ALTAMONT ENVIRONMENTAL, INC.
ENGINEERING & HYDROGEOLOGY
78½ PATTON AVE., ASHEVILLE, NC 28801
TEL. 828.281.3350 FAC. 828.281.3351
www.altamontenvironmental.com

50-02

10-20-03

FALL 2003 SEMI-ANNUAL WATER QUALITY MONITORING REPORT

Fac/Perm/Co ID #	Date	Doc ID#
BC	12/20/03	DIN

JACKSON COUNTY MUNICIPAL SOLID WASTE LANDFILL JACKSON COUNTY, NORTH CAROLINA

Prepared for
Jackson County MSWLF

December 10, 2003

Prepared by
Altamont Environmental, Inc.
78 ½ Patton Avenue
Asheville, North Carolina 28801
(828) 281-3350

James S. McElduff, P.E.
Project Engineer

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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 permit requires semiannual monitoring of groundwater and surface water quality.

This report serves as the second semiannual groundwater and surface water monitoring report for 2003 and is being submitted in accordance with requirements stipulated in the North Carolina Department of Environment and Natural Resources (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. This report provides an evaluation of the groundwater and surface water quality. Statistical analyses of groundwater data and groundwater flow information 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-1 through MW-5) and surface water sample locations (SW-1 and SW-2) were sampled on October 20 and 21, 2003 by Altamont Environmental, Inc. (Altamont). The monitoring well and surface water sample locations are shown on Figure 2. Altamont also sampled two domestic wells (DW-Bulla and DW-Wilkie) adjacent to the landfill on October 21, 2003.

Prior to sampling the groundwater, the static water level in each well and well depth were measured. Each well was then purged and sampled using a disposable bailer. Samples were obtained after a minimum of three well volumes had been purged and pH, specific conductivity, and temperature readings had stabilized to within ten percent of the previous reading. Oxygen reduction potential (ORP) and dissolved oxygen (DO) readings were also taken. A summary of field indicator parameters is included in Table 1 and copies of the Sampling Logs are included in Appendix A.

In correspondence dated November 19, 2002, the North Carolina Department of Environment and Natural Resources (DENR) agreed to modify the assessment monitoring requirements at the Jackson County closed landfill. Sampling and analysis for semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and pesticides are currently on a biennial basis. These parameters shall be analyzed in the October 2004 sampling event.

Groundwater and surface water samples were analyzed for the following parameters:

- Appendix II Volatile Organic Compounds (VOCs) using EPA Method 8260
- Appendix II Metals using various EPA Methods from the 6010/7000 series
- Herbicides using EPA Method 8151
- Sulfide using EPA Method 376.2
- Cyanide using EPA Method 335.3

Domestic well samples were analyzed for Appendix II VOCs using EPA Method 8260.

The samples were analyzed by Pace Analytical Services, Inc. (Pace), a North Carolina certified laboratory, in Huntersville, North Carolina. Proper chain-of-custody documentation was followed during collection and transportation of each sample. A trip blank was also analyzed for VOCs. The analytical reports and chain-of-custody forms are included in Appendix B.

2.2 ANALYTICAL RESULTS

Analytical results for the Appendix II metals are shown in Table 2. Eleven metals were detected in monitoring wells and two metals were detected in surface water samples. Metal concentrations in all monitoring wells and surface water locations were below their respective North Carolina Administrative Code (NCAC), Title 15A, Subchapter 2L groundwater quality standard (2L Standard).

The analytical results for detected VOCs are shown in Table 3. As shown in Table 3, the following VOCs were detected in one or more of the monitoring wells: 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, cis-1,2-dichloroethene, and xylene. Benzene was found in MW-1 in excess of the 2L Standard. No other VOCs were detected in the monitoring wells at concentrations greater than the 2L Standards. Analytical results for the domestic wells and surface water samples showed that no VOCs were detected.

Cyanide, sulfide, and herbicides were not detected in the monitoring wells or surface water samples. As a result, the data was not summarized in tables.

2.3 HYDROGEOLOGY

Groundwater at the MSWLF occurs in two aquifers, one in bedrock and the other in the shallow saprolite. Two bedrock wells MW-1 and MW-2 are located in the northwest portion of the site. Groundwater elevations in these wells are below the top of bedrock. This indicates that the bedrock aquifer is probably unconfined in these areas. Water level data collected from MW-3, MW-4 and MW-5 (Table 4) indicate that the predominant groundwater flow direction in the shallow aquifer is to the southwest toward the Tuckasegee River. Figure 3 depicts the generalized groundwater flow direction based on the groundwater measurements made by Altamont on October 20 and 21, 2003.

2.4 STATISTICAL ANALYSES

The statistical Analysis of Variance (ANOVA) testing procedure was performed on data from all five of the monitoring wells at the landfill. The analysis was performed for each of the analyzed parameters using the Single Factor ANOVA option in the EXCEL 5.0 analysis tool-pack.

The analysis was used to determine if the differences in the total metal or VOC concentrations observed at each sampling location are significant enough to suggest contamination of groundwater above background concentrations. The ANOVA procedure tests the null hypothesis that the mean concentration of each analyte is equal at each sampling location. If the means for a particular constituent are not equal, then the alternative hypothesis that at least one of the wells differs from the rest is evaluated. This is determined by comparing the computed F-statistic to the critical (or tabulated) F-statistic. If the computed F-statistic exceeds the critical F-statistic, the null hypothesis is rejected and one or more of the wells may be contaminated. If the critical F-statistic exceeds the computed F-statistic, then the null hypothesis is accepted and the possibility of contamination is rejected. Data from all available laboratory analyses performed to date were taken into account. Compounds that were not detected at concentrations above the laboratory reporting limit were evaluated using one-half of the reporting limit. The ANOVA statistical calculations for each constituent are summarized in Appendix C.

According to the statistical analysis, the total metals barium, chromium, copper, nickel, vanadium, and zinc showed significant deviation from the mean. None of these metals were detected at a concentration above their respective 2L Standard. Furthermore, chromium was not detected above the laboratory detection limit for any monitoring wells. The statistical analysis also showed that the VOCs 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethene, ethylbenzene, methylene chloride, tetrachoroethene, trichloroethene, and xylene displayed significant deviation from the mean. Of these constituents, only benzene in MW-1 was detected at a concentration above the 2L Standard. Additionally, chloroethane, ethylbenzene, methylene chloride, and tetrachoroethene were not detected above the laboratory detection limit for any monitoring wells.

3.0 CONCLUSIONS

The semiannual groundwater monitoring was conducted on October 20 and 21, 2003 at the Jackson County MSWLF. Analytical results indicate that one VOC exceeded the respective 2L Standard. Although the ANOVA statistical test suggests significant deviations from the mean for some parameters, recent consultations with statisticians regarding use of statistical testing of water quality results at landfills has identified uncertainties in the applicability of such tests. The conclusions of the ANOVA tests may be inaccurate.

Metals

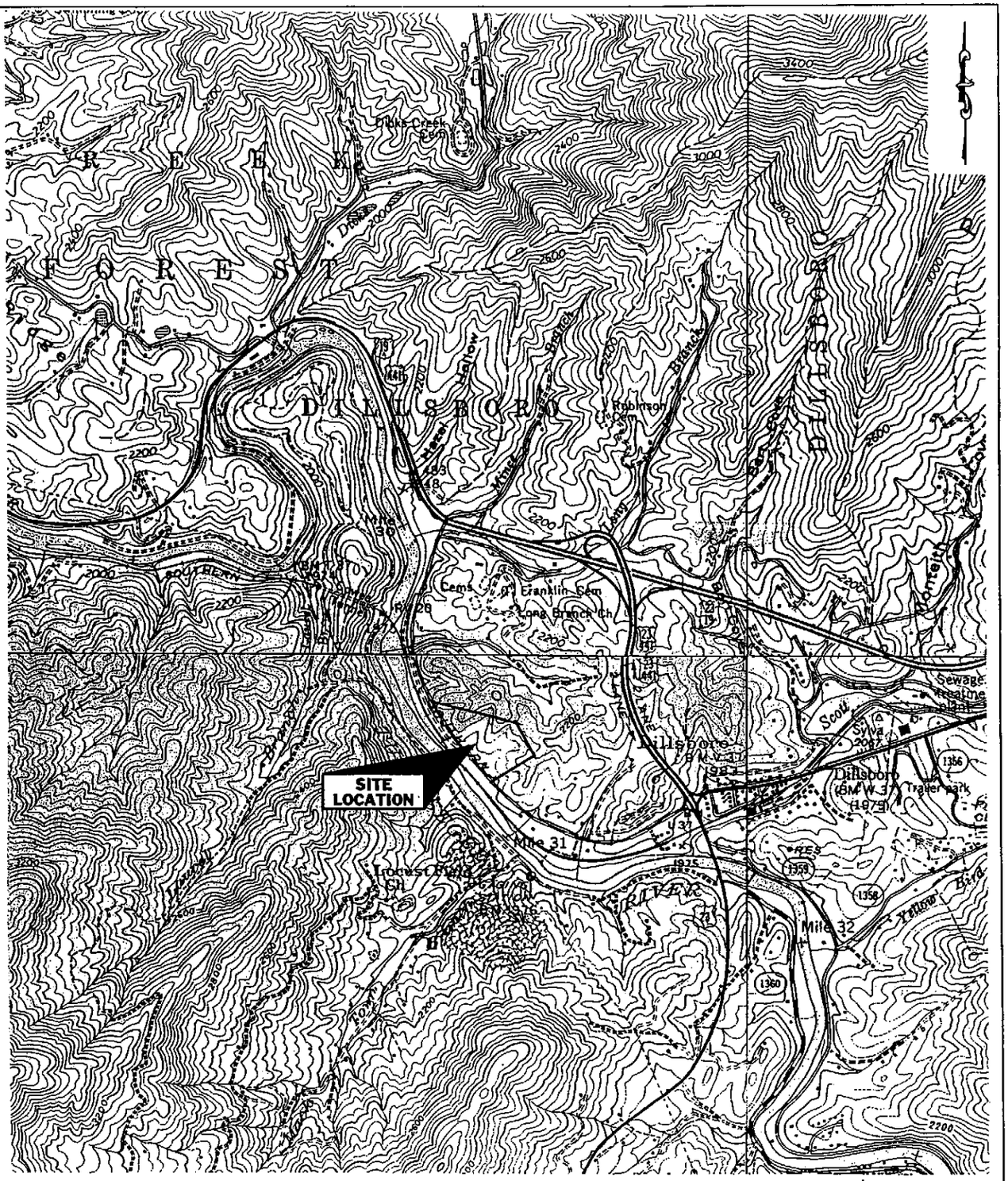
Analytical results indicate that none of the detected metals were found at concentrations above their respective 2L Standard. The statistical analysis indicated that barium, chromium, copper, nickel, vanadium, and zinc showed significant deviation from the mean. Field notes taken during well sampling indicate that the water samples were low to moderately turbid. These metals are naturally occurring and may have been present as undissolved particles in the unfiltered samples, thereby causing low concentrations of the metals to be detected.

Volatile Organic Compounds

One VOC, benzene, was detected in MW-1 at a concentration greater than the its respective 2L Standard. Review of historical groundwater data since October 1996, indicates that the concentrations of benzene have fluctuated between 3.5 μg/L and 14 μg/L in MW-1. MW-1 is a bedrock well located in the northern portion of the landfill. In light of the indication that the bedrock aquifer is unconfined at the landfill, recharge to the bedrock is presumably from the overlying saprolite aquifer. The Tuckasegee River, which is located adjacent to the landfill to the southwest, represents a major drainage for this area, so 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. Indeed, groundwater collected from the downgradient bedrock well, MW-2, did not contain concentrations of VOCs above the laboratory reporting limits. In addition, surface water samples did not contain concentrations of VOCs above the laboratory reporting limits.

Concentrations of other VOCs detected in groundwater samples were all well below their respective 2L Standard. Statistical analyses of VOCs identified 11 compounds with significant deviation from the mean. However, four of the VOCs determined to have a significant deviation from the mean were not detected above laboratory reporting limits. The analytical results continue to demonstrate that the two domestic wells that were sampled have not been affected by VOCs. These wells will continue to be monitored.

FIGURES



ALTAMONT ENVIRONMENTAL, INC.

78½ Patton Ave., Asheville, NC 28801
Tel. 828.281.3350 Fac.828.281.3351
www.altamontenvironmental.com

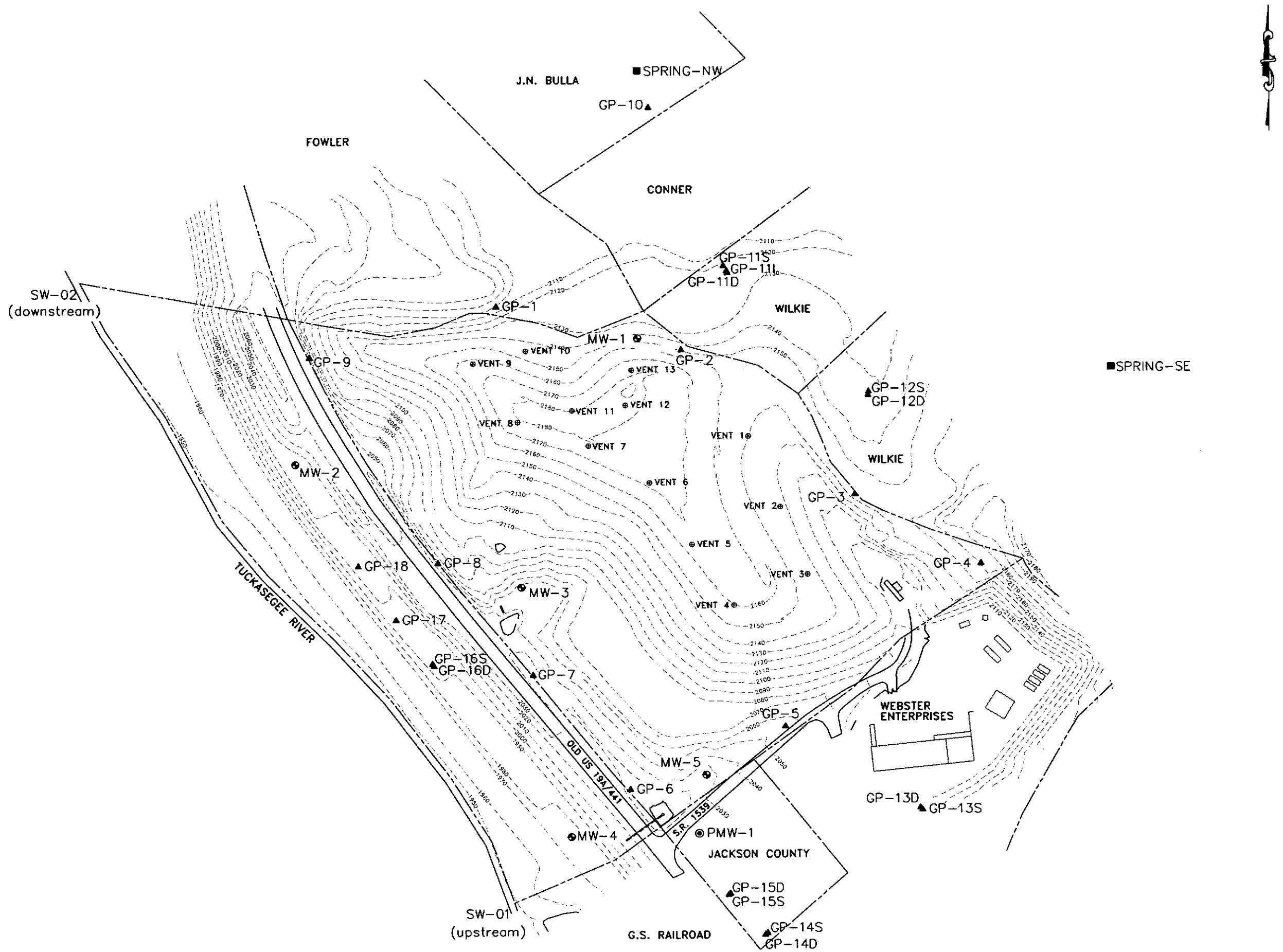
FIGURE 1

SITE LOCATION MAP
JACKSON COUNTY LANDFILL
JACKSON COUNTY, NORTH CAROLINA

GREENS CREEK, WHITTIER, SYLVA NORTH & SYLVA SOUTH
USGS QUADRANGLES

DRAWN BY: GAP DATE: 11-21-03
PROJECT MANAGER: JIM MCELDUFF
CLIENT: JACKSON COUNTY
FILE: P:\JACKSON\DILLSBORO GW\FIGURES\FIGURE 1

GRAPHIC SCALE (FEET)
1000 0 1000 2000
COUNTOUR INTERVAL: 40 FEET



NOTES:

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

LEGEND:

- MW-1 MONITORING WELL LOCATION
- GP-1 GAS PROBE LOCATION
- PMV-1 PRIVATE MONITORING WELL LOCATION
- SPRING-NW SPRING LOCATION
- PROPERTY BOUNDARY

GRAPHIC SCALE (FEET)

200 0 100 200

REV.	DATE	DESCRIPTION	BY	CHK	APV
3	11-21-03	UPDATE	GAP	JSM	
2	05-13-02	UPDATE	SEK	JSM	
1	11-12-01	ORIGINAL	JMC	JPM	

DRAWN BY: JMC DATE: 11-12-01
PROJECT NUMBER: 2094.01
CADD DIRECTORY: P:\JACKSON\DILLSBORO GW\FIGURES
CADD FILENAME: SITE DIAGRAM

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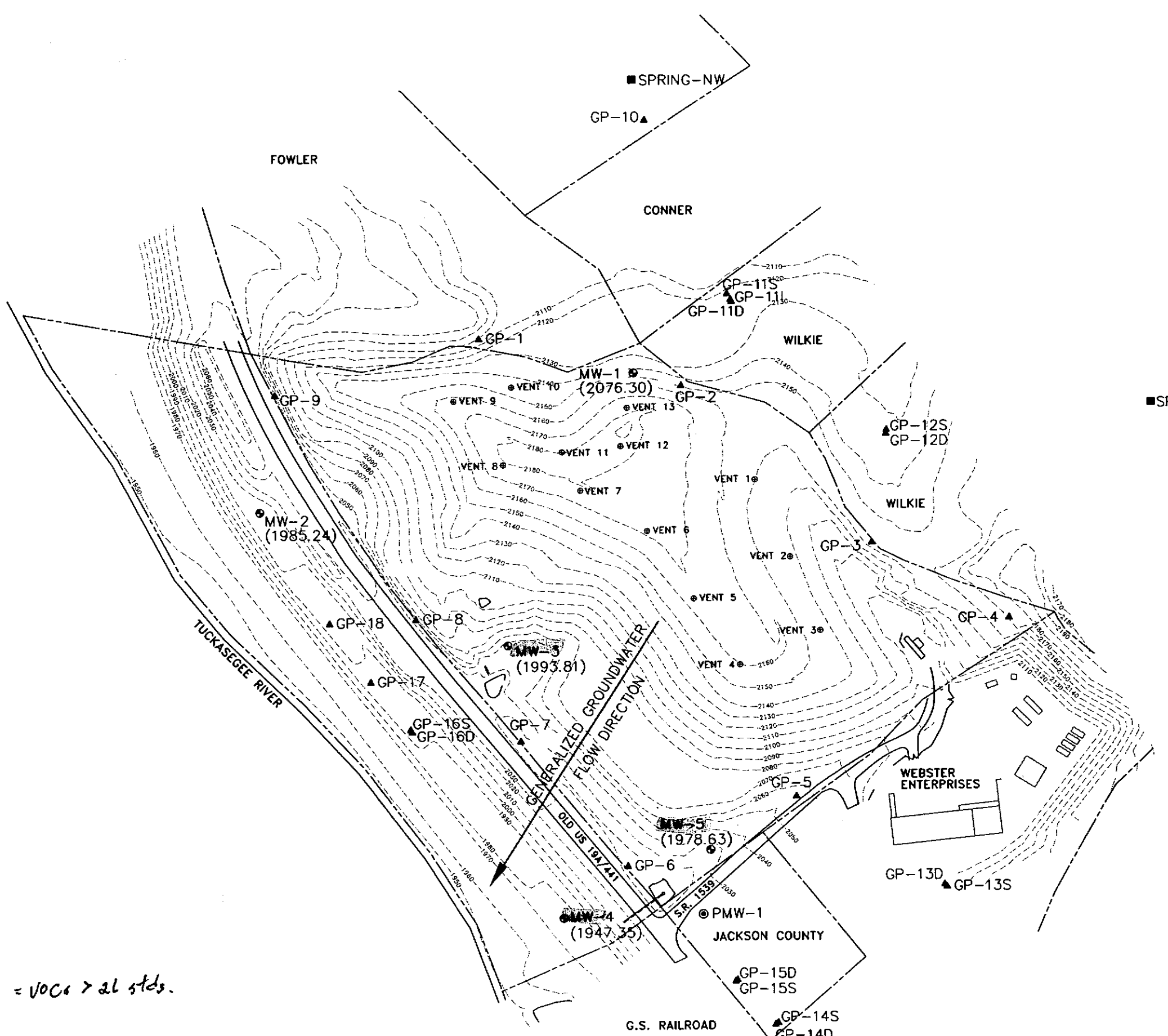
78½ PATTON AVE., ASHEVILLE, NC 28801
TEL. 828.281.3350 FAC .828.281.3351
www.altamontenvironmental.com

MONITORING WELL AND GAS PROBE LOCATION MAP

JACKSON COUNTY LANDFILL
JACKSON COUNTY, NORTH CAROLINA

DRAWING NUMBER

FIGURE 2



= VOCs > 2L stds.

= VOCs < 2L stds.

NOTES:

1. TOPOGRAPHIC CONTOURS ARE FOR REPRESENTATIVE PURPOSES. CONTOURS OBTAINED FROM McGILL ASSOCIATES.
2. GROUNDWATER FLOW DIRECTION BASED ON GROUNDWATER ELEVATIONS IN MW-3, MW-4, AND MW-5 (WATER TABLE WELLS).

LEGEND:

- MW-1 MONITORING WELL LOCATION
- GP-1 GAS PROBE LOCATION
- PMW-1 PRIVATE MONITORING WELL LOCATION
- SPRING-NW SPRING LOCATION
- PROPERTY BOUNDARY

GRAPHIC SCALE (FEET)

200 0 100 200

REV.	DATE	DESCRIPTION	BY	CHK	APV
3	11-21-03	UPDATE	GAP	JSM	
2	05-13-02	UPDATE	SEX	JSM	
1	11-12-01	ORIGINAL	JMC	JPM	

DRAWN BY: JMC DATE: 11-12-01
PROJECT NUMBER: 2094.01
CADD DIRECTORY: P:\JACKSON\DILLSBORO GW\FIGURES
CADD FILENAME: SITE DIAGRAM

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78½ PATTON AVE., ASHEVILLE, NC 28801
TEL 828.281.3350 FAC.828.281.3351
www.altamontenvironmental.com

GENERALIZED GROUNDWATER FLOW DIRECTION
OCTOBER 20 & 21, 2003

JACKSON COUNTY LANDFILL
JACKSON COUNTY, NORTH CAROLINA

DRAWING NUMBER

FIGURE 3

TABLES

Table 1
Water Quality Field Parameters
Jackson County MSWLF
Jackson County, North Carolina

October 20 and 21, 2003

Well ID	Date	Sample Collection Time	Depth to Groundwater (feet)	pH	Temperature (°C)	Specific Conductivity (µS)
MW-1	10/20/2003	17:30	95.12	4.91	17.1	131.7
MW-2	10/21/2003	12:00	30.14	5.59	15.2	102.6
MW-3	10/20/2003	15:20	51.72	5.65	20.2	249.0
MW-4	10/21/2003	11:00	33.42	4.95	14.1	359.0
MW-5	10/20/2003	14:15	50.34	5.54	17.3	326.0
SW-01	10/21/2003	8:45	NA	7.27	10.5	48.1
SW-02	10/20/2003	15:00	NA	8.62	10.25	48.1
DW-Bulla	10/21/2003	10:15	NA	NA	NA	NA
DW-Wilkie	10/21/2003	9:45	NA	NA	NA	NA

Notes: 1. µS means micro-siemen.
2. Depth to Water measured from top of casing.
3. pH is measured in Standard Units.
4. NA means not applicable.

Table 2
Summary of Analytical Results for Appendix II Metals
Jackson County MSWLF
Jackson County, North Carolina

October 20 and 21, 2003

Compound	MW-1	MW-2	MW-3	MW-4	MW-5	SW-1	SW-2	NC 2L Standard
Barium	0.15	0.050	0.16	0.29	0.37	0.019	0.014	2.0
Beryllium	<0.001	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	NL
Cobalt	0.25	<0.005	0.042	<0.005	0.019	<0.005	<0.005	NL
Copper	0.0068	0.0023	<0.002	<0.002	0.018	0.0030	<0.002	1.0
Lead	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	0.015
Mercury	<0.0002	<0.0002	0.00088	0.00046	<0.0002	<0.0002	<0.0002	0.0011
Nickel	0.015	0.0051	<0.005	<0.005	0.0095	<0.005	<0.005	0.1
Selenium	0.0055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05
Tin	<0.005	<0.005	<0.005	<0.005	0.0053	<0.005	<0.005	NL
Vanadium	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	NL
Zinc	0.014	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	2.1

Notes:
1. Concentrations are in milligrams per liter (mg/L).
2. < indicates compound not detected at or above the concentration shown (Pace detection limit).
3. **Bold** indicates exceedance of 2L Standard in monitoring wells.
4. Only compounds detected above laboratory detection limits are shown. For a complete list of analyses and dection limits, refer to the analytical laboratory reports.
5. NL indicates the compound does not have an applicable 2L Standard.

Table 3
Summary of Analytical Results for Appendix II VOCs
Jackson County MSWLF
Jackson County, North Carolina

October 20 and 21, 2003

Compound	MW-1	MW-2	MW-3	MW-4	MW-5	SW-1	SW-2	Bulla Well	Wilkie Well	NC 2L Standard
1,1-Dichloroethane	13	<5.0	5.8	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	700
1,4-Dichlorobenzene	8.6	<5.0	17	6.3	11	<5.0	<5.0	<5.0	<5.0	75
Benzene	**9.6**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1
Chlorobenzene	<5.0	<5.0	7.6	6.9	6.0	<5.0	<5.0	<5.0	<5.0	50
cis-1,2-Dichloroethene	24	<5.0	8.9	18	32	<5.0	<5.0	<5.0	<5.0	70
o-Xylene	30	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NL
Xylenes (Total)	38	<15	<15	<15	<15	<15	<15	<15	<15	530

Notes: 1. Concentrations are in micrograms per liter (µg/L).
2. < indicates compound not detected at or above the concentration shown (Pace detection limit).
3. **Bold** indicates exceedance of 2L Standard in monitoring wells.
4. Only compounds detected above laboratory detection limits are shown. For a complete list of analyses and dection limits, refer to the analytical laboratory reports.
5. NL indicates the compound does not have an applicable 2L Standard.

Table 4
Well Construction Details and Corresponding Elevations
Jackson County MSWLF
Jackson County, North Carolina

October 20 and 21, 2003

Well ID	Ground Surface Elevation	TOC Elevation	Depth To Water (from TOC)	Groundwater Elevation	Depth to Bedrock	Bedrock Elevation	Screened Interval	Elevation of Screened Interval
MW-1	2169.40	2171.42	95.12	2076.30	83.0	2086.40	95 to 110	2074.4 to 2059.4
MW-2	2013.15	2015.38	30.14	1985.24	13.0	2000.15	45 to 60	1968.2 to 1953.2
MW-3	2044.16	2045.53	51.72	1993.81	57.0	1987.16	48.5 to 63.5	1995.7 to 1980.7
MW-4	1978.68	1980.77	33.42	1947.35	NA	NA	25 to 40	1951.7 to 1936.7
MW-5	2027.38	2028.97	50.34	1978.63	NA	NA	50 to 60	1977.4 to 1967.4

Notes:
1. All elevations are in feet, 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; NA means not applicable.
3. Depth to Bedrock and Screened Interval taken from boring logs completed on April 21, 22, and 23, 1992 by S&ME.

APPENDICES

APPENDIX A

SAMPLING LOGS

ALTAMONT ENVIRONMENTAL, INC.

Engineering & Hydrogeology
78 1/2 PATTON AVE., ASHEVILLE, NC 28801
TEL.828.821.3350 FAC.828.281.3351
www.altamontenvironmental.com

Well Sampling Log

FACILITY NAME: JACKSON
LOCATION: DILLSBORO
SAMPLING PERSONNEL: J. MORRIS

DATE: 10/20/03
SAMPLING TIME: 17:30
WEATHER: CLEAR/60s

WELL NUMBER: MW-01
WELL DIAMETER: 2"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT (STICK-UP)
COMMENTS:

WELL DEPTH IN FEET (WD): 112.80 DATE: 10/20/03
WATER LEVEL IN FEET (WL): 95.12 DATE: 10/20 TIME: 16:15
LENGTH OF WATER COLUMN: 17.68 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 3.0 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 9.0 GALLONS
ACTUAL VOLUME PURGED: 9.0 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-TEFLON (BAILER-DISP) DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON (BAILER-DISP) DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. ~~(umhos/cm)~~ mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	1 WITMC	5.75	3[illegible]	21.1	3.19	189	CLEAR/LOW	
2	3.0	5.91	4[illegible]	20.1	2.89	185	CLEAR/LOW	
3	6.0	5.37	13[illegible]	17.8	1.71	175	CLEAR/LOW	
4	9.0	4.95	132.[illegible]	16.9	2.66	168	CLEAR/LOW -ODOR	
5	12.0	4.91	131.7	17.1	2.11	121	CLEAR/LOW -ODOR	
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	METALS, SULFIDE
40 ml GLASS	4	VOCs
1 L GLASS	1	HERB
OTHER	1	CYANIDE

PROTECTIVE CASING: SOS PAD: GOOD LOCK: GOOD VEGETATION: NONE ACCESS: (GOOD) POOR

Sampling Personnel Signature: [signature] Date: 10/20/03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

ALTAMONT ENVIRONMENTAL, INC.

Engineering & Hydrogeology
78 1/2 PATTON AVE., ASHEVILLE, NC 28801
TEL.828.821.3350 FAC.828.281.3351
www.altamontenvironmental.com

Well Sampling Log

FACILITY NAME: JACKSON CO. UF
LOCATION: DILLSBORO, NC
SAMPLING PERSONNEL: J. MORRIS

DATE: 10/21/03
SAMPLING TIME: 12:00
WEATHER: FOGGY COOL

WELL NUMBER: MW-02
WELL DIAMETER: 2"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS:

WELL DEPTH IN FEET (WD): 62.75 DATE: 10/21/03
WATER LEVEL IN FEET (WL): 30.14 DATE: ____ TIME: 11:40
LENGTH OF WATER COLUMN: 32.64 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 5.55 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 16.65 GALLONS
ACTUAL VOLUME PURGED: 16.7 GALLONS

FINISH WL 30.71

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

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. ~~(µmhos/cm)~~ mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	INITIAL	5.96	129.9	14.0	5.03	228	clear/low	
2	5.5	5.85	114.4	14.4	7.41	245	clear/low	
3	11.0	5.59	108.9	14.7	7.22	245	clear/low	
4	16.7	5.59	102.6	15.2	6.47	223	clear/low	
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	METALS, SULFIDE
40 ml GLASS	4	VOCS
1 L GLASS	1	HERB.
OTHER	1	CYANIDE

PROTECTIVE CASING: GOOD PAD: 50% LOCK: GOOD VEGETATION: LOTS ACCESS: GOOD / POOR

Sampling Personnel Signature: [signature] **Date:** 10/21/03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

ALTAMONT ENVIRONMENTAL, INC.

Engineering & Hydrogeology
78 1/2 PATTON AVE., ASHEVILLE, NC 28801
TEL.828.821.3350 FAC.828.281.3351
www.altamontenvironmental.com

Well Sampling Log

FACILITY NAME: JACKSON LF
LOCATION: MILLSBORO
SAMPLING PERSONNEL:
DATE: 10/20/03
SAMPLING TIME: 15:20
WEATHER: CLEAR/60S

WELL NUMBER: MW-3
WELL DIAMETER: 2"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS:

WELL DEPTH IN FEET (WD): 62.50 DATE: 10/20/03
WATER LEVEL IN FEET (WL): 51.72 DATE: ____ TIME: 14:55
LENGTH OF WATER COLUMN: 10.78 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 1.8 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 5.4 GALLONS
ACTUAL VOLUME PURGED: 5.4 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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (~~umhos/cm~~) mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	INITIAL	6.01	314	22.1	3.71	198	CLEAR/LOW	
2	1.8	5.80	301	21.1	2.25	171	" "	
3	3.6	5.68	255	20.5	1.98	168	" "	
4	5.4	5.65	249	20.2	1.75	207	" "	
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	METALS, SULFIDE
40 ml GLASS	4	VOCs
1 L GLASS	2	HERB.
OTHER	1	CYANIDE

PROTECTIVE CASING: GOOD PAD: GOOD LOCK: GOOD VEGETATION: YES ACCESS: GOOD/POOR

Sampling Personnel Signature: [signature] **Date:** 10/20/03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

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Engineering & Hydrogeology
78 1/2 PATTON AVE., ASHEVILLE, NC 28801
TEL.828.821.3350 FAC.828.281.3351
www.altamontenvironmental.com

Well Sampling Log

FACILITY NAME: JACKSON CO, LF
DATE: 10/21/03
LOCATION: DILLSBORO, NC
SAMPLING TIME: 11:00
SAMPLING PERSONNEL: J. MORRIS / Z. PRICE
WEATHER: FOGGY / 60s

WELL NUMBER: MW-04
WELL DIAMETER: 2"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS:

WELL DEPTH IN FEET (WD): 42.48 DATE: 10/21/03
WATER LEVEL IN FEET (WL): 33.42 DATE: 10/21/03 TIME: 9:00
LENGTH OF WATER COLUMN: 9.06 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 1.5 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 4.5 GALLONS
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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. ~~(umhos/cm)~~ mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	INITIAL	5.00	337	15.4	1.36	251	Clear / low	
2	1.5	4.88	359	14.8	1.66	280	clear / low	
3	3.0	4.91	363	14.2	1.98	286	clear / low	
4	4.5	4.95	359	14.1	2.33	302	Clear / low	
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	Metals Sulfide
40 ml GLASS	4	VOCs
1 L GLASS	1	Herbicides
OTHER	1	~~Cyanide~~ Cyanide

PROTECTIVE CASING: GOOD PAD: GOOD LOCK: GOOD VEGETATION: LOTS ACCESS: GOOD / POOR

Sampling Personnel Signature: [signature] **Date:** 10/21/03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

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Well Sampling Log

FACILITY NAME: JACKSON VF
DATE: 10/20/07
LOCATION: DICKSKOND
SAMPLING TIME: 14:15
SAMPLING PERSONNEL: J. Mollis
WEATHER: CLEAR / 70s

WELL NUMBER: MW-5
WELL DIAMETER: 2"
TYPE OF CASING: PVC
MEASURING POINT: TOC
FLUSH MOUNT / STICK-UP
COMMENTS:

WELL DEPTH IN FEET (WD): 60.12 DATE: 10/20/03
WATER LEVEL IN FEET (WL): 50.34 DATE: ____ TIME: ____
LENGTH OF WATER COLUMN: 9.78 FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: 1.6 GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: 5.1 GALLONS
ACTUAL VOLUME PURGED: 5.1 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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (~~umhos/cm~~) MS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
		6.22						
1	1.7	~~7.12~~	324	17.6	2.28	120	yellowish clear low	
2	3.4	5.75	319	17.3	2.64	95	yellowish clear low	
3	5.1	5.54	326	17.3	2.88	98	yellowish clear low	
4								
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	METALS, SULFIDE
40 ml GLASS	4	VOCs
1 L GLASS	2	HERB
OTHER	1	CYANIDE

PROTECTIVE CASING: GOOD PAD: GOOD LOCK: GOOD VEGETATION: YES ACCESS: GOOD / POOR

Sampling Personnel Signature: [signature] **Date:** 10/20/07

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

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Well Sampling Log

FACILITY NAME: JACKSON CO. CF
DATE: 10/21/03
LOCATION: DILLSBORO, NC
SAMPLING TIME: 8:45
SAMPLING PERSONNEL: JAMES ARRIS
WEATHER: FOGGY / COOL

WELL NUMBER: SW-1
WELL DIAMETER: N/A
TYPE OF CASING:
MEASURING POINT:
FLUSH MOUNT / STICK-UP:
COMMENTS:

WELL DEPTH IN FEET (WD): N/A DATE:
WATER LEVEL IN FEET (WL): DATE: TIME:
LENGTH OF WATER COLUMN: FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: GALLONS
ACTUAL VOLUME PURGED: 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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. ~~(umhos/cm)~~ mS	TEMP (C°) 10.5	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY CLEAR/LOW	COMMENTS
1	SAMPLE	7.27	48.1	[illegible]	10.10	183	[illegible]	
2								
3								
4								
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	SULFIDE, METALS
40 ml GLASS	4	VOCs
1 L GLASS	1	HERB
OTHER	1	CYANIDE

PROTECTIVE CASING: RUST PAD: GOOD LOCK: GOOD VEGETATION: LOTS ACCESS: GOOD / POOR

Sampling Personnel Signature: [signature] **Date:** 10/21/03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

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Well Sampling Log

FACILITY NAME: JACKSON
LOCATION: SW-02
SAMPLING PERSONNEL: Z. Price

DATE: 10-20-03
SAMPLING TIME: 15:00
WEATHER: Clear 70s

WELL NUMBER: SW-02
WELL DIAMETER: N/A
TYPE OF CASING:
MEASURING POINT:
FLUSH MOUNT / STICK-UP
COMMENTS: Sample taken just upstream of small tributary. Pres. to bend in river

WELL DEPTH IN FEET (WD): N/A — DATE: 10-20-03
WATER LEVEL IN FEET (WL): — DATE: — TIME: 15:00
LENGTH OF WATER COLUMN: — FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: — GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: — GALLONS
ACTUAL VOLUME PURGED: — 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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (~~umhos/cm~~) mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	SAMPLE	8.62	48.1	~~16.70~~ 16.6	10.25	110	Clear/low	
2								
3								
4								
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC	2	METALS, SULFIDE
40 ml GLASS	4	VOCs
1 L GLASS	2	HERB
OTHER	1	CYANIDE

PROTECTIVE CASING: PAD: LOCK: VEGETATION: yes ACCESS: GOOD / POOR

Sampling Personnel Signature: Zan Price. Date: 10.20.03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius
MS = microsiemen

Directions. Take left trail across from Joe Wilkinson (grassed trail not gravel driveway)
- Sample just upstream of tributary (from box culvert under US19A)

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Well Sampling Log

FACILITY NAME: JACKSON	DATE: 10-21-03
LOCATION: OW-Bulla	SAMPLING TIME: 10:15
SAMPLING PERSONNEL: Z. PRICE	WEATHER: 50s, foggy

WELL NUMBER: OW-Bulla	WELL DEPTH IN FEET (WD): N/A	DATE: 10-21-03
WELL DIAMETER: N/A	WATER LEVEL IN FEET (WL):	DATE: ____ TIME: 10:15
TYPE OF CASING:	LENGTH OF WATER COLUMN :	FEET
MEASURING POINT:	(WD) - (WL) = (LWC)	
FLUSH MOUNT / STICK-UP	ONE CASING VOLUME:	GALLONS
COMMENTS: - Res Drinking well.	(LWC) x (WCV)	
Sample taken from kitchen sink	THREE CASING VOLUMES:	GALLONS
	ACTUAL VOLUME PURGED: 30	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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER: ρ

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

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (~~umhos/cm~~) MS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	30						clear / low	
2								
3								
4								
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC		
40 ml GLASS	4 ~~VOC~~	VOC
1 L GLASS		
OTHER		

PROTECTIVE CASING:_____ PAD:_____ LOCK:_____ VEGETATION: yes ACCESS: (GOOD) / POOR

Sampling Personnel Signature: Zan Price **Date:** 10-21-03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

* - pH / Cond / temp meter would not turn on

Purge Rate.. 2 gpm x 15 min = 30 gal.

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Well Sampling Log

FACILITY NAME: JACKSON
LOCATION: OW Wilkie
SAMPLING PERSONNEL:
DATE: 10-21-03
SAMPLING TIME: 9:45
WEATHER: 50s foggy

WELL NUMBER: OW-Wilkie
WELL DIAMETER:
TYPE OF CASING:
MEASURING POINT:
FLUSH MOUNT / STICK-UP
COMMENTS: - Residential drinking well - pH/cond/temp meter would not turn on

WELL DEPTH IN FEET (WD): DATE: 10-21-03
WATER LEVEL IN FEET (WL): DATE: TIME: 9:45
LENGTH OF WATER COLUMN : FEET
(WD) - (WL) = (LWC)
ONE CASING VOLUME: GALLONS
(LWC) x (WCV)
THREE CASING VOLUMES: GALLONS
ACTUAL VOLUME PURGED: 30 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-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:
SAMPLE METHOD: BAILER-TEFLON BAILER-DISP. DEDICATED PUMP WHALE PUMP GRUNDFOS OTHER:

READING	GALLONS PURGED	pH UNITS	SPECIFIC COND. (~~umhos/cm~~) mS	TEMP (C°)	DISSOLVED OXYGEN (mg/L)	OXIDATION REDUCTION POTENTIAL (mV)	COLOR AND TURBIDITY	COMMENTS
1	30						clear/low	
2								
3								
4								
5								
6								
7								
8								
9								

SAMPLING CONTAINER	NUMBER OF CONTAINERS	REQUESTED ANALYSIS
250 ml PLASTIC		
40 ml GLASS	4 - ~~VOC~~	VOC
1 L GLASS		
OTHER		

PROTECTIVE CASING: PAD: LOCK: VEGETATION: yes ACCESS: (GOOD) POOR

Sampling Personnel Signature: Jon Pain **Date:** 10.21.03

Notes: µmhos/cm = micro-ohms per centimeter
mV = millivolt
mg/L = milligrams per liter
C° = degrees Celcius

318 Joe Wilkie Road - Sample taken directly from outside spigot adjacent to lower garage. West side of house

Purge Rate: 4 gpm x 7.5 min = 30 gal.

APPENDIX B

LABORATORY ANALYTICAL REPORTS

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

November 04, 2003

Mr. Jim McElduff
Altamont Environmental
78 1/2 Patton Ave.
Asheville, NC 28801

RE: Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Dear Mr. McElduff:

Enclosed are the analytical results for sample(s) received by the laboratory on October 22, 2003. 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,

Kristi R. Tart

Kristi Tart
Kristi.Tart@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457790 | Project Sample Number: 9252841-001 | Date Collected: 10/20/03 17:30
Client Sample ID: MW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 02:41	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 02:41	LBG	7440-38-2		
Barium	0.15	mg/l	0.0050	10/31/03 02:41	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 02:41	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 02:41	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 02:41	LBG	7440-47-3		
Cobalt	0.25	mg/l	0.0050	10/31/03 02:41	LBG	7440-48-4		
Copper	0.0068	mg/l	0.0020	10/31/03 02:41	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 02:41	LBG	7439-92-1		
Nickel	0.015	mg/l	0.0050	10/31/03 02:41	LBG	7440-02-0		
Selenium	0.0055	mg/l	0.0050	10/31/03 02:41	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 02:41	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 02:41	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 02:41	LBG	7440-62-2		
Zinc	0.014	mg/l	0.010	10/31/03 02:41	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	mg/l	0.00020	10/30/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/28/03	ACL	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/24/03 22:18	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/24/03 22:18	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/24/03 22:18	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/24/03 22:18	RPJ	93-72-1		

REPORT OF LABORATORY ANALYSIS

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Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FL NELAP	E87648

Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FL NELAP	E87627

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Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457790 | Project Sample Number: 9252841-001 | Date Collected: 10/20/03 17:30
Client Sample ID: MW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	60	%		10/24/03 22:18	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 09:39	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 09:39	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 09:39	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 09:39	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 09:39	DLK	107-05-1		
Benzene	9.6	ug/l	5.0	10/28/03 09:39	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 09:39	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 09:39	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 09:39	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 09:39	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 09:39	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 09:39	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 09:39	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 09:39	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 09:39	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 09:39	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 09:39	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 09:39	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 09:39	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 09:39	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 09:39	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 09:39	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 09:39	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 09:39	DLK	541-73-1		
1,4-Dichlorobenzene	8.6	ug/l	5.0	10/28/03 09:39	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 09:39	DLK	110-57-6		
1,1-Dichloroethane	13.	ug/l	5.0	10/28/03 09:39	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 09:39	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 09:39	DLK	75-35-4		
cis-1,2-Dichloroethene	24.	ug/l	5.0	10/28/03 09:39	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 09:39	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 09:39	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 09:39	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 09:39	DLK	594-20-7		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457790 | Project Sample Number: 9252841-001 | Date Collected: 10/20/03 17:30
Client Sample ID: MW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 09:39	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 09:39	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 09:39	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 09:39	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 09:39	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 09:39	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 09:39	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 09:39	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 09:39	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 09:39	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 09:39	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 09:39	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 09:39	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 09:39	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 09:39	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 09:39	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 09:39	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 09:39	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 09:39	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 09:39	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 09:39	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 09:39	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 09:39	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 09:39	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 09:39	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 09:39	DLK	75-01-4		
Xylene (Total)	38.	ug/l	5.0	10/28/03 09:39	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 09:39	DLK			
o-Xylene	30.	ug/l	5.0	10/28/03 09:39	DLK	95-47-6		
Toluene-d8 (S)	100	%		10/28/03 09:39	DLK	2037-26-5		
4-Bromofluorobenzene (S)	96	%		10/28/03 09:39	DLK	460-00-4		
Dibromofluoromethane (S)	98	%		10/28/03 09:39	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	91	%		10/28/03 09:39	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457816 | Project Sample Number: 9252841-002 | Date Collected: 10/21/03 12:00
Client Sample ID: MW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 03:03	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 03:03	LBG	7440-38-2		
Barium	0.050	mg/l	0.0050	10/31/03 03:03	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 03:03	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 03:03	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 03:03	LBG	7440-47-3		
Cobalt	ND	mg/l	0.0050	10/31/03 03:03	LBG	7440-48-4		
Copper	0.0023	mg/l	0.0020	10/31/03 03:03	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 03:03	LBG	7439-92-1		
Nickel	0.0051	mg/l	0.0050	10/31/03 03:03	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 03:03	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 03:03	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 03:03	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 03:03	LBG	7440-62-2		
Zinc	ND	mg/l	0.010	10/31/03 03:03	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	mg/l	0.00020	10/30/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/30/03	ALV	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/25/03 01:05	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/25/03 01:05	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/25/03 01:05	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/25/03 01:05	RPJ	93-72-1		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457816 | Project Sample Number: 9252841-002 | Date Collected: 10/21/03 12:00
Client Sample ID: MW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	56	%		10/25/03 01:05	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 10:08	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 10:08	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 10:08	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 10:08	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 10:08	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 10:08	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 10:08	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 10:08	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 10:08	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 10:08	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 10:08	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 10:08	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 10:08	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 10:08	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 10:08	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 10:08	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 10:08	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 10:08	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 10:08	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 10:08	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 10:08	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 10:08	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 10:08	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 10:08	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 10:08	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 10:08	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 10:08	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 10:08	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 10:08	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 10:08	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 10:08	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 10:08	DLK	594-20-7		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457816 | Project Sample Number: 9252841-002 | Date Collected: 10/21/03 12:00
Client Sample ID: MW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 10:08	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 10:08	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 10:08	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 10:08	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 10:08	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 10:08	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 10:08	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 10:08	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 10:08	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 10:08	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 10:08	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 10:08	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 10:08	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 10:08	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 10:08	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 10:08	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 10:08	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 10:08	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 10:08	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 10:08	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 10:08	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 10:08	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 10:08	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 10:08	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 10:08	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 10:08	DLK	95-47-6		
Toluene-d8 (S)	98	%		10/28/03 10:08	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		10/28/03 10:08	DLK	460-00-4		
Dibromofluoromethane (S)	99	%		10/28/03 10:08	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	94	%		10/28/03 10:08	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457840 | Project Sample Number: 9252841-003 | Date Collected: 10/20/03 15:20
Client Sample ID: MW-03 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 02:45	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 02:45	LBG	7440-38-2		
Barium	0.16	mg/l	0.0050	10/31/03 02:45	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 02:45	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 02:45	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 02:45	LBG	7440-47-3		
Cobalt	0.042	mg/l	0.0050	10/31/03 02:45	LBG	7440-48-4		
Copper	ND	mg/l	0.0020	10/31/03 02:45	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 02:45	LBG	7439-92-1		
Nickel	ND	mg/l	0.0050	10/31/03 02:45	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 02:45	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 02:45	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 02:45	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 02:45	LBG	7440-62-2		
Zinc	ND	mg/l	0.010	10/31/03 02:45	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	0.00088	mg/l	0.00020	10/30/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/28/03	ACL	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/24/03 22:52	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/24/03 22:52	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/24/03 22:52	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/24/03 22:52	RPJ	93-72-1		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457840 | Project Sample Number: 9252841-003 | Date Collected: 10/20/03 15:20
Client Sample ID: MW-03 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	69	%		10/24/03 22:52	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 10:37	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 10:37	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 10:37	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 10:37	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 10:37	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 10:37	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 10:37	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 10:37	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 10:37	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 10:37	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 10:37	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 10:37	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 10:37	DLK	56-23-5		
Chlorobenzene	7.6	ug/l	5.0	10/28/03 10:37	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 10:37	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 10:37	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 10:37	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 10:37	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 10:37	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 10:37	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 10:37	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 10:37	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 10:37	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 10:37	DLK	541-73-1		
1,4-Dichlorobenzene	17.	ug/l	5.0	10/28/03 10:37	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 10:37	DLK	110-57-6		
1,1-Dichloroethane	5.8	ug/l	5.0	10/28/03 10:37	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 10:37	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 10:37	DLK	75-35-4		
cis-1,2-Dichloroethene	8.9	ug/l	5.0	10/28/03 10:37	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 10:37	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 10:37	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 10:37	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 10:37	DLK	594-20-7		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457840 | Project Sample Number: 9252841-003 | Date Collected: 10/20/03 15:20
Client Sample ID: MW-03 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 10:37	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 10:37	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 10:37	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 10:37	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 10:37	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 10:37	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 10:37	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 10:37	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 10:37	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 10:37	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 10:37	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 10:37	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 10:37	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 10:37	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 10:37	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 10:37	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 10:37	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 10:37	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 10:37	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 10:37	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 10:37	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 10:37	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 10:37	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 10:37	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 10:37	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 10:37	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 10:37	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 10:37	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 10:37	DLK	95-47-6		
Toluene-d8 (S)	98	%		10/28/03 10:37	DLK	2037-26-5		
4-Bromofluorobenzene (S)	91	%		10/28/03 10:37	DLK	460-00-4		
Dibromofluoromethane (S)	95	%		10/28/03 10:37	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	90	%		10/28/03 10:37	DLK	17060-07-0		

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Huntersville, NC 28078
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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457857 | Project Sample Number: 9252841-004 | Date Collected: 10/21/03 11:00
Client Sample ID: MW-04 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-38-2		
Barium	0.29	mg/l	0.0050	10/31/03 03:08	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 03:08	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 03:08	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 03:08	LBG	7440-47-3		
Cobalt	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-48-4		
Copper	ND	mg/l	0.0020	10/31/03 03:08	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 03:08	LBG	7439-92-1		
Nickel	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 03:08	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 03:08	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 03:08	LBG	7440-62-2		
Zinc	ND	mg/l	0.010	10/31/03 03:08	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	0.00046	mg/l	0.00020	11/04/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/30/03	ALV	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/25/03 01:38	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/25/03 01:38	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/25/03 01:38	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/25/03 01:38	RPJ	93-72-1		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457857 | Project Sample Number: 9252841-004 | Date Collected: 10/21/03 11:00
Client Sample ID: MW-04 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	75	%		10/25/03 01:38	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 11:06	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 11:06	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 11:06	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 11:06	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 11:06	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 11:06	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 11:06	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 11:06	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 11:06	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 11:06	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 11:06	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 11:06	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 11:06	DLK	56-23-5		
Chlorobenzene	6.9	ug/l	5.0	10/28/03 11:06	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 11:06	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 11:06	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 11:06	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 11:06	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 11:06	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 11:06	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 11:06	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 11:06	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 11:06	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 11:06	DLK	541-73-1		
1,4-Dichlorobenzene	6.3	ug/l	5.0	10/28/03 11:06	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 11:06	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 11:06	DLK	75-35-4		
cis-1,2-Dichloroethene	18.	ug/l	5.0	10/28/03 11:06	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 11:06	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 11:06	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 11:06	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 11:06	DLK	594-20-7		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457857 | Project Sample Number: 9252841-004 | Date Collected: 10/21/03 11:00
Client Sample ID: MW-04 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 11:06	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 11:06	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 11:06	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 11:06	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 11:06	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 11:06	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 11:06	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 11:06	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 11:06	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 11:06	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 11:06	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 11:06	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 11:06	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 11:06	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 11:06	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 11:06	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 11:06	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 11:06	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 11:06	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 11:06	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 11:06	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 11:06	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 11:06	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 11:06	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 11:06	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 11:06	DLK	95-47-6		
Toluene-d8 (S)	100	%		10/28/03 11:06	DLK	2037-26-5		
4-Bromofluorobenzene (S)	95	%		10/28/03 11:06	DLK	460-00-4		
Dibromofluoromethane (S)	99	%		10/28/03 11:06	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		10/28/03 11:06	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457865 | Project Sample Number: 9252841-005 | Date Collected: 10/20/03 14:15
Client Sample ID: MW-05 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 02:50	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 02:50	LBG	7440-38-2		
Barium	0.37	mg/l	0.0050	10/31/03 02:50	LBG	7440-39-3		
Beryllium	0.0011	mg/l	0.0010	10/31/03 02:50	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 02:50	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 02:50	LBG	7440-47-3		
Cobalt	0.019	mg/l	0.0050	10/31/03 02:50	LBG	7440-48-4		
Copper	0.018	mg/l	0.0020	10/31/03 02:50	LBG	7440-50-8		
Lead	0.011	mg/l	0.0050	10/31/03 02:50	LBG	7439-92-1		
Nickel	0.0095	mg/l	0.0050	10/31/03 02:50	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 02:50	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 02:50	LBG	7440-22-4		
Tin	0.0053	mg/l	0.0050	10/31/03 02:50	LBG	7440-31-5		
Vanadium	0.012	mg/l	0.0050	10/31/03 02:50	LBG	7440-62-2		
Zinc	0.023	mg/l	0.010	10/31/03 02:50	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	mg/l	0.00020	10/30/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/28/03	ACL	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/24/03 23:25	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/24/03 23:25	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/24/03 23:25	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/24/03 23:25	RPJ	93-72-1		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457865 | Project Sample Number: 9252841-005 | Date Collected: 10/20/03 14:15
Client Sample ID: MW-05 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	67	%		10/24/03 23:25	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 11:35	DLK	67-64-1
Acetonitrile	ND	ug/l	5.0	10/28/03 11:35	DLK	75-05-8
Acrolein	ND	ug/l	100	10/28/03 11:35	DLK	107-02-8
Acrylonitrile	ND	ug/l	100	10/28/03 11:35	DLK	107-13-1
Allyl chloride	ND	ug/l	5.0	10/28/03 11:35	DLK	107-05-1
Benzene	ND	ug/l	5.0	10/28/03 11:35	DLK	71-43-2
Bromochloromethane	ND	ug/l	5.0	10/28/03 11:35	DLK	74-97-5
Bromodichloromethane	ND	ug/l	5.0	10/28/03 11:35	DLK	75-27-4
Bromoform	ND	ug/l	5.0	10/28/03 11:35	DLK	75-25-2
Bromomethane	ND	ug/l	10.	10/28/03 11:35	DLK	74-83-9
2-Butanone (MEK)	ND	ug/l	100	10/28/03 11:35	DLK	78-93-3
Carbon disulfide	ND	ug/l	10.	10/28/03 11:35	DLK	75-15-0
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 11:35	DLK	56-23-5
Chlorobenzene	6.0	ug/l	5.0	10/28/03 11:35	DLK	108-90-7
Chloroethane	ND	ug/l	10.	10/28/03 11:35	DLK	75-00-3
Chloroform	ND	ug/l	5.0	10/28/03 11:35	DLK	67-66-3
Chloromethane	ND	ug/l	10.	10/28/03 11:35	DLK	74-87-3
Chloroprene	ND	ug/l	10.	10/28/03 11:35	DLK	126-99-8
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 11:35	DLK	96-12-8
Dibromochloromethane	ND	ug/l	5.0	10/28/03 11:35	DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 11:35	DLK	106-93-4
Dibromomethane	ND	ug/l	5.0	10/28/03 11:35	DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 11:35	DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 11:35	DLK	541-73-1
1,4-Dichlorobenzene	11.	ug/l	5.0	10/28/03 11:35	DLK	106-46-7
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 11:35	DLK	110-57-6
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	75-34-3
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	107-06-2
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 11:35	DLK	75-35-4
cis-1,2-Dichloroethene	32.	ug/l	5.0	10/28/03 11:35	DLK	156-59-2
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 11:35	DLK	156-60-5
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 11:35	DLK	78-87-5
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 11:35	DLK	142-28-9
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 11:35	DLK	594-20-7

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Fax: 704.875.9091

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457865 | Project Sample Number: 9252841-005 | Date Collected: 10/20/03 14:15
Client Sample ID: MW-05 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 11:35	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 11:35	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 11:35	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 11:35	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 11:35	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 11:35	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 11:35	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 11:35	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 11:35	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 11:35	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 11:35	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 11:35	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 11:35	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 11:35	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 11:35	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 11:35	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 11:35	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 11:35	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 11:35	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 11:35	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 11:35	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 11:35	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 11:35	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 11:35	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 11:35	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 11:35	DLK	95-47-6		
Toluene-d8 (S)	98	%		10/28/03 11:35	DLK	2037-26-5		
4-Bromofluorobenzene (S)	92	%		10/28/03 11:35	DLK	460-00-4		
Dibromofluoromethane (S)	101	%		10/28/03 11:35	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	99	%		10/28/03 11:35	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457873 | Project Sample Number: 9252841-006 | Date Collected: 10/21/03 08:45
Client Sample ID: SW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-38-2		
Barium	0.019	mg/l	0.0050	10/31/03 03:12	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 03:12	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 03:12	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 03:12	LBG	7440-47-3		
Cobalt	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-48-4		
Copper	0.0030	mg/l	0.0020	10/31/03 03:12	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 03:12	LBG	7439-92-1		
Nickel	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 03:12	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 03:12	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 03:12	LBG	7440-62-2		
Zinc	ND	mg/l	0.010	10/31/03 03:12	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	mg/l	0.00020	11/04/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/30/03	ALV	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/25/03 02:11	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/25/03 02:11	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/25/03 02:11	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/25/03 02:11	RPJ	93-72-1		

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Client Project ID: Jackson LF/2040

Lab Sample No: 923457873 | Project Sample Number: 9252841-006 | Date Collected: 10/21/03 08:45
Client Sample ID: SW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
2,4-DCPA (S)	62	%		10/25/03 02:11	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 12:03	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 12:03	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 12:03	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 12:03	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 12:03	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 12:03	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 12:03	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 12:03	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 12:03	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 12:03	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 12:03	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 12:03	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 12:03	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 12:03	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 12:03	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 12:03	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 12:03	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 12:03	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 12:03	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 12:03	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 12:03	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 12:03	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:03	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:03	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:03	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 12:03	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 12:03	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 12:03	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 12:03	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 12:03	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 12:03	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 12:03	DLK	594-20-7		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457873 | Project Sample Number: 9252841-006 | Date Collected: 10/21/03 08:45
Client Sample ID: SW-01 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 12:03	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 12:03	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 12:03	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 12:03	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 12:03	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 12:03	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 12:03	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 12:03	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 12:03	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 12:03	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 12:03	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 12:03	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 12:03	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 12:03	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 12:03	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 12:03	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 12:03	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 12:03	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 12:03	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 12:03	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 12:03	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 12:03	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 12:03	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 12:03	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 12:03	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 12:03	DLK	95-47-6		
Toluene-d8 (S)	98	%		10/28/03 12:03	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		10/28/03 12:03	DLK	460-00-4		
Dibromofluoromethane (S)	102	%		10/28/03 12:03	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	97	%		10/28/03 12:03	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457881 | Project Sample Number: 9252841-007 | Date Collected: 10/20/03 15:00
Client Sample ID: SW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-36-0		
Arsenic	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-38-2		
Barium	0.014	mg/l	0.0050	10/31/03 02:54	LBG	7440-39-3		
Beryllium	ND	mg/l	0.0010	10/31/03 02:54	LBG	7440-41-7		
Cadmium	ND	mg/l	0.0010	10/31/03 02:54	LBG	7440-43-9		
Chromium	ND	mg/l	0.0020	10/31/03 02:54	LBG	7440-47-3		
Cobalt	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-48-4		
Copper	ND	mg/l	0.0020	10/31/03 02:54	LBG	7440-50-8		
Lead	ND	mg/l	0.0050	10/31/03 02:54	LBG	7439-92-1		
Nickel	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-02-0		
Selenium	ND	mg/l	0.0050	10/31/03 02:54	LBG	7782-49-2		
Silver	ND	mg/l	0.0020	10/31/03 02:54	LBG	7440-22-4		
Tin	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-31-5		
Vanadium	ND	mg/l	0.0050	10/31/03 02:54	LBG	7440-62-2		
Zinc	ND	mg/l	0.010	10/31/03 02:54	LBG	7440-66-6		
Date Digested	10/27/03			10/27/03				
Mercury, CVAAS, in Water	Method: EPA 7470							
Mercury	ND	mg/l	0.00020	10/30/03	LBG	7439-97-6		
Thallium, AAS Furnace	Prep/Method: EPA 3020 / EPA 7841							
Thallium	ND	mg/l	0.0020	10/28/03	CBJ	7440-28-0		
Date Digested	10/24/03			10/24/03				
Wet Chemistry								
Cyanide, Total, Water	Method: EPA 335.3							
Cyanide	ND	mg/l	0.0020	10/30/03	ALV	57-12-5		
Sulfide, Total	Method: EPA 376.2							
Sulfide	ND	mg/l	0.050	10/22/03	MSH			
GC Semivolatiles								
Chlorinated Acid Herbicides	Prep/Method: EPA 3510 / EPA 8151							
2,4-D	ND	ug/l	2.0	10/24/03 23:58	RPJ	94-75-7		
Dinoseb	ND	ug/l	1.0	10/24/03 23:58	RPJ	88-85-7		
2,4,5-T	ND	ug/l	2.0	10/24/03 23:58	RPJ	93-76-5		
2,4,5-TP (Silvex)	ND	ug/l	2.0	10/24/03 23:58	RPJ	93-72-1		

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Huntersville, NC 28078
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Fax: 704.875.9091

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457881 | Project Sample Number: 9252841-007 | Date Collected: 10/20/03 15:00
Client Sample ID: SW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
2,4-DCPA (S)	52	%		10/24/03 23:58	RPJ	19719-28-9		
Date Extracted	10/23/03			10/23/03				

GC/MS Volatiles

GC/MS Appendix II VOCs by 8260 Method: EPA 8260

Acetone	ND	ug/l	100	10/28/03 12:32	DLK	67-64-1
Acetonitrile	ND	ug/l	5.0	10/28/03 12:32	DLK	75-05-8
Acrolein	ND	ug/l	100	10/28/03 12:32	DLK	107-02-8
Acrylonitrile	ND	ug/l	100	10/28/03 12:32	DLK	107-13-1
Allyl chloride	ND	ug/l	5.0	10/28/03 12:32	DLK	107-05-1
Benzene	ND	ug/l	5.0	10/28/03 12:32	DLK	71-43-2
Bromochloromethane	ND	ug/l	5.0	10/28/03 12:32	DLK	74-97-5
Bromodichloromethane	ND	ug/l	5.0	10/28/03 12:32	DLK	75-27-4
Bromoform	ND	ug/l	5.0	10/28/03 12:32	DLK	75-25-2
Bromomethane	ND	ug/l	10.	10/28/03 12:32	DLK	74-83-9
2-Butanone (MEK)	ND	ug/l	100	10/28/03 12:32	DLK	78-93-3
Carbon disulfide	ND	ug/l	10.	10/28/03 12:32	DLK	75-15-0
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 12:32	DLK	56-23-5
Chlorobenzene	ND	ug/l	5.0	10/28/03 12:32	DLK	108-90-7
Chloroethane	ND	ug/l	10.	10/28/03 12:32	DLK	75-00-3
Chloroform	ND	ug/l	5.0	10/28/03 12:32	DLK	67-66-3
Chloromethane	ND	ug/l	10.	10/28/03 12:32	DLK	74-87-3
Chloroprene	ND	ug/l	10.	10/28/03 12:32	DLK	126-99-8
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 12:32	DLK	96-12-8
Dibromochloromethane	ND	ug/l	5.0	10/28/03 12:32	DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 12:32	DLK	106-93-4
Dibromomethane	ND	ug/l	5.0	10/28/03 12:32	DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:32	DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:32	DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 12:32	DLK	106-46-7
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 12:32	DLK	110-57-6
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	75-34-3
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	107-06-2
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 12:32	DLK	75-35-4
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 12:32	DLK	156-59-2
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 12:32	DLK	156-60-5
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 12:32	DLK	78-87-5
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 12:32	DLK	142-28-9
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 12:32	DLK	594-20-7

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Huntersville, NC 28078
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Fax: 704.875.9091

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457881 | Project Sample Number: 9252841-007 | Date Collected: 10/20/03 15:00
Client Sample ID: SW-02 | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 12:32	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 12:32	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 12:32	DLK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	10/28/03 12:32	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 12:32	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 12:32	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 12:32	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 12:32	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 12:32	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 12:32	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 12:32	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 12:32	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 12:32	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 12:32	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 12:32	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 12:32	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 12:32	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 12:32	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 12:32	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 12:32	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 12:32	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 12:32	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 12:32	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 12:32	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 12:32	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 12:32	DLK	95-47-6		
Toluene-d8 (S)	96	%		10/28/03 12:32	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		10/28/03 12:32	DLK	460-00-4		
Dibromofluoromethane (S)	103	%		10/28/03 12:32	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	95	%		10/28/03 12:32	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457907 | Project Sample Number: 9252841-008 | Date Collected: 10/21/03 09:45
Client Sample ID: WILKIE WELL | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles								
GC/MS Appendix II VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	100	10/28/03 13:01	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 13:01	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 13:01	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 13:01	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 13:01	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 13:01	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 13:01	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 13:01	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 13:01	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 13:01	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 13:01	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 13:01	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 13:01	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 13:01	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 13:01	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 13:01	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 13:01	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 13:01	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 13:01	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 13:01	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 13:01	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 13:01	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:01	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:01	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:01	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 13:01	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 13:01	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 13:01	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 13:01	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 13:01	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 13:01	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 13:01	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 13:01	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 13:01	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 13:01	DLK	10061-02-6		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457907 | Project Sample Number: 9252841-008 | Date Collected: 10/21/03 09:45
Client Sample ID: WILKIE WELL | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Ethylbenzene	ND	ug/l	5.0	10/28/03 13:01	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 13:01	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 13:01	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 13:01	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 13:01	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 13:01	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 13:01	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 13:01	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 13:01	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 13:01	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 13:01	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 13:01	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 13:01	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 13:01	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 13:01	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 13:01	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 13:01	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 13:01	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 13:01	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 13:01	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 13:01	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 13:01	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 13:01	DLK	95-47-6		
Toluene-d8 (S)	97	%		10/28/03 13:01	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		10/28/03 13:01	DLK	460-00-4		
Dibromofluoromethane (S)	101	%		10/28/03 13:01	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		10/28/03 13:01	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457915 | Project Sample Number: 9252841-009 | Date Collected: 10/21/03 10:15
Client Sample ID: BULLA WELL | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles								
GC/MS Appendix II VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	100	10/28/03 13:30	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 13:30	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 13:30	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 13:30	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 13:30	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 13:30	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 13:30	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 13:30	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 13:30	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 13:30	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 13:30	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 13:30	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 13:30	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 13:30	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 13:30	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 13:30	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 13:30	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 13:30	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 13:30	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 13:30	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 13:30	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 13:30	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:30	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:30	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 13:30	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 13:30	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 13:30	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 13:30	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 13:30	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 13:30	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 13:30	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 13:30	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 13:30	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 13:30	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 13:30	DLK	10061-02-6		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457915 | Project Sample Number: 9252841-009 | Date Collected: 10/21/03 10:15
Client Sample ID: BULLA WELL | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Ethylbenzene	ND	ug/l	5.0	10/28/03 13:30	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 13:30	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 13:30	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 13:30	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 13:30	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 13:30	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 13:30	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 13:30	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 13:30	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 13:30	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 13:30	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 13:30	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 13:30	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 13:30	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 13:30	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 13:30	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 13:30	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 13:30	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 13:30	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 13:30	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 13:30	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 13:30	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 13:30	DLK	95-47-6		
Toluene-d8 (S)	100	%		10/28/03 13:30	DLK	2037-26-5		
4-Bromofluorobenzene (S)	93	%		10/28/03 13:30	DLK	460-00-4		
Dibromofluoromethane (S)	100	%		10/28/03 13:30	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	95	%		10/28/03 13:30	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457923 | Project Sample Number: 9252841-010 | Date Collected: 10/21/03 00:00
Client Sample ID: TRIP BLANK | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles								
GC/MS Appendix II VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	100	10/28/03 06:17	DLK	67-64-1		
Acetonitrile	ND	ug/l	5.0	10/28/03 06:17	DLK	75-05-8		
Acrolein	ND	ug/l	100	10/28/03 06:17	DLK	107-02-8		
Acrylonitrile	ND	ug/l	100	10/28/03 06:17	DLK	107-13-1		
Allyl chloride	ND	ug/l	5.0	10/28/03 06:17	DLK	107-05-1		
Benzene	ND	ug/l	5.0	10/28/03 06:17	DLK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	10/28/03 06:17	DLK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	10/28/03 06:17	DLK	75-27-4		
Bromoform	ND	ug/l	5.0	10/28/03 06:17	DLK	75-25-2		
Bromomethane	ND	ug/l	10.	10/28/03 06:17	DLK	74-83-9		
2-Butanone (MEK)	ND	ug/l	100	10/28/03 06:17	DLK	78-93-3		
Carbon disulfide	ND	ug/l	10.	10/28/03 06:17	DLK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	10/28/03 06:17	DLK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	10/28/03 06:17	DLK	108-90-7		
Chloroethane	ND	ug/l	10.	10/28/03 06:17	DLK	75-00-3		
Chloroform	ND	ug/l	5.0	10/28/03 06:17	DLK	67-66-3		
Chloromethane	ND	ug/l	10.	10/28/03 06:17	DLK	74-87-3		
Chloroprene	ND	ug/l	10.	10/28/03 06:17	DLK	126-99-8		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	10/28/03 06:17	DLK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	10/28/03 06:17	DLK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	10/28/03 06:17	DLK	106-93-4		
Dibromomethane	ND	ug/l	5.0	10/28/03 06:17	DLK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	10/28/03 06:17	DLK	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	10/28/03 06:17	DLK	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	10/28/03 06:17	DLK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	10/28/03 06:17	DLK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	10/28/03 06:17	DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 06:17	DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	10/28/03 06:17	DLK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	10/28/03 06:17	DLK	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	10/28/03 06:17	DLK	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	10/28/03 06:17	DLK	594-20-7		
1,1-Dichloropropene	ND	ug/l	5.0	10/28/03 06:17	DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 06:17	DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	10/28/03 06:17	DLK	10061-02-6		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

Lab Sample No: 923457923 | Project Sample Number: 9252841-010 | Date Collected: 10/21/03 00:00
Client Sample ID: TRIP BLANK | Matrix: Water | Date Received: 10/22/03 09:45

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Ethylbenzene	ND	ug/l	5.0	10/28/03 06:17	DLK	100-41-4		
Ethyl methacrylate	ND	ug/l	5.0	10/28/03 06:17	DLK	97-63-2		
2-Hexanone	ND	ug/l	50.	10/28/03 06:17	DLK	591-78-6		
Iodomethane	ND	ug/l	5.0	10/28/03 06:17	DLK	74-88-4		
Isobutanol	ND	ug/l	100	10/28/03 06:17	DLK	78-83-1		
Methacrylonitrile	ND	ug/l	50.	10/28/03 06:17	DLK	126-98-7		
Methylene chloride	ND	ug/l	5.0	10/28/03 06:17	DLK	75-09-2		
Methyl methacrylate	ND	ug/l	5.0	10/28/03 06:17	DLK	80-62-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	50.	10/28/03 06:17	DLK	108-10-1		
Naphthalene	ND	ug/l	5.0	10/28/03 06:17	DLK	91-20-3		
Propionitrile	ND	ug/l	50.	10/28/03 06:17	DLK	107-12-0		
Styrene	ND	ug/l	5.0	10/28/03 06:17	DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	10/28/03 06:17	DLK	127-18-4		
Toluene	ND	ug/l	5.0	10/28/03 06:17	DLK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	10/28/03 06:17	DLK	79-00-5		
Trichloroethene	ND	ug/l	5.0	10/28/03 06:17	DLK	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	10/28/03 06:17	DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	10/28/03 06:17	DLK	96-18-4		
Vinyl acetate	ND	ug/l	50.	10/28/03 06:17	DLK	108-05-4		
Vinyl chloride	ND	ug/l	10.	10/28/03 06:17	DLK	75-01-4		
Xylene (Total)	ND	ug/l	5.0	10/28/03 06:17	DLK	1330-20-7		
m&p-Xylene	ND	ug/l	10.	10/28/03 06:17	DLK			
o-Xylene	ND	ug/l	5.0	10/28/03 06:17	DLK	95-47-6		
Toluene-d8 (S)	95	%		10/28/03 06:17	DLK	2037-26-5		
4-Bromofluorobenzene (S)	94	%		10/28/03 06:17	DLK	460-00-4		
Dibromofluoromethane (S)	99	%		10/28/03 06:17	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		10/28/03 06:17	DLK	17060-07-0		

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

PARAMETER FOOTNOTES

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
(S)	Surrogate

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 83921 — Analysis Method: EPA 8151
QC Batch Method: EPA 3510 — Analysis Description: Chlorinated Acid Herbicides
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

METHOD BLANK: 923464358
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
2,4-D	ug/l	ND	2.0	
Dinoseb	ug/l	ND	1.0	
2,4,5-T	ug/l	ND	2.0	
2,4,5-TP (Silvex)	ug/l	ND	2.0	
2,4-DCPA (S)	%	31		1

LABORATORY CONTROL SAMPLE & LCSD: 923464366 923464374

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	RPD	Footnotes
2,4-D	ug/l	5.000	4.229	5.936	85	119	34	2,3
2,4,5-TP (Silvex)	ug/l	5.000	4.005	4.851	80	97	19	
2,4,5-T	ug/l	5.000	2.941	4.040	59	81	31	4
Dinoseb	ug/l	5.000	1.160	1.330	23	27	14	
2,4-DCPA (S)					54	58		

LABORATORY CONTROL SAMPLE & LCSD: 923472518 923472526

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	RPD	Footnotes
2,4-D	ug/l	5.000	6.778	8.220	136	164	19	2,2
2,4,5-TP (Silvex)	ug/l	5.000	4.110	4.954	82	99	19	
2,4,5-T	ug/l	5.000	4.261	5.252	85	105	21	
Dinoseb	ug/l	5.000	1.636	1.206	33	24	30	
2,4-DCPA (S)					58	59		

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

MATRIX SPIKE: 923472534

Parameter	Units	923469589 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
2,4-D	ug/l	0	5.000	5.210	104	
2,4,5-TP (Silvex)	ug/l	0	5.000	3.658	73	
2,4,5-T	ug/l	0	5.000	2.852	57	1
Dinoseb	ug/l	0	5.000	1.165	23	
2,4-DCPA (S)					50	

SAMPLE DUPLICATE: 923464382

Parameter	Units	923457790 Result	DUP Result	RPD	Footnotes
2,4-D	ug/l	ND	ND	NC	
Dinoseb	ug/l	ND	ND	NC	
2,4,5-T	ug/l	ND	ND	NC	
2,4,5-TP (Silvex)	ug/l	ND	ND	NC	
2,4-DCPA (S)	%	60	63		

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 84117 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: GC/MS Appendix II VOCs by 8260
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881 923457907 923457915 923457923

METHOD BLANK: 923475081
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881 923457907 923457915 923457923

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	100	
Acetonitrile	ug/l	ND	5.0	
Acrolein	ug/l	ND	100	
Acrylonitrile	ug/l	ND	100	
Allyl chloride	ug/l	ND	5.0	
Benzene	ug/l	ND	5.0	
Bromochloromethane	ug/l	ND	5.0	
Bromodichloromethane	ug/l	ND	5.0	
Bromoform	ug/l	ND	5.0	
Bromomethane	ug/l	ND	10.	
2-Butanone (MEK)	ug/l	ND	100	
Carbon disulfide	ug/l	ND	10.	
Carbon tetrachloride	ug/l	ND	5.0	
Chlorobenzene	ug/l	ND	5.0	
Chloroethane	ug/l	ND	10.	
Chloroform	ug/l	ND	5.0	
Chloromethane	ug/l	ND	10.	
Chloroprene	ug/l	ND	10.	
1,2-Dibromo-3-chloropropane	ug/l	ND	5.0	
Dibromochloromethane	ug/l	ND	5.0	
1,2-Dibromoethane (EDB)	ug/l	ND	5.0	
Dibromomethane	ug/l	ND	5.0	
1,2-Dichlorobenzene	ug/l	ND	5.0	
1,3-Dichlorobenzene	ug/l	ND	5.0	
1,4-Dichlorobenzene	ug/l	ND	5.0	
trans-1,4-Dichloro-2-butene	ug/l	ND	5.0	
1,1-Dichloroethane	ug/l	ND	5.0	
1,2-Dichloroethane	ug/l	ND	5.0	
1,1-Dichloroethene	ug/l	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

METHOD BLANK: 923475081
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881 923457907 923457915 923457923

Parameter	Units	Blank Result	Reporting Limit	Footnotes
cis-1,2-Dichloroethene	ug/l	ND	5.0	
trans-1,2-Dichloroethene	ug/l	ND	5.0	
1,2-Dichloropropane	ug/l	ND	5.0	
1,3-Dichloropropane	ug/l	ND	5.0	
2,2-Dichloropropane	ug/l	ND	5.0	
1,1-Dichloropropene	ug/l	ND	5.0	
cis-1,3-Dichloropropene	ug/l	ND	5.0	
trans-1,3-Dichloropropene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
Ethyl methacrylate	ug/l	ND	5.0	
2-Hexanone	ug/l	ND	50.	
Iodomethane	ug/l	ND	5.0	
Isobutanol	ug/l	ND	100	
Methacrylonitrile	ug/l	ND	50.	
Methylene chloride	ug/l	ND	5.0	
Methyl methacrylate	ug/l	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/l	ND	50.	
Naphthalene	ug/l	ND	5.0	
Propionitrile	ug/l	ND	50.	
Styrene	ug/l	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	5.0	
Tetrachloroethene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
1,1,1-Trichloroethane	ug/l	ND	5.0	
1,1,2-Trichloroethane	ug/l	ND	5.0	
Trichloroethene	ug/l	ND	5.0	
Trichlorofluoromethane	ug/l	ND	5.0	
1,2,3-Trichloropropane	ug/l	ND	5.0	
Vinyl acetate	ug/l	ND	50.	
Vinyl chloride	ug/l	ND	10.	
Xylene (Total)	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	99		

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

METHOD BLANK: 923475081
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881 923457907 923457915 923457923

Parameter	Units	Blank Result	Reporting Limit	Footnotes
4-Bromofluorobenzene (S)	%	92		
Dibromofluoromethane (S)	%	99		
1,2-Dichloroethane-d4 (S)	%	95		

LABORATORY CONTROL SAMPLE: 923475099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	88.59	89	
Acetonitrile	ug/l	500.00	390.0	78	
Acrolein	ug/l	250.00	249.4	100	
Acrylonitrile	ug/l	250.00	197.8	79	
Allyl chloride	ug/l	50.00	42.60	85	
Benzene	ug/l	50.00	42.30	85	
Bromochloromethane	ug/l	50.00	41.82	84	
Bromodichloromethane	ug/l	50.00	43.57	87	
Bromoform	ug/l	50.00	43.86	88	
Bromomethane	ug/l	50.00	50.87	102	
2-Butanone (MEK)	ug/l	100.00	87.46	88	
Carbon disulfide	ug/l	100.00	108.8	109	
Carbon tetrachloride	ug/l	50.00	51.86	104	
Chlorobenzene	ug/l	50.00	41.29	83	
Chloroethane	ug/l	50.00	76.99	154	1
Chloroform	ug/l	50.00	40.84	82	
Chloromethane	ug/l	50.00	40.68	81	
Chloroprene	ug/l	50.00	64.11	128	2
1,2-Dibromo-3-chloropropane	ug/l	50.00	40.99	82	
Dibromochloromethane	ug/l	50.00	44.13	88	
1,2-Dibromoethane (EDB)	ug/l	50.00	42.87	86	
Dibromomethane	ug/l	50.00	41.73	84	
1,2-Dichlorobenzene	ug/l	50.00	42.68	85	
1,3-Dichlorobenzene	ug/l	50.00	41.50	83	
1,4-Dichlorobenzene	ug/l	50.00	44.11	88	
trans-1,4-Dichloro-2-butene	ug/l	50.00	45.14	90	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

LABORATORY CONTROL SAMPLE: 923475099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
1,1-Dichloroethane	ug/l	50.00	39.78	80	
1,2-Dichloroethane	ug/l	50.00	39.25	78	
1,1-Dichloroethene	ug/l	50.00	46.13	92	
cis-1,2-Dichloroethene	ug/l	50.00	39.74	80	
trans-1,2-Dichloroethene	ug/l	50.00	42.98	86	
1,2-Dichloropropane	ug/l	50.00	41.56	83	
1,3-Dichloropropane	ug/l	50.00	41.19	82	
2,2-Dichloropropane	ug/l	50.00	51.06	102	
1,1-Dichloropropene	ug/l	50.00	43.41	87	
cis-1,3-Dichloropropene	ug/l	50.00	45.21	90	
trans-1,3-Dichloropropene	ug/l	50.00	44.86	90	
Ethylbenzene	ug/l	50.00	40.40	81	
Ethyl methacrylate	ug/l	50.00	46.32	93	
2-Hexanone	ug/l	100.00	93.86	94	
Iodomethane	ug/l	100.00	90.60	91	
Isobutanol	ug/l	1000.00	688.4	69	
Methacrylonitrile	ug/l	500.00	427.1	85	
Methylene chloride	ug/l	50.00	38.67	77	
Methyl methacrylate	ug/l	50.00	45.33	91	
4-Methyl-2-pentanone (MIBK)	ug/l	100.00	99.24	99	
Naphthalene	ug/l	50.00	33.32	67	
Propionitrile	ug/l	500.00	351.6	70	
Styrene	ug/l	50.00	40.26	80	
1,1,1,2-Tetrachloroethane	ug/l	50.00	41.90	84	
1,1,2,2-Tetrachloroethane	ug/l	50.00	43.02	86	
Tetrachloroethene	ug/l	50.00	42.20	84	
Toluene	ug/l	50.00	40.74	82	
1,1,1-Trichloroethane	ug/l	50.00	42.98	86	
1,1,2-Trichloroethane	ug/l	50.00	43.01	86	
Trichloroethene	ug/l	50.00	41.44	83	
Trichlorofluoromethane	ug/l	50.00	60.57	121	
1,2,3-Trichloropropane	ug/l	50.00	43.36	87	
Vinyl acetate	ug/l	100.00	67.86	68	
Vinyl chloride	ug/l	50.00	47.43	95	
Xylene (Total)	ug/l	50.00	120.6	241	
m&p-Xylene	ug/l	100.00	82.18	82	
o-Xylene	ug/l	50.00	38.44	77	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

LABORATORY CONTROL SAMPLE: 923475099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Toluene-d8 (S)				101	
4-Bromofluorobenzene (S)				95	
Dibromofluoromethane (S)				97	
1,2-Dichloroethane-d4 (S)				96	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 84263 — Analysis Method: EPA 7470
QC Batch Method: EPA 7470 — Analysis Description: Mercury, CVAAS, in Water
Associated Lab Samples: 923457790 923457816 923457840 923457865 923457881

METHOD BLANK: 923480602
Associated Lab Samples: 923457790 923457816 923457840 923457865 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Mercury	mg/l	ND	0.0002	

LABORATORY CONTROL SAMPLE: 923480610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Mercury	mg/l	0.0050	0.0055	110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923480636 923480644

Parameter	Units	923467278 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Mercury	mg/l	0	0.0050	0.0051	0.0050	103	99	3	

SAMPLE DUPLICATE: 923480651

Parameter	Units	923467286 Result	DUP Result	RPD	Footnotes
Mercury	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 84264 — Analysis Method: EPA 7470
QC Batch Method: EPA 7470 — Analysis Description: Mercury, CVAAS, in Water
Associated Lab Samples: 923457857 923457873

METHOD BLANK: 923480669
Associated Lab Samples: 923457857 923457873

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Mercury	mg/l	ND	0.0002	

LABORATORY CONTROL SAMPLE: 923480677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Mercury	mg/l	0.0050	0.0056	111	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923480685 923480693

Parameter	Units	923457857 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Mercury	mg/l	0.00046	0.0050	0.0059	0.0059	108	109	1	

SAMPLE DUPLICATE: 923480701

Parameter	Units	923457873 Result	DUP Result	RPD	Footnotes
Mercury	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 83942 — Analysis Method: EPA 7841
QC Batch Method: EPA 3020 — Analysis Description: Thallium, AAS Furnace
Associated Lab Samples: 923457790 923457840

METHOD BLANK: 923465728
Associated Lab Samples: 923457790 923457840

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Thallium	mg/l	ND	0.0020	

LABORATORY CONTROL SAMPLE: 923465736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Thallium	mg/l	0.0300	0.0314	105	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923465744 923465751

Parameter	Units	923454847 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Thallium	mg/l	0	0.0300	0.0300	0.0316	100	105	5	

SAMPLE DUPLICATE: 923465769

Parameter	Units	923454854 Result	DUP Result	RPD	Footnotes
Thallium	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 83943
QC Batch Method: EPA 3020
Associated Lab Samples: 923457816 923457857 923457865 923457873 923457881

Analysis Method: EPA 7841
Analysis Description: Thallium, AAS Furnace

METHOD BLANK: 923465777
Associated Lab Samples: 923457816 923457857 923457865 923457873 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Thallium	mg/l	ND	0.0020	

LABORATORY CONTROL SAMPLE: 923465785

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Thallium	mg/l	0.0300	0.0336	112	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923465793 923465801

Parameter	Units	923457865 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Thallium	mg/l	0	0.0300	0.0318	0.0301	106	100	5	

SAMPLE DUPLICATE: 923465819

Parameter	Units	923457881 Result	DUP Result	RPD	Footnotes
Thallium	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 83945 — Analysis Method: EPA 6010
QC Batch Method: EPA 3010 — Analysis Description: Metals by Trace ICP
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

METHOD BLANK: 923465876
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Antimony	mg/l	ND	0.0050	
Arsenic	mg/l	ND	0.0050	
Barium	mg/l	ND	0.0050	
Beryllium	mg/l	ND	0.0010	
Cadmium	mg/l	ND	0.0010	
Chromium	mg/l	ND	0.0020	
Cobalt	mg/l	ND	0.0050	
Copper	mg/l	ND	0.0020	
Lead	mg/l	ND	0.0050	
Nickel	mg/l	ND	0.0050	
Selenium	mg/l	ND	0.0050	
Silver	mg/l	ND	0.0020	
Tin	mg/l	ND	0.0050	
Vanadium	mg/l	ND	0.0050	
Zinc	mg/l	ND	0.010	

LABORATORY CONTROL SAMPLE: 923465884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Antimony	mg/l	0.5000	0.5550	111	
Arsenic	mg/l	0.5000	0.5300	106	
Barium	mg/l	0.5000	0.5520	110	
Beryllium	mg/l	0.5000	0.5370	107	
Cadmium	mg/l	0.5000	0.5400	108	
Chromium	mg/l	0.5000	0.4980	100	
Cobalt	mg/l	0.5000	0.5300	106	
Copper	mg/l	0.5000	0.5280	106	
Lead	mg/l	0.5000	0.5550	111	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

LABORATORY CONTROL SAMPLE: 923465884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nickel	mg/l	0.5000	0.5170	103	
Selenium	mg/l	0.5000	0.5140	103	
Silver	mg/l	0.5000	0.4830	97	
Tin	mg/l	0.5000	0.5450	109	
Vanadium	mg/l	0.5000	0.5350	107	
Zinc	mg/l	0.5000	0.5490	110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923465892 923465900

Parameter	Units	923463616 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Antimony	mg/l	0	0.5000	0.4910	0.5190	98	104	6	
Arsenic	mg/l	0.00274	0.5000	0.5170	0.5530	103	110	7	
Barium	mg/l	0.05500	0.5000	0.5880	0.6130	107	112	4	
Beryllium	mg/l	0.00045	0.5000	0.5240	0.5510	105	110	5	
Cadmium	mg/l	0	0.5000	0.5130	0.5410	103	108	5	
Chromium	mg/l	0.01570	0.5000	0.4830	0.5060	94	98	5	
Cobalt	mg/l	0.00108	0.5000	0.5030	0.5280	100	105	5	
Copper	mg/l	0.03010	0.5000	0.5370	0.5600	101	106	4	
Lead	mg/l	0.01020	0.5000	0.5380	0.5610	106	110	4	
Nickel	mg/l	0.00912	0.5000	0.5000	0.5250	98	103	5	
Selenium	mg/l	0	0.5000	0.4970	0.5160	99	103	4	
Silver	mg/l	0	0.5000	0.4740	0.4930	95	99	4	
Tin	mg/l	0.00296	0.5000	0.5240	0.5490	104	109	5	
Vanadium	mg/l	0.02930	0.5000	0.5390	0.5640	102	107	5	
Zinc	mg/l	0.02490	0.5000	0.5460	0.5710	104	109	4	

SAMPLE DUPLICATE: 923465918

Parameter	Units	923455117 Result	DUP Result	RPD	Footnotes
Antimony	mg/l	ND	ND	NC	
Arsenic	mg/l	0.01000	0.00900	15	
Barium	mg/l	2.400	2.400	3	
Beryllium	mg/l	0.00420	0.00380	10	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

SAMPLE DUPLICATE: 923465918

Parameter	Units	923455117 Result	DUP Result	RPD	Footnotes
Cadmium	mg/l	ND	ND	NC	
Chromium	mg/l	0.1800	0.1700	6	
Cobalt	mg/l	0.06200	0.05800	8	
Copper	mg/l	0.2300	0.2200	4	
Lead	mg/l	0.05300	0.05200	2	
Nickel	mg/l	0.1300	0.1200	7	
Selenium	mg/l	ND	ND	NC	
Silver	mg/l	ND	ND	NC	
Tin	mg/l	0.02000	0.01700	20	
Vanadium	mg/l	0.4100	0.3900	5	
Zinc	mg/l	0.5700	0.5300	7	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 83799 — Analysis Method: EPA 376.2
QC Batch Method: EPA 376.2 — Analysis Description: Sulfide, Total
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

METHOD BLANK: 923458186
Associated Lab Samples: 923457790 923457816 923457840 923457857 923457865 923457873 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Sulfide	mg/l	ND	0.050	

LABORATORY CONTROL SAMPLE: 923458194

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Sulfide	mg/l	0.5000	0.4940	99	

MATRIX SPIKE: 923458210

Parameter	Units	923457816 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Sulfide	mg/l	0	0.5000	0.2880	58	5

SAMPLE DUPLICATE: 923458202

Parameter	Units	923448633 Result	DUP Result	RPD	Footnotes
Sulfide	mg/l	ND	ND	NC	

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Asheville Certification IDs
NC Wastewater 40
NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

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Pace Analytical Services, Inc.
9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 84088 — Analysis Method: EPA 335.3
QC Batch Method: EPA 335.3 — Analysis Description: Cyanide, Total, Water
Associated Lab Samples: 923457790 923457840 923457865

METHOD BLANK: 923473607
Associated Lab Samples: 923457790 923457840 923457865

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Cyanide	mg/l	ND	0.0020	

LABORATORY CONTROL SAMPLE: 923473615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Cyanide	mg/l	0.1000	0.1000	100	

MATRIX SPIKE: 923473623

Parameter	Units	923464176 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Cyanide	mg/l	0	0.1000	0.0100	10	5

SAMPLE DUPLICATE: 923473631

Parameter	Units	923464184 Result	DUP Result	RPD	Footnotes
Cyanide	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QC Batch: 84188 — Analysis Method: EPA 335.3
QC Batch Method: EPA 335.3 — Analysis Description: Cyanide, Total, Water
Associated Lab Samples: 923457816 923457857 923457873 923457881

METHOD BLANK: 923477350
Associated Lab Samples: 923457816 923457857 923457873 923457881

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Cyanide	mg/l	ND	0.0020	

LABORATORY CONTROL SAMPLE: 923477368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Cyanide	mg/l	0.1000	0.0974	97	

MATRIX SPIKE: 923477376

Parameter	Units	923457881 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Cyanide	mg/l	0	0.1000	0.0795	80	

SAMPLE DUPLICATE: 923477384

Parameter	Units	923468458 Result	DUP Result	RPD	Footnotes
Cyanide	mg/l	ND	ND	NC	

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Lab Project Number: 9252841
Client Project ID: Jackson LF/2040

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

LCS(D)	Laboratory Control Sample (Duplicate)
MS(D)	Matrix Spike (Duplicate)
DUP	Sample Duplicate
ND	Not detected at or above adjusted reporting limit
NC	Not Calculable
J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL	Adjusted Method Detection Limit
RPD	Relative Percent Difference
(S)	Surrogate
[1]	The surrogate and/or spike recovery was outside acceptance limits.
[2]	Recovery falls outside of QC limits, however, this compound is not found in the associated samples.
[3]	The calculated RPD was outside QC acceptance limits.
[4]	RPD value was outside of control limits, however % Recoveries were acceptable. Samples for QC batch accepted based on % recoveries and completeness of QC data.
[5]	The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

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Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FL NELAP	E87648

Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FL NELAP	E87627

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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.

774883

Page: 1 of 1

Required Client Information: Section A

Company: ALTAMONT ENVIRONMENTAL
Address: 1011 PATTON AVE
ASHEVILLE, NC
28801
Phone: (828) 281-3350 Fax: (828) 281-3515

Required Client Information: Section B

Report To: JIM MCGUFF
Copy To: JESSE MORRIS
Invoice To: JOHN HUNTON
P.O.:
Project Name: JACKSON LF
Project Number: 2040

Client Information (Check quote/contract):
Requested Due Date: NOVEMBER 5, 2003 *TAT: 5 WD.

* Turn around times less than 14 days subject to laboratory and contractual obligations and may result in a Rush Turnaround Surcharge.
Turn Around Time (TAT) in calendar days.

To Be Completed by Pace Analytical and Client: Section C

Quote Reference:
Project Manager:
Project #: ~~9282~~ 9252841
Profile #:

Section D Required Client Information:

SAMPLE ID
One character per box.
(A–Z, 0–9 / .–)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
WATER	WT
SOIL	SL
OIL	OL
WIPE	WP
AIR	AR
TISSUE	TS
OTHER	OT

ITEM #	SAMPLE ID	MATRIX CODE	DATE COLLECTED mm/dd/yy	TIME COLLECTED hh:mm a/p	# Containers	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analyses				Remarks / Lab ID
1	MW-01	WT	10/20/03	17:30	8	X		X	X	X			X	4	1	1		923457790
2	MW-02	WT	10/21/03	12:00	8	X		X	X	X			X	4	1	1		816
3	MW-03	WT	10/20/03	15:20	9	X		X	X	X			X	4	2	1		840
4	MW-04	WT	10/21/03	11:00	8	X		X	X	X			X	4	1	1		857
5	MW-05	WT	10/20/03	14:15	9	X		X	X	X			X	4	2	1		865
6	SW-01	WT	10/21/03	8:45	8	X		X	X	X			X	4	1	1		873
7	SW-02	WT	10/20/03	15:00	9	X		X	X	X			X	4	2	1		881
8	WELL 1	WT	10/21/03	7:45	4				X					4				907
9	BLANK	WT	10/21/03	10:15	4				X					4				915
10	TRIP BLANK	WT	LAB		2				X					2				923
11	TEMP BLANK	WT	LAB															
12																		

SHIPMENT METHOD	AIRBILL NO.	SHIPPING DATE	NO. OF COOLERS
FED EX		10/21/03	2

ITEM NUMBER	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
1	J. MORRIS / ALTAMONT	10/21	11:00	Pace	10/22/03	9:45a

SAMPLE CONDITION

Temp in °C	.3
Received on Ice	(Y)/N
Sealed Cooler	(Y)/N
Samples Intact	(Y)/N

SAMPLE NOTES

8433 8694 5123

Additional Comments:

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: JESSE L. MORRIS
SIGNATURE of SAMPLER:
DATE Signed: 10/21/03 (MM/DD/YY)

SEE REVERSE SIDE FOR INSTRUCTIONS

Form COC01 Rev 0402

APPENDIX C

SUMMARY OF ANOVA STATISTICAL ANALYSES

APPENDIX C

SUMMARY OF ANOVA STATISTICAL ANALYSES
JACKSON COUNTY LANDFILL

October 20 and 21, 2003

JACKSON COUNTY, NORTH CAROLINA

Compound	Conclusion
Metals	
Antimony	No Significant Deviation
Arsenic	No Significant Deviation
Barium	**Significant Deviation**
Beryllium	No Significant Deviation
Cadmium	No Significant Deviation
Chromium	**Significant Deviation**
Cobalt	No Significant Deviation
Copper	**Significant Deviation**
Lead	No Significant Deviation
Mercury	No Significant Deviation
Nickel	**Significant Deviation**
Selenium	No Significant Deviation
Silver	No Significant Deviation
Thallium	No Significant Deviation
Tin	No Significant Deviation
Vanadium	**Significant Deviation**
Zinc	**Significant Deviation**
VOCs	
1,1,1,2-Tetrachloroethane	No Significant Deviation
1,1,1-Trichloroethane	No Significant Deviation
1,1,2,2-Tetrachloroethane	No Significant Deviation
1,1,2-Trichloroethane	No Significant Deviation
1,1-Dichloroethane	**Significant Deviation**
1,1-Dichloroethene	No Significant Deviation
1,2,3-Trichloropropane	No Significant Deviation
1,2-Dibromo-3-Chloropropane	No Significant Deviation
1,2-Dibromoethane	No Significant Deviation
1,2-Dichlorobenzene	No Significant Deviation
1,2-Dichloroethane	No Significant Deviation
1,2-Dichloropropane	No Significant Deviation
1,3-Dichlorobenzene	No Significant Deviation
1,4-Dichlorobenzene	**Significant Deviation**
2-Butanone	No Significant Deviation
2-Hexanone	No Significant Deviation
4-Methyl-2-Pentanone	No Significant Deviation
Acetone	No Significant Deviation
Acrylonitrile	No Significant Deviation

APPENDIX C

SUMMARY OF ANOVA STATISTICAL ANALYSES
JACKSON COUNTY LANDFILL

October 20 and 21, 2003

JACKSON COUNTY, NORTH CAROLINA

Compound	Conclusion
VOCs	
Benzene	**Significant Deviation**
Bromochloromethane	No Significant Deviation
Bromodichloromethane	No Significant Deviation
Bromoform	No Significant Deviation
Bromomethane	No Significant Deviation
Carbon Disulfide	No Significant Deviation
Carbon Tetrachloride	No Significant Deviation
Chlorobenzene	**Significant Deviation**
Chloroethane	**Significant Deviation**
Chloroform	No Significant Deviation
Chloromethane	No Significant Deviation
cis-1,2-Dichloroethene	**Significant Deviation**
cis-1,3-Dichloropropene	No Significant Deviation
Dibromochloromethane	No Significant Deviation
Dibromomethane	No Significant Deviation
Ethylbenzene	**Significant Deviation**
Iodomethane	No Significant Deviation
Methylene Chloride	**Significant Deviation**
Styrene	No Significant Deviation
Tetrachloroethene	**Significant Deviation**
Toluene	No Significant Deviation
trans-1,2-Dichloroethene	No Significant Deviation
trans-1,4-Dichloro-2-Butene	No Significant Deviation
Trichloroethene	**Significant Deviation**
Trichlorofluoromethane	No Significant Deviation
Vinyl Acetate	No Significant Deviation
Vinyl chloride	No Significant Deviation
Xylenes	**Significant Deviation**

ALTAMONT ENVIRONMENTAL, INC.
ENGINEERING & HYDROGEOLOGY
78½ PATTON AVE., ASHEVILLE, NC 28801
TEL.828.281.3350 FAC.828.281.3351
www.altamontenvironmental.com

TRANSMITTAL LETTER

To: Mr. Larry Rose

From: G. Alexander Price

Date: December 10, 2003

cc:

Subject: Jackson County Landfill

Contents:

1. A copy of the Fall 2003 Semiannual Water Quality Monitoring Report for the Jackson County Municipal Solid Waste Landfill prepared by Altamont Environmental, Inc., dated December 10, 2003.

Received
DEC 2003
Solid Waste Section