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).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- 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):

Altamont Environmental, Inc.

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

Name: Katie Massie Phone: (828) 281-3350

E-mail: kmassie@altamontenvironmental.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Jackson County Municipal Solid Waste Landfill	US Highway 441 Dillsboro, NC 28725	50-02	.1600	April 15 & 16, 2008

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

☐ No. No groundwater or surface water standards 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.

Joel D. Lenk P.G. (828) 281-3350

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

Signature 7/15/08 Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:

NORTH CAROLINA LICENSED PGA 2341 GEOLOGIST JOEL D. LENK

Revised 01/2007

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SPRING 2008 SEMIANNUAL WATER QUALITY MONITORING REPORT

JACKSON COUNTY MUNICIPAL SOLID WASTE LANDFILL JACKSON COUNTY, NORTH CAROLINA

Prepared for
Jackson County Solid Waste Department

July 15, 2008

Prepared by
Altamont Environmental, Inc.
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Asheville, North Carolina 28801
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Joel D. Lenk
Project Geologist

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1.0 INTRODUCTION

The Jackson County Solid Waste Department maintains a closed Municipal Solid Waste Landfill (MSWLF) located approximately three-quarters of a mile west of Dillsboro, North Carolina, north of Old Dillsboro Road (Old U.S. 74). The approximate location of the landfill is shown in Figure 1. The landfill is governed by the North Carolina Department of Environment and Natural Resources (DENR), Division of Waste Management (DWM), Permit No. 50-02 issued to Jackson County. The landfill permit requires semiannual monitoring of groundwater and surface water quality.

This report serves as the first semiannual groundwater and surface water monitoring report for 2008 and is being submitted in accordance with requirements stipulated in the North Carolina DENR Solid Waste Management Rules 15A North Carolina Administrative Code (NCAC) 13B. The data and report also comply with the subsequent memorandum regarding Appendix II monitoring from DENR, dated April 21, 1995. In correspondence dated November 19, 2002, the DENR agreed to modify the assessment monitoring requirements at the Jackson County closed landfill. Sampling and analysis for Appendix II volatile organic compounds (VOCs), Appendix II metals, and Appendix II herbicides are currently on a biennial basis. These parameters were analyzed during the current sampling event. This report provides an evaluation of groundwater and surface water quality. Statistical analyses of groundwater quality data and groundwater flow direction are also provided.

This report contains the following items:

- Groundwater level measurements and corresponding elevations for the landfill monitoring wells;
- An illustration of groundwater and surface water sampling locations;
- Generalized groundwater flow direction map;
- Summary of groundwater and surface water analytical results;
- Statistical analyses for metals and VOCs;
- Sampling logs; and
- Groundwater and surface water quality analytical results with chain-of-custody forms.

2.0 SEMIANNUAL MONITORING

2.1 GROUNDWATER, SURFACE WATER, AND DOMESTIC WELL SAMPLING

The closed MSWLF monitoring wells (MW-01, MW-02, MW-03, MW-04, MW-05 and MW-06) and surface water sample locations (SW-01 and SW-02) were sampled on April 15 and16, 2008 by Altamont Environmental, Inc. (Altamont). The monitoring well and surface water sample locations are depicted on Figure 2.

Prior to collecting groundwater samples from monitoring wells, the static water level was measured in each well. The monitoring wells were purged using low-flow techniques in accordance with the procedures described in Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures United States Environmental Protection Agency (US EPA), Groundwater Issues (April 1996). During purging, the pH, specific conductivity, dissolved oxygen, oxidation-reduction potential (ORP), turbidity and temperature were measured and recorded every three minutes. Well purging continued until these parameters stabilized (three successive readings in which pH+/- 0.1 unit; specific conductivity +/- 3 percent; temperature, dissolved oxygen and turbidity +/- 10 percent; and ORP +/- 10 millivolts). At that time, a groundwater sample was collected using laboratory-supplied sample bottles by a technician wearing sterile Nitrile gloves. Collected samples were immediately placed on ice in sample coolers for transport to the laboratory. Proper chain-of-custody documentation was followed during collection and transport of each sample. A trip blank was included in the sample cooler and analyzed for Appendix I Volatile Organic Compounds (VOCs).

Surface water samples SW-01 and SW-02 were collected at designated locations from the Tuckasegee River, which is adjacent to the southwestern border of the landfill. SW-01 is representative of surface of water quality upstream of the landfill; SW-02 is representative of surface water quality downstream from the landfill. Samples were collected in laboratory-supplied sample bottles by a technician wearing new disposable Nitrile gloves. Collected samples were immediately placed on ice in sample coolers for transport to the laboratory. Proper chain-of-custody documentation was followed during collection and transport of each sample. Similar to groundwater sampling, temperature, pH, specific conductivity,

dissolved oxygen, and turbidity were measured and recorded at each surface water sampling location (see Table 1).

Field parameters and additional observations pertaining to the MSWLF sampling locations are provided on sampling logs, which are included as Appendix A. Groundwater and surface water samples were analyzed by Pace Analytical Services, Inc. (Pace), a North Carolina Certified Laboratory located in Asheville, North Carolina. Altamont submitted the groundwater samples collected from the monitoring wells and the surface water samples for analyses as follows:

- Appendix I Volatile Organic Compounds (VOCs) using US Environmental Protection Agency (EPA) Method 8260; and
- Appendix I Metals using EPA Methods 6010 and 7470.

2.2 ANALYTICAL RESULTS

The laboratory analytical results for the groundwater samples (monitoring wells MW-01 – MW-06, and domestic wells DW-01 and DW-02) and surface water samples (SW-01 and SW-02) collected at the MSWLF are compiled in Table 1. Table 1 is displayed in the Electronic Data Deliverable format specified by the Solid Waste Section memorandum dated October 27, 2006. The laboratory analytical report issued by Pace and chain-of-custody forms are included in Appendix B.

As stipulated in the October 27, 2006 Solid Waste Section memorandum referenced above, all laboratory analytical results were reported and appropriately qualified. Non-detections (non-detects), values reported by the laboratory as below Method Detection Limits (MDLs), were tabulated on Table 1 as "Below Quantitation Limit" (BQL), and were qualified with the "U" qualifier. The MDL is the minimum concentration of a substance that can be measured and reported by a laboratory with 99% confidence that the constituent concentration is greater than zero. All detections (values above the MDL) were compared to constituent-specific Solid Waste Section Limits (SWSLs) established by the NC Solid Waste Section. The SWSL is defined as the lowest concentration of a constituent in a sample that can be quantitatively determined with suitable precision and accuracy. If a reported concentration is above the laboratory

MDL but below the SWSL, the analytical result is qualified as estimated. These results are flagged with a "J" qualifier (J-flag) in Table 1.

Detected concentrations of constituents in groundwater samples were compared to the applicable standard from the North Carolina Administrative Code (NCAC) Title 15A, Subchapter 2L groundwater quality standards (2L Standard). Detected concentrations of constituents in groundwater with no established 2L Standard were compared to the Groundwater Protection Standard (GWPS) pursuant to 15A NACA 13B.1634. Surface water sample detections were compared to the standard from the North Carolina Administrative Code (NCAC) Title 13A, Subchapter 2B groundwater quality standards (2B Standard).

2.2.1 Groundwater – Monitoring Wells

Analytical results for groundwater samples collected from the monitoring wells are discussed below. Analytical results for Appendix I metals are shown in Tables 1 and 2 and are discussed first, followed by a discussion of VOC analytical results.

Appendix I Metals

- Seven metals (beryllium, chromium, copper, nickel, selenium, thallium, and vanadium) were detected only at concentrations below SWSLs (J-flags) in one or more of the monitoring well groundwater samples.
- Five metals (barium, cadmium, cobalt, mercury, and zinc) were detected in samples collected from one or more of the monitoring wells at concentrations above the SWSLs. Table 2 presents all detected constituent concentrations above SWSLs.
- One metal (vanadium) was detected at an estimated concentration below the SWSL (J-flag) but at a concentration exceeding the respective GWPS.
- One of the five metals (cadmium) detected above SWSLs in groundwater samples collected from the monitoring wells exceeded the respective 2L Standard.

The following statements summarize the 2L Standard and GWPS exceedances for Appendix I metals in groundwater samples, as shown in Table 3.

- Vanadium was detected in the groundwater sample collected from MW-05 at a concentration of 5.7 µg/l. This concentration exceeds the 3.5 µg/l GWPS, but is qualified as estimated with a "J"-flag because it is less than the SWSL of 25 µg/l.
- Cadmium was detected in the groundwater sample collected from MW-05 at a concentration of 6.0 µg/l, which is greater than the 2L Standard of 1.75 µg/l.

Appendix I VOCs

- Five VOCs were detected only at estimated concentrations below SWSLs (J-flags) in the groundwater samples collected from monitoring wells. These VOCs are: 1,2-dichlorobenzene, chloroethane, o-xylene, trichloroethene, and vinyl chloride.
- One of the VOCs detected below the SWSL (vinyl chloride) exceeded the respective 2L Standard.
- Three VOCs (1,1-dichloroethane, benzene, and cis-1,2-dichloroethene) were detected at concentrations above the respective SWSLs.
- One of the three VOCs detected above the SWSL (benzene) exceeded the respective 2L Standard.

The following statements summarize the 2L Standard exceedances for Appendix I VOCs in groundwater samples, as shown in Table 3.

- Vinyl chloride was detected above the 2L Standard (0.015 µg/l) in the groundwater samples collected from MW-01, MW-04 and MW-05. All three concentrations were below the SWSL of 1 µg/l.
- The concentrations of benzene detected in the groundwater samples collected from MW-01, MW-03, MW-04, and MW-06 exceeded the 2L Standard of 1 µg/l.

2.2.2 Surface Water

The following statements summarize detections of Appendix I metals and Appendix I VOCs in the two surface water samples collected during the April 2008 sampling event.

Appendix I Metals

- Five metals (barium, chromium, cobalt, copper, and vanadium, and zinc) were detected only at estimated concentrations below SWSLs in the surface water samples collected during the Spring 2008 sampling event. No other metals were detected in either surface water sample.
- None of the metals detected in surface water samples SW-01 or SW-02 exceeded 2B Standards.

Appendix I VOCs

- VOCs were not detected in either surface water sample (SW-01 or SW-02).

2.3 HYDROGEOLOGY

Groundwater occurring in the saprolite and bedrock aquifers is monitored at the MSWLF. Three bedrock aquifer monitoring wells, MW-01, MW-02, and MW-06, are located in the northwest portion of the site. Because these three wells are situated in a linear pattern, and groundwater flow in fractured bedrock is complex, an accurate groundwater flow direction in bedrock cannot be reliably predicted.

Monitoring wells MW-03, MW-04, and MW-05 (Figure 3), located at the southern portion of the landfill, are completed in unconsolidated saprolite or partially weathered rock (PWR) aquifer. Water level data collected from MW-03, MW-04, and MW-05 (Table 4) were used to predict that groundwater flow direction in the shallow aquifer is to the southwest, toward the Tuckasegee River. Figure 3 depicts the generalized groundwater flow direction in the saprolite / PWR aquifer based on the groundwater measurements made by Altamont on April 15 and 16, 2008.

2.4 STATISTICAL ANALYSES

Typically, the analysis of variance procedure is used to compare concentration data from several compliance wells with concentration data from background wells. However, as stated in a letter from Altamont to DENR dated January 16, 2004, the Jackson County MSWLF does not have an adequate background well. Monitoring well MW-01 was installed by a previous consultant in a location that was presumably thought to represent background water quality. However, historical analytical results from samples collected from MW-01 suggest that water quality at MW-01 is not representative of background groundwater conditions. Therefore, an analysis of variance procedure is not feasible for this landfill.

In lieu of an analysis of variance (ANOVA) procedure, Altamont performed the Student's *t*-test statistical procedure (*t*-test) to determine whether the mean concentration of a detected constituent is statistically greater than its respective 2L Standard. The *t*-test is commonly used when comparing a time series of data (e.g., current and historic concentrations of a specific contaminant detected in samples collected from a well) to one given value (e.g., the 2L Standard). GWPS values were used for constituents that did not have a listed 2L Standard.

The *t*-test evaluates the null hypothesis that the mean concentration of a detected constituent is equal to the 2L Standard. If the mean for a particular constituent is not statistically greater than its respective 2L Standard, then the null hypothesis is accepted. Conversely, if the mean for a particular constituent is statistically greater than the respective 2L Standard, then the null hypothesis is rejected and the mean concentration is acknowledged to be greater than the 2L Standard. This is determined by comparing the computed *t*-statistic to the tabulated *t*-statistic.

The computed *t*-statistic takes into account the mean, standard deviation, number of data points, and the 2L Standard (or GWPS), as shown in the following equation:

$$t_{\text{computed}} = \frac{\text{mean} - \text{2L Standard}}{\dfrac{\text{standard deviation}}{\sqrt{\text{sample size}}}}$$

The tabulated *t*-statistic is derived from a standard *t*-distribution table and is based on the sample size and a pre-determined sensitivity value (α). DENR, in Subchapter 13B, Section .1632(h)(2), established α as 0.01. If the tabulated *t*-statistic exceeds the computed *t*-statistic, then the null hypothesis is accepted. If the computed *t*-statistic exceeds the tabulated *t*-statistic, then the null hypothesis is rejected, and the alternate hypothesis is accepted.

The statistical analysis was performed on detected metals and VOCs. For a given constituent, a dataset, (or sample set) consisted of analytical results from all available laboratory analyses performed to date. Concentrations detected below the laboratory MDL (non-detects) during the current sampling event were replaced with the method reporting limit specified by the laboratory (MRL) in all datasets. The MDL was replaced with the MRL since the MRL is the minimum concentration of an constituent in a sample that can be quantitatively determined by the referenced method with suitable precision and accuracy by the laboratory. Statistical evaluation of a given constituent whose sample set contained a large amount of non-detects was not conducted if the MRL exceeded the groundwater quality standard of interest. Altamont consulted with Dr. Arthur Lubin, an environmental statistician with the EPA, on January 9, 2004 concerning the use of values reported as “non-detectable”. Dr. Lubin stated that a valid statistical comparison is not possible when a sample set contains non-detect values and the detection limit (or value

used to replace non-detects) is greater than the groundwater standard. Dr. Lubin added that a qualitative analysis of the data is the only feasible option for this scenario. Statistical analyses were not performed for constituents that have not been detected historically; in the event of future detections, Altamont will conduct statistical analyses on these constituents.

2.4.1 Appendix I Metals

The results of the statistical analyses are included as Appendix C. Statistical analyses for cobalt, thallium, and vanadium were not performed during previous monitoring events because there were no established groundwater quality standards available for comparison. New regulations adopted the DENR Solid Waste Section (described in a memorandum dated October 16, 2007) stipulate that groundwater analytical results for constituents with no established 2L Standard are to be compared to the GWPS established by the North Carolina Department of Environmental Health.

Valid analysis of thallium and vanadium datasets was not possible due to the large number of historical non-detects, which exceed the current GWPSs established for these metals. Please note that per Solid Waste Section regulations, all groundwater samples were analyzed by laboratory methods whose MRLs were equal to or below the SWSLs for all constituents. The SWSLs for both thallium and vanadium exceed the current designated water quality standards applicable to these constituents.

Statistical analyses of all other detected constituents indicate that the concentrations detected in groundwater samples collected from monitoring wells do not exceed their respective 2L Standards or GWPSs.

2.4.2 Appendix I VOCs

Statistical evaluation shows that the mean concentration of one detected VOC was statistically greater than the respective 2L Standard in one or more of the monitoring wells. This suggests that contamination is present in groundwater in the vicinity of one or more of the monitoring wells.

The mean concentration of benzene in monitoring wells MW-01, MW-05, and MW-06 is statistically greater than the respective 2L groundwater standard of 1 µg/l. Use of the *t*-test to evaluate concentrations of benzene in MW-02, MW-03, and MW-04 is not valid, as the sample sets contain a majority of historical non-detect values which exceed the current 2L Standard.

Statistical analysis of the historical vinyl chloride datasets was not possible due to the large amount of non-detects in sample sets from each of the six monitoring wells. Analyses were not conducted on the o-xylene datasets due to the lack of a water quality standard for comparison.

There is no evidence that concentrations of the other VOCs detected in the samples collected from monitoring wells exceed groundwater quality standards.

3.0 SUMMARY

The first semiannual groundwater monitoring event of 2008 was conducted on April 15 and 16, 2008 at the Jackson County MSWLF.

3.1 GROUNDWATER – MONITORING WELLS

Appendix I Metals

Five metals (barium, cadmium, cobalt, mercury, and zinc) were detected above SWSLs in the groundwater samples collected from one or more of the monitoring wells during the Spring 2008 water quality monitoring event. Of these five metals, only cadmium was detected at a concentration exceeding its respective 2L Standard. The cadmium concentration detected in MW-05 (6.0 µg/l) exceeds the 2L Standard of 1.75 µg/l. Cadmium has been detected intermittently at low levels in groundwater samples collected from monitoring wells at the MSWLF. The concentration detected in the groundwater sample collected from MW-05 during the sampling event conducted in October 2007 also exceeded the 1.75 µg/l 2L Standard. Statistical analyses of historical concentrations of cadmium, however, indicate that the mean level of cadmium in the groundwater collected from each of the monitoring wells is below the 2L Standard.

The 5.7 µg/l concentration of vanadium detected in the groundwater sample collected from MW-05 exceeds the GWPS of 3.5µg/l, but it is well below the SWSL of 25 µg/l. Vanadium, which has been intermittently detected in monitoring well samples at the MSWLF historically, was also detected in the samples collected from MW-02, MW-03, MW-04, and MW-06 at concentrations below the GWPS and SWSL during the April 2008 sampling event.

Some or all of the vanadium and cadmium detected in the MW-05 groundwater sample may be attributed to turbidity. Low-flow sampling techniques reduce the turbidity of groundwater samples, which is caused by fine-grained suspended sediments that can contain naturally occurring metallic ions derived from the parent rock. Due to an obstruction in the well casing, the MW-05 sample was not collected using the low-flow techniques utilized to sample the other monitoring wells. Instead, MW-05 was purged and the

groundwater sample collected using traditional hand bailing sampling techniques during this sampling event. The turbidity of the MW-05 sample was measured as 149.9 nephelometric turbidity units (ntu), which was the highest turbidity level measured in any groundwater sample collected during this sampling event. Furthermore, since the adoption of low-flow sampling techniques following the October 2007 sampling event, both the total number of metals detected above SWSLs and the number of metals detected at concentrations exceeding water quality standards has decreased. In October 2007, fourteen metals were detected above SWSLs and eight metals were detected above their designated water quality standards. In contrast, during the April 2008 sampling event five metals were detected above SWSLs and only two exceeded water quality standards. The decrease in overall metals detections and metals exceedances of water quality standards since implementing low-flow sampling techniques, the observation that the two metals exceedances observed during the April 2008 sampling event were detected in the groundwater sample that was collected using hand-bailing techniques, and the fact that the exceedances were detected in the groundwater sample that exhibited the highest turbidity level, strongly suggest that some or all of the cadmium and vanadium detected in the groundwater sample from MW-05 may be attributable to turbidity.

Appendix I VOCs

Of the three VOCs detected above SWSLs (1,1-dichloroethane, benzene, and cis-1,2-dichloroethene) in groundwater samples collected from the monitoring wells at the site, only benzene was detected at concentrations in excess of the 1 µg/l 2L Standard. Concentrations of benzene detected in four groundwater samples (MW-01, MW-03, MW-04, and MW-06) exceeded the 2L Standard. Statistical analysis, using the Student's *t*-test, revealed that the mean concentration of benzene is significantly greater than the 2L Standard in monitoring wells MW-01, MW-05, and MW-06, which indicates that there may be contamination of groundwater by benzene in the vicinity of each of these wells. The datasets for MW-02, MW-03, and MW-04 were not statistically evaluated as they each contained a majority of historical non-detects greater than the current 2L Standard.

Review of historical groundwater data since October 1996, indicates that the concentrations of benzene have fluctuated between 2.5 µg/L and 14 µg/L in MW-1. Detected benzene concentrations in MW-6 (installed in March 2004) have ranged from 5.7 µg/L to 6.4 µg/L. MW-1 and MW-6 are bedrock wells located in the northwest portion of the landfill. Assuming that the bedrock aquifer is unconfined at the

landfill, recharge of groundwater to bedrock is presumably from the overlying saprolite aquifer. The Tuckaseegee River, located adjacent to the landfill to the southwest, represents a major drainage for this area. It is likely that groundwater in the bedrock aquifer discharges to the river. Benzene is a volatile compound that is easily attenuated; therefore it is probable that the concentration of benzene is significantly reduced by the time the groundwater discharges to the stream. Groundwater collected from the downgradient bedrock well, MW-2, did not contain concentrations of VOCs above the laboratory reporting limit, and VOCs were not detected in surface water samples.

One additional VOC, vinyl chloride, was detected in one or more of the groundwater samples collected from monitoring wells and exceeded water quality standards. Vinyl chloride was detected in three wells (MW-01, MW-04, and MW-05) at concentrations above the 2L Standard of 0.015 µg/l. However, all three detections of vinyl chloride were below the SWSL of 1 µg/l. Statistical analysis of the vinyl chloride datasets was not possible due to an historical lack of detections in monitoring well samples.

3.2 SURFACE WATER

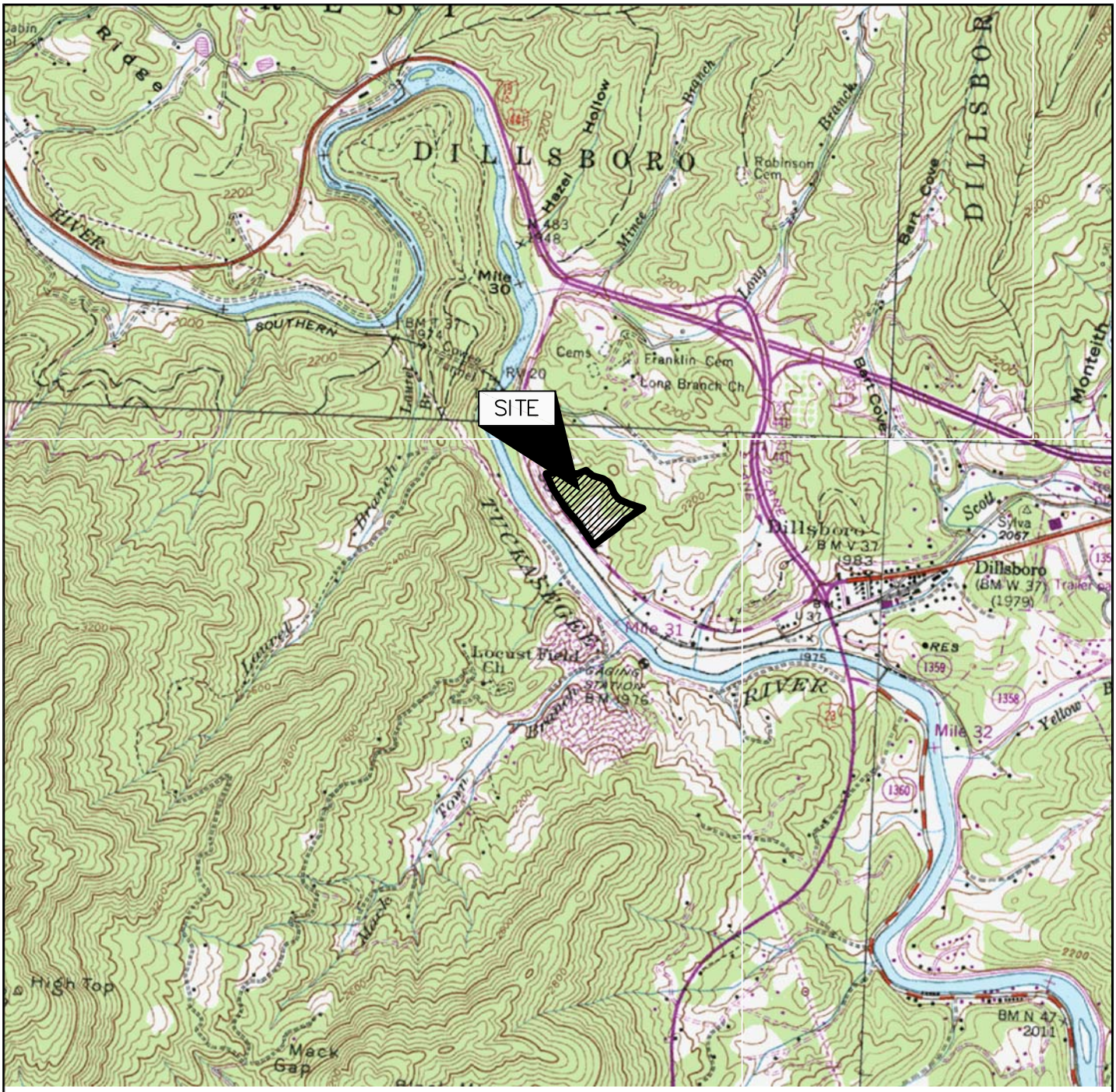
Appendix I Metals

Metals were not detected above SWSLs in either of the surface water samples collected from the Tuckasegee River.

Appendix I VOCs

VOCs were not detected in surface water samples collected either upstream or downstream of the landfill.

Altamont will continue to monitor Appendix I VOCs and Appendix I metals on a semiannual basis at the Jackson County MSWLF. The next semiannual sampling event, which will consist of analysis for Appendix II Metals and Appendix II VOCs, is scheduled for October 2008.



SOURCE: USGS TOPOGRAPHIC MAPS; GREENS CREEK, SYLVA NORTH, SYLVA SOUTH, AND WHITTIER, NORTH CAROLINA QUADRANGLES

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SITE LOCATION MAP

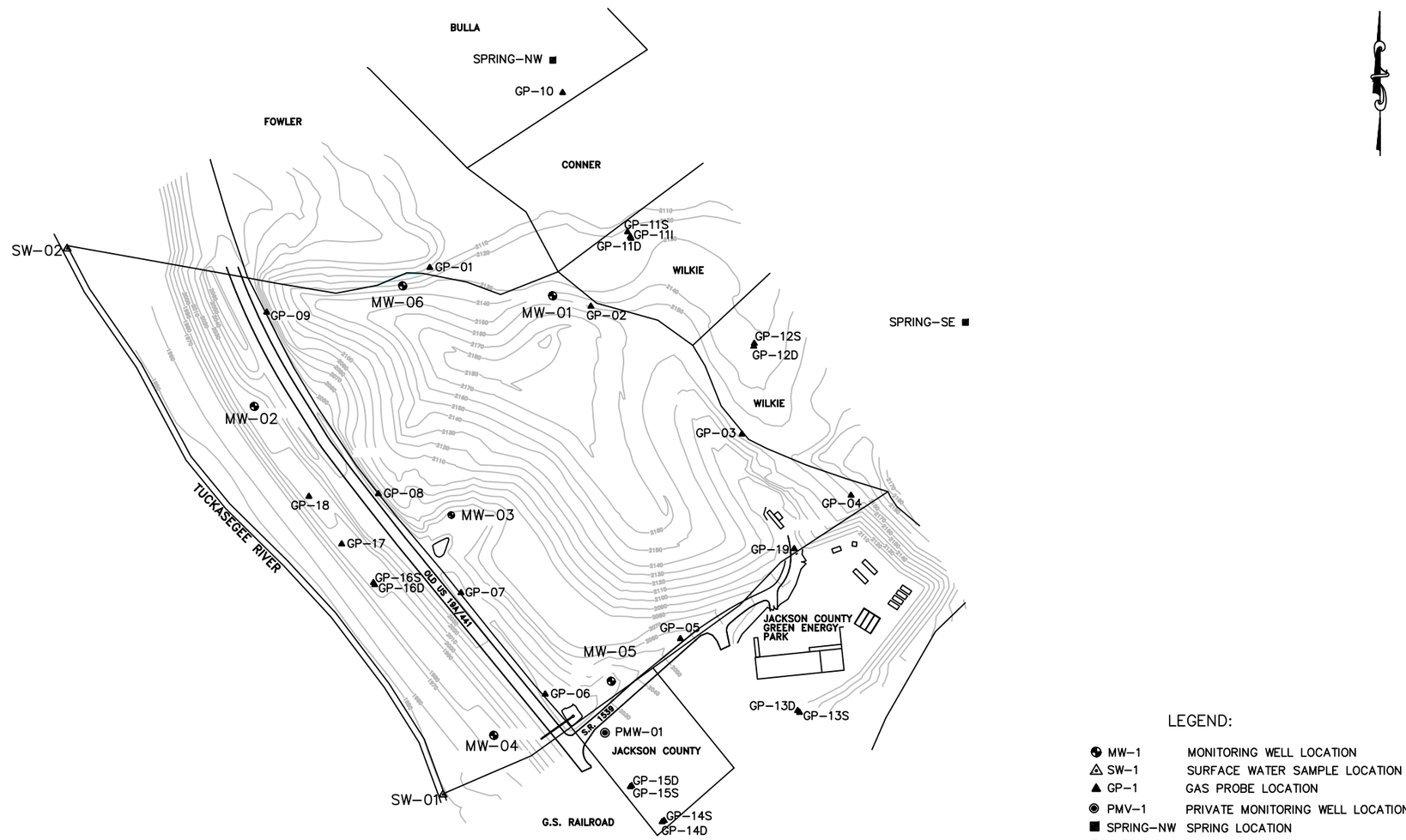
MUNICIPAL SOLID WASTE LANDFILL
JACKSON COUNTY
NORTH CAROLINA

FIGURE 1

DRAWN BY: KATIE MASSIE
PROJECT MANAGER: JOEL LENK
CLIENT: JACKSON COUNTY
DATE: 06-09-08

SCALE (FEET)
1000 0 1000 2000

P:\JACKSON COUNTY\DILLSBORO GW\FIGURES\CAD\FIGURE 1 (04-08)



LEGEND:

MW-1	MONITORING WELL LOCATION
SW-1	SURFACE WATER SAMPLE LOCATION
GP-1	GAS PROBE LOCATION
PMV-1	PRIVATE MONITORING WELL LOCATION
SPRING-NW	SPRING LOCATION
FOWLER	PROPERTY OWNER SURNAME

NOTE:

1. TOPOGRAPHIC CONTOURS ARE FOR REPRESENTATIVE PURPOSES. CONTOURS OBTAINED FROM McGILL ASSOCIATES.

REV.	DATE	DESCRIPTION	BY	CHK	APV
9	06-09-08	UPDATE	KRM	JDH	
8	01-24-08	UPDATE	KRM	JDH	
7	11-03-06	NEW TITLE BLOCK	JK	CFG	
6	06-28-06	UPDATE	ZP	JSM	
5	01-08-05	UPDATE	ZP	JSM	
4	06-18-04	UPDATE	ZP	JSM	
3	11-21-03	UPDATE	ZP	JSM	
2	05-13-02	UPDATE	SEK	JSM	
1	11-12-01	ORIGINAL	JMC	JPM	

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DRAWN BY: KATIE MASSIE
PROJECT MANAGER: JOEL LENK
CLIENT: JACKSON COUNTY
DATE: 06/09/08

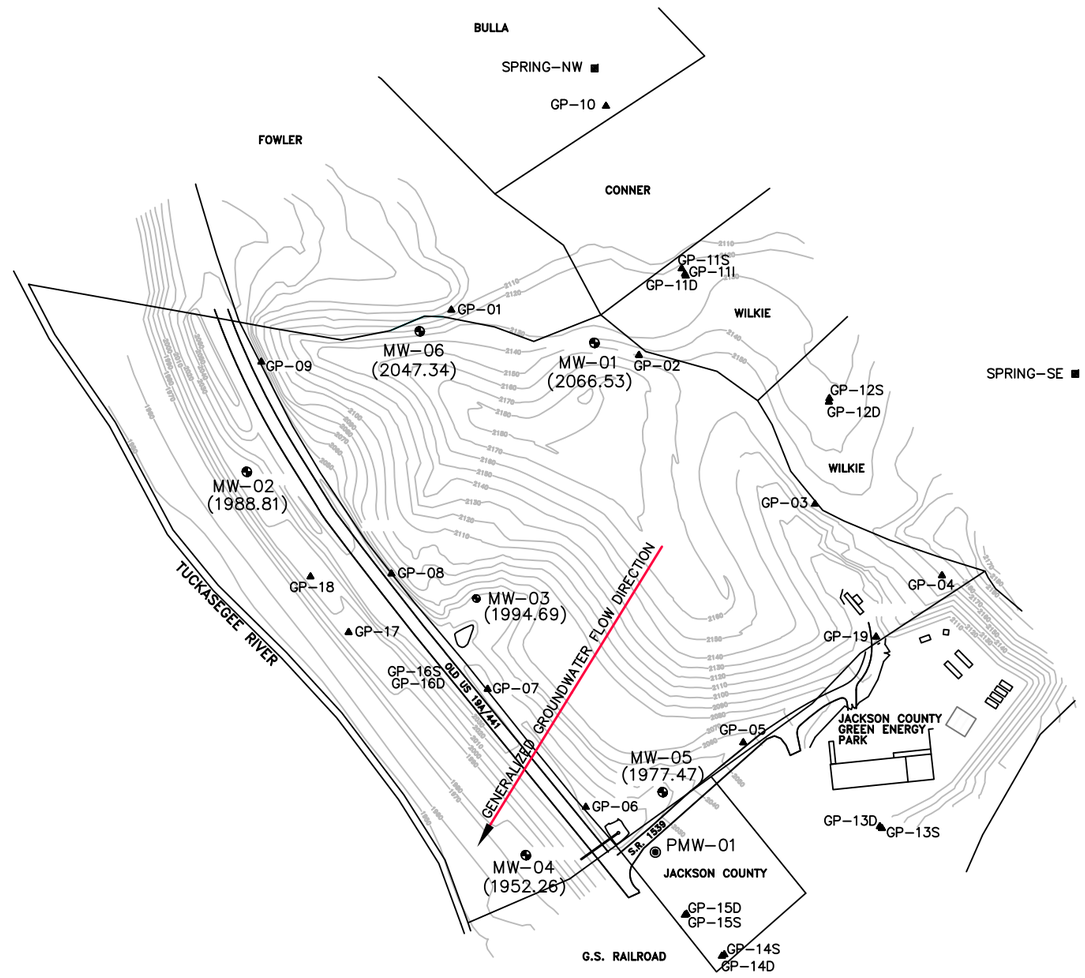
SCALE (FEET)
150 0 150 300

MONITORING WELL AND GAS PROBE LOCATION MAP

MUNICIPAL SOLID WASTE LANDFILL
JACKSON COUNTY
NORTH CAROLINA

FIGURE 2

P:\JACKSON COUNTY\DILLSBORO GW\FIGURES\CAD\FIGURE 2 LOCATION MAP (04-08)



LEGEND:

◕	MW-1 MONITORING WELL LOCATION
△	SW-1 SURFACE WATER SAMPLE LOCATION
▲	GP-1 GAS PROBE LOCATION
◉	PMV-1 PRIVATE MONITORING WELL LOCATION
■	SPRING-NW SPRING LOCATION
(2066.53)	GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL ON APRIL 15 AND 16, 2008
FOWLER	PROPERTY OWNER SURNAME

NOTE:

1. TOPOGRAPHIC CONTOURS ARE FOR REPRESENTATIVE PURPOSES. CONTOURS OBTAINED FROM McGILL ASSOCIATES.
2. GROUNDWATER FLOW DIRECTION BASED ON GROUNDWATER ELEVATIONS MEASURED IN FEET ON APRIL 15 AND 16, 2008 IN MW-03, MW-04, AND MW-05.
3. GROUNDWATER ELEVATIONS AND FLOW DIRECTION ARE UPDATED ON A SEMI-ANNUAL BASIS EVERY APRIL AND OCTOBER FOLLOWING THE SAMPLE COLLECTION EVENTS.

REV.	DATE	DESCRIPTION	BY	CHK	APV
3	06-09-08	UPDATE	KM	JDH	
2	10-30-06	NEW TITLE BLOCK	JK	JDH	
1	11-12-01	ORIGINAL	JMC	JPM	

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DRAWN BY: KATIE MASSIE
PROJECT MANAGER: JOEL LENK
CLIENT: JACKSON COUNTY
DATE: 06/09/08

SCALE (FEET)
150 0 150 300

GENERALIZED GROUNDWATER FLOW DIRECTION-SAPROLITE AND PARTIALLY WEATHERED BEDROCK ZONE

MUNICIPAL SOLID WASTE LANDFILL
JACKSON COUNTY
NORTH CAROLINA

FIGURE
3

P:\JACKSON COUNTY\DILLSBORO GW\FIGURES\CAD\FIGURE 3 FLOW DIRECTION_04-08

Table 4
Well Construction Details and Corresponding Elevations
Jackson County MSWLF
Jackson County, North Carolina
April 15-16, 2008

Well ID	Ground Surface Elevation	TOC Elevation	Depth To Water (from TOC)	Groundwater Elevation	Depth to Bedrock (from Ground Surface)	Bedrock Elevation	Screened Interval (from Ground Surface)	Elevation of Screened Interval
MW-01	2169.40	2171.42	104.89	2066.53	83.0	2086.40	95 to 110	2074.4 to 2059.4
MW-02	2013.15	2015.38	26.57	1988.81	13.0	2000.15	45 to 60	1968.2 to 1953.2
MW-03	2044.16	2045.53	50.84	1994.69	57.0	1987.16	48.5 to 63.5	1995.7 to 1980.7
MW-04	1978.68	1980.77	28.51	1952.26	NA	NA	25 to 40	1951.7 to 1936.7
MW-05	2027.38	2028.97	51.50	1977.47	NA	NA	50 to 60	1977.4 to 1967.4
MW-06	2136.58	2139.57	92.23	2047.34	47.6	2089.0	84.6 to 94.6	2052.0 to 2042.0

Notes:

1. All measurements are in feet. Elevations are measured relative to mean sea level and are based on a survey completed on April 9, 1999 by Davenport & Assoc., Inc.
2. TOC means Top of Casing.
3. NA means Not Applicable.
4. MW-01 through MW-04 Depth to Bedrock and Screened Interval taken from boring logs completed on April 21, 22, and 23, 1992 by S&ME.
5. MW-05 Screened Interval taken from boring log completed on September 23, 1994 by AAA Greene Bros. of Sylva.
6. MW-06 Depth to Bedrock and Screened Interval taken from Altamont boring log completed March 23, 2004.

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
Date: 4-16-08

Well ID: MW-01
Screen Interval: 95-110 bgs
Depth to Water: 104.89 toc
Depth of Pump Intake: 109.5 toc
Stickup: 2.02

Arrive: 12:25
Start Time: 12:45
Sample Time: 13:14
Finish Time: 13:46
Drawdown Set (toc): 105.05

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU
12:58	105.00	16.92	5.61	236	65.0	3.72	44.01
13:01	105.05	16.43	5.48	233	63.7	2.24	37.69
13:04	105.05	16.26	5.45	233	62.1	1.88	32.69
13:07	105.05	16.16	5.45	232	59.9	1.39	32.25
13:10	105.05	16.13	5.45	232	59.3	1.29	29.00
13:13	105.05	16.08	5.44	231	58.7	1.19	30.14
Sample Time							
13:14 - 13:20							

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS: Discharge time set @ 25 sec, Fill time set at 15 sec
Draw down level alarm went off 1-2 sec per cycle

Sample name: MW-01

Sampling Technician Name: Jon Hazinski

SIGNATURE:

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
Katie Massie
Date: 04-15-08

Well ID: MW-02
Screen Interval: 45-60 bgs
Depth to Water: 26.57 toc
Depth of Pump Intake: 54.75 toc
Stickup: 2.23

Arrive: 10:50AM
Start Time: 11:16
Sample Time: 1139
Finish Time: 1210
Drawdown Set (toc): 28.20

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU
1120	27.80	14.47	6.18	215	142.4	6.80	12.61
1123	28.20	14.40	5.84	221	151.3	4.61	18.13
1126	28.20	14.38	5.80	222	154.6	3.76	16.14
1129	28.20	14.39	5.79	221	157.5	3.73	17.06
1132	28.20	14.34	5.80	219	159.3	3.64	19.84
1135	28.20	14.25	5.73	215	164.0	3.78	16.31
1138	28.20	14.23	5.79	213	164.1	3.74	15.23

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS:
discharge time set @ 10sec; fill time set @ 10sec
drawdown level alarm sounded for 15-20 sec per cycle

Sample name: MW-02

Sampling Technician Name: J Hazinski

SIGNATURE:

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
Date: 4-16-08

Well ID: MW-03
Screen Interval: 48.5-63.5 bgs
Depth to Water: 50.84 toc
Depth of Pump Intake: 57.40 toc
Stickup: 1.37

Arrive: 9:45
Start Time: 10:15
Sample Time: 10:38
Finish Time: 11:05
Drawdown Set (toc): 51.20

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU
10:19	51.10	14.91	5.58	429	173.1	2.44	0.07
10:22	51.20	15.21	5.59	434	173.8	2.38	0.33
10:25	51.20	15.29	5.57	438	173.0	1.62	0.92
10:28	51.20	15.31	5.59	440	171.3	1.24	0.58
10:31	51.20	15.30	5.60	443	170.8	1.05	0.49
10:34	51.20	15.31	5.58	444	169.9	0.96	0.44
10:37	51.20	15.31	5.58	445	171.7	0.90	0.39
Sample Time							
10:38-10:43							

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS: Discharge time set at 10 sec
Fill time set at 10 sec
Draw down level alarm went off 5 sec per cycle

Sample name: MW-03

Sampling Technician Name: Jon Hazinski

SIGNATURE:

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
K. Mosie
Date: 04-15-08

Well ID: MW-04
Screen Interval: 25-40 bgs
Depth to Water: 28.51 toc
Depth of Pump Intake: 34.60 toc
Stickup: ~~2.02~~ 2.09

Arrive: 1556
Start Time: 1605
Sample Time: 1644
Finish Time: 1710
Drawdown Set (toc): 29.00

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU
1616	28.80	16.07	5.47	710	171.2	3.86	76.76
1619	28.80	~~16~~15.18	5.38	698	201.5	3.29	39.43
1622	29.00	15.13	5.37	705	230.7	3.40	31.18
1625	29.00	15.12	5.33	711	288.5	3.32	12.92
1628	29.00	15.09	5.36	714	336.2	3.18	10.92
1631	29.00	15.09	5.36	716	378.2	3.12	17.90
1634	29.00	15.09	5.36	717	405.2	3.09	17.94
1637	29.00	15.11	5.36	719	434.3	3.07	18.93
1640	29.00	15.12	5.36	718	458.4	3.06	17.14
1643	29.00	1511	5.36	719	482.3	3.07	16.59

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS: * pump leaking around bottom + top gaskets / had to use teflon tape to seal up pump

discharge time set @ 10 sec
fill time set @ 10 sec
Drawdown level meter alarm went off 5 sec each cycle

Sample name: MW-04

Sampling Technician Name: J Hazinki

SIGNATURE:

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Well Sampling Log

FACILITY NAME: Jackson Co Landfill
DATE: 4-16-08
LOCATION: Dillsboro, NC
SAMPLING TIME: 14:58
SAMPLING PERSONNEL: Jon Hazinski
WEATHER: Sunny, Warm

WELL NUMBER: MW-05
WELL DEPTH IN FEET (WD): 60.12
START TIME: 14:00
WELL DIAMETER: 2"
WATER LEVEL IN FEET (WL): 51.50
TYPE OF CASING: PVC
LENGTH OF WATER COLUMN: 8.62 FEET
MEASURING POINT: TOC
(WD) - (WL) = (LWC)
FLUSH MOUNT / STICK-UP
ONE CASING VOLUME: 1.47 GALLONS
COMMENTS: Had to use 2 small bailers tied together
(LWC) x (WCV)
THREE CASING VOLUMES: 4.41 GALLONS
Well casing damaged
ACTUAL VOLUME PURGED: 4.5 GALLONS

WELL CASING VOLUMES (WCV)
2" = 0.17 Gal/Ft 3" = 0.38 Gal/Ft 4" = 0.66 Gal/Ft 6" = 1.5 Gal/Ft 8" = 2.6 Gal/Ft 12" = 5.8 Gal/Ft

PURGE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-DISP. BAILER-TEFLON DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (µS)	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	initial	6.24	1223	18.53	4.24	87.0	29.49	
2	1.50	6.27	1142	16.55	2.28	47.2	136.0	
3	3.0	6.23	1090	16.38	2.49	40.7	139.5	
4	4.5	6.28	1085	16.19	2.55	38.0	149.9	
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	App I Metals
40 ml GLASS	3	App I VOCs
1 L GLASS		
OTHER		

PROTECTIVE CASING: OK PAD: OK LOCK: OK VEGETATION: OK ACCESS: OK

Sampling Personnel Signature: [signature] **Date:** 4-16-08

Notes: µS = micro-Siemen
C° = degrees Celsius
mg/L = milligrams per liter
mV = millivolt
NTU = nephelometric turbidity units

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
Date: 4-16-08

Well ID: MW-05
Screen Interval: 50-60 bgs
Depth to Water: 51.50 toc
Depth of Pump Intake: 56.60 toc
Stickup: 1.59

Arrive: 11:25
Start Time:
Sample Time:
Finish Time: 12:15
Drawdown Set (toc):

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS: No low-flow sample collected. obstruction in well casing at approx 13.5 feet. Pump will not go any further down the well.

Sample name: MW-05

Sampling Technician Name: Jon Hazinski

SIGNATURE:

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Low-Flow Sampling Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Personnel: Jon Hazinski
K Massie
Date: 04-15-08

Well ID: MW-06
Screen Interval: 84.6-94.6 bgs
Depth to Water: 92.23 toc 96.00
Depth of Pump Intake: ~~92.59~~ toc 95.5
Stickup: 2.99

Arrive: 1315
Start Time: 1320
Sample Time: 1457
Finish Time: 1545
Drawdown Set (toc): 94.60

Time	DTW (feet)	Temp (°C)	pH	Conductivity (µS)	ORP (mV)	DO (mg/L)	Turbidity NTU
1341	93.00	17.50	5.75	161	75.8	5.21	53.38
1344	93.00	17.00	5.49	154	88.9	2.10	28.10
1347	93.20	17.07	5.46	153	90.2	1.90	28.01
1350	93.40	16.67	5.43	148	93.5	1.89	27.38
1353	93.60	16.76	5.40	144	97.8	2.28	22.21
1438	~~93.94~~ 20	19.60	6.02	167	76.3	5.35	38.20
1441	94.40	18.45	5.64	169	111.8	4.55	46.18
1444	94.60	17.20	5.47	162	129.9	2.04	68.26
1447	94.60	17.30	5.42	157	136.7	1.61	60.36
1450	94.60	17.81	5.43	159	138.1	1.38	62.81
1453	94.60	17.92	5.43	160	138.4	1.26	58.27
1456	94.60	18.30	5.45	161	138.1	1.28	56.85
sample time							
1457-1515							

STABILIZATION

3 successive readings, 3 minutes apart:
within +/- 10% DO and turbidity; +/- 3% Conductivity; +/- 0.1 pH unit; +/- 10 mV for ORP
from *EPA - Low-Flow (Minimal Drawdown) Groundwater Sampling Procedures,* April 1996

COMMENTS:
1357: pump malfunction required pulling pump out of MW-06. Bladder ~~changed~~ leaked - air getting past bladder bladder replaced, missing bottom gasket, top gasket moved down + sealed with Teflon tape; pump placed back in well
1440 - pump intake lowered to 96.00

discharge time set @ 20 sec/~~cycle~~
fill time set @ 15 sec/~~cycle~~

Sample name: MW-06

Sampling Technician Name: J Hazinski / K Massie

SIGNATURE:

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C

Sampling Log

FACILITY NAME: Jackson Co Landfill
DATE: 4-15-08
LOCATION: Dillsboro, NC
SAMPLING TIME: 17:17
SAMPLING PERSONNEL: J Hazinski
WEATHER: Sunny, Warm

SAMPLE NAME: SW-01

START TIME: 17:15
END TIME: 17:20

COMMENTS: Upstream Sample

SAMPLE METHOD: GRAB SYRINGE PUMP BAILER-DISP. OTHER:

READING	pH UNITS	SPECIFIC COND. (µS)	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	6.40	37	12.15	8.12	200.0	47.57	
2							
3							
4							
5							
6							
7							
8							
9							

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
125 ml PLASTIC		
250 ml PLASTIC	2	Appendix I Metals
500 ml PLASTIC		
40 ml GLASS	3	Appendix I VOCs
1 L GLASS		
OTHER		

VEGETATION: OK ACCESS: OK

Sampling Personnel Signature: [signature] **Date:** 04-15-08

Notes: µS = micro-Siemen
C° = degrees Celsius
mg/L = milligrams per liter
mV = millivolt
NTU = nephelometric turbidity units

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Sampling Log

FACILITY NAME: Jackson Co Landfill
DATE: 04-15-08
LOCATION: Dillsboro, NC
SAMPLING TIME: 12:25
SAMPLING PERSONNEL: J Hazinski / K Massie
WEATHER: Sunny + cool

SAMPLE NAME: SW-02

START TIME: 12:24
END TIME: 12:29

COMMENTS: downstream sample

SAMPLE METHOD: GRAB SYRINGE PUMP BAILER-DISP. OTHER:

READING	pH UNITS	SPECIFIC COND. (µS)	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	TURBIDITY (NTU)	COMMENTS
1	6.42	35	9.15	10.08	111.2	37.68	
2							
3							
4							
5							
6							
7							
8							
9							

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
125 ml PLASTIC		
250 ml PLASTIC	2	Appendix I metals
500 ml PLASTIC		
40 ml GLASS	3	Appendix I VOCs
1 L GLASS		
OTHER		

VEGETATION: OK ACCESS: OK

Sampling Personnel Signature: [signature] **Date:** 4-15-08

Notes: µS = micro-Siemen
C° = degrees Celsius
mg/L = milligrams per liter
mV = millivolt
NTU = nephelometric turbidity units

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Equipment Documentation & Instrument Calibration Data Sheet

Project Name: Jackson Co Landfill
Project Number: 2040.12
Project Location: Dillsboro, NC

Equipment Documentation

Equipment or meters used to take measurements (e.g. water level meters, survey equipment, etc.):

Equipment Type	Manufacturer	Serial Number	Date of Use
150-ft Water Level	Heron	7186	
150-ft Water Level	Solinst	26154	
150-ft Water Level	Solinst	22754	
150-ft Water Level	Testwell	150	

Calibration Documentation

Person Conducting Calibration: Jon Hazinski
Date of Calibration: 4-14-08
Date of Field Measurements: 4-15-08

Micro TPW Turbidity Meter

Calibration Time	Calib Standard Exp	Instrument Serial #	Instrument Reading		
			1000 NTU	10.0 NTU	0.02 NTU
17:45	Sept 08	200601045	Initial: 1098 Cal: 1012	Initial: 10.86 Cal: 10.73	Initial: 0.56 Cal: 0.35

YSI 556 Multiparameter Meter

Calibration Time	Calib Standard Expiration Date	Instrument Serial Number	Instrument Readings						
			pH 4	pH 7	pH 10	QC pH 7	Conductivity 447 µS	QC 84 µS	ORP 200 mV
17:30	Oct 09	07D100979	Initial: 3.98 Cal: 4.00	Initial: 6.99 Cal: 7.00	Initial: 9.99 Cal: 9.99	Meas: 7.03	Initial: 338 Cal: 447	Meas: 77	Initial: 211.1 Cal: 200.00
			Initial: Cal:	Initial: Cal:	Initial: Cal:	Meas:	Initial: Cal:	Meas:	Initial: Cal:

Comments:

Signature and Date: 4-15-08

Note: Electronic equipment calibrated according to the manufacturer's operation manual.

Pace Analytical Services, Inc.
2225 Riverside Dr.
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(828)254-7176

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

April 29, 2008

Mr. Joel Lenk
Altamont Environmental
50 College Street
Asheville, NC 28801

RE: Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

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

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

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

Sincerely,

Lorri Patton

Lorri Patton

lorri.patton@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

CERTIFICATIONS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Charlotte Certification IDs

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

Asheville Certification IDs

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

Eden Certification IDs

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

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SAMPLE SUMMARY

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9217552001	**MW-01**	Water	04/16/08 13:14	04/16/08 16:55
9217552002	**MW-02**	Water	04/15/08 11:39	04/16/08 16:55
9217552003	**MW-03**	Water	04/16/08 10:38	04/16/08 16:55
9217552004	**MW-04**	Water	04/15/08 16:44	04/16/08 16:55
9217552005	**MW-05**	Water	04/16/08 14:58	04/16/08 16:55
9217552006	**MW-06**	Water	04/15/08 14:57	04/16/08 16:55
9217552007	**SW-01**	Water	04/15/08 17:17	04/16/08 16:55
9217552008	**SW-02**	Water	04/15/08 12:25	04/16/08 16:55
9217552009	**Trip Blank**	Water	04/16/08 00:00	04/16/08 16:55

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SAMPLE ANALYTE COUNT

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9217552001	**MW-01**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552002	**MW-02**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552003	**MW-03**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552004	**MW-04**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552005	**MW-05**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552006	**MW-06**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552007	**SW-01**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552008	**SW-02**	EPA 6010 GW North Carolina	SAJ	14	PASI-A
		EPA 7470	SHB	1	PASI-A
		EPA 8260	MCK	53	PASI-C
9217552009	**Trip Blank**	EPA 8260	MCK	53	PASI-C

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-01 **Lab ID: 9217552001** Collected: 04/16/08 13:14 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/21/08 10:41	04/23/08 03:36	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/21/08 10:41	04/23/08 03:36	7440-38-2	
Barium	**67.4**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:36	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/21/08 10:41	04/23/08 03:36	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/21/08 10:41	04/23/08 03:36	7440-43-9	
Chromium	ND	ug/L	5.0	0.40	1	04/21/08 10:41	04/23/08 03:36	7440-47-3	
Cobalt	**25.4**	ug/L	5.0	0.60	1	04/21/08 10:41	04/23/08 03:36	7440-48-4	
Copper	**1.7J**	ug/L	5.0	0.30	1	04/21/08 10:41	04/23/08 03:36	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/21/08 10:41	04/23/08 03:36	7439-92-1	
Nickel	**5.4**	ug/L	5.0	1.7	1	04/21/08 10:41	04/23/08 03:36	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/21/08 10:41	04/23/08 03:36	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/21/08 10:41	04/23/08 03:36	7440-22-4	
Vanadium	ND	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:36	7440-62-2	
Zinc	**35.3**	ug/L	10.0	0.40	1	04/21/08 10:41	04/23/08 03:36	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:17	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 07:40	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 07:40	107-13-1	
Benzene	**5.9**	ug/L	1.0	0.25	1		04/25/08 07:40	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 07:40	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 07:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 07:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 07:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 07:40	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 07:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 07:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 07:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 07:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 07:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 07:40	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 07:40	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 07:40	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 07:40	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 07:40	74-95-3	
1,2-Dichlorobenzene	**0.46J**	ug/L	1.0	0.30	1		04/25/08 07:40	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 07:40	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 07:40	110-57-6	
1,1-Dichloroethane	**9.0**	ug/L	1.0	0.32	1		04/25/08 07:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 07:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 07:40	75-35-4	
cis-1,2-Dichloroethene	**10.7**	ug/L	1.0	0.19	1		04/25/08 07:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 07:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 07:40	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-01 **Lab ID: 9217552001** Collected: 04/16/08 13:14 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 07:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 07:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 07:40	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 07:40	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 07:40	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 07:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 07:40	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 07:40	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 07:40	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 07:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 07:40	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 07:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 07:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 07:40	79-00-5	
Trichloroethene	**0.95J**	ug/L	1.0	0.47	1		04/25/08 07:40	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 07:40	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 07:40	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 07:40	108-05-4	
Vinyl chloride	**0.67J**	ug/L	1.0	0.62	1		04/25/08 07:40	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 07:40	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 07:40	1330-20-7	
o-Xylene	**0.57J**	ug/L	1.0	0.23	1		04/25/08 07:40	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		04/25/08 07:40	460-00-4	
Dibromofluoromethane (S)	103	%	85-115		1		04/25/08 07:40	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120		1		04/25/08 07:40	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		04/25/08 07:40	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-02 **Lab ID: 9217552002** Collected: 04/15/08 11:39 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/21/08 10:41	04/23/08 03:41	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/21/08 10:41	04/23/08 03:41	7440-38-2	
Barium	**39.3**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:41	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/21/08 10:41	04/23/08 03:41	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/21/08 10:41	04/23/08 03:41	7440-43-9	
Chromium	ND	ug/L	5.0	0.40	1	04/21/08 10:41	04/23/08 03:41	7440-47-3	
Cobalt	**15.4**	ug/L	5.0	0.60	1	04/21/08 10:41	04/23/08 03:41	7440-48-4	
Copper	**0.46J**	ug/L	5.0	0.30	1	04/21/08 10:41	04/23/08 03:41	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/21/08 10:41	04/23/08 03:41	7439-92-1	
Nickel	**5.7**	ug/L	5.0	1.7	1	04/21/08 10:41	04/23/08 03:41	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/21/08 10:41	04/23/08 03:41	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/21/08 10:41	04/23/08 03:41	7440-22-4	
Vanadium	**0.47J**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:41	7440-62-2	
Zinc	**7.1J**	ug/L	10.0	0.40	1	04/21/08 10:41	04/23/08 03:41	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:20	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 08:04	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 08:04	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		04/25/08 08:04	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 08:04	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 08:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 08:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 08:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 08:04	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 08:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 08:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 08:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 08:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 08:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 08:04	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 08:04	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 08:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 08:04	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 08:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		04/25/08 08:04	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 08:04	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 08:04	110-57-6	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.32	1		04/25/08 08:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 08:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 08:04	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/L	1.0	0.19	1		04/25/08 08:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 08:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 08:04	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-02 **Lab ID: 9217552002** Collected: 04/15/08 11:39 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 08:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 08:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 08:04	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 08:04	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 08:04	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 08:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 08:04	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 08:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 08:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 08:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 08:04	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 08:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 08:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 08:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 08:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 08:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 08:04	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 08:04	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 08:04	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 08:04	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 08:04	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 08:04	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		04/25/08 08:04	460-00-4	
Dibromofluoromethane (S)	103	%	85-115		1		04/25/08 08:04	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120		1		04/25/08 08:04	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		04/25/08 08:04	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-03 **Lab ID: 9217552003** Collected: 04/16/08 10:38 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/21/08 10:41	04/23/08 03:45	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/21/08 10:41	04/23/08 03:45	7440-38-2	
Barium	**117**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:45	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/21/08 10:41	04/23/08 03:45	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/21/08 10:41	04/23/08 03:45	7440-43-9	
Chromium	ND	ug/L	5.0	0.40	1	04/21/08 10:41	04/23/08 03:45	7440-47-3	
Cobalt	**42.9**	ug/L	5.0	0.60	1	04/21/08 10:41	04/23/08 03:45	7440-48-4	
Copper	ND	ug/L	5.0	0.30	1	04/21/08 10:41	04/23/08 03:45	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/21/08 10:41	04/23/08 03:45	7439-92-1	
Nickel	**5.6**	ug/L	5.0	1.7	1	04/21/08 10:41	04/23/08 03:45	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/21/08 10:41	04/23/08 03:45	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/21/08 10:41	04/23/08 03:45	7440-22-4	
Vanadium	**0.20J**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:45	7440-62-2	
Zinc	**5.7J**	ug/L	10.0	0.40	1	04/21/08 10:41	04/23/08 03:45	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:22	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 08:27	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 08:27	107-13-1	
Benzene	**1.1**	ug/L	1.0	0.25	1		04/25/08 08:27	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 08:27	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 08:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 08:27	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 08:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 08:27	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 08:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 08:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 08:27	108-90-7	
Chloroethane	**0.71J**	ug/L	1.0	0.54	1		04/25/08 08:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 08:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 08:27	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 08:27	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 08:27	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 08:27	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 08:27	74-95-3	
1,2-Dichlorobenzene	**0.56J**	ug/L	1.0	0.30	1		04/25/08 08:27	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 08:27	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 08:27	110-57-6	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.32	1		04/25/08 08:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 08:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 08:27	75-35-4	
cis-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.19	1		04/25/08 08:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 08:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 08:27	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-03 **Lab ID: 9217552003** Collected: 04/16/08 10:38 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 08:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 08:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 08:27	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 08:27	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 08:27	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 08:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 08:27	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 08:27	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 08:27	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 08:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 08:27	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 08:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 08:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 08:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 08:27	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 08:27	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 08:27	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 08:27	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 08:27	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 08:27	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 08:27	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 08:27	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		04/25/08 08:27	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		04/25/08 08:27	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120		1		04/25/08 08:27	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		04/25/08 08:27	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-04 **Lab ID: 9217552004** Collected: 04/15/08 16:44 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/21/08 10:41	04/23/08 03:49	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/21/08 10:41	04/23/08 03:49	7440-38-2	
Barium	**103**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:49	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/21/08 10:41	04/23/08 03:49	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/21/08 10:41	04/23/08 03:49	7440-43-9	
Chromium	**0.79J**	ug/L	5.0	0.40	1	04/21/08 10:41	04/23/08 03:49	7440-47-3	
Cobalt	**3.4J**	ug/L	5.0	0.60	1	04/21/08 10:41	04/23/08 03:49	7440-48-4	
Copper	ND	ug/L	5.0	0.30	1	04/21/08 10:41	04/23/08 03:49	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/21/08 10:41	04/23/08 03:49	7439-92-1	
Nickel	**3.9J**	ug/L	5.0	1.7	1	04/21/08 10:41	04/23/08 03:49	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/21/08 10:41	04/23/08 03:49	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/21/08 10:41	04/23/08 03:49	7440-22-4	
Vanadium	**1.2J**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:49	7440-62-2	
Zinc	**3.0J**	ug/L	10.0	0.40	1	04/21/08 10:41	04/23/08 03:49	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	**0.39**	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:25	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 08:51	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 08:51	107-13-1	
Benzene	**1.2**	ug/L	1.0	0.25	1		04/25/08 08:51	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 08:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 08:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 08:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 08:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 08:51	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 08:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 08:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 08:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 08:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 08:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 08:51	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 08:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 08:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 08:51	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 08:51	74-95-3	
1,2-Dichlorobenzene	**0.54J**	ug/L	1.0	0.30	1		04/25/08 08:51	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 08:51	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 08:51	110-57-6	
1,1-Dichloroethane	**0.57J**	ug/L	1.0	0.32	1		04/25/08 08:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 08:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 08:51	75-35-4	
cis-1,2-Dichloroethene	**11.0**	ug/L	1.0	0.19	1		04/25/08 08:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 08:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 08:51	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-04 **Lab ID: 9217552004** Collected: 04/15/08 16:44 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 08:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 08:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 08:51	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 08:51	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 08:51	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 08:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 08:51	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 08:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 08:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 08:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 08:51	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 08:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 08:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 08:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 08:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 08:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 08:51	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 08:51	108-05-4	
Vinyl chloride	**0.76J**	ug/L	1.0	0.62	1		04/25/08 08:51	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 08:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 08:51	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 08:51	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		04/25/08 08:51	460-00-4	
Dibromofluoromethane (S)	104	%	85-115		1		04/25/08 08:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120		1		04/25/08 08:51	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		04/25/08 08:51	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-05 **Lab ID: 9217552005** Collected: 04/16/08 14:58 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/21/08 10:41	04/23/08 03:53	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/21/08 10:41	04/23/08 03:53	7440-38-2	
Barium	**171**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:53	7440-39-3	
Beryllium	**0.24J**	ug/L	1.0	0.10	1	04/21/08 10:41	04/23/08 03:53	7440-41-7	
Cadmium	**6.0**	ug/L	1.0	0.50	1	04/21/08 10:41	04/23/08 03:53	7440-43-9	
Chromium	**0.53J**	ug/L	5.0	0.40	1	04/21/08 10:41	04/23/08 03:53	7440-47-3	
Cobalt	**5.1**	ug/L	5.0	0.60	1	04/21/08 10:41	04/23/08 03:53	7440-48-4	
Copper	**4.2J**	ug/L	5.0	0.30	1	04/21/08 10:41	04/23/08 03:53	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/21/08 10:41	04/23/08 03:53	7439-92-1	
Nickel	**3.7J**	ug/L	5.0	1.7	1	04/21/08 10:41	04/23/08 03:53	7440-02-0	
Selenium	**6.5J**	ug/L	10.0	3.8	1	04/21/08 10:41	04/23/08 03:53	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/21/08 10:41	04/23/08 03:53	7440-22-4	
Vanadium	**5.7**	ug/L	5.0	0.20	1	04/21/08 10:41	04/23/08 03:53	7440-62-2	
Zinc	**12.4**	ug/L	10.0	0.40	1	04/21/08 10:41	04/23/08 03:53	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:27	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 09:14	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 09:14	107-13-1	
Benzene	**0.56J**	ug/L	1.0	0.25	1		04/25/08 09:14	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 09:14	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 09:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 09:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 09:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 09:14	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 09:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 09:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 09:14	108-90-7	
Chloroethane	**0.65J**	ug/L	1.0	0.54	1		04/25/08 09:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 09:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 09:14	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 09:14	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 09:14	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 09:14	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 09:14	74-95-3	
1,2-Dichlorobenzene	**0.75J**	ug/L	1.0	0.30	1		04/25/08 09:14	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 09:14	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 09:14	110-57-6	
1,1-Dichloroethane	**0.35J**	ug/L	1.0	0.32	1		04/25/08 09:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 09:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 09:14	75-35-4	
cis-1,2-Dichloroethene	**27.4**	ug/L	1.0	0.19	1		04/25/08 09:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 09:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 09:14	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-05 **Lab ID: 9217552005** Collected: 04/16/08 14:58 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 09:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 09:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 09:14	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 09:14	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 09:14	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 09:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 09:14	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 09:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 09:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 09:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 09:14	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 09:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 09:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 09:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 09:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 09:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 09:14	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 09:14	108-05-4	
Vinyl chloride	**0.93J**	ug/L	1.0	0.62	1		04/25/08 09:14	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 09:14	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 09:14	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 09:14	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		04/25/08 09:14	460-00-4	
Dibromofluoromethane (S)	104	%	85-115		1		04/25/08 09:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120		1		04/25/08 09:14	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		04/25/08 09:14	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-06 **Lab ID: 9217552006** Collected: 04/15/08 14:57 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/24/08 10:55	04/28/08 10:55	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/24/08 10:55	04/28/08 10:55	7440-38-2	
Barium	**61.1**	ug/L	5.0	0.20	1	04/24/08 10:55	04/28/08 10:55	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/24/08 10:55	04/28/08 10:55	7440-41-7	
Cadmium	**1.1**	ug/L	1.0	0.50	1	04/24/08 10:55	04/28/08 10:55	7440-43-9	
Chromium	**3.1J**	ug/L	5.0	0.40	1	04/24/08 10:55	04/28/08 10:55	7440-47-3	
Cobalt	**7.3**	ug/L	5.0	0.60	1	04/24/08 10:55	04/28/08 10:55	7440-48-4	
Copper	**6.4**	ug/L	5.0	0.30	1	04/24/08 10:55	04/28/08 10:55	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/24/08 10:55	04/28/08 10:55	7439-92-1	
Nickel	**12.1**	ug/L	5.0	1.7	1	04/24/08 10:55	04/28/08 10:55	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/24/08 10:55	04/28/08 10:55	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/24/08 10:55	04/28/08 10:55	7440-22-4	
Vanadium	**2.6J**	ug/L	5.0	0.20	1	04/24/08 10:55	04/28/08 10:55	7440-62-2	
Zinc	**17.4**	ug/L	10.0	0.40	1	04/24/08 10:55	04/28/08 10:55	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:31	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 09:38	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 09:38	107-13-1	
Benzene	**1.9**	ug/L	1.0	0.25	1		04/25/08 09:38	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 09:38	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 09:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 09:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 09:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 09:38	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 09:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 09:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 09:38	108-90-7	
Chloroethane	**0.90J**	ug/L	1.0	0.54	1		04/25/08 09:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 09:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 09:38	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 09:38	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 09:38	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 09:38	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 09:38	74-95-3	
1,2-Dichlorobenzene	**0.35J**	ug/L	1.0	0.30	1		04/25/08 09:38	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 09:38	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 09:38	110-57-6	
1,1-Dichloroethane	**11.8**	ug/L	1.0	0.32	1		04/25/08 09:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 09:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 09:38	75-35-4	
cis-1,2-Dichloroethene	**7.7**	ug/L	1.0	0.19	1		04/25/08 09:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 09:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 09:38	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: MW-06 **Lab ID: 9217552006** Collected: 04/15/08 14:57 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 09:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 09:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 09:38	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 09:38	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 09:38	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 09:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 09:38	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 09:38	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 09:38	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 09:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 09:38	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 09:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 09:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 09:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 09:38	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 09:38	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 09:38	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 09:38	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 09:38	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 09:38	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 09:38	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 09:38	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		04/25/08 09:38	460-00-4	
Dibromofluoromethane (S)	109	%	85-115		1		04/25/08 09:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	113	%	79-120		1		04/25/08 09:38	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		04/25/08 09:38	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: SW-01 **Lab ID: 9217552007** Collected: 04/15/08 17:17 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/24/08 10:55	04/28/08 10:58	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/24/08 10:55	04/28/08 10:58	7440-38-2	
Barium	**13.8**	ug/L	5.0	0.20	1	04/24/08 10:55	04/28/08 10:58	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/24/08 10:55	04/28/08 10:58	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/24/08 10:55	04/28/08 10:58	7440-43-9	
Chromium	**0.96J**	ug/L	5.0	0.40	1	04/24/08 10:55	04/28/08 10:58	7440-47-3	
Cobalt	ND	ug/L	5.0	0.60	1	04/24/08 10:55	04/28/08 10:58	7440-48-4	
Copper	**0.61J**	ug/L	5.0	0.30	1	04/24/08 10:55	04/28/08 10:58	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/24/08 10:55	04/28/08 10:58	7439-92-1	
Nickel	ND	ug/L	5.0	1.7	1	04/24/08 10:55	04/28/08 10:58	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/24/08 10:55	04/28/08 10:58	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/24/08 10:55	04/28/08 10:58	7440-22-4	
Vanadium	**0.35J**	ug/L	5.0	0.20	1	04/24/08 10:55	04/28/08 10:58	7440-62-2	
Zinc	ND	ug/L	10.0	0.40	1	04/24/08 10:55	04/28/08 10:58	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:34	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 10:01	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 10:01	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		04/25/08 10:01	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 10:01	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 10:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 10:01	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 10:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 10:01	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 10:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 10:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 10:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 10:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 10:01	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 10:01	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 10:01	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 10:01	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 10:01	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 10:01	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		04/25/08 10:01	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 10:01	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 10:01	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		04/25/08 10:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 10:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 10:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		04/25/08 10:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 10:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 10:01	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: SW-01 **Lab ID: 9217552007** Collected: 04/15/08 17:17 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 10:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 10:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 10:01	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 10:01	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 10:01	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 10:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 10:01	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 10:01	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 10:01	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 10:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 10:01	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 10:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 10:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 10:01	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 10:01	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 10:01	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 10:01	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 10:01	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 10:01	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 10:01	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 10:01	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 10:01	95-47-6	
4-Bromofluorobenzene (S)	101	%	87-109		1		04/25/08 10:01	460-00-4	
Dibromofluoromethane (S)	104	%	85-115		1		04/25/08 10:01	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	79-120		1		04/25/08 10:01	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		04/25/08 10:01	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: SW-02 **Lab ID: 9217552008** Collected: 04/15/08 12:25 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 GW North Carolina Preparation Method: EPA 3010								
Antimony	ND	ug/L	5.0	2.6	1	04/24/08 10:55	04/25/08 22:09	7440-36-0	
Arsenic	ND	ug/L	5.0	2.7	1	04/24/08 10:55	04/25/08 22:09	7440-38-2	
Barium	**14.3**	ug/L	5.0	0.20	1	04/24/08 10:55	04/25/08 22:09	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	04/24/08 10:55	04/25/08 22:09	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	04/24/08 10:55	04/25/08 22:09	7440-43-9	
Chromium	**0.71J**	ug/L	5.0	0.40	1	04/24/08 10:55	04/25/08 22:09	7440-47-3	
Cobalt	ND	ug/L	5.0	0.60	1	04/24/08 10:55	04/25/08 22:09	7440-48-4	
Copper	**0.65J**	ug/L	5.0	0.30	1	04/24/08 10:55	04/25/08 22:09	7440-50-8	
Lead	ND	ug/L	5.0	4.0	1	04/24/08 10:55	04/25/08 22:09	7439-92-1	
Nickel	ND	ug/L	5.0	1.7	1	04/24/08 10:55	04/25/08 22:09	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	04/24/08 10:55	04/25/08 22:09	7782-49-2	
Silver	ND	ug/L	5.0	0.10	1	04/24/08 10:55	04/25/08 22:09	7440-22-4	
Vanadium	**0.48J**	ug/L	5.0	0.20	1	04/24/08 10:55	04/25/08 22:09	7440-62-2	
Zinc	**6.4J**	ug/L	10.0	0.40	1	04/24/08 10:55	04/25/08 22:09	7440-66-6	
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.090	1	04/22/08 09:05	04/22/08 14:36	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 10:25	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 10:25	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		04/25/08 10:25	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 10:25	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 10:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 10:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 10:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 10:25	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 10:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 10:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 10:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 10:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 10:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 10:25	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 10:25	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 10:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 10:25	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 10:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		04/25/08 10:25	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 10:25	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 10:25	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		04/25/08 10:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 10:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 10:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		04/25/08 10:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 10:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 10:25	78-87-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: SW-02 **Lab ID: 9217552008** Collected: 04/15/08 12:25 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 10:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 10:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 10:25	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 10:25	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 10:25	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 10:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 10:25	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 10:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 10:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 10:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 10:25	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 10:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 10:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 10:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 10:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 10:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 10:25	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 10:25	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 10:25	75-01-4	
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 10:25	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 10:25	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 10:25	95-47-6	
4-Bromofluorobenzene (S)	96	%	87-109		1		04/25/08 10:25	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		04/25/08 10:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120		1		04/25/08 10:25	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		04/25/08 10:25	2037-26-5	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: Trip Blank **Lab ID: 9217552009** Collected: 04/16/08 00:00 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	25.0	2.2	1		04/25/08 02:12	67-64-1	
Acrylonitrile	ND	ug/L	10.0	1.9	1		04/25/08 02:12	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		04/25/08 02:12	71-43-2	
Bromochloromethane	ND	ug/L	1.0	0.17	1		04/25/08 02:12	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		04/25/08 02:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.26	1		04/25/08 02:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.29	1		04/25/08 02:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	5.0	0.96	1		04/25/08 02:12	78-93-3	
Carbon disulfide	ND	ug/L	2.0	1.2	1		04/25/08 02:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		04/25/08 02:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.23	1		04/25/08 02:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.54	1		04/25/08 02:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/25/08 02:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		04/25/08 02:12	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	3.0	2.5	1		04/25/08 02:12	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/25/08 02:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		04/25/08 02:12	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.21	1		04/25/08 02:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.30	1		04/25/08 02:12	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		04/25/08 02:12	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	1.0	1		04/25/08 02:12	110-57-6	
1,1-Dichloroethane	ND	ug/L	1.0	0.32	1		04/25/08 02:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/25/08 02:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.56	1		04/25/08 02:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.19	1		04/25/08 02:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.49	1		04/25/08 02:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		04/25/08 02:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		04/25/08 02:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		04/25/08 02:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		04/25/08 02:12	100-41-4	
2-Hexanone	ND	ug/L	5.0	0.46	1		04/25/08 02:12	591-78-6	
Iodomethane	ND	ug/L	5.0	0.32	1		04/25/08 02:12	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		04/25/08 02:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	0.33	1		04/25/08 02:12	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		04/25/08 02:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.33	1		04/25/08 02:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.40	1		04/25/08 02:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		04/25/08 02:12	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		04/25/08 02:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		04/25/08 02:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		04/25/08 02:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		04/25/08 02:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		04/25/08 02:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		04/25/08 02:12	96-18-4	
Vinyl acetate	ND	ug/L	2.0	0.35	1		04/25/08 02:12	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		04/25/08 02:12	75-01-4	

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ANALYTICAL RESULTS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

Sample: Trip Blank **Lab ID: 9217552009** Collected: 04/16/08 00:00 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Xylene (Total)	ND	ug/L	2.0	0.66	1		04/25/08 02:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		04/25/08 02:12	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		04/25/08 02:12	95-47-6	
4-Bromofluorobenzene (S)	99	%	87-109		1		04/25/08 02:12	460-00-4	
Dibromofluoromethane (S)	103	%	85-115		1		04/25/08 02:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	79-120		1		04/25/08 02:12	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		04/25/08 02:12	2037-26-5	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

QC Batch: MPRP/2215 | Analysis Method: EPA 6010 GW North Carolina
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005

METHOD BLANK: 103785
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Antimony	ug/L	ND	5.0	
Arsenic	ug/L	ND	5.0	
Barium	ug/L	ND	5.0	
Beryllium	ug/L	ND	1.0	
Cadmium	ug/L	ND	1.0	
Chromium	ug/L	ND	5.0	
Cobalt	ug/L	1.1J	5.0	
Copper	ug/L	0.54J	5.0	
Lead	ug/L	ND	5.0	
Nickel	ug/L	ND	5.0	
Selenium	ug/L	ND	10.0	
Silver	ug/L	ND	5.0	
Vanadium	ug/L	ND	5.0	
Zinc	ug/L	2.3J	10.0	

LABORATORY CONTROL SAMPLE: 103786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	459	92	80-120	
Arsenic	ug/L	500	464	93	80-120	
Barium	ug/L	500	436	87	80-120	
Beryllium	ug/L	500	449	90	80-120	
Cadmium	ug/L	500	452	90	80-120	
Chromium	ug/L	500	453	91	80-120	
Cobalt	ug/L	500	447	89	80-120	
Copper	ug/L	500	447	89	80-120	
Lead	ug/L	500	452	90	80-120	
Nickel	ug/L	500	444	89	80-120	
Selenium	ug/L	500	461	92	80-120	
Silver	ug/L	250	228	91	80-120	
Vanadium	ug/L	500	450	90	80-120	
Zinc	ug/L	500	460	92	80-120	

MATRIX SPIKE SAMPLE: 103787

Parameter	Units	9217148007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	454	91	75-125	
Arsenic	ug/L	ND	500	458	92	75-125	
Barium	ug/L	36.6	500	469	86	75-125	
Beryllium	ug/L	ND	500	443	89	75-125	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

MATRIX SPIKE SAMPLE: 103787

Parameter	Units	9217148007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	ND	500	444	89	75-125	
Chromium	ug/L	1.8J	500	448	89	75-125	
Cobalt	ug/L	1.9J	500	440	88	75-125	
Copper	ug/L	2.5J	500	452	90	75-125	
Lead	ug/L	ND	500	446	89	75-125	
Nickel	ug/L	1.8J	500	439	87	75-125	
Selenium	ug/L	ND	500	452	90	75-125	
Silver	ug/L	0.23J	250	229	92	75-125	
Vanadium	ug/L	2.3J	500	447	89	75-125	
Zinc	ug/L	3.4J	500	454	90	75-125	

SAMPLE DUPLICATE: 103788

Parameter	Units	9217151001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND	0	25	
Arsenic	ug/L	ND	ND	65	25	
Barium	ug/L	59.2	55.1	7	25	
Beryllium	ug/L	ND	ND	168	25	
Cadmium	ug/L	ND	ND	200	25	
Chromium	ug/L	0.57J	ND	164	25	
Cobalt	ug/L	1.8J	2.3J	26	25	
Copper	ug/L	ND	0.34J	200	25	
Lead	ug/L	ND	ND	0	25	
Nickel	ug/L	ND	ND	23	25	
Selenium	ug/L	ND	ND	70	25	
Silver	ug/L	ND	ND	0	25	
Vanadium	ug/L	ND	0.53J	150	25	
Zinc	ug/L	6.7J	6.3J	7	25	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

QC Batch: MERP/1435 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006, 9217552007, 9217552008

METHOD BLANK: 103962
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006, 9217552007, 9217552008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ug/L	ND	0.20	

LABORATORY CONTROL SAMPLE: 103963

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	94	80-120	

MATRIX SPIKE SAMPLE: 103964

Parameter	Units	9217562001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.6	103	75-125	

SAMPLE DUPLICATE: 103965

Parameter	Units	9217562002 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND	200	25	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

QC Batch: MPRP/2236 | Analysis Method: EPA 6010 GW North Carolina
QC Batch Method: EPA 3010 | Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9217552006, 9217552007, 9217552008

METHOD BLANK: 105332
Associated Lab Samples: 9217552006, 9217552007, 9217552008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Antimony	ug/L	ND	5.0	
Arsenic	ug/L	ND	5.0	
Barium	ug/L	ND	5.0	
Beryllium	ug/L	ND	1.0	
Cadmium	ug/L	ND	1.0	
Chromium	ug/L	ND	5.0	
Cobalt	ug/L	ND	5.0	
Copper	ug/L	ND	5.0	
Lead	ug/L	ND	5.0	
Nickel	ug/L	ND	5.0	
Selenium	ug/L	ND	10.0	
Silver	ug/L	ND	5.0	
Vanadium	ug/L	ND	5.0	
Zinc	ug/L	4.0J	10.0	

LABORATORY CONTROL SAMPLE: 105333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	493	99	80-120	
Arsenic	ug/L	500	495	99	80-120	
Barium	ug/L	500	493	99	80-120	
Beryllium	ug/L	500	501	100	80-120	
Cadmium	ug/L	500	495	99	80-120	
Chromium	ug/L	500	503	101	80-120	
Cobalt	ug/L	500	495	99	80-120	
Copper	ug/L	500	500	100	80-120	
Lead	ug/L	500	500	100	80-120	
Nickel	ug/L	500	494	99	80-120	
Selenium	ug/L	500	495	99	80-120	
Silver	ug/L	250	248	99	80-120	
Vanadium	ug/L	500	494	99	80-120	
Zinc	ug/L	500	514	103	80-120	

MATRIX SPIKE SAMPLE: 105334

Parameter	Units	9217552006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	487	97	75-125	
Arsenic	ug/L	ND	500	490	98	75-125	
Barium	ug/L	61.1	500	542	96	75-125	
Beryllium	ug/L	ND	500	496	99	75-125	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

MATRIX SPIKE SAMPLE: 105334

Parameter	Units	9217552006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	ug/L	1.1	500	486	97	75-125	
Chromium	ug/L	3.1J	500	498	99	75-125	
Cobalt	ug/L	7.3	500	492	97	75-125	
Copper	ug/L	6.4	500	502	99	75-125	
Lead	ug/L	ND	500	483	97	75-125	
Nickel	ug/L	12.1	500	495	97	75-125	
Selenium	ug/L	ND	500	490	98	75-125	
Silver	ug/L	ND	250	245	98	75-125	
Vanadium	ug/L	2.6J	500	490	97	75-125	
Zinc	ug/L	17.4	500	515	100	75-125	

SAMPLE DUPLICATE: 105335

Parameter	Units	9217552007 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND	0	25	
Arsenic	ug/L	ND	ND	0	25	
Barium	ug/L	13.8	13.7	.7	25	
Beryllium	ug/L	ND	ND	200	25	
Cadmium	ug/L	ND	ND	84	25	
Chromium	ug/L	0.96J	0.94J	2	25	
Cobalt	ug/L	ND	ND	43	25	
Copper	ug/L	0.61J	0.91J	39	25	
Lead	ug/L	ND	ND	200	25	
Nickel	ug/L	ND	ND	102	25	
Selenium	ug/L	ND	ND	163	25	
Silver	ug/L	ND	ND	200	25	
Vanadium	ug/L	0.35J	0.34J	3	25	
Zinc	ug/L	ND	5.2J	175	25	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

QC Batch: MSV/3202 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

METHOD BLANK: 9217784001
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784001

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	109	79-120	
4-Bromofluorobenzene (S)	%	100	87-109	
Dibromofluoromethane (S)	%	104	85-115	
Toluene-d8 (S)	%	101	70-120	

METHOD BLANK: 9217784002

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784002

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	104	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	101	85-115	
Toluene-d8 (S)	%	100	70-120	

METHOD BLANK: 9217784003

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784003

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	105	79-120	
4-Bromofluorobenzene (S)	%	100	87-109	
Dibromofluoromethane (S)	%	104	85-115	
Toluene-d8 (S)	%	100	70-120	

METHOD BLANK: 9217784004

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784004

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	104	79-120	
4-Bromofluorobenzene (S)	%	97	87-109	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784004

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Dibromofluoromethane (S)	%	102	85-115	
Toluene-d8 (S)	%	101	70-120	

METHOD BLANK: 9217784005

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 9217784005

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	104	79-120	
4-Bromofluorobenzene (S)	%	98	87-109	
Dibromofluoromethane (S)	%	101	85-115	
Toluene-d8 (S)	%	100	70-120	

METHOD BLANK: 105445

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 105445

Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	103	79-120	
4-Bromofluorobenzene (S)	%	101	87-109	
Dibromofluoromethane (S)	%	101	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 105446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.2	108	83-125	
1,1,1-Trichloroethane	ug/L	50	59.9	120	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	56.6	113	73-127	
1,1,2-Trichloroethane	ug/L	50	58.5	117	77-123	
1,1-Dichloroethane	ug/L	50	60.0	120	76-129	
1,1-Dichloroethene	ug/L	50	57.9	116	78-146	
1,2,3-Trichloropropane	ug/L	50	58.0	116	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	62.1	124	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	62.3	125	81-125	
1,2-Dichlorobenzene	ug/L	50	56.1	112	82-126	
1,2-Dichloroethane	ug/L	50	57.4	115	72-126	
1,2-Dichloropropane	ug/L	50	61.0	122	80-127	
1,4-Dichlorobenzene	ug/L	50	57.6	115	79-125	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

LABORATORY CONTROL SAMPLE: 105446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	100	132	132	50-134	
2-Hexanone	ug/L	100	140	140	58-138	L3
4-Methyl-2-pentanone (MIBK)	ug/L	100	127	127	70-131	
Acetone	ug/L	100	134	134	50-146	
Acrylonitrile	ug/L	250	203	81	66-124	
Benzene	ug/L	50	58.2	116	78-128	
Bromochloromethane	ug/L	50	57.5	115	73-124	
Bromodichloromethane	ug/L	50	64.8	130	81-125	L3
Bromoform	ug/L	50	51.1	102	71-125	
Bromomethane	ug/L	50	39.5	79	50-150	
Carbon disulfide	ug/L	50	64.0	128	54-150	
Carbon tetrachloride	ug/L	50	59.6	119	81-137	
Chlorobenzene	ug/L	50	58.5	117	82-126	
Chloroethane	ug/L	50	58.0	116	69-140	
Chloroform	ug/L	50	62.4	125	77-129	
Chloromethane	ug/L	50	53.3	107	54-139	
cis-1,2-Dichloroethene	ug/L	50	59.1	118	76-133	
cis-1,3-Dichloropropene	ug/L	50	68.5	137	76-127	L3
Dibromochloromethane	ug/L	50	53.3	107	77-125	
Dibromomethane	ug/L	50	59.8	120	77-125	
Ethylbenzene	ug/L	50	58.3	117	80-127	
Iodomethane	ug/L	100	146	146	65-172	
m&p-Xylene	ug/L	100	117	117	82-127	
Methylene Chloride	ug/L	50	56.6	113	67-133	
o-Xylene	ug/L	50	58.5	117	83-124	
Styrene	ug/L	50	62.2	124	80-130	
Tetrachloroethene	ug/L	50	54.3	109	78-128	
Toluene	ug/L	50	58.5	117	76-126	
trans-1,2-Dichloroethene	ug/L	50	55.3	111	78-134	
trans-1,3-Dichloropropene	ug/L	50	59.0	118	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	72.5	145	51-140	L3
Trichloroethene	ug/L	50	59.5	119	79-127	
Trichlorofluoromethane	ug/L	50	54.3	109	76-148	
Vinyl acetate	ug/L	100	118	118	50-150	
Vinyl chloride	ug/L	50	59.2	118	67-143	
Xylene (Total)	ug/L	150	175	117	83-125	
1,2-Dichloroethane-d4 (S)	%			103	79-120	
4-Bromofluorobenzene (S)	%			100	87-109	
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			101	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 105451 105452

Parameter	Units	9217527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	75.4	70.8	151	142	60-150	6	30	M3
Benzene	ug/L	ND	50	50	65.7	60.9	131	122	74-136	8	30	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 105451 105452

Parameter	Units	9217527001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorobenzene	ug/L	ND	50	50	65.1	59.3	130	119	79-135	9	30	
Toluene	ug/L	ND	50	50	65.1	60.8	130	122	73-131	7	30	
Trichloroethene	ug/L	ND	50	50	63.8	59.3	128	119	73-131	7	30	
1,2-Dichloroethane-d4 (S)	%						105	106	79-120			
4-Bromofluorobenzene (S)	%						100	98	87-109			
Dibromofluoromethane (S)	%						101	102	85-115			
Toluene-d8 (S)	%						101	100	70-120			

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

QC Batch: MSV/3203 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9217552007, 9217552008, 9217552009

METHOD BLANK: 105449
Associated Lab Samples: 9217552007, 9217552008, 9217552009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,1-Trichloroethane	ug/L	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	
1,1,2-Trichloroethane	ug/L	ND	1.0	
1,1-Dichloroethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	1.0	
1,2,3-Trichloropropane	ug/L	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/L	ND	3.0	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	
1,2-Dichlorobenzene	ug/L	ND	1.0	
1,2-Dichloroethane	ug/L	ND	1.0	
1,2-Dichloropropane	ug/L	ND	1.0	
1,4-Dichlorobenzene	ug/L	ND	1.0	
2-Butanone (MEK)	ug/L	ND	5.0	
2-Hexanone	ug/L	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	
Acetone	ug/L	ND	25.0	
Acrylonitrile	ug/L	ND	10.0	
Benzene	ug/L	ND	1.0	
Bromochloromethane	ug/L	ND	1.0	
Bromodichloromethane	ug/L	ND	1.0	
Bromoform	ug/L	ND	1.0	
Bromomethane	ug/L	ND	5.0	
Carbon disulfide	ug/L	ND	2.0	
Carbon tetrachloride	ug/L	ND	1.0	
Chlorobenzene	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Chloroform	ug/L	ND	1.0	
Chloromethane	ug/L	ND	1.0	
cis-1,2-Dichloroethene	ug/L	ND	1.0	
cis-1,3-Dichloropropene	ug/L	ND	1.0	
Dibromochloromethane	ug/L	ND	1.0	
Dibromomethane	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
Iodomethane	ug/L	ND	5.0	
m&p-Xylene	ug/L	ND	2.0	
Methylene Chloride	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Styrene	ug/L	ND	1.0	
Tetrachloroethene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	1.0	
trans-1,3-Dichloropropene	ug/L	ND	1.0	

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

METHOD BLANK: 105449

Associated Lab Samples: 9217552007, 9217552008, 9217552009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	1.0	
Trichloroethene	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
Vinyl acetate	ug/L	ND	2.0	
Vinyl chloride	ug/L	ND	1.0	
Xylene (Total)	ug/L	ND	2.0	
1,2-Dichloroethane-d4 (S)	%	103	79-120	
4-Bromofluorobenzene (S)	%	101	87-109	
Dibromofluoromethane (S)	%	101	85-115	
Toluene-d8 (S)	%	100	70-120	

LABORATORY CONTROL SAMPLE: 105450

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	54.2	108	83-125	
1,1,1-Trichloroethane	ug/L	50	59.9	120	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	56.6	113	73-127	
1,1,2-Trichloroethane	ug/L	50	58.5	117	77-123	
1,1-Dichloroethane	ug/L	50	60.0	120	76-129	
1,1-Dichloroethene	ug/L	50	57.9	116	78-146	
1,2,3-Trichloropropane	ug/L	50	58.0	116	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	62.1	124	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	62.3	125	81-125	
1,2-Dichlorobenzene	ug/L	50	56.1	112	82-126	
1,2-Dichloroethane	ug/L	50	57.4	115	72-126	
1,2-Dichloropropane	ug/L	50	61.0	122	80-127	
1,4-Dichlorobenzene	ug/L	50	57.6	115	79-125	
2-Butanone (MEK)	ug/L	100	132	132	50-134	
2-Hexanone	ug/L	100	140	140	58-138	L3
4-Methyl-2-pentanone (MIBK)	ug/L	100	127	127	70-131	
Acetone	ug/L	100	134	134	50-146	
Acrylonitrile	ug/L	250	203	81	66-124	
Benzene	ug/L	50	58.2	116	78-128	
Bromochloromethane	ug/L	50	57.5	115	73-124	
Bromodichloromethane	ug/L	50	64.8	130	81-125	L3
Bromoform	ug/L	50	51.1	102	71-125	
Bromomethane	ug/L	50	39.5	79	50-150	
Carbon disulfide	ug/L	50	64.0	128	54-150	
Carbon tetrachloride	ug/L	50	59.6	119	81-137	
Chlorobenzene	ug/L	50	58.5	117	82-126	
Chloroethane	ug/L	50	58.0	116	69-140	
Chloroform	ug/L	50	62.4	125	77-129	
Chloromethane	ug/L	50	53.3	107	54-139	
cis-1,2-Dichloroethene	ug/L	50	59.1	118	76-133	
cis-1,3-Dichloropropene	ug/L	50	68.5	137	76-127	L3

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QUALITY CONTROL DATA

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

LABORATORY CONTROL SAMPLE: 105450

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	53.3	107	77-125	
Dibromomethane	ug/L	50	59.8	120	77-125	
Ethylbenzene	ug/L	50	58.3	117	80-127	
Iodomethane	ug/L	100	146	146	65-172	
m&p-Xylene	ug/L	100	117	117	82-127	
Methylene Chloride	ug/L	50	56.6	113	67-133	
o-Xylene	ug/L	50	58.5	117	83-124	
Styrene	ug/L	50	62.2	124	80-130	
Tetrachloroethene	ug/L	50	54.3	109	78-128	
Toluene	ug/L	50	58.5	117	76-126	
trans-1,2-Dichloroethene	ug/L	50	55.3	111	78-134	
trans-1,3-Dichloropropene	ug/L	50	59.0	118	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	72.5	145	51-140	L3
Trichloroethene	ug/L	50	59.5	119	79-127	
Trichlorofluoromethane	ug/L	50	54.3	109	76-148	
Vinyl acetate	ug/L	100	118	118	50-150	
Vinyl chloride	ug/L	50	59.2	118	67-143	
Xylene (Total)	ug/L	150	175	117	83-125	
1,2-Dichloroethane-d4 (S)	%			103	79-120	
4-Bromofluorobenzene (S)	%			100	87-109	
Dibromofluoromethane (S)	%			103	85-115	
Toluene-d8 (S)	%			101	70-120	

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Pace Analytical Services, Inc.
2225 Riverside Dr.
Asheville, NC 28804
(828)254-7176

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

QUALIFIERS

Project: Jackson Co LF 2040.12
Pace Project No.: 9217552

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

May 15, 2008

Client Services
Pace Analytical Ashville
2225 Riverside Dr.
Asheville, NC 28804

RE: Project: 9217552 ALTAMONT
Pace Project No.: 1071727

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

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

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SAMPLE SUMMARY

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9217552001	**MW-01**	Water	04/16/08 13:14	04/16/08 16:55
9217552002	**MW-02**	Water	04/15/08 11:39	04/16/08 16:55
9217552003	**MW-03**	Water	04/16/08 10:38	04/16/08 16:55
9217552004	**MW-04**	Water	04/15/08 16:44	04/16/08 16:55
9217552005	**MW-05**	Water	04/16/08 14:58	04/16/08 16:55
9217552006	**MW-06**	Water	04/15/08 14:57	04/16/08 16:55
9217552007	**SW-01**	Water	04/15/08 17:17	04/16/08 16:55
9217552008	**SW-02**	Water	04/15/08 12:25	04/16/08 16:55

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SAMPLE ANALYTE COUNT

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9217552001	**MW-01**	EPA 200.8	RJS	1	PASI-M
9217552002	**MW-02**	EPA 200.8	RJS	1	PASI-M
9217552003	**MW-03**	EPA 200.8	RJS	1	PASI-M
9217552004	**MW-04**	EPA 200.8	RJS	1	PASI-M
9217552005	**MW-05**	EPA 200.8	RJS	1	PASI-M
9217552006	**MW-06**	EPA 200.8	RJS	1	PASI-M
9217552007	**SW-01**	EPA 200.8	RJS	1	PASI-M
9217552008	**SW-02**	EPA 200.8	RJS	1	PASI-M

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PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

Sample: MW-01 **Lab ID: 9217552001** Collected: 04/16/08 13:14 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**0.27**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 18:44	7440-28-0	

Sample: MW-02 **Lab ID: 9217552002** Collected: 04/15/08 11:39 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**0.15**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 18:48	7440-28-0	

Sample: MW-03 **Lab ID: 9217552003** Collected: 04/16/08 10:38 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**0.12**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 18:52	7440-28-0	

Sample: MW-04 **Lab ID: 9217552004** Collected: 04/15/08 16:44 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**<0.050**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 18:56	7440-28-0	

Sample: MW-05 **Lab ID: 9217552005** Collected: 04/16/08 14:58 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**0.23**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 19:00	7440-28-0	

Sample: MW-06 **Lab ID: 9217552006** Collected: 04/15/08 14:57 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**0.20**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 19:04	7440-28-0	

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ANALYTICAL RESULTS

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

Sample: SW-01 **Lab ID: 9217552007** Collected: 04/15/08 17:17 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**<0.050**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 19:09	7440-28-0	

Sample: SW-02 **Lab ID: 9217552008** Collected: 04/15/08 12:25 Received: 04/16/08 16:55 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
200.8 MET ICPMS	Analytical Method: EPA 200.8 Preparation Method: EPA 200.8								
Thallium	**<0.050**	ug/L	0.10	0.050	1	04/21/08 10:58	04/22/08 19:13	7440-28-0	

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QUALITY CONTROL DATA

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

QC Batch: MPRP/11904 | Analysis Method: EPA 200.8
QC Batch Method: EPA 200.8 | Analysis Description: 200.8 MET
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006, 9217552007, 9217552008

METHOD BLANK: 467156
Associated Lab Samples: 9217552001, 9217552002, 9217552003, 9217552004, 9217552005, 9217552006, 9217552007, 9217552008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Thallium	ug/L	<0.050	0.10	

LABORATORY CONTROL SAMPLE: 467157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Thallium	ug/L	80	82.0	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 467158 467159

Parameter	Units	402715001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Thallium	ug/L	ND	80	80	80.7	80.1	101	100	70-130	.7	20	

MATRIX SPIKE SAMPLE: 467160

Parameter	Units	9217552008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Thallium	ug/L	<0.050	80	83.3	104	70-130	

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QUALIFIERS

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 9217552 ALTAMONT
Pace Project No.: 1071727

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
9217552001	**MW-01**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552002	**MW-02**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552003	**MW-03**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552004	**MW-04**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552005	**MW-05**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552006	**MW-06**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552007	**SW-01**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696
9217552008	**SW-02**	EPA 200.8	MPRP/11904	EPA 200.8	ICPM/4696

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

1053478

Section A Required Client Information:

Company	Altamont Environmental
Address	50 College St
	Asheville, NC 28801
Email To:	jlenk@altamontenvironmental.com
Phone	281-3350
Fax	281-3351
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Joel Lenk
Copy To:	
Purchase Order No.:	
Project Name:	Jackson Co - LF
Project Number:	2040.12

Section C Invoice Information:

Attention:	Judith Robertson
Company Name:	Altamont
Address:	Same
Pace Quote Reference:	
Pace Project Manager:	Lori Patton
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other_____

SITE LOCATION ☐GA ☐IL ☐IN ☐MI ~~☐MN~~ ☒NC ☐OH ☐SC ☐WI ☐OTHER _____

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / .-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	App I Metals	Thallium	App I VOC 8260	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	MW-01	WT	G			4-16-08	13:14	16.1	5			2	3					X	X	X		9217552001
2	MW-02	WT	G			4-15-08	11:39	14.2	5			2	3					X	X	X		002
3	MW-03	WT	G			4-16-08	10:38	15.3	5			2	3					X	X	X		003
4	MW-04	WT	G			4-15-08	16:44	15.1	5			2	3					X	X	X		004
5	MW-05	WT	G			4-16-08	14:58	16.2	5			2	3					X	X	X		005
6	MW-06	WT	G			4-15-08	14:57	18.3	5			2	3					X	X	X		006
7	SW-01	WT	G			4-15-08	17:17	12.2	5			2	3					X	X	X		007
8	SW-02	WT	G			4-15-08	12:25	9.2	5			2	3					X	X	X		008
9	TRIP BLANK	WT		LAB →					2				2							X		009
10																						
11																						
12																						

Filtered (Y/N)

Requested Analysis:

Additional Comments:

App I VOC by 8260 low level
All analytical results need to include MDL and J-Flag values if present.

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITION			
Jon Hazinski	4-16-08	16:54	[signature]	4/16/08	16:55	4.4	Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N
							Y/N	Y/N	Y/N
							Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jon Hazinski

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM / DD / YY) 4-16-08

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

ALLQ020rev.3,31Mar05

Appendix C
Summary of *t* -Test Analysis of Detected Constituents
Jackson County Municipal Solid Waste Landfill
Jackson County, North Carolina

April 15-16, 2008

Detected Constituent	Groundwater Quality Standard[1]		Average Concentration Significantly Greater than the Groundwater Quality Standard[4]
	2L Standard[2] (µg/L)	GWPS[3] (µg/L)	
Metals			
Barium	2,000	NE[5]	none
Beryllium	NE[5]	4	none
Cadmium	1.75	NE[5]	N/V[6]
Chromium	50	NE[5]	none
Cobalt	NE[5]	70	none
Copper	1,000	NE[5]	none
Mercury	1.05	NE[5]	none
Nickel	100	NE[5]	none
Selenium	50	NE[5]	none
Thallium	NE[5]	0.28	N/V[6]
Vanadium	NE[5]	3.5	**MW-04, MW-05, and MW-06[8]**
Zinc	1,050	NE[5]	none
VOCs			
1,1-Dichloroethane	70	NE[5]	none
1,2-Dichlorobenzene	24	NE[5]	none
Benzene	1	NE[5]	**MW-01, MW-05, and MW-06[9]**
Chloroethane	2,800	NE[5]	none
cis-1,2-Dichloroethene	70	NE[5]	none
Trichloroethene	3	NE[5]	none
Vinyl chloride	0	NE[6]	N/V[6]
o-xylene	NE[5]	NE[5]	N/A[7]

Appendix C
Summary of *t* -Test Analysis of Detected Constituents
Jackson County Municipal Solid Waste Landfill
Jackson County, North Carolina

April 15-16, 2008

Notes:

1. Groundwater quality standards include 2L Standards and Groundwater Protection Standards (GWPS). Groundwater quality standards are in units of micrograms per liter (µg/L).
2. 2L Standard from "North Carolina Administrative Code, Title 15A: Department of Environment and Natural Resources, Subchapter 2L - Groundwater Classifications and Standards," NC DENR, last amended on April 1, 2005.
3. A Groundwater Protection Standard (GWPS) is used for comparison in the event a constituent has no established 2L Standard. GWPS is pursuant to "15A NCAC 13B .1634," NC DENR. Current standards were obtained from http://www.wastenotnc.org/sw/swenvmonitoringlist.asp, last amended on October 23, 2007.
4. Monitoring wells whose average concentrations are statistically greater than the relevant groundwater quality standard are listed. "None" indicates that the average concentration of the given constituent was not statistically greater than the groundwater quality standard in any of the monitoring wells.
5. NE indicates "Not Established".
6. N/V means the statistical analysis was not valid for any of the monitoring well data because the groundwater quality standard is greater than the values used for non-detects, and all datasets contain a majority of non-detects.
7. N/A means that datasets were not analyzed because there is currently no groundwater quality standard for comparison.
8. *t* -test for vanadium is not valid for MW-01, MW-02, or MW-03 since the sample sets contain a majority of non-detect values and most of the values used for non-detects (i.e., the Method Reporting Limit) is greater than the groundwater quality standard.
9. *t* -test for benzene is not valid for MW-2, MW-3, and MW-4 since the sample sets contain mostly non-detect values and the value used for non-detects (i.e., the Method Reporting Limit) is greater than the groundwater quality standard.