SA
Dibromomethane	ND	N/A	N/A	N/A	SA
1,1,1,2-Tetrachloroethane	ND	N/A	N/A	N/A	SA
1,2,3-Trichloropropane	ND	N/A	N/A	N/A	SA
1,2-Dibromo-3-Chloropropane(DBCP)	ND	N/A	N/A	N/A	SA
1,2-Dibromoethane (EDB)	ND	N/A	N/A	N/A	SA

COMMENTS:

Corresponding Samples: **635442-50**

% = Percent

ND = Non Detected

N/A = Not Available

Research & Analytical Laboratories, Inc.
Analytical/Process Consultations

RESEARCH & ANALYTICAL LABS. SIDNEY L. CHAMPION NC #34 DIRECTOR CERTIFIED ANALYSIS

Quality Control Summary Results for Project Identified as Roaring River Landfill (A Wilkes County Project, 30 December 2008

Inorganics Appendix I Parameter	Prep. Blank (µg/L)	ICV Recovery %	CCV Recovery %	LCS Recovery %	Spike Recovery %	% Difference
Arsenic	BDL	102	103 103	96	93	0
Antimony	BDL	99	100 108 108	84	95	23
Barium	BDL	99	102 102	97	93	0
Beryllium	BDL	102	101 101	94	93	0
Cadmium	BDL	109	101 101	104	98	0
Chromium	BDL	95	101 102	95	91	1
Cobalt	BDL	101	102 102	96	92	0
Copper	BDL	102	101 101	93	90	1
Lead	BDL	102	102 101	92	88	1
Nickel	BDL	102	102 101	96	92	0
Selenium	BDL	109	104 104	108	103	2
Silver	BDL	99	100 100	95	91	0
Thallium	BDL	98	103 102	96	93	0
Vanandium	BDL	103	101 100	94	92	0
Zinc	BDL	105	101 101	98	92	1

COMMENTS: 635442-20
% = Percent
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample
N/A = Not Available

*** Post Spike**

GROUNDWATER MONITORING FIELD LOG

Personnel Present:

Glenn Price

Comments:

* Obstruction in well @ 4.0 ft

** Well shaft bent 50' down unable to purge

Facility Wilkes County

Roaring River Landfill

December 30, 2009

Weather Clear 38°F

Date

Monitoring Well No..	MW-2 R	MW-5	MW-6	MW-7	*MW-8	MW-9	MW-10	**MW-12 S	MW-12 D	MW-17	MW-18	Leachate
Total Depth (FT.)	116.0	38.11	37.60	41.77	58.50	37.57	76.75	104.00	134.00	24.63	46.85	
Surface Depth (FT.)	80.41	37.88	37.60	41.69	Obstruction in well	29.69	76.69	102.68	108.48	19.65	35.83	
Water Depth (FT.)	35.59	0.23	0	0.08		7.88	0.06	1.32	25.52	4.98	11.02	
Diameter (IN.)	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	2"	
Conversion Factor	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	
Well Volume (GAL.)	5.69	0.04	*Well Dry*	*Well Dry*	*Obstruction unable to purge*	1.26	*Well Dry*	0.21	4.08	0.79	1.76	
Volume (GAL.) X 3	17.08	*Well Dry*				3.78		0.63	12.25	2.39	5.29	
# Bails (L)	70					16		3	50	10	22	
Purge Date	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08
Purge Time (hrs.)	0955					0810			0910	1052	1022	
Purge Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer		Bailer	Bailer	Bailer	
Volume Removed (GAL.)	8.50-Dry					4.00			6.50-Dry	1.00-Dry	4.25-Dry	
Sampling Date	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08	12/30/08
Sampling Time (hrs.)	1014					0825			0948	1104	1041	0845
Sampling Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Grab
pH (Standard Units)	6.77					5.17			9.19	5.77	5.69	8.40
Temperature (EC)	10.8					9.9			12.4	14.8	11.4	5.3
Conductivity (µmhos/cm)												
Dissolved Oxygen (mg/L)												
Observations/Sampling	Clear					Clear			Clear	Sl. Turbid	Turbid	Sl. Turbid

* Duplicate

RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical / Process Consultations
Phone (336) 996-2841

CHAIN OF CUSTODY RECORD

COMPANY: Wilkes Co Landfills
STREET ADDRESS:
CITY, STATE, ZIP:
CONTACT: PHONE:
JOB NO.:
PROJECT: Roaring River
SAMPLER NAME (PLEASE PRINT): Glen Price
SAMPLER SIGNATURE:

SAMPLE NUMBER (LAB USE ONLY)	DATE	TIME	COMP	GRAB	TEMP °C	RES Cl	CHLORINE REMOVED (Y or N)	SAMPLE MATRIX (S or W)	SAMPLE LOCATION / I.D.	NO. OF CONTAINERS	2L G (BNA, Herb. / Pest.)	2 40ml Vials (VOA) HCL	250ml G (TOX)	250ml P (TOC) H_2SO_4	1L P, G (BOD, TSS, Unpreserved, etc.)	1L G (Phenol, Oil & Grease) H_2SO_4	1L P, G (COD, N, P) H_2SO_4	1L P, G (Metals, Hardness) HNO_3	1L P, G (CYANIDE) NaOH	Sterile P, G (Coliform)	REQUESTED ANALYSIS
635442	12/30/11	1014		–				W	MW-2R	6		4			1			1			* See Remarks
443		0825		–				W	MW-9	6		4			1			1			
444		0948		–				W	MW-12D	6		4			1			1			
445		1104		–				W	MW-17	6		4			1			1			
446		1041		–				W	MW-18	6		4			1			1			
447		0825		–				W	Duplicate	6		4			1			1			
448		0500		–				W	TB	5		4						1			TB
449		1131		–				W	FB	5		4						1			FB
450	✓	0845		–				W	Leachate	10		4			2	2		1	1		* Remarks + Hg, Mn, O+G, CN, BOD, TSS, Mo

RELINQUISHED BY	DATE/TIME	RECEIVED BY
	12/31/11 1130	
RELINQUISHED BY	DATE/TIME	RECEIVED BY

REMARKS: * Sb, As, Ba, Be, Cd, Cr, Co, Cu, Ni, Pb, Se, Ag, Ti, V, Zn, VOA 8260, Cond

SAMPLE TEMPERATURE AT RECEIPT 1.8 °C Ice

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-5	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-5	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	108-88-3	196	Toluene	1.0	ug/L	U	1	1.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-5	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-5	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	04/28/2008	N/A	05/01/2008
97-04	MW-5	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	04/28/2008	N/A	05/01/2008
97-04	MW-5	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	04/28/2008	N/A	05/01/2008
97-04	MW-5	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-5	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	04/28/2008	N/A	05/01/2008
97-04	MW-5	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-5	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-5	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-5	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-5	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-5	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	04/28/2008	N/A	05/01/2008

RAL Sample #: 615659

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics													
FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-5	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-39-3	15	Barium	**221**	ug/L		1	100	1.1	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-47-3	51	Chromium	**14**	ug/L		1	10.0	0.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-48-4	53	Cobalt	**28.9**	ug/L		1	10.0	0.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-50-8	54	Copper	**8.6**	ug/L	J	1	10.0	2.0	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7439-92-1	131	Lead	**10.2**	ug/L		1	10.0	2.0	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-02-0	152	Nickel	**8.9**	ug/L	J	1	50.0	0.6	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-62-2	209	Vanadium	**8.8**	ug/L	J	1	25.0	0.4	04/28/2008	04/30/2008	05/02/2008
97-04	MW-5	7440-66-6	213	Zinc	**52.1**	ug/L		1	10.0	2.7	04/28/2008	04/30/2008	05/02/2008

RAL Sample #: 615659

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-8	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	71-43-2	16	Benzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-8	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	108-88-3	196	Toluene	1.0	ug/L	U	1	1.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-8	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-8	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	04/28/2008	N/A	05/01/2008
97-04	MW-8	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	04/28/2008	N/A	05/01/2008
97-04	MW-8	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	04/28/2008	N/A	05/01/2008
97-04	MW-8	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-8	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	04/28/2008	N/A	05/01/2008
97-04	MW-8	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-8	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	04/28/2008	N/A	05/01/2008
97-04	MW-8	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	04/28/2008	N/A	05/01/2008
97-04	MW-8	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	04/28/2008	N/A	05/01/2008
97-04	MW-8	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	04/28/2008	N/A	05/01/2008
97-04	MW-8	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	04/28/2008	N/A	05/01/2008

RAL Sample #: 615660

N/A = Not Applicable

U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-8	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-39-3	15	Barium	**6.6**	ug/L	J	1	100	1.1	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-47-3	51	Chromium	10.0	ug/L	U	1	10.0	0.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-48-4	53	Cobalt	**0.9**	ug/L	J	1	10.0	0.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-50-8	54	Copper	10.0	ug/L	U	1	10.0	2.0	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7439-92-1	131	Lead	**1.7**	ug/L	J	1	10.0	2.0	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-02-0	152	Nickel	50.0	ug/L	U	1	50.0	0.6	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-62-2	209	Vanadium	25.0	ug/L	U	1	25.0	0.4	04/28/2008	04/30/2008	05/02/2008
97-04	MW-8	7440-66-6	213	Zinc	**40.8**	ug/L		1	10.0	2.7	04/28/2008	04/30/2008	05/02/2008

RAL Sample #: 615660

N/A = Not Applicable

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Leachate - Volatile Organics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	Leachate	75-09-2	140	Methylene Chloride	1.0	ug/L	U	1	1.0	0.6	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-69-4	203	Trichlorofluoromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-35-4	77	1,1-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-34-3	75	1,1-Dichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	67-66-3	44	Chloroform	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	56-23-5	36	Carbon Tetrachloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	78-87-5	82	1,2-Dichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	79-01-6	201	Trichloroethene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	124-48-1	66	Dibromochloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	79-00-5	202	1,1,2-Trichloroethane	5.0	ug/L	U	1	5.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	127-18-4	192	Tetrachloroethene	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	108-90-7	39	Chlorobenzene	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	156-60-5	79	Trans-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	107-06-2	76	1,2-Dichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	71-55-6	200	1,1,1-Trichloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-27-4	29	Bromodichloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	10061-01-5	86	Cis-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	71-43-2	16	Benzene	**0.3**	ug/L	J	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	10061-02-6	87	Trans-1,3-Dichloropropene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-25-2	30	Bromoform	3.0	ug/L	U	1	3.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Leachate	79-34-5	191	1,1,2,2-Tetrachloroethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	108-88-3	196	Toluene	**1.3**	ug/L	B	1	1.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Leachate	100-41-4	110	Ethyl Benzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	74-87-3	137	Chloromethane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	74-83-9	136	Bromomethane	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-01-4	211	Vinyl Chloride	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-00-3	41	Chloroethane	10.0	ug/L	U	1	10.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	67-64-1	3	Acetone	100	ug/L	U	1	100	1.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	75-15-0	35	Carbon Disulfide	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Leachate	108-05-4	210	Vinyl Acetate	50.0	ug/L	U	1	50.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	78-93-3	141	2-Butanone	100	ug/L	U	1	100	0.9	12/30/2008	N/A	01/12/2009
97-04	Leachate	108-10-1	147	4-Methyl-2-Pentanone	100	ug/L	U	1	100	1.0	12/30/2008	N/A	01/12/2009
97-04	Leachate	591-78-6	124	2-Hexanone	50.0	ug/L	U	1	50.0	1.4	12/30/2008	N/A	01/12/2009
97-04	Leachate	100-42-5	186	Styrene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	1330-20-7	346	Total Xylenes	4.0	ug/L	U	1	4.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Leachate	107-13-1	8	Acrylonitrile	200	ug/L	U	1	200	12.4	12/30/2008	N/A	01/12/2009
97-04	Leachate	95-50-1	69	1,2-Dichlorobenzene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	106-46-7	71	1,4-Dichlorobenzene	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	110-57-6	73	Trans-1,4-Dichloro-2-butene	100	ug/L	U	1	100	0.5	12/30/2008	N/A	01/12/2009
97-04	Leachate	156-59-2	78	Cis-1,2-Dichloroethene	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	74-88-4	142	Methyl Iodide	10.0	ug/L	U	1	10.0	0.2	12/30/2008	N/A	01/12/2009
97-04	Leachate	74-97-5	28	Bromochloromethane	3.0	ug/L	U	1	3.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	74-95-3	139	Dibromomethane	10.0	ug/L	U	1	10.0	0.3	12/30/2008	N/A	01/12/2009
97-04	Leachate	630-20-6	190	1,1,1,2-Tetrachloroethane	5.0	ug/L	U	1	5.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	96-18-4	206	1,2,3-Trichloropropane	1.0	ug/L	U	1	1.0	0.1	12/30/2008	N/A	01/12/2009
97-04	Leachate	92-12-8	67	1,2-Dibromo-3-Chloropropane(DBCP)	1.0	ug/L	U	1	1.0	0.5	12/30/2008	N/A	01/12/2009
97-04	Leachate	106-93-4	68	1,2-Dibromoethane (EDB)	1.0	ug/L	U	1	1.0	0.2	12/30/2008	N/A	01/12/2009

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

RAL Sample #: 635450

N/A = Not Applicable

Wilkes County - Leachate - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	Leachate	7440-36-0	13	Antimony	6.0	ug/L	U	1	6.0	1.2	12/30/2008	12/31/2008	02/05/2009
97-04	Leachate	7440-38-2	14	Arsenic	10.0	ug/L	U	1	10.0	5.5	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-39-3	15	Barium	**80.0**	ug/L	J	1	100	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-41-7	23	Beryllium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	744-43-9	34	Cadmium	1.0	ug/L	U	1	1.0	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-47-3	51	Chromium	**7.4**	ug/L	J	1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-48-4	53	Cobalt	**20.4**	ug/L		1	10.0	0.7	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-50-8	54	Copper	**16.2**	ug/L		1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7439-92-1	131	Lead	**3.0**	ug/L	J	1	10.0	2.0	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-02-0	152	Nickel	**41.3**	ug/L	J	1	50.0	0.6	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7782-49-2	183	Selenium	10.0	ug/L	U	1	10.0	6.3	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-22-4	184	Silver	10.0	ug/L	U	1	10.0	1.1	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-28-0	194	Thallium	5.5	ug/L	U	1	5.5	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-62-2	209	Vanadium	**9.8**	ug/L	J	1	25.0	0.4	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7440-66-6	213	Zinc	**44.5**	ug/L		1	10.0	2.7	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7439-96-5	342	Manganese	**628**	ug/L		1	NE	0.2	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7439-98-7	397	Molybdenum	10.0	ug/L	U	1	NE	1.3	12/30/2008	12/31/2008	01/06/2009
97-04	Leachate	7439-97-6	132	Mercury	0.2	ug/L	U	1	0.2	0.01	12/30/2008	12/31/2008	01/05/2009
97-04	Leachate	SW316	316	BOD	**27.8**	mg/L		1	NE	2.0	12/30/2008	N/A	12/31/2008
97-04	Leachate	NE	NE	Oil & Grease	5.0	mg/L	U	1	NE	5.0	12/30/2008	N/A	01/08/2009
97-04	Leachate	57-12-5	58	Cyanide	10.0	ug/L	U	1	10.0	5.0	12/30/2008	N/A	01/05/2009
97-04	Leachate	SW343	343	TSS	**84.0**	mg/L		1	NE	5.0	12/30/2008	N/A	01/02/2009

RAL Sample #: 635450

N/A = Not Applicable

NE = Not Established
U = Not detected.
J = Estimated results. Present but below reporting limit.
B = Lab blank contamination.
µg/L = micrograms per Liter = parts per billion (ppb)

Wilkes County - Roaring River Landfill - Inorganics

FACILITY PERMIT	WELL ID	CAS Number	SWS ID	PARAMETER	RESULT	UNITS	QUALIFIER	DILUTION FACTOR	SWSL	MDL	COLLECT DATE	EXTRACTION DATE	ANALYSIS DATE
97-04	MW-18	7439-92-1	131	Lead	**20.8**	ug/L	B	1	10.0	2.0	03/12/2009	03/13/2009	03/17/2009
97-04	MW-18	7439-92-1	131	Soluble Lead	**6.5**	ug/L	J	1	10.0	2.0	03/12/2009	03/13/2009	03/18/2009
97-04	MW-18	7440-62-2	209	Vanadium	**20.4**	ug/L	J	1	25.0	0.4	03/12/2009	03/13/2009	03/17/2009
97-04	MW-18	7440-62-2	209	Soluble Vanadidum	**7.6**	ug/L	J	1	25.0	0.4	03/12/2009	03/13/2009	03/18/2009

RAL Sample #: 640886

U = Not detected.

J = Estimated results. Present but below reporting limit.

B = Lab blank contamination.

µg/L = micrograms per Liter = parts per billion (ppb)

N/A = Not Applicable

Research & Analytical Laboratories, Inc.
Analytical/Process Consultations

RESEARCH & ANALYTICAL LABS SIDNEY L. CHAMPION NC #34 DIRECTOR CERTIFIED ANALYSIS

Quality Control Summary Results for Project Identified as Roaring River Landfill (A Wilkes County Project, 12 March 2009)

Inorganics Appendix I Parameter	Prep. Blank (µg/L)	ICV Recovery %	CCV Recovery %	LCS Recovery %	Spike Recovery %	% Difference
Lead	5.2 J	99		90	106	4
Vanandium	BDL	104		90	107	2

COMMENTS: 640886

% = Percent

ICV = Initial Calibration Verification

CCV = Continuing Calibration Verification

LCS = Laboratory Control Sample

N/A = Not Available

GROUNDWATER MONITORING FIELD LOG

Personnel Present: Glenn Price

Comments:

Facility: Wilkes County
Roaring River Landfill

March 12, 2009
Date

Weather: Cloudy 44°F

Monitoring Well No.	MW-18											Leachate
Total Depth (FT.)	46.85											
Surface Depth (FT.)	35.93											
Water Depth (FT.)	10.92											
Diameter (IN.)	2"											
Conversion Factor	0.16											
Well Volume (GAL.)	1.75											
Volume (GAL.) X 3	5.24											
# Bails (L)	21											
Purge Date	03/12/09											
Purge Time (hrs.)	1045											
Purge Method	Bailer											
Volume Removed (GAL.)	5.25											
Sampling Date	03/12/09											
Sampling Time (hrs.)	1104											
Sampling Method	Bailer											
pH (Standard Units)	6.22											
Temperature (EC)	11.9											
Conductivity (µmhos/cm)	11.7											
Dissolved Oxygen (mg/L)												
Observations/Sampling	Turbid @ Purge Start at Sampling											

* Duplicate

RESEARCH & ANALYTICAL LABORATORIES, INC.

Analytical / Process Consultations
Phone (336) 996-2841

CHAIN OF CUSTODY RECORD

COMPANY: Wilkes Co Landfills
JOB NO.:
STREET ADDRESS:
PROJECT: Roaring River
CITY, STATE, ZIP:
SAMPLER NAME (PLEASE PRINT): Glenn Tine
CONTACT: PHONE:
SAMPLER SIGNATURE:

SAMPLE NUMBER (LAB USE ONLY)	DATE	TIME	COMP	GRAB	TEMP °C	RES Cl	CHLORINE REMOVED (Y or N)	SAMPLE MATRIX (S or W)	SAMPLE LOCATION / I.D.	NO. OF CONTAINERS	2L G (BNA, Herb. / Pest.)	2 40ml Vials (VOA) HCL	250ml G (TOX)	250ml P (TOC) H_2SO_4	1L P, G (BOD, TSS, Unpreserved, etc.)	1L G (Phenol, Oil & Grease) H_2SO_4	1L P, G (COD, N, P) H_2SO_4	1L P, G (Metals, Hardness) HNO_3	1L P, G (CYANIDE) NaOH	Sterile P, G (Coliform)	REQUESTED ANALYSIS
640886	3/12/09	1104		✓		—	—	W	MW-18	2				1			1				Pb, V, Soluble Pb, Soluble V, Cond

WATER / WASTEWATER | MISC.

RELINQUISHED BY	DATE/TIME	RECEIVED BY
	3/13/09 1350	
RELINQUISHED BY	DATE/TIME	RECEIVED BY

REMARKS:

SAMPLE TEMPERATURE AT RECEIPT 16 °C on ice