Groundwater Sampling Report and Statistical Analysis

Prepared for

Iredell County Subtitle D Lined MSWLF, Phases 3 & 4
Statesville, North Carolina

July 2009

Permit Number: 49-03
MESCO Project Number: G09014.0

Completed on September 14, 2009

Municipal Engineering Services Company, P.A.
Garner, Boone and Morehead City, North Carolina

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

NC DENR
Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- **Prepare one form for each individually monitored unit.**
- **Please type or print legibly.**
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Municipal Engineering Services Co., PA

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

Name: Jonathan Pfohl Phone: (919) 772-5393

E-mail: jpfohl@mesco.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Iredell County Subtitle D Lined MSWLF, Phases 3 & 4	354 Twin Oaks Road Statesville, NC 28625	49-03	.1600	July 22 & 23, 2009

Environmental Status: (Check all that apply)

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

Type of data submitted: (Check all that apply)

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

Notification attached?

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

Certification

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

Jonathan Pfohl — Facility Representative Name (Print)
Environmental Specialist — Title
(919) 772-5393 — (Area Code) Telephone Number

Signature
9/14/09 — Date

Affix NC Licensed/ Professional Geologist Seal

P.O. BOX 97, Garner, NC 27529
Facility Representative Address

C-0281
NC PE Firm License Number (if applicable effective May 1, 2009)

Revised 6/2009

OPERATION/CONSTRUCTION MANAGERS

Municipal Services

CIVIL/SANITARY ENGINEERS

Engineering Company, P.A.

September 14, 2009

Mr. Ervin Lane
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
401 Oberlin Road, Suite 150
Raleigh, NC 27605

Re: Groundwater Sampling and Statistical Analysis
Iredell County Subtitle D Lined MSWLF, Phases 3 & 4
Permit No. 49-03
MESCO Project No. G09014.0

Dear Mr. Lane:

Introduction

The Iredell County Subtitle D Lined Municipal Solid Waste Landfill (MSWLF) Phases 3 & 4 located in Statesville NC, currently operating under permit #49-03 is required to submit semi-annual compliance reports as a condition of the detection monitoring program. Municipal Engineering Services Company, P.A. (MESCO) performed this sampling event between July 22 & 23, 2009 in accordance to the semi-annual monitoring schedule prescribed by the NC Solid Waste Section rules/regulations as promulgated in 15A NCAC 13B.1600.

This portion of the facility is comprised of two Phases (3 & 4) which are contiguous therefore they are combined and treated as a single unit for overall continuity in this report. The detection monitoring program outlined in the approved Sampling and Analysis Plans (SAP) for both phases consist of a total of thirteen (13) monitoring locations. The sampling locations consist of eleven groundwater wells, one surface water point, and a leachate sampling location. As specified within 15A NCAC 13B.1632.(j) this report contains all required information from this sampling event; including field observations relating to the condition of the monitoring wells, field data, laboratory data, statistical analysis, sampling methodologies, quality assurance and quality control data, a single-day potentiometric map, information on ground-water flow directions and flow rates, and other pertinent information related to this sampling event.

Sampling Procedure

MESCO performed this sampling event utilizing portable monitoring methodology in accordance with approved SAP contained in the *Hydrogeologic Design Study* revised on May 8, 2007. This event consisted of collection of water samples from all monitoring locations including ten downgradient groundwater monitoring wells (MW-18, MW-19SR, MW-19D, MW-20, MW-21S, MW-21D, MW-27S, MW-27D, MW-28, MW-29), one background well (MW-17), one surface water point (SW-5) and a leachate sample (FORCEMAIN). All monitoring locations are shown upon the enclosed single-day potentiometric map formulated for the entire facility.

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PO Box 828, Morehead City, NC 28557 (252) 726-9481 PO Box 349, Boone, North Carolina 28607 (828) 262-1767

All sampling was conducted utilizing methodology outlined in the *Solid Waste Section Guidelines for Groundwater, Soil, and Surface Water Sampling* revised April 2008. The depth to water in each well was gaged with an electronic probe prior to purging to quantify the static water level for construction of the single-day potentiometric map. Low flow pumping methodology or baling was used to purge the wells. In addition to the required field measurements (pH, specific conductance, temperature) additional field parameters (DO, ORP, TDS and turbidity) were also quantified to better discern the water quality. The samples were then immediately collected via a disposable baler, placed in laboratory prepared pre-preserved containers, separated based upon likelihood of potential cross-contamination, kept upon ice, and transported to the laboratory under proper chain of custody (C-O-C) within the specified hold times for each analysis.

Field and Laboratory Results

Pace Analytical Laboratories (PACE) of Huntersville and Asheville NC performed the laboratory analysis on the collected groundwater and surface water samples for the complete Appendix I list of volatile organic compounds (VOCs) via EPA 8260 and total unfiltered metals via EPA 6010. A leachate sample was also taken from the sump which serves both Phases 3 & 4. The leachate sample was analyzed for the required leachate specific list which also includes the Appendix I list of VOCs and total metals. Quality control measures were also implemented during this event which included submittal and subsequent quantification of blanks.

The enclosed field data sheet consists of all field parameter data and it appears to be generally consistent relative to each other and congruent with data historically reported. All water samples were analyzed utilizing the Method Detection Limits (MDL) with reference to the Solid Waste Section detection limit (SWSL) values current as of the sampling event. All detected constituents were referenced to the Groundwater Protection Standards (GWP) and compared to the North Carolina Groundwater Standards (2L) or the North Carolina Surface Water Standards (2B) for regulatory exceedance. The results are shown in the enclosed tables titled "Detection Scan".

Quantifiable concentrations (>SWSL) of VOCs continue to be absent from samples obtained from all groundwater and surface water monitoring locations. Metal(s) were found in concentrations above the SWSL in samples collected from five of the eleven monitoring wells. No constituents were detected in concentrations in exceedance of either the applicable 2L or 2B Standards.

Statistical Analysis

MESCO also completed the statistical analysis as required by the Solid Waste Section. The statistical analysis was conducted upon all of the monitoring wells surrounding the entire lined MSWLF. The purpose of these analyses was to determine, in comparison to background levels, statistical significance of the few constituents detected within the downgradient wells during the July 2009 event. Since there were no VOCs detected in concentrations in exceedance of the SWSL during this event, statistical analysis was only conducted for total metals.

Interwell Analyses (Metals)

MESCO conducted an interwell statistical analysis on all of the detected metals. Historical data from monitoring well MW-17 was defined as the background well, and an upper tolerance limit (UTL) with 95% coverage was computed for each detected constituent from the background data at a 95% level of confidence. For each tested constituent, an appropriate statistical analysis method was selected based on the percentages of non-detects (%ND) in the historical background data. The following table (Table 1) summarizes the methods used for four different %ND ranges.

Table 1. Statistical Analysis Methods for Various %ND Ranges

%ND	Analysis Method	ND Substitution
%ND<15%	Parametric tolerance limit	1/2 ND
15%<%ND<50%	Parametric tolerance limit	Cohen or 1/2 ND
50%<%ND<90%	Non-parametric tolerance limit	1/2 ND
90%<%ND	Poisson tolerance limit	-

NOTE: For parametric tolerance interval, normality of the background data was checked by the Shapiro-Wilks normality test, as the method requires that the data be normally distributed.

A preliminary data screening was conducted upon the metals detected in all monitoring locations. Detected parameters with concentrations found below quantifiable levels (SWSL) and below those detected within the background well were eliminated and a statistical analysis was not conducted for that particular constituent/well. A total of five metals were tested for statistical significance. For cadmium detected within MW-27S and MW-29 the Poisson tolerance limit method without ND Substitution was used since the constituent has rarely been detected within the background well. For all other detected metals the non-parametric tolerance limit with ½ NDs was used on the original data as the non-detection rates within the background well were between 50% and 90% and the background data was not normally distributed.

Intrawell Analyses (Metals)

Intrawell Analyses was only conducted upon the detection of barium within the sample taken from MW-20 as this was the only constituent that was initially found to be statistically significant by interwell analysis. In general, intrawell analysis is conducted in order to attempt to differentiate true contamination from spatial variability. Baseline levels in this context are defined as the background level derived from the data in a given downgradient well. Intrawell analyses through Shewhart-CUSUM control charts require a minimum of eight independent historical sampling events and a detection rate greater than 25% (%ND≤75%).

Results

Data distributions were reviewed using box and whiskers plots. In order to evaluate variability in concentrations with respect to time and season, time series plots were generated for select constituents. Time series plots were also visually evaluated for seasonality and "outliers" (defined as data that appears to be incongruent with respect to historical results). There appears to not be any apparent outliers or seasonality in the latest data record.

The number and type of metal detections continue to be consistent with historical results. The interwell analysis results conducted upon all of the monitoring wells indicate that downgradient MW-20 was found to contain a concentration of barium over established background levels. However, according to further intrawell analysis through Shewahart-CUSUM chart formulation, barium has not increased compared to it's own historical levels.

Groundwater and Surface Water Characterization

Per calculations based upon formulation of the single-day potentiometric map the groundwater flow remains in a southeast direction towards the unnamed tributary of Fourth Creek with flow rates ranging from 2 feet/year (MW-21S) to 207 feet/year (MW-28) averaging approximately 59 feet/year. The flow directions and gradients are consistent with historical observations, showing no changes that would result in a different interpretation of the groundwater system or hinder the effectiveness of the current monitoring network. All of the surface water monitoring locations within the facility boundaries were visually observed to be of normal volume, flow, and turbidity.

Conclusion

The results of the laboratory and subsequent statistical analysis indicate no signs of contamination originating from the Iredell County Lined Subtitle D MSWLF Phases 3 & 4. MESCO recommends that the facility continue detection monitoring and is tentatively scheduled to be sampled again in January 2010. If you have any questions regarding this report, please contact me at (919) 772-5393 or by email at jpfohl@mesco.com.

Sincerely,
MUNICIPAL ENGINEERING SERVICES CO., P.A.

Jonathan Pfohl
Environmental Specialist

Enclosures
cc: Mr. David Lambert
Iredell County

Detection Scan All Detections above SWS, GWP or NCGW2L
Iredell County Subtitle D MSWLF, Phase 3 & 4

Sample ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause
MW-18	Chromium	7/23/09	11.7	ug/L	0.40	10	50				
MW-18	**Vanadium**	**7/23/09**	**11.8[j]**	**ug/L**	**0.20**	**25**			**3.5**	**8.3**	**Natural**
MW-19SR	Barium	7/23/09	217	ug/L	0.20	100	2000				
MW-19SR	**Vanadium**	**7/23/09**	**3.6[j]**	**ug/L**	**0.20**	**25**			**3.5**	**0.1**	**Natural**
MW-20	Barium	7/23/09	278	ug/L	0.20	100	2000				
MW-20	**Vanadium**	**7/23/09**	**7[j]**	**ug/L**	**0.20**	**25**			**3.5**	**3.5**	**Natural**
MW-20	Zinc	7/23/09	19.4	ug/L	0.40	10	1050				
MW-27D	**Vanadium**	**7/23/09**	**9.6[j]**	**ug/L**	**0.20**	**25**			**3.5**	**6.1**	**Natural**
MW-27S	Cadmium	7/23/09	1	ug/L	0.50	1	1.75				
MW-28	**Vanadium**	**7/23/09**	**4.9[j]**	**ug/L**	**0.20**	**25**			**3.5**	**1.4**	**Natural**
MW-29	Beryllium	7/23/09	1	ug/L	0.10	1			4		
MW-29	Cadmium	7/23/09	1.5	ug/L	0.50	1	1.75				
MW-29	**Vanadium**	**7/23/09**	**6.7[j]**	**ug/L**	**0.20**	**25**			**3.5**	**3.2**	**Natural**
FORCEMAIN	**1,4-Dichlorobenzene**	**7/22/09**	**2.2**	**ug/L**	**1.6**	**1**	**1.4**			**0.8**	
FORCEMAIN	2-Butanone	7/22/09	585	ug/L	4.8	100	4200				
FORCEMAIN	Acetone	7/22/09	323	ug/L	10.8	100	700				
FORCEMAIN	**Antimony**	**7/22/09**	**3.7[j]**	**ug/L**	**2.6**	**6**			**1.4**	**2.3**	
FORCEMAIN	Barium	7/22/09	618	ug/L	0.20	100	2000				
FORCEMAIN	**Benzene**	**7/22/09**	**7.5**	**ug/L**	**1.2**	**1**	**1**			**6.5**	
FORCEMAIN	BOD, 5 day	7/22/09	148	mg/L	2.0	2			NE		
FORCEMAIN	Chromium	7/22/09	23.2	ug/L	0.40	10	50				
FORCEMAIN	COD	7/22/09	675000	ug/L	25000	NE	NE		NE		
FORCEMAIN	Copper	7/22/09	173	ug/L	0.30	10	1000				
FORCEMAIN	Ethylbenzene	7/22/09	25.6	ug/L	1.5	5	550				
FORCEMAIN	**Methylene Chloride**	**7/22/09**	**13.9**	**ug/L**	**4.8**	**2**	**4.6**			**9.3**	
FORCEMAIN	Nickel	7/22/09	88.6	ug/L	1.7	50	100				
FORCEMAIN	pH	7/22/09	7	Std. Units	0.10	0.1					
FORCEMAIN	Toluene	7/22/09	22.1	ug/L	1.3	1	1000				
FORCEMAIN	**Vanadium**	**7/22/09**	**13.2[j]**	**ug/L**	**0.20**	**25**			**3.5**	**9.7**	
FORCEMAIN	Xylene (Total)	7/22/09	44.3	ug/L	3.3	5	530				
FORCEMAIN	Zinc	7/22/09	93	ug/L	0.40	10	1050				

[1] Table only contains detected constituents detected above the SWSL, GWP, NCGW2L or NCSW2B Standards

[2] MDL = Method Detection Limit

[3] SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

[4] NCGW2L = North Carolina Ground Water 2L Standard (Current as of Sampling Event)

[5] NCSW2B = North Carolina Surface Water 2B Standard for Specific Stream Classification (Current as of Sampling Event)

[6] GWP = Groundwater Protection Standard (Current as of Sampling Event)

[J] =The reported value is estimated & between the laboratory MDL & the SWSL, adjusted for actual sample preparation data and moisture content.

LFG = Landfill Gas

NE = Not Established

BOLD = Concentration >GWP, NCGW2L, or NCSW2B Standard (Current as of Sampling Event)

Detection Scan All Detections above MDL
Iredell County Subtitle D MSWLF, Phase 3 & 4

Sample ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause
MW-17	Vanadium	7/23/09	2.4	ug/L	0.20	25			3.5		
MW-17	Copper	7/23/09	1.4	ug/L	0.30	10	1000				
MW-17	Zinc	7/23/09	9.5	ug/L	0.40	10	1050				
MW-17	Nickel	7/23/09	2.2	ug/L	1.7	50	100				
MW-17	Chromium	7/23/09	2.2	ug/L	0.40	10	50				
MW-17	Barium	7/23/09	34.3	ug/L	0.20	100	2000				
MW-18	Copper	7/23/09	7.7	ug/L	0.30	10	1000				
MW-18	**Vanadium**	**7/23/09**	**11.8[j]**	**ug/L**	**0.20**	**25**			**3.5**	**8.3**	**Natural**
MW-18	Zinc	7/23/09	3.9	ug/L	0.40	10	1050				
MW-18	Nickel	7/23/09	5.3	ug/L	1.7	50	100				
MW-18	Beryllium	7/23/09	0.19	ug/L	0.10	1			4		
MW-18	Barium	7/23/09	35.8	ug/L	0.20	100	2000				
MW-18	Chromium	7/23/09	11.7	ug/L	0.40	10	50				
MW-19D	Vanadium	7/23/09	2.1	ug/L	0.20	25			3.5		
MW-19D	Chromium	7/23/09	0.72	ug/L	0.40	10	50				
MW-19D	Arsenic	7/23/09	3	ug/L	2.7	10	50				
MW-19D	Barium	7/23/09	1.8	ug/L	0.20	100	2000				
MW-19SR	**Vanadium**	**7/23/09**	**3.6[j]**	**ug/L**	**0.20**	**25**			**3.5**	**0.1**	**Natural**
MW-19SR	Arsenic	7/23/09	9.3	ug/L	2.7	10	50				
MW-19SR	Nickel	7/23/09	2.5	ug/L	1.7	50	100				
MW-19SR	Chromium	7/23/09	2.2	ug/L	0.40	10	50				
MW-19SR	Barium	7/23/09	217	ug/L	0.20	100	2000				
MW-20	**Vanadium**	**7/23/09**	**7[j]**	**ug/L**	**0.20**	**25**			**3.5**	**3.5**	**Natural**
MW-20	Arsenic	7/23/09	5.1	ug/L	2.7	10	50				
MW-20	Zinc	7/23/09	19.4	ug/L	0.40	10	1050				
MW-20	Selenium	7/23/09	6.4	ug/L	3.8	10	50				
MW-20	Copper	7/23/09	0.79	ug/L	0.30	10	1000				
MW-20	Nickel	7/23/09	22.2	ug/L	1.7	50	100				
MW-20	Chromium	7/23/09	2.6	ug/L	0.40	10	50				
MW-20	Barium	7/23/09	278	ug/L	0.20	100	2000				
MW-21D	Vanadium	7/23/09	1.5	ug/L	0.20	25			3.5		
MW-21D	Chromium	7/23/09	1.1	ug/L	0.40	10	50				
MW-21D	Arsenic	7/23/09	3.3	ug/L	2.7	10	50				
MW-21D	Barium	7/23/09	13.5	ug/L	0.20	100	2000				
MW-21D	Zinc	7/23/09	0.42	ug/L	0.40	10	1050				
MW-21S	Cobalt	7/23/09	2.7	ug/L	0.60	10			70		
MW-21S	Barium	7/23/09	44	ug/L	0.20	100	2000				
MW-21S	Zinc	7/23/09	4.8	ug/L	0.40	10	1050				
MW-21S	Nickel	7/23/09	2.4	ug/L	1.7	50	100				
MW-21S	Copper	7/23/09	1.6	ug/L	0.30	10	1000				
MW-21S	Vanadium	7/23/09	1	ug/L	0.20	25			3.5		
MW-21S	Acetone	7/23/09	15	ug/L	2.2	100	700				
MW-21S	Chromium	7/23/09	1.2	ug/L	0.40	10	50				

Sample ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause
MW-27D	Beryllium	7/23/09	0.29	ug/L	0.10	1			4		
MW-27D	Lead	7/23/09	4	ug/L	4.0	10	15				
MW-27D	Nickel	7/23/09	4.4	ug/L	1.7	50	100				
MW-27D	Chromium	7/23/09	7.5	ug/L	0.40	10	50				
MW-27D	Cadmium	7/23/09	0.71	ug/L	0.50	1	1.75				
MW-27D	**Vanadium**	**7/23/09**	**9.6[j]**	**ug/L**	**0.20**	**25**			**3.5**	**6.1**	**Natural**
MW-27D	Copper	7/23/09	0.71	ug/L	0.30	10	1000				
MW-27D	Barium	7/23/09	18.7	ug/L	0.20	100	2000				
MW-27D	Zinc	7/23/09	5.5	ug/L	0.40	10	1050				
MW-27D	Silver	7/23/09	0.18	ug/L	0.10	10	18				
MW-27S	Zinc	7/23/09	4.4	ug/L	0.40	10	1050				
MW-27S	Copper	7/23/09	0.96	ug/L	0.30	10	1000				
MW-27S	Beryllium	7/23/09	0.14	ug/L	0.10	1			4		
MW-27S	Chromium	7/23/09	1.1	ug/L	0.40	10	50				
MW-27S	Barium	7/23/09	23.3	ug/L	0.20	100	2000				
MW-27S	Vanadium	7/23/09	1.9	ug/L	0.20	25			3.5		
MW-27S	Cadmium	7/23/09	1	ug/L	0.50	1	1.75				
MW-27S	Cobalt	7/23/09	1	ug/L	0.60	10			70		
MW-28	Barium	7/23/09	10.2	ug/L	0.20	100	2000				
MW-28	Nickel	7/23/09	2.5	ug/L	1.7	50	100				
MW-28	Chromium	7/23/09	1.9	ug/L	0.40	10	50				
MW-28	Zinc	7/23/09	2.9	ug/L	0.40	10	1050				
MW-28	Toluene	7/23/09	0.7	ug/L	0.26	1	1000				
MW-28	**Vanadium**	**7/23/09**	**4.9[j]**	**ug/L**	**0.20**	**25**			**3.5**	**1.4**	**Natural**
MW-28	Copper	7/23/09	5.4	ug/L	0.30	10	1000				
MW-28	Beryllium	7/23/09	0.11	ug/L	0.10	1			4		
MW-29	Cadmium	7/23/09	1.5	ug/L	0.50	1	1.75				
MW-29	Copper	7/23/09	1.4	ug/L	0.30	10	1000				
MW-29	Barium	7/23/09	53.3	ug/L	0.20	100	2000				
MW-29	Lead	7/23/09	4.5	ug/L	4.0	10	15				
MW-29	Zinc	7/23/09	8.9	ug/L	0.40	10	1050				
MW-29	Chromium	7/23/09	5.1	ug/L	0.40	10	50				
MW-29	Beryllium	7/23/09	1	ug/L	0.10	1			4		
MW-29	Nickel	7/23/09	2.7	ug/L	1.7	50	100				
MW-29	**Vanadium**	**7/23/09**	**6.7[j]**	**ug/L**	**0.20**	**25**			**3.5**	**3.2**	**Natural**
SW-5	Zinc	7/23/09	3	ug/L	0.40	10		50			
SW-5	Vanadium	7/23/09	1.3	ug/L	0.20	25		NE			
SW-5	Chromium	7/23/09	0.67	ug/L	0.40	10		50			
SW-5	Barium	7/23/09	19.7	ug/L	0.20	100		20000			

Sample ID	Parameter Name [1]	Sample Date	Result	Unit	MDL [2]	SWSL [3]	2L [4]	2B [5]	GWP [6]	Exceedance	Preliminary Cause
FORCEMAIN	2-Butanone	7/22/09	585	ug/L	4.8	100	4200				
FORCEMAIN	Copper	7/22/09	173	ug/L	0.30	10	1000				
FORCEMAIN	Zinc	7/22/09	93	ug/L	0.40	10	1050				
FORCEMAIN	Xylene (Total)	7/22/09	44.3	ug/L	3.3	5	530				
FORCEMAIN	Arsenic	7/22/09	7	ug/L	2.7	10	50				
FORCEMAIN	**Methylene Chloride**	**7/22/09**	**13.9**	**ug/L**	**4.8**	**2**	**4.6**			**9.3**	
FORCEMAIN	Silver	7/22/09	0.22	ug/L	0.10	10	18				
FORCEMAIN	**Benzene**	**7/22/09**	**7.5**	**ug/L**	**1.2**	**1**	**1**			**6.5**	
FORCEMAIN	pH	7/22/09	7	Std. Units	0.10	0.1					
FORCEMAIN	Sulfate	7/22/09	5900	ug/L	5000	250000	250000				
FORCEMAIN	Chromium	7/22/09	23.2	ug/L	0.40	10	50				
FORCEMAIN	4-Methyl-2-pentanone	7/22/09	17.6	ug/L	1.6	100			560		
FORCEMAIN	COD	7/22/09	###	ug/L	25000	NE	NE		NE		
FORCEMAIN	BOD, 5 day	7/22/09	148	mg/L	2.0	2			NE		
FORCEMAIN	**Vanadium**	**7/22/09**	**13.2[j]**	**ug/L**	**0.20**	**25**			**3.5**	**9.7**	
FORCEMAIN	Nickel	7/22/09	88.6	ug/L	1.7	50	100				
FORCEMAIN	**Antimony**	**7/22/09**	**3.7[j]**	**ug/L**	**2.6**	**6**			**1.4**	**2.3**	
FORCEMAIN	Barium	7/22/09	618	ug/L	0.20	100	2000				
FORCEMAIN	Toluene	7/22/09	22.1	ug/L	1.3	1	1000				
FORCEMAIN	Acetone	7/22/09	323	ug/L	10.8	100	700				
FORCEMAIN	Ethylbenzene	7/22/09	25.6	ug/L	1.5	5	550				
FORCEMAIN	**1,4-Dichlorobenzene**	**7/22/09**	**2.2**	**ug/L**	**1.6**	**1**	**1.4**			**0.8**	
FORCEMAIN	Cobalt	7/22/09	2.8	ug/L	0.60	10			70		
FORCEMAIN	Lead	7/22/09	7.5	ug/L	4.0	10	15				
EB	Methylene Chloride	7/23/09	1.3	ug/L	0.97	2	4.6				
EB	Silver	7/23/09	0.39	ug/L	0.10	10	18				
EB	Zinc	7/23/09	3.7	ug/L	0.40	10	1050				
EB	Barium	7/23/09	22.2	ug/L	0.20	100	2000				
EB	Vanadium	7/23/09	0.41	ug/L	0.20	25			3.5		
FB	Methylene Chloride	7/23/09	1.2	ug/L	0.97	2	4.6				

[1] Table contains all constituents detected above MDL

[2] MDL = Method Detection Limit

[3] SWSL = Solid Waste Section Reporting Limit (Current as of Sampling Event)

[4] 2L = North Carolina Ground Water 2L Standard (Current as of Sampling Event)

[5] 2B = North Carolina Surface Water 2B Standard for Specific Stream Classification (Current as of Sampling Event)

[6] GWP = Groundwater Protection Standard (Current as of Sampling Event)

[J] =The reported value is estimated & between the laboratory MDL & the SWSL, adjusted for actual sample preparation data and moisture content.

LFG = Landfill Gas

NE = Not Established

BOLD = Concentration >GWP, NCGW2L, or NCSW2B Standard (Current as of Sampling Event)

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient	Flow Rate (ft/yr)	Flow Direction	Water Table Depth (ft)	Water Table Elevation (ft)	Screened Interval Lithology
MW-17	3.73E-05	21.7%	0.024	4	S70E	36.65	817.70	Silt
MW-18	7.43E-04	21.7%	0.014	51	S48E	8.51	792.21	Silt
MW-19SR	4.54E-04	21.7%	0.022	47	S80E	10.24	787.02	Sandy Silt
MW-19D	2.81E-03	21.7%	0.027	n/a	n/a	8.90	786.91	Fractured Rock
MW-20	9.50E-04	21.7%	0.007	33	S83E	5.80	790.13	Silt
MW-21S	1.67E-05	21.7%	0.020	2	S71E	33.78	790.19	Saprolite
MW-21D	9.08E-07	21.7%	0.011	n/a	n/a	31.42	791.34	Fractured Rock
MW-27S	5.62E-04	17.0%	0.016	55	S34E	12.67	794.58	Silty Sand
MW-27D	4.67E-04	6.0%	0.003	n/a	n/a	11.64	795.31	Clayey Sand
MW-28	1.52E-03	17.0%	0.022	207	S02E	8.37	801.80	Silty Sand
MW-29	7.70E-04	17.0%	0.016	77	S12E	10.48	798.58	Silty Sand

NOTE: Values for hydraulic conductivity on all wells and piezometers determined via slug test by MESCO
Wells screened in rock not utilized for flow directions/gradients
Hydraulic Conductivity value for MW-19SR assumed identical to previously adjacent MW-19S
Hydrologic Gradient taken from the July 23, 2009 sampling event.

$$Q = -\frac{K}{n_e} \cdot \frac{dh}{dl}$$

where

K = hydraulic conductivity
ne = effective porosity
dh = head difference
dl = horizontal distance

Field Observations of Monitoring Locations
Iredell County Subtitle D MSWLF, Phase 3 & 4
July 22 & 23, 2009 Sampling Event

Sample Location	Viable Monitoring Location	Lack of Any Evidence of Tampering	Locked	Hinge/Hasp Operational	Tagged or Labeled	Concrete Surface Pad Effective	Turbidity Field Reading (NTU)	Degree of Visual Turbidity of Collected Sample	Comments
MW-17	Yes	Yes	Yes	Yes	Yes	Yes	58.1	Clear	
MW-18	Yes	Yes	Yes	Yes	Yes	Yes	38.2	Clear	
MW-19SR	Yes	Yes	Yes	Yes	Yes	Yes	2.59	Clear	
MW-19D	Yes	Yes	Yes	Yes	Yes	Yes	1.75	Clear	
MW-20	Yes	Yes	Yes	Yes	Yes	Yes	7.77	Clear	
MW-21S	Yes	Yes	Yes	Yes	Yes	Yes	17.3	Clear	
MW-21D	Yes	Yes	Yes	Yes	Yes	Yes	3.9	Clear	Wasps nest inside case
MW-27S	Yes	Yes	Yes	Yes	Yes	Yes	21.8	Clear	
MW-27D	Yes	Yes	Yes	Yes	Yes	Yes	51.7	Clear	
MW-28	Yes	Yes	Yes	Yes	Yes	Yes	34.7	Clear	
MW-29	Yes	Yes	Yes	Yes	Yes	Yes	100	Slight	
SW-5	Yes	na	na	na	na	na	18.7	Clear	
P4-7S	Yes	Yes	Yes	Yes	Yes	Yes	na	na	
P4-7D	Yes	Yes	Yes	Yes	Yes	Yes	na	na	
P-4	Yes	Yes	Yes	Yes	Yes	Yes	na	na	
FORCEMAIN	Yes	na	na	na	na	na	na	Moderate	

Any unusual field conditions, observations, or events:

Nothing to note.

Project: Iredell County Subtitle D MSWLF, Phase 3 & 4

Samplers: J. Pfohl

P. 1 of 1

Monitoring Point	Sample Date	Sample Time	Sampling Parameters: Depth to Water (BTOP) Static	Lab Parameters to be analyzed for	Volume Purged (Gal)	Sample Type	Goes Dry During Purge	Comments	Total Depth	Water Quality Parameters: Cl⁻ (mg/l)	DO (mg/L)	ORP	pH	Temp. ©	Specific Cond. (us/cm	TDS (mg/L)	Turbidity	CH4 (ppm)
MW-17	7/23/09	11:00	36.65	I	4	P&DB	Y		45'	NR	7.2	175	5.51	17.0	60	20	58.1	NR
MW-18	7/23/09	6:00PM	8.51	I	8	P&DB	N		20		6.3	121	6.40	15.3	60	20	38.1c	
MW-19SR	7/23/09	3:55	10.29	I	7	P&DB	N		22.02		2.1	-48	5.95	17.9	400	190	2.59c	
MW-19D	7/23/09	3:15	8.90	I	11	P&DB	N		59		6.3	113	7.18	16.0	70	30	1.75c	
MW-20	7/23/09	6:30PM	5.80	I	3	P&DB	N		20		1.8	123	6.81	16.6	360	170	7.77c	
MW-21S	7/23/09	12:00	33.78	I	3	P&DB	Y		41		6.5	160	6.72	16.8	20	10	17.3c	
MW-21D	7/23/09	11:30	31.42	I	24	P&DB	Y		138.25		0.9	131	7.02	16.9	200	90	3.9c	
FORCEMAIN	7/22/09	2:00	—	Leachate	—	spigot	—	Took 7/22/09 for Hold-time constituent evidence										
SW-5	7/23/09	2:10	—	I	—	Dip	—	sep. c-o-c	—	NR	6.6	85	6.79	22.2	60	30	18.7c	
MW-27S	7/23/09	4:50	12.67	I	4	P&DB	N		20.09		3.4	123	5.38	16.1	60	30	21.8c	
MW-27D	7/23/09	4:25	11.64	I	17	P&DB	N		44.42		3.3	122	6.34	15.4	180	80	51.7c	
MW-28	7/23/09	2:40	8.37	I	2	DB	Y		12.42		0.8	37	6.13	15.6	100	40	[illegible]	
MW-29	7/23/09	5:30	10.48	I	4	P&DB	Y		17.68		2.2	151	5.42	15.7	130	60	100 st	
P-4	NS	—	25.08	WLR	—	—	—	—	—	—	—	—	—	—	—	—	—	—
P4-7S		—	10.89		—	—	—	—	—	—	—	—	—	—	—	—	—	—
P4-7D		—	11.05		—	—	—	—	—	—	—	—	—	—	—	—	—	—

ON Sep. c-o-c →

Comments

SS B=Stainless Steel Baler, D B=Disposable Baler, P=Low flow Pump, PD=Purged Dry

VT=Very Turbid, MT=Moderately Turbid, ST=Slightly Turbid, C=Clear

NR=No Reading Attempted, NS=No Sample Obtained

SW-5 Put on Sep. C-O-C 1324875 to be combined 1324866 & Reported seperately as (SW-1, SW-2 & SW-5) Monitor (Ph.1/2 & Ph. 3/4)

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 1

1324874

Section A Required Client Information:

Company: Municipal Engineering Services
Address: PO Box 97
Garner NC 27529
Email To: jpfohl@mesco.com
Phone: (919)772-5393 Fax: (919)772-1176
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Jonathan Pfohl
Copy To:
Purchase Order No.:
Project Name: Iredell Co MSWLF, Ph 3 #4
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie
Pace Profile #:

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

Site Location STATE: NC

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N): Analysis Test: 8260B VOCs - App 1; Metals - Total - App I

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	8260B VOCs - App 1	Metals - Total - App I	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-17	WT	G			7/23/09	11:00		4			1	3					✓	✓	N	9249223 001
2	MW-18						6:00PM														002
3	MW-19SR						3:55														003
4	MW-19D						3:15														004
5	MW-20						6:30PM														005
6	MW-21S						12:00														006
7	MW-21D						11:30														007
8	MW-27S						4:50														008
9	MW-27D						4:25														009
10	MW-28						2:40														010
11	MW-29						5:30														011
12	Forcemain (1324840) - Seperate chain					7/22/09	2:00		Submitted on seperate chain But Report w/ these.												012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
~~Forcemain~~	[signature] / MESCO (chatham)	7/23/09	7:30PM	[signature] - Pace	7-24-09	12:45				
SW-5 - submitted on seperate C-O-C (MESCO) Nate Brandy		7-24-09	14:00	[signature] / Pace	7/24/09	14:00	3°	ice	no	yes

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jonathan Pfohl
SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/23/09

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

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

Report w/ other Iredell Co MSWLF, ph 3&4 samples that will be submitted later

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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.

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1324840

Section A Required Client Information:

Company: Municipal Engineering Services (MESCO)
Address: PO Box 97
Garner NC 27529
Email To: jpfohl@mescoa.com
Phone: (919) 772-5313 Fax: (919) 772-1174
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Jonathan Pfohl
Copy To:
Purchase Order No.:
Project Name: Iredell Co. MSWLF, Ph 3&4
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie
Pace Profile #: 2103-3

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

Site Location STATE: NC

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N): N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: 8260B-VOCs App I	Metals - App I	pH	COD	BOD	Phosphorus	Nitrate / Sulfate	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	FORCEMAIN	WW	G			7/22/09	2:00			5	2	1	3					✓	✓	✓	✓	✓	✓	✓	N	92492230 01
2																											
3																											
4																											
5																											
6																											
7																											
8																											
9																											
10																											
11																											
12																											

92492223
4 qw 7/22

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	MESCO	7/22/09	1600	Pace	7/22/9	1600				
	Pace	7/22/9	1640	Pace	7/22/09	16:40	3.4	yes	no	yes

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Jonathan Pfohl
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY): 7/22/03

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

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

Sample Condition Upon Receipt

Pace Analytical

Client Name: municipal Project # 9249223

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Optional	
Proj. Due Date:	N/A
Proj. Name:	N/A

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Thermometer Used T060 Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 3.0 Biological Tissue is Frozen: Yes No N/A

Date and Initials of person examining contents: 07/24

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): N/A		

Client Notification/ Resolution: Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: BKM Date: 7/27/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical

Sample Condition Upon Receipt

Client Name: Municipal Project # 9249223

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Thermometer Used T060 Type of Ice: Wet Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 3.4 Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Optional	
Proj. Due Date:	N/A
Proj. Name:	N/A

Date and Initials of person examining contents: CMM 7/22/09

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix:_____		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed
Samples checked for dechlorination:	☑Yes ☐No ☐N/A	14. Client sent back dechlorination bottles after sample.
Headspace in VOA Vials (>6mm):	☑Yes ☐No ☐N/A	15. All
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): N/A		

Client Notification/ Resolution: Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: KCH Date: 7/23/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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1324866

Section A Required Client Information:

Company: Municipal Engineering Services (MESCO)
Address: PO Box 97
Garner NC 27529
Email To: jpfohl@mesco.com
Phone: (919)772-5393 Fax: (919)772-1176
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Jonathan Pfohl
Copy To:
Purchase Order No.:
Project Name: Iredell Co. Sb D LF, [redacted] Surface Water
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #: 2103-3

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

Site Location STATE: NC

Section D Required Client Information

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N) 8260B VOCs App I	Metals - App I	VOCs - App II	Metals - App II	SVOCs - App II	Co-Pesticides - App II	PCB - App II	Herbicides - App II	Cyanide	Sulfide	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SW-1	WT	G			7/21/09	2:50		4			1	3					✓	✓								N	924925 001
2	SW-2	WT	G			7/21/09	3:15		4			1	3					✓	✓									002
3	SW-5 (Will Be Submitted 7/23/09)	WT	G																									
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
MW-15, MW-1B,	MESCO	7/22/09	1600	R Sampson Pace	7/22/9	1600				
	Pace	7/22/9	1640	J Moore	7/22	1640	2.7	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Pfohl

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 7/22/09

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

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

Pace Analytical

Sample Condition Upon Receipt

Client Name: Mun. Project # 9249225

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Thermometer Used T060 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 27 Biological Tissue is Frozen: Yes No N/A

Temp should be above freezing to 6°C

Optional	
Proj. Due Date:	N/A
Proj. Name:	N/A

Date and Initials of person examining contents: TR 7/22

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): N/A		

Client Notification/ Resolution: Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Kett Date: 7/22/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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

SAMPLE ACKNOWLEDGEMENT

Samples Submitted By: Municipal Engineering Services
Client Project ID: IREDELL CO MSWLF, PH 3 & 4
Client PO#:

Pace Project Manager: Bonnie McKee
Phone 1(704)875-9092
bonnie.mckee@pacelabs.com
Pace Analytical Project ID: 9249223
Samples Received: July 22, 2009
Estimated Completion: July 29, 2009

Customer Sample ID	Pace Analytical Lab ID	Matrix	Date/Time Collected	Method
FORCE MAIN	9249223001	Water	07/22/09 14:00	353.2 Nitrogen, NO2/NO3 unpres 365.1 Phosphorus, Total 5210B BOD, 5 day 5220D COD 6010 ICP Groundwater Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc 8260 MSV Low Level 9040 pH ASTM D516-90 Sulfate Water

Please contact your project manager if you recognize any discrepancy in this form or have any questions about your project.

Thank you for choosing Pace Analytical Services, Inc.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

1324738

Section A Required Client Information:

Company: Municipal Engineering Services
Address: PO Box 97
Garner NC 27529
Email To: jpfohl@mesco.com
Phone: (919)772-5393 Fax: (919)772-1176
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Jonathan Pfohl
Copy To:
Purchase Order No.:
Project Name: Iredell Co. MSWLF - Blanks
Project Number:

Section C Invoice Information:

Attention: See Section A
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: Bonnie
Pace Profile #: 2103-7

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

Site Location STATE: NC

Section D Required Client Information

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

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	EB	WT	G			7/23/09	7:10			4		1	3						9249402
2	FB	WT	G			7/23/09	7:15			3			3						001
3	TB (PACE Filled)																		002
4																			003
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Requested Analysis Filtered (Y/N): Y/N: N

Analysis Test: 8260 App I VOCs; Metals App II (2); VOCs - App II

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Blanks For entire Facility.	JPF / MESCO (Jonathan)	7/23/09	7:30	J Moody - Pace	7-24-09	12:45
PACE DI H_2O & D. Baker	J Moody	7-24-09	14:00	[illegible] / Pace	1/24/09	14:00
MESCO Holding additional containers						

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	2.1	yes	no	yes

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jonathan Pfohl

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 7/23/09

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

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

Pace Analytical

Sample Condition Upon Receipt

Client Name: Municipal Eng Project # 9249402

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace Other_____

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Optional	
Proj. Due Date:	N/A
Proj. Name:	N/A

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other_____

Thermometer Used T060 Type of Ice: ☑ Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2.1 Biological Tissue is Frozen: Yes No N/A

Date and Initials of person examining contents: CW 3 7/24

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☐Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix:	W	
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☑Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	W / HCL
Pace Trip Blank Lot # (if purchased): N/A		

Client Notification/ Resolution: Field Data Required? Y / N / N/A

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: BMH Date: 07-27-09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Statistical Analysis Results Summary

Inter-Well Analyses Summary
Iredell County Subtitle D MSWLF, Phase 3 & 4

Background Well: (MW-17)

Barium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
58.82	no	Non-parametric tolerance interval	1/2 ND	260	ug/l

Well	Result	Significance
MW-19SR	217	no
MW-20	278	Yes

Beryllium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
88.24	-	Non-parametric tolerance interval	1/2 ND	1.3	ug/l

Well	Result	Significance
MW-29	1	no

Cadmium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
94.12	-	Poisson Tolerance Limit	ND	3	ug/l

Well	Result	Significance
MW-27S	1	no
MW-29	1.5	no

Chromium, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
64.71	no	Non-parametric tolerance interval	1/2 ND	72	ug/l

Well	Result	Significance
MW-18	11.7	no

Zinc, total

%ND	Normality	Method	ND Adj.	Upper Limit (a = 95%)	Unit
52.94	no	Non-parametric tolerance interval	1/2 ND	130	ug/l

Well	Result	Significance
MW-20	19.4	no

NOTE: Bold-faced monitoring points indicate detected levels exceeds NCGW2L standard

Intra-Well Analysis Summary (Metals)
Iredell County Subtitle D MSWLF, Phase 3 & 4

Well	Barium
MW-20	no

EXPLANATION

yes=detection statistically significant by intrawell analysis
no=detection not statistically significant by intrawell analysis
n/a=unable to run intrawell analysis due to insufficient number of sampling events
Bold=Detected in exceedance of the NC 2L Standard

NO Metals have statistically increased via Intra-Well Analysis

Summary of Pooled VOCs in Background Well (MW-17)
Iredell County Subtitle D MSWLF, Phase 3 & 4

Constituent	Samples	NDs	% NDs
1,1,1,2-Tetrachloroethane	17	17	100.00
1,1,1-Trichloroethane	17	17	100.00
1,1,2,2-Tetrachloroethane	17	17	100.00
1,1,2-Trichloroethane	17	17	100.00
1,1-Dichloroethane	17	17	100.00
1,1-Dichloroethene	17	17	100.00
1,2,3-Trichloropropane	17	17	100.00
1,2-Dibromo-3-chloropropane	17	17	100.00
1,2-Dibromoethane	17	17	100.00
1,2-Dichlorobenzene	17	17	100.00
1,2-Dichloroethane	17	17	100.00
1,2-Dichloropropane	17	17	100.00
1,4-Dichlorobenzene	17	17	100.00
2-Butanone	17	17	100.00
2-Hexanone	17	17	100.00
4-Methyl-2-Pentanone	17	17	100.00
Acetone	17	17	100.00
Acrylonitrile	17	17	100.00
Benzene	17	17	100.00
Bromochloromethane	17	17	100.00
Bromodichloromethane	17	17	100.00
Bromoform	17	17	100.00
Bromomethane	17	17	100.00
Carbon disulfide	17	17	100.00
Carbon tetrachloride	17	17	100.00
Chlorobenzene	17	17	100.00
Chlorodibromomethane	17	17	100.00
Chloroethane	17	17	100.00
Chloroform	17	17	100.00
Chloromethane	17	17	100.00
cis-1,2-Dichloroethene	17	17	100.00
cis-1,3-Dichloropropene	17	17	100.00
Dibromomethane	17	17	100.00
Dichloromethane	17	17	100.00
Ethylbenzene	17	17	100.00
Iodomethane	17	17	100.00
Styrene	17	17	100.00
Tetrachloroethylene	17	17	100.00
Toluene	17	17	100.00
trans-1,2-Dichloroethene	17	17	100.00
trans-1,3-Dichloropropene	17	17	100.00
trans-1,4-Dichloro-2-butene	17	17	100.00
Trichloroethylene	17	17	100.00
Trichlorofluoromethane	17	17	100.00
Vinyl acetate	17	17	100.00
Vinyl chloride	17	17	100.00
Xylene	17	17	100.00
Total	**799**	**799**	**100.00**

Poisson Prediction Interval Based upon Pooled Background VOCs
Iredell County Subtitle D MSWLF, Phase 3 & 4

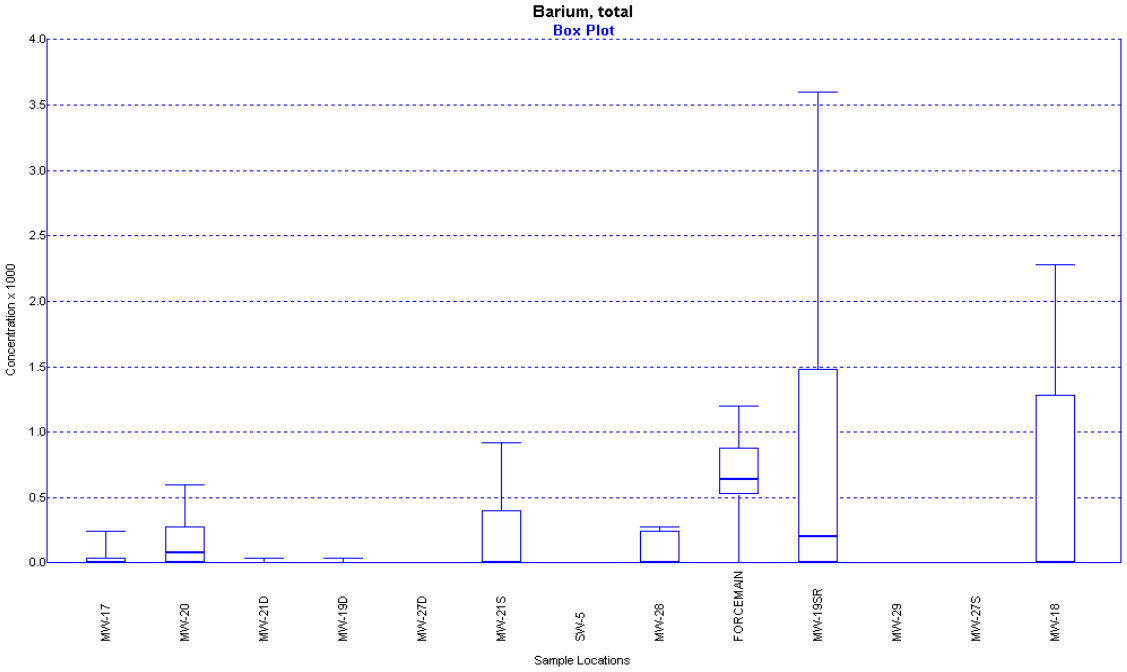
All detected VOCs (Background Well: MW-17)

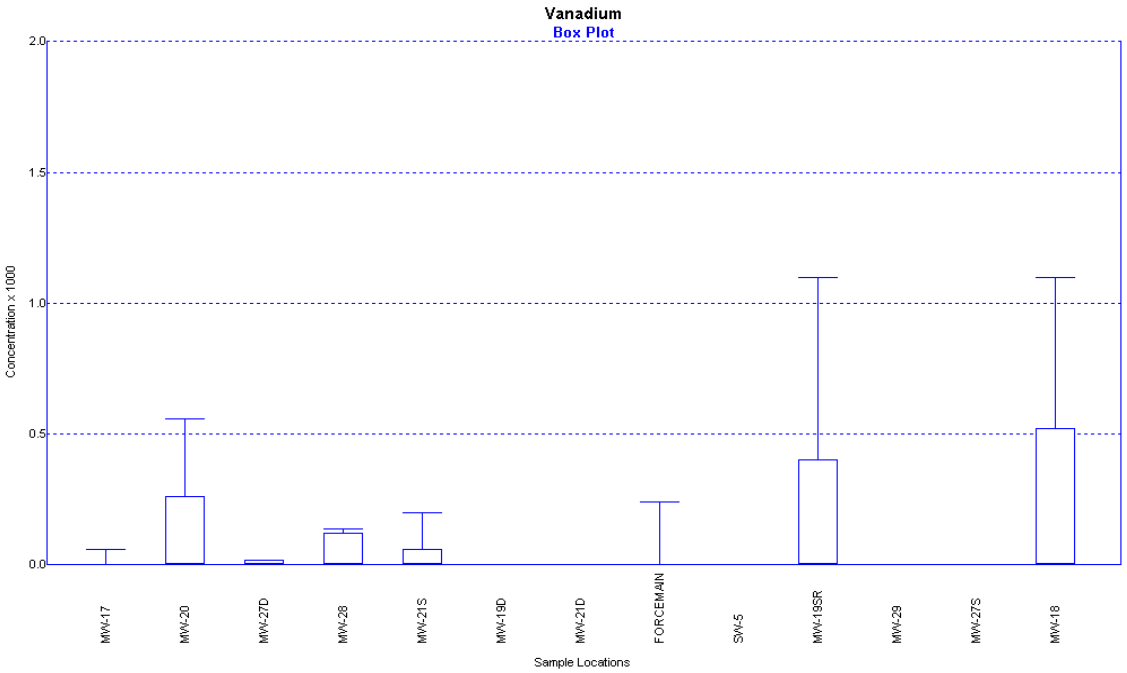
Constituent	None
None	-
Detection(s) per Scan	0.00

Total number of sampling events [n] = 17
Total number of detections in background wells [y] = 0
Number of comparisons (downgradient wells) [k] = 11
One-sided value of Student's t-statistic (95% confidence) [t] = 2.96
Expected number of detections in a single future sample [y*] = **0.52**

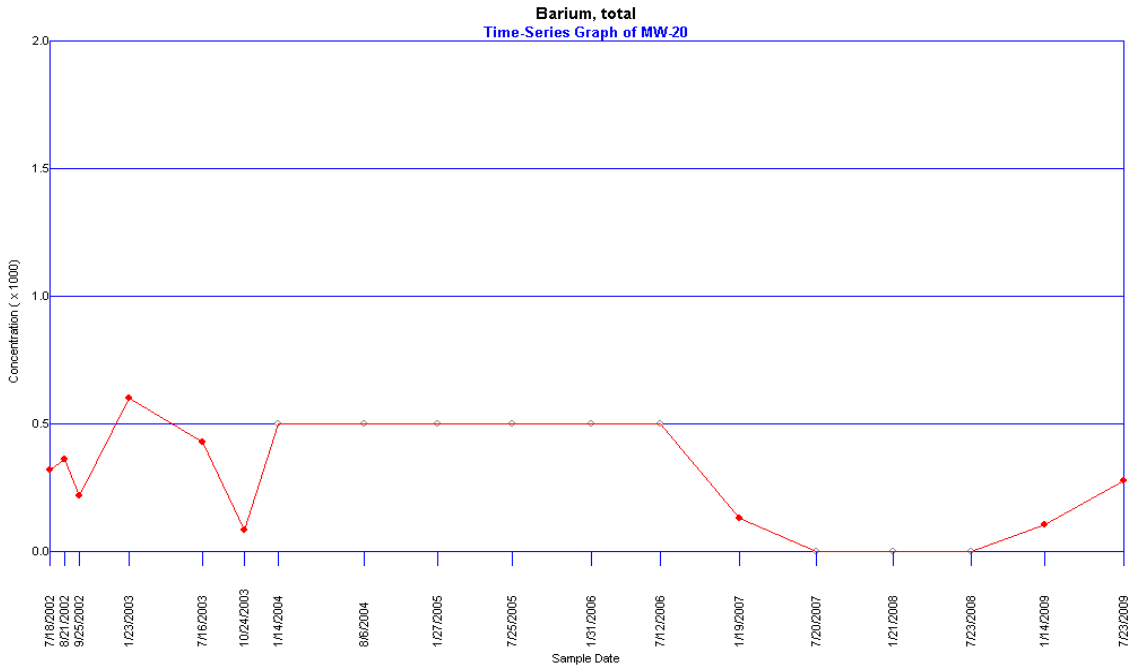
NO Statistically Significant VOC detections within Any Wells at a 95% confidence level

Box Plots for Select Constituents (Metals)
Iredell County Subtitle D MSWLF, Phase 3 & 4

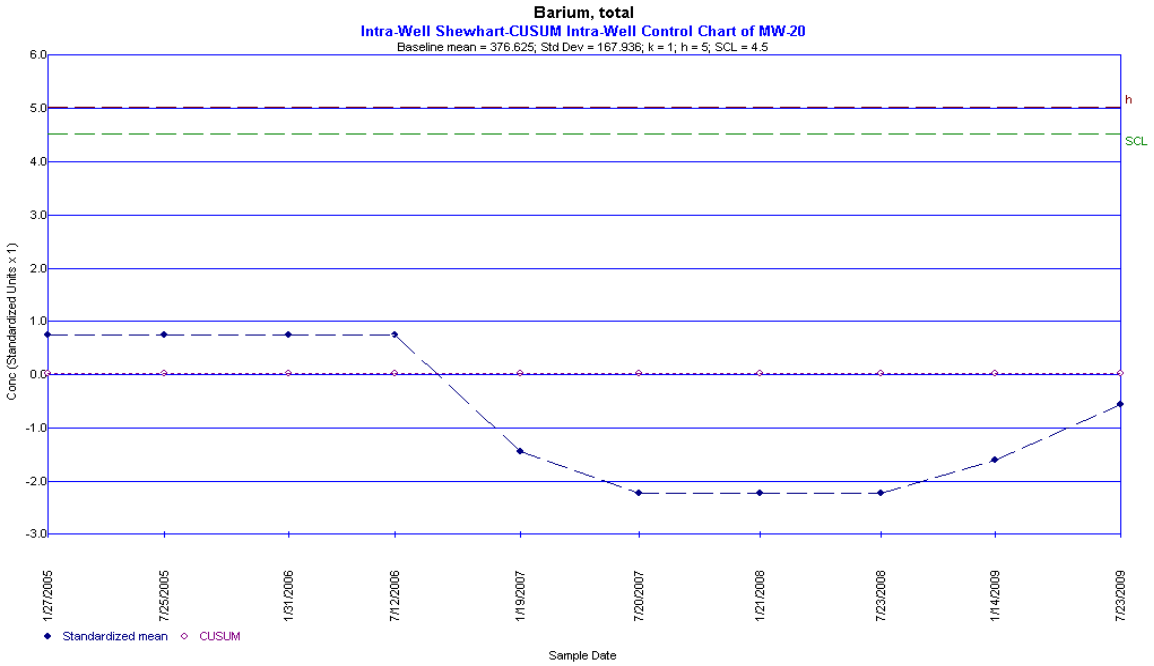




Time Series Plots for Select Constituents (Metals)
Iredell County Subtitle D MSWLF, Phase 3 & 4



Shewart-CUSUM charts for select constituents
Iredell County Subtitle D MSWLF, Phase 3 & 4



Basic Statistics

Basic Statistics

Parameter: Barium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
167	
Total Non-Detects	95
Pooled Mean	309.333
Pooled Std Dev	570.219
Background Mean	127.135
Background Std Dev	113.558

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-17	17	10	58.8235	2161.3

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-17	127.135	113.558	0	1306	76.8235

Compliance Wells

There are 12 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-21D	17	10	58.8235	1750.1
MW-19D	17	10	58.8235	1653.4
MW-29	6	6	100	1.8
MW-27D	6	6	100	1.8
MW-21S	17	9	52.9412	4927.6
MW-27S	6	6	100	1.8
SW-5	12	9	75	1329.6
MW-18	17	10	58.8235	10774.4
MW-20	17	8	47.0588	4026.2
MW-28	6	4	66.6667	533.6
MW-19SR	17	5	29.4118	16441
FORCEMAIN	12	2	16.6667	8056

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-21D	102.947	113.292	-24.1882	171.776	1245	73.2353
MW-19D	97.2588	117.119	-29.8765	171.776	1197	70.4118
MW-29	0.3	0.219089	-126.835	237.813	288	48
MW-27D	0.3	0.219089	-126.835	237.813	288	48
MW-21S	289.859	231.88	162.724	171.776	1547	91
MW-27S	0.3	0.219089	-126.835	237.813	288	48
SW-5	110.8	123.333	-16.3353	188.824	751	62.5833
MW-18	633.788	867.474	506.653	171.776	1493	87.8235
MW-20	236.835	149.783	109.7	171.776	1578	92.8235
MW-28	88.9333	137.528	-38.202	237.813	457	76.1667
MW-19SR	967.118	1211.19	839.982	171.776	1989	117
FORCEMAIN	671.333	301.595	544.198	188.824	1601	133.417

Analysis of Variance Statistics

SS Wells	1.535e+007
SS Total	5.39748e+007

Kruskal-Wallis Statistics

Non-Detect Rank	48
Background Rank Sum	1306
Background Rank Mean	76.8235
H Statistic	36.5298
H Adjusted for Ties	44.7709

Basic Statistics

Parameter: Beryllium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
167	
Total Non-Detects	136
Pooled Mean	2.18353
Pooled Std Dev	5.50643
Background Mean	0.688235
Background Std Dev	0.383051

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-17	17	15	88.2353	11.7

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-17	0.688235	0.383051	0	1305.5	76.7941

Compliance Wells

There are 12 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-27D	6	6	100	0.9
MW-28	6	4	66.6667	9
MW-27S	6	6	100	0.9
MW-18	17	12	70.5882	90.5
MW-29	6	3	50	4.25
MW-21S	17	11	64.7059	30.6
MW-21D	17	17	100	10.3
MW-20	17	12	70.5882	42.3
SW-5	12	12	100	7.3
MW-19SR	17	10	58.8235	134.9
MW-19D	17	17	100	10.3
FORCEMAIN	12	11	91.6667	11.7

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-27D	0.15	0.154919	-0.538235	2.4393	411	68.5
MW-28	1.5	2.26053	0.811765	2.4393	571	95.1667
MW-27S	0.15	0.154919	-0.538235	2.4393	411	68.5
MW-18	5.32353	8.24796	4.63529	1.76195	1625	95.5882
MW-29	0.708333	0.665895	0.020098	2.4393	623.5	103.917
MW-21S	1.8	2.24541	1.11176	1.76195	1637.5	96.3235
MW-21D	0.605882	0.331607	-0.0823529	1.76195	1164.5	68.5
MW-20	2.48824	3.28089	1.8	1.76195	1589	93.4706
SW-5	0.608333	0.376487	-0.079902	1.93681	822	68.5
MW-19SR	7.93529	12.9146	7.24706	1.76195	1799	105.824
MW-19D	0.605882	0.331607	-0.0823529	1.76195	1164.5	68.5
FORCEMAIN	0.975	1.29167	0.286765	1.93681	904.5	75.375

Analysis of Variance Statistics

SS Wells	969.52
SS Total	5033.25

Kruskal-Wallis Statistics

Non-Detect Rank	68.5
Background Rank Sum	1305.5
Background Rank Mean	76.7941
H Statistic	14.2532
H Adjusted for Ties	30.9908

Basic Statistics

Parameter: Cadmium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
167	
Total Non-Detects	137
Pooled Mean	1.5024
Pooled Std Dev	8.54598
Background Mean	0.478235
Background Std Dev	0.219637

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-17	17	16	94.1176	8.13

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-17	0.478235	0.219637	0	1245	73.2353

Compliance Wells

There are 12 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-21S	17	14	82.3529	13.73
MW-27D	6	6	100	1.29
MW-27S	6	5	83.3333	2.04
MW-21D	17	8	47.0588	37.25
MW-19SR	17	12	70.5882	128.43
MW-19D	17	17	100	7.43
MW-18	17	15	88.2353	12.53
MW-20	17	14	82.3529	11.63
SW-5	12	10	83.3333	6.48
MW-29	6	5	83.3333	2.54
MW-28	6	6	100	1.29
FORCEMAIN	12	9	75	18.13

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-21S	0.807647	1.1568	0.329412	2.94851	1415	83.2353
MW-27D	0.215	0.0383406	-0.263235	4.08202	414	69
MW-27S	0.34	0.325146	-0.138235	4.08202	483	80.5
MW-21D	2.19118	2.27756	1.71294	2.94851	1954	114.941
MW-19SR	7.55471	26.4422	7.07647	2.94851	1614	94.9412
MW-19D	0.437059	0.117939	-0.0411765	2.94851	1173	69
MW-18	0.737059	0.879792	0.258824	2.94851	1345	79.1176
MW-20	0.684118	0.682533	0.205882	2.94851	1408	82.8235
SW-5	0.54	0.310161	0.0617647	3.24112	973	81.0833
MW-29	0.423333	0.52857	-0.054902	4.08202	493	82.1667
MW-28	0.215	0.0383406	-0.263235	4.08202	414	69
FORCEMAIN	1.51083	2.42578	1.0326	3.24112	1097	91.4167

Analysis of Variance Statistics

SS Wells	743.551
SS Total	12123.6

Kruskal-Wallis Statistics

Non-Detect Rank	69
Background Rank Sum	1245
Background Rank Mean	73.2353
H Statistic	12.0186
H Adjusted for Ties	26.8323

Basic Statistics

Parameter: Chromium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
167	
Total Non-Detects	115
Pooled Mean	55.2778
Pooled Std Dev	162.87
Background Mean	12.2235
Background Std Dev	19.006

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-17	17	11	64.7059	207.8

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-17	12.2235	19.006	0	1442	84.8235

Compliance Wells

There are 12 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-27D	6	4	66.6667	50.2
MW-21S	17	9	52.9412	474.6
MW-29	6	6	100	3.7
MW-27S	6	5	83.3333	14.6
MW-19D	17	14	82.3529	53.5
MW-28	6	4	66.6667	99.7
MW-19SR	17	9	52.9412	2570.3
MW-20	17	11	64.7059	1766.2
MW-21D	17	12	70.5882	61.6
FORCEMAIN	12	9	75	230.7
SW-5	12	12	100	34.7
MW-18	17	9	52.9412	3663.8

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-27D	8.36667	12.4444	-3.85686	71.8854	503	83.8333
MW-21S	27.9176	42.8329	15.6941	51.9239	1652	97.1765
MW-29	0.616667	0.318852	-11.6069	71.8854	348	58
MW-27S	2.43333	4.64485	-9.7902	71.8854	419	69.8333
MW-19D	3.14706	2.0878	-9.07647	51.9239	1172	68.9412
MW-28	16.6167	25.2382	4.39314	71.8854	519	86.5
MW-19SR	151.194	256.854	138.971	51.9239	1751	103
MW-20	103.894	170.944	91.6706	51.9239	1552	91.2941
MW-21D	3.62353	2.06202	-8.6	51.9239	1300	76.4706
FORCEMAIN	19.225	44.8029	7.00147	57.0769	940	78.3333
SW-5	2.89167	2.2146	-9.33186	57.0769	696	58
MW-18	215.518	348.62	203.294	51.9239	1734	102

Analysis of Variance Statistics

SS Wells	874265
SS Total	4.40345e+006

Kruskal-Wallis Statistics

Non-Detect Rank	58
Background Rank Sum	1442
Background Rank Mean	84.8235
H Statistic	14.5965
H Adjusted for Ties	21.6736

Basic Statistics

Parameter: Zinc, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

	Total Observations
167	
Total Non-Detects	96
Pooled Mean	205.974
Pooled Std Dev	1283.4
Background Mean	36.3824
Background Std Dev	35.0163

Background Wells

There is 1 background well

Well	Samples	Non-Detects	% ND	Total
MW-17	17	9	52.9412	618.5

Well	Mean	Std Dev	Std Err	Rank Sum	Rank Mean
MW-17	36.3824	35.0163	0	1426.5	83.9118

Compliance Wells

There are 12 compliance wells

Well	Samples	Non-Detects	% ND	Total
MW-21D	17	10	58.8235	518.9
MW-18	17	11	64.7059	3215.4
MW-19D	17	13	76.4706	241.1
MW-29	6	3	50	68.7
SW-5	12	12	100	143.1
MW-27D	6	1	16.6667	161.5
MW-20	17	10	58.8235	1633.3
MW-21S	17	9	52.9412	944.2
MW-27S	6	5	83.3333	23.6
MW-19SR	17	8	47.0588	7448.1
MW-28	6	3	50	340.2
FORCEMAIN	12	2	16.6667	19041

Well	Mean	Std Dev	Dif From Bkg	Std Err	Rank Sum	Rank Mean
MW-21D	30.5235	24.5766	-5.85882	433.636	1360	80
MW-18	189.141	301.144	152.759	433.636	1427.5	83.9706
MW-19D	14.1824	10.7668	-22.2	433.636	1069.5	62.9118
MW-29	11.45	13.5512	-24.9324	600.342	479.5	79.9167
SW-5	11.925	11.6685	-24.4574	476.671	582	48.5
MW-27D	26.9167	21.6196	-9.46569	600.342	639.5	106.583
MW-20	96.0765	136.586	59.6941	433.636	1470	86.4706
MW-21S	55.5412	67.1625	19.1588	433.636	1500.5	88.2647
MW-27S	3.93333	6.54421	-32.449	600.342	351.5	58.5833
MW-19SR	438.124	872.361	401.741	433.636	1718	101.059
MW-28	56.7	80.258	20.3176	600.342	549.5	91.5833
FORCEMAIN	1586.75	4593.26	1550.37	476.671	1454	121.167

Analysis of Variance Statistics

SS Wells	2.7277e+007
SS Total	2.73422e+008

Kruskal-Wallis Statistics

Non-Detect Rank	48.5
Background Rank Sum	1426.5
Background Rank Mean	83.9118
H Statistic	22.3579
H Adjusted for Ties	27.6006

Interwell Analyses for Metals

Non-Parametric Tolerance Interval

Parameter: Barium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 45.098%
Background Samples (n) = 17
Maximum Background Concentration = 260
Minimum Coverage = 83.8%
Average Coverage = 94.4444%

Well	Sample	Result	Impacted
MW-20	7/18/2002	320	TRUE
MW-20	8/21/2002	360	TRUE
MW-20	9/25/2002	220	FALSE
MW-20	1/23/2003	600	TRUE
MW-20	7/16/2003	430	TRUE
MW-20	10/24/2003	83	FALSE
MW-20	1/14/2004	ND<250	FALSE
MW-20	8/6/2004	ND<250	FALSE
MW-20	1/27/2005	ND<250	FALSE
MW-20	7/25/2005	ND<250	FALSE
MW-20	1/31/2006	ND<250	FALSE
MW-20	7/12/2006	ND<250	FALSE
MW-20	1/19/2007	132	FALSE
MW-20	7/20/2007	ND<0.1	FALSE
MW-20	1/21/2008	ND<0.1	FALSE
MW-20	1/14/2009	103	FALSE
MW-20	7/23/2009	278	TRUE
MW-19SR	7/18/2002	3600	TRUE
MW-19SR	8/21/2002	1800	TRUE
MW-19SR	9/25/2002	3300	TRUE
MW-19SR	1/22/2003	910	TRUE
MW-19SR	7/18/2003	1200	TRUE
MW-19SR	10/24/2003	290	TRUE
MW-19SR	1/14/2004	ND<250	FALSE
MW-19SR	8/5/2004	ND<250	FALSE
MW-19SR	1/26/2005	ND<250	FALSE
MW-19SR	7/20/2005	ND<250	FALSE
MW-19SR	2/1/2006	3060	TRUE
MW-19SR	7/12/2006	ND<250	FALSE
MW-19SR	1/19/2007	156	FALSE
MW-19SR	7/20/2007	152	FALSE
MW-19SR	1/22/2008	378	TRUE
MW-19SR	1/14/2009	128	FALSE
MW-19SR	7/23/2009	217	FALSE

Non-Parametric Tolerance Interval

Parameter: Beryllium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 78.2609%
Background Samples (n) = 17
Maximum Background Concentration = 1.3
Minimum Coverage = 83.8%
Average Coverage = 94.4444%

Well	Sample	Result	Impacted
MW-29	3/20/2008	1.7	TRUE
MW-29	5/16/2008	ND<0.35	FALSE
MW-29	7/18/2008	ND<0.05	FALSE
MW-29	9/3/2008	1.1	FALSE
MW-29	1/14/2009	ND<0.05	FALSE
MW-29	7/23/2009	1	FALSE

Poisson Tolerance Limit

Parameter: Cadmium, total

Original Data (Not Transformed)
Non-Detects Replaced with Detection Limit

Poisson Count of 17 background Samples = 15.06
Degrees of Freedom = 32

95% Confidence Values

Chi-Squared Value (95% Confidence) = 46.1942
Lambda (from Zack's formula) = 1.35865
Smallest Degrees of Freedom = 8
Upper Tolerance Limit (95%) = 3

99% Confidence Values

Chi-Squared Value (99% Confidence) = 53.4857
Lambda (from Zack's formula) = 1.57311
Smallest Degrees of Freedom = 12
Upper Tolerance Limit (99%) = 5

	Date	Result	Impacted 95%	Impacted 99%
MW-29	3/20/2008	ND<0.5	FALSE	FALSE
	5/16/2008	ND<0.5	FALSE	FALSE
	7/18/2008	ND<0.36	FALSE	FALSE
	9/3/2008	ND<0.36	FALSE	FALSE
	1/14/2009	ND<0.36	FALSE	FALSE
	7/23/2009	1.5	FALSE	FALSE
MW-27S	3/20/2008	ND<0.5	FALSE	FALSE
	5/16/2008	ND<0.5	FALSE	FALSE
	7/18/2008	ND<0.36	FALSE	FALSE
	9/3/2008	ND<0.36	FALSE	FALSE
	1/14/2009	ND<0.36	FALSE	FALSE
	7/23/2009	1	FALSE	FALSE

Non-Parametric Tolerance Interval

Parameter: Chromium, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 58.8235%
Background Samples (n) = 17
Maximum Background Concentration = 72
Minimum Coverage = 83.8%
Average Coverage = 94.4444%

Well	Sample	Result	Impacted
MW-18	7/18/2002	620	TRUE
MW-18	8/21/2002	740	TRUE
MW-18	9/25/2002	1000	TRUE
MW-18	1/23/2003	790	TRUE
MW-18	7/16/2003	420	TRUE
MW-18	10/24/2003	9.2	FALSE
MW-18	1/14/2004	ND<5	FALSE
MW-18	8/6/2004	ND<5	FALSE
MW-18	1/27/2005	ND<5	FALSE
MW-18	7/25/2005	ND<5	FALSE
MW-18	1/31/2006	ND<5	FALSE
MW-18	7/12/2006	ND<5	FALSE
MW-18	1/19/2007	ND<5	FALSE
MW-18	7/20/2007	ND<1	FALSE
MW-18	1/21/2008	ND<1	FALSE
MW-18	1/14/2009	35.9	FALSE
MW-18	7/23/2009	11.7	FALSE

Non-Parametric Tolerance Interval

Parameter: Zinc, total

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Total Percent Non-Detects = 55.8824%
Background Samples (n) = 17
Maximum Background Concentration = 130
Minimum Coverage = 83.8%
Average Coverage = 94.4444%

Well	Sample	Result	Impacted
MW-20	7/18/2002	370	TRUE
MW-20	8/21/2002	220	TRUE
MW-20	9/25/2002	240	TRUE
MW-20	1/23/2003	410	TRUE
MW-20	7/16/2003	200	TRUE
MW-20	10/24/2003	16	FALSE
MW-20	1/14/2004	ND<25	FALSE
MW-20	8/6/2004	ND<25	FALSE
MW-20	1/27/2005	ND<25	FALSE
MW-20	7/25/2005	ND<25	FALSE
MW-20	1/31/2006	ND<25	FALSE
MW-20	7/12/2006	ND<25	FALSE
MW-20	1/19/2007	ND<5	FALSE
MW-20	7/20/2007	ND<0.5	FALSE
MW-20	1/21/2008	ND<0.5	FALSE
MW-20	1/14/2009	ND<1.9	FALSE
MW-20	7/23/2009	19.4	FALSE

Laboratory Results

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

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

August 06, 2009

Mr. Jonathan Pfohl
Municipal Engineering Services
PO Box 97
Garner, NC 27529

RE: Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Dear Mr. Pfohl:
Enclosed are the analytical results for sample(s) received by the laboratory between July 22, 2009 and July 24, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

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

Sincerely,

Bonnie McKee

Bonnie McKee

bonnie.mckee@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Charlotte Certification IDs

Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84

Asheville Certification IDs

Connecticut Certification #: PH-0106
Virginia Certification #: 00072
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
West Virginia Certification #: 356
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095
Florida/NELAP Certification #: E87648
North Carolina Wastewater Certification #: 40

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SAMPLE SUMMARY

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9249223001	**FORCE MAIN**	Water	07/22/09 14:00	07/22/09 16:40
9249223002	**MW-17**	Water	07/23/09 11:00	07/24/09 14:00
9249223003	**MW-18**	Water	07/23/09 18:00	07/24/09 14:00
9249223004	**MW-19SR**	Water	07/23/09 15:55	07/24/09 14:00
9249223005	**MW-19D**	Water	07/23/09 15:15	07/24/09 14:00
9249223006	**MW-20**	Water	07/23/09 15:30	07/24/09 14:00
9249223007	**MW-21S**	Water	07/23/09 12:00	07/24/09 14:00
9249223008	**MW-21D**	Water	07/23/09 11:30	07/24/09 14:00
9249223009	**MW-27S**	Water	07/23/09 16:50	07/24/09 14:00
9249223010	**MW-27D**	Water	07/23/09 16:25	07/24/09 14:00
9249223011	**MW-28**	Water	07/23/09 14:40	07/24/09 14:00
9249223012	**MW-29**	Water	07/23/09 17:30	07/24/09 14:00

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SAMPLE ANALYTE COUNT

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9249223001	**FORCE MAIN**	ASTM D516-90	LEP	1	PASI-A
		EPA 353.2	DMN	1	PASI-A
		EPA 365.1	DMN	1	PASI-A
		EPA 6010	SHB	15	PASI-A
		EPA 8260	AW	54	PASI-C
		EPA 9040	TEE	1	PASI-A
		SM 5210B	TEE	1	PASI-A
		SM 5220D	TEE	1	PASI-A
9249223002	**MW-17**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223003	**MW-18**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223004	**MW-19SR**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223005	**MW-19D**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223006	**MW-20**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223007	**MW-21S**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223008	**MW-21D**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223009	**MW-27S**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223010	**MW-27D**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223011	**MW-28**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C
9249223012	**MW-29**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: FORCE MAIN **Lab ID: 9249223001** Collected: 07/22/09 14:00 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	**3.7J**	ug/L	6.0	2.6	1	07/24/09 11:55	07/25/09 03:24	7440-36-0	
Arsenic	**7.0J**	ug/L	10.0	2.7	1	07/24/09 11:55	07/25/09 03:24	7440-38-2	
Barium	**618**	ug/L	100	0.20	1	07/24/09 11:55	07/25/09 03:24	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/24/09 11:55	07/25/09 03:24	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/24/09 11:55	07/25/09 03:24	7440-43-9	
Chromium	**23.2**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:24	7440-47-3	Z2
Cobalt	**2.8J**	ug/L	10.0	0.60	1	07/24/09 11:55	07/25/09 03:24	7440-48-4	
Copper	**173**	ug/L	10.0	0.30	1	07/24/09 11:55	07/25/09 03:24	7440-50-8	
Lead	**7.5J**	ug/L	10.0	4.0	1	07/24/09 11:55	07/25/09 03:24	7439-92-1	
Nickel	**88.6**	ug/L	50.0	1.7	1	07/24/09 11:55	07/25/09 03:24	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/24/09 11:55	07/25/09 03:24	7782-49-2	
Silver	**0.22J**	ug/L	10.0	0.10	1	07/24/09 11:55	07/25/09 03:24	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/24/09 11:55	07/25/09 03:24	7440-28-0	
Vanadium	**13.2J**	ug/L	25.0	0.20	1	07/24/09 11:55	07/25/09 03:24	7440-62-2	
Zinc	**93.0**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:24	7440-66-6	Z2
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**323J**	ug/L	500	10.8	5		07/27/09 23:44	67-64-1	
Acrylonitrile	ND	ug/L	1000	9.4	5		07/27/09 23:44	107-13-1	
Benzene	**7.5**	ug/L	5.0	1.2	5		07/27/09 23:44	71-43-2	
Bromochloromethane	ND	ug/L	15.0	0.85	5		07/27/09 23:44	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	0.90	5		07/27/09 23:44	75-27-4	
Bromoform	ND	ug/L	15.0	1.3	5		07/27/09 23:44	75-25-2	
Bromomethane	ND	ug/L	50.0	1.4	5		07/27/09 23:44	74-83-9	
2-Butanone (MEK)	**585**	ug/L	500	4.8	5		07/27/09 23:44	78-93-3	
Carbon disulfide	ND	ug/L	500	5.8	5		07/27/09 23:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1.2	5		07/27/09 23:44	56-23-5	
Chlorobenzene	ND	ug/L	15.0	1.2	5		07/27/09 23:44	108-90-7	
Chloroethane	ND	ug/L	50.0	2.7	5		07/27/09 23:44	75-00-3	
Chloroform	ND	ug/L	25.0	0.70	5		07/27/09 23:44	67-66-3	
Chloromethane	ND	ug/L	5.0	0.55	5		07/27/09 23:44	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	65.0	12.6	5		07/27/09 23:44	96-12-8	
Dibromochloromethane	ND	ug/L	15.0	1.0	5		07/27/09 23:44	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1.4	5		07/27/09 23:44	106-93-4	
Dibromomethane	ND	ug/L	50.0	1.0	5		07/27/09 23:44	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	25.0	1.5	5		07/27/09 23:44	95-50-1	
1,4-Dichlorobenzene	**2.2J**	ug/L	5.0	1.6	5		07/27/09 23:44	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	500	5.0	5		07/27/09 23:44	110-57-6	
1,1-Dichloroethane	ND	ug/L	25.0	1.6	5		07/27/09 23:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.60	5		07/27/09 23:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	25.0	2.8	5		07/27/09 23:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	25.0	0.95	5		07/27/09 23:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	25.0	2.4	5		07/27/09 23:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	1.4	5		07/27/09 23:44	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	1.4	5		07/27/09 23:44	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	5.0	0.65	5		07/27/09 23:44	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: FORCE MAIN **Lab ID: 9249223001** Collected: 07/22/09 14:00 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	5.0	1.3	5		07/27/09 23:44	10061-02-6	
Ethylbenzene	**25.6**	ug/L	5.0	1.5	5		07/27/09 23:44	100-41-4	
2-Hexanone	ND	ug/L	250	2.3	5		07/27/09 23:44	591-78-6	
Iodomethane	ND	ug/L	50.0	1.6	5		07/27/09 23:44	74-88-4	
Methylene Chloride	**13.9**	ug/L	10.0	4.8	5		07/27/09 23:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	**17.6J**	ug/L	500	1.6	5		07/27/09 23:44	108-10-1	
Styrene	ND	ug/L	5.0	1.3	5		07/27/09 23:44	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	25.0	1.6	5		07/27/09 23:44	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	15.0	2.0	5		07/27/09 23:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	2.3	5		07/27/09 23:44	127-18-4	
Toluene	**22.1**	ug/L	5.0	1.3	5		07/27/09 23:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	2.4	5		07/27/09 23:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	1.4	5		07/27/09 23:44	79-00-5	
Trichloroethene	ND	ug/L	5.0	2.4	5		07/27/09 23:44	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1.0	5		07/27/09 23:44	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	2.0	5		07/27/09 23:44	96-18-4	
Vinyl acetate	ND	ug/L	250	1.8	5		07/27/09 23:44	108-05-4	
Vinyl chloride	ND	ug/L	5.0	3.1	5		07/27/09 23:44	75-01-4	
Xylene (Total)	**44.3**	ug/L	25.0	3.3	5		07/27/09 23:44	1330-20-7	
m&p-Xylene	**31.3**	ug/L	10.0	3.3	5		07/27/09 23:44	1330-20-7	
o-Xylene	**13.0**	ug/L	5.0	1.2	5		07/27/09 23:44	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		5		07/27/09 23:44	460-00-4	
Dibromofluoromethane (S)	104	%	85-115		5		07/27/09 23:44	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		5		07/27/09 23:44	17060-07-0	
Toluene-d8 (S)	101	%	70-120		5		07/27/09 23:44	2037-26-5	
5210B BOD, 5 day	Analytical Method: SM 5210B								
BOD, 5 day	**148**	mg/L	2.0	2.0	1	07/23/09 20:00	07/28/09 18:00		
9040 pH	Analytical Method: EPA 9040								
pH	**7.0**	Std. Units	0.10	0.10	1		07/24/09 19:25		H6
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	ug/L	100	100	1		07/23/09 22:27		
365.1 Phosphorus, Total	Analytical Method: EPA 365.1								
Phosphorus	ND	ug/L	100	100	1		07/25/09 07:36	7723-14-0	
5220D COD	Analytical Method: SM 5220D								
Chemical Oxygen Demand	**675000**	ug/L	25000	25000	1		07/24/09 16:10		
ASTM D516-90 Sulfate Water	Analytical Method: ASTM D516-90								
Sulfate	**5900**	ug/L	5000	5000	1		07/28/09 13:39	14808-79-8	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-17 **Lab ID: 9249223002** Collected: 07/23/09 11:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:28	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:28	7440-38-2	
Barium	**34.3J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:28	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:28	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:28	7440-43-9	
Chromium	**2.2J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:28	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:28	7440-48-4	
Copper	**1.4J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:28	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:28	7439-92-1	
Nickel	**2.2J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:28	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:28	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:28	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:28	7440-28-0	
Vanadium	**2.4J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:28	7440-62-2	
Zinc	**9.5J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:28	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/31/09 09:16	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/31/09 09:16	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/31/09 09:16	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/31/09 09:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/31/09 09:16	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/31/09 09:16	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/31/09 09:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/31/09 09:16	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/31/09 09:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/31/09 09:16	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/31/09 09:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/31/09 09:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/31/09 09:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/31/09 09:16	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/31/09 09:16	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/31/09 09:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/31/09 09:16	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/31/09 09:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/31/09 09:16	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/31/09 09:16	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/31/09 09:16	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/31/09 09:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/31/09 09:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/31/09 09:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/31/09 09:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/31/09 09:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/31/09 09:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/31/09 09:16	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/31/09 09:16	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-17 **Lab ID: 9249223002** Collected: 07/23/09 11:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/31/09 09:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/31/09 09:16	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/31/09 09:16	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/31/09 09:16	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/31/09 09:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/31/09 09:16	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/31/09 09:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/31/09 09:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/31/09 09:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/31/09 09:16	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/31/09 09:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/31/09 09:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/31/09 09:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/31/09 09:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/31/09 09:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/31/09 09:16	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/31/09 09:16	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/31/09 09:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/31/09 09:16	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/31/09 09:16	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/31/09 09:16	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/31/09 09:16	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/31/09 09:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	79-120		1		07/31/09 09:16	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		07/31/09 09:16	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-18 **Lab ID: 9249223003** Collected: 07/23/09 18:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:32	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:32	7440-38-2	
Barium	**35.8J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:32	7440-39-3	
Beryllium	**0.19J**	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:32	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:32	7440-43-9	
Chromium	**11.7**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:32	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:32	7440-48-4	
Copper	**7.7J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:32	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:32	7439-92-1	
Nickel	**5.3J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:32	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:32	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:32	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:32	7440-28-0	
Vanadium	**11.8J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:32	7440-62-2	
Zinc	**3.9J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:32	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 15:16	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 15:16	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 15:16	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 15:16	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 15:16	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 15:16	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 15:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 15:16	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 15:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 15:16	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 15:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 15:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 15:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 15:16	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 15:16	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 15:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 15:16	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 15:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 15:16	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 15:16	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 15:16	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 15:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 15:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 15:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 15:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 15:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 15:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 15:16	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 15:16	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-18 **Lab ID: 9249223003** Collected: 07/23/09 18:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 15:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 15:16	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 15:16	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 15:16	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 15:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 15:16	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 15:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 15:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 15:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 15:16	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 15:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 15:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 15:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 15:16	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 15:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 15:16	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 15:16	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 15:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 15:16	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 15:16	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 15:16	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 15:16	460-00-4	
Dibromofluoromethane (S)	103	%	85-115		1		07/29/09 15:16	1868-53-7	
1,2-Dichloroethane-d4 (S)	110	%	79-120		1		07/29/09 15:16	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/29/09 15:16	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-19SR **Lab ID: 9249223004** Collected: 07/23/09 15:55 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:36	7440-36-0	
Arsenic	**9.3J**	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:36	7440-38-2	
Barium	**217**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:36	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:36	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:36	7440-43-9	
Chromium	**2.2J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:36	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:36	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:36	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:36	7439-92-1	
Nickel	**2.5J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:36	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:36	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:36	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:36	7440-28-0	
Vanadium	**3.6J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:36	7440-62-2	
Zinc	ND	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:36	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 15:35	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 15:35	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 15:35	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 15:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 15:35	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 15:35	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 15:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 15:35	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 15:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 15:35	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 15:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 15:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 15:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 15:35	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 15:35	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 15:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 15:35	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 15:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 15:35	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 15:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 15:35	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 15:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 15:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 15:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 15:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 15:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 15:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 15:35	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 15:35	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-19SR **Lab ID: 9249223004** Collected: 07/23/09 15:55 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 15:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 15:35	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 15:35	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 15:35	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 15:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 15:35	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 15:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 15:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 15:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 15:35	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 15:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 15:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 15:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 15:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 15:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 15:35	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 15:35	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 15:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 15:35	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 15:35	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 15:35	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/29/09 15:35	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/29/09 15:35	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 15:35	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/29/09 15:35	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-19D **Lab ID: 9249223005** Collected: 07/23/09 15:15 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:40	7440-36-0	
Arsenic	**3.0J**	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:40	7440-38-2	
Barium	**1.8J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:40	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:40	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:40	7440-43-9	
Chromium	**0.72J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:40	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:40	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:40	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:40	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:40	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:40	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:40	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:40	7440-28-0	
Vanadium	**2.1J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:40	7440-62-2	
Zinc	ND	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:40	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 15:54	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 15:54	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 15:54	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 15:54	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 15:54	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 15:54	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 15:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 15:54	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 15:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 15:54	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 15:54	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 15:54	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 15:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 15:54	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 15:54	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 15:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 15:54	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 15:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 15:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 15:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 15:54	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 15:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 15:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 15:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 15:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 15:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 15:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 15:54	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 15:54	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-19D **Lab ID: 9249223005** Collected: 07/23/09 15:15 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 15:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 15:54	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 15:54	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 15:54	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 15:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 15:54	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 15:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 15:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 15:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 15:54	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 15:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 15:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 15:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 15:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 15:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 15:54	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 15:54	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 15:54	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 15:54	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 15:54	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 15:54	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/29/09 15:54	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/29/09 15:54	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120		1		07/29/09 15:54	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		07/29/09 15:54	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-20 **Lab ID: 9249223006** Collected: 07/23/09 15:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:44	7440-36-0	
Arsenic	**5.1J**	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:44	7440-38-2	
Barium	**278**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:44	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:44	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:44	7440-43-9	
Chromium	**2.6J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:44	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:44	7440-48-4	
Copper	**0.79J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:44	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:44	7439-92-1	
Nickel	**22.2J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:44	7440-02-0	
Selenium	**6.4J**	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:44	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:44	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:44	7440-28-0	
Vanadium	**7.0J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:44	7440-62-2	
Zinc	**19.4**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:44	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 16:13	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 16:13	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 16:13	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 16:13	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 16:13	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 16:13	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 16:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 16:13	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 16:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 16:13	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 16:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 16:13	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 16:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 16:13	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 16:13	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 16:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 16:13	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 16:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 16:13	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 16:13	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 16:13	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 16:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 16:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 16:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 16:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 16:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 16:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 16:13	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 16:13	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-20 **Lab ID: 9249223006** Collected: 07/23/09 15:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 16:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 16:13	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 16:13	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 16:13	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 16:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 16:13	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 16:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 16:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 16:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 16:13	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 16:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 16:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 16:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 16:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 16:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 16:13	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 16:13	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 16:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 16:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 16:13	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 16:13	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 16:13	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/29/09 16:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120		1		07/29/09 16:13	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		07/29/09 16:13	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-21S **Lab ID: 9249223007** Collected: 07/23/09 12:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 04:49	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 04:49	7440-38-2	
Barium	**44.0J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 04:49	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 04:49	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 04:49	7440-43-9	
Chromium	**1.2J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:49	7440-47-3	
Cobalt	**2.7J**	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 04:49	7440-48-4	
Copper	**1.6J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 04:49	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 04:49	7439-92-1	
Nickel	**2.4J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 04:49	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 04:49	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 04:49	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 04:49	7440-28-0	
Vanadium	**1.0J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 04:49	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 04:49	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	**15.0J**	ug/L	100	2.2	1		07/29/09 16:32	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 16:32	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 16:32	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 16:32	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 16:32	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 16:32	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 16:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 16:32	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 16:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 16:32	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 16:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 16:32	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 16:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 16:32	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 16:32	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 16:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 16:32	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 16:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 16:32	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 16:32	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 16:32	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 16:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 16:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 16:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 16:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 16:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 16:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 16:32	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 16:32	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-21S **Lab ID: 9249223007** Collected: 07/23/09 12:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 16:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 16:32	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 16:32	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 16:32	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 16:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 16:32	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 16:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 16:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 16:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 16:32	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 16:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 16:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 16:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 16:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 16:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 16:32	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 16:32	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 16:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 16:32	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 16:32	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 16:32	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 16:32	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/29/09 16:32	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 16:32	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/29/09 16:32	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-21D **Lab ID: 9249223008** Collected: 07/23/09 11:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:03	7440-36-0	
Arsenic	**3.3J**	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:03	7440-38-2	
Barium	**13.5J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:03	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:03	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:03	7440-43-9	
Chromium	**1.1J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:03	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:03	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:03	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:03	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:03	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:03	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:03	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:03	7440-28-0	
Vanadium	**1.5J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:03	7440-62-2	
Zinc	**0.42J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:03	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 16:51	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 16:51	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 16:51	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 16:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 16:51	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 16:51	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 16:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 16:51	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 16:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 16:51	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 16:51	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 16:51	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 16:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 16:51	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 16:51	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 16:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 16:51	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 16:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 16:51	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 16:51	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 16:51	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 16:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 16:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 16:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 16:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 16:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 16:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 16:51	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 16:51	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-21D **Lab ID: 9249223008** Collected: 07/23/09 11:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 16:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 16:51	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 16:51	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 16:51	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 16:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 16:51	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 16:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 16:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 16:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 16:51	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 16:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 16:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 16:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 16:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 16:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 16:51	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 16:51	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 16:51	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 16:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 16:51	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 16:51	95-47-6	
4-Bromofluorobenzene (S)	100	%	87-109		1		07/29/09 16:51	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/29/09 16:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120		1		07/29/09 16:51	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/29/09 16:51	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-27S **Lab ID: 9249223009** Collected: 07/23/09 16:50 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:07	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:07	7440-38-2	
Barium	**23.3J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:07	7440-39-3	
Beryllium	**0.14J**	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:07	7440-41-7	
Cadmium	**1.0**	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:07	7440-43-9	
Chromium	**1.1J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:07	7440-47-3	
Cobalt	**1.0J**	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:07	7440-48-4	
Copper	**0.96J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:07	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:07	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:07	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:07	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:07	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:07	7440-28-0	
Vanadium	**1.9J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:07	7440-62-2	
Zinc	**4.4J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:07	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 17:09	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 17:09	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 17:09	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 17:09	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 17:09	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 17:09	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 17:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 17:09	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 17:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 17:09	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 17:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 17:09	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 17:09	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 17:09	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 17:09	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 17:09	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 17:09	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 17:09	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 17:09	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 17:09	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 17:09	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 17:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 17:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 17:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 17:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 17:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 17:09	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 17:09	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 17:09	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-27S **Lab ID: 9249223009** Collected: 07/23/09 16:50 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 17:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 17:09	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 17:09	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 17:09	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 17:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 17:09	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 17:09	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 17:09	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 17:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 17:09	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 17:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 17:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 17:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 17:09	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 17:09	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 17:09	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 17:09	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 17:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 17:09	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 17:09	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 17:09	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 17:09	460-00-4	
Dibromofluoromethane (S)	103	%	85-115		1		07/29/09 17:09	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120		1		07/29/09 17:09	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		07/29/09 17:09	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-27D **Lab ID: 9249223010** Collected: 07/23/09 16:25 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:11	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:11	7440-38-2	
Barium	**18.7J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:11	7440-39-3	
Beryllium	**0.29J**	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:11	7440-41-7	
Cadmium	**0.71J**	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:11	7440-43-9	
Chromium	**7.5J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:11	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:11	7440-48-4	
Copper	**0.71J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:11	7440-50-8	
Lead	**4.0J**	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:11	7439-92-1	
Nickel	**4.4J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:11	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:11	7782-49-2	
Silver	**0.18J**	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:11	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:11	7440-28-0	
Vanadium	**9.6J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:11	7440-62-2	
Zinc	**5.5J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:11	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 17:28	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 17:28	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 17:28	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 17:28	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 17:28	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 17:28	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 17:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 17:28	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 17:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 17:28	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 17:28	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 17:28	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 17:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 17:28	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 17:28	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 17:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 17:28	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 17:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 17:28	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 17:28	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 17:28	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 17:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 17:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 17:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 17:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 17:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 17:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 17:28	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 17:28	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-27D **Lab ID: 9249223010** Collected: 07/23/09 16:25 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 17:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 17:28	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 17:28	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 17:28	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 17:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 17:28	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 17:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 17:28	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 17:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 17:28	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 17:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 17:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 17:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 17:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 17:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 17:28	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 17:28	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 17:28	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 17:28	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 17:28	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 17:28	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/29/09 17:28	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/29/09 17:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 17:28	17060-07-0	
Toluene-d8 (S)	101	%	70-120		1		07/29/09 17:28	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-28 **Lab ID: 9249223011** Collected: 07/23/09 14:40 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:19	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:19	7440-38-2	
Barium	**10.2J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:19	7440-39-3	
Beryllium	**0.11J**	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:19	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:19	7440-43-9	
Chromium	**1.9J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:19	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:19	7440-48-4	
Copper	**5.4J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:19	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:19	7439-92-1	
Nickel	**2.5J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:19	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:19	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:19	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:19	7440-28-0	
Vanadium	**4.9J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:19	7440-62-2	
Zinc	**2.9J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:19	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 18:06	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 18:06	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 18:06	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 18:06	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 18:06	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 18:06	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 18:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 18:06	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 18:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 18:06	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 18:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 18:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 18:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 18:06	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 18:06	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 18:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 18:06	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 18:06	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 18:06	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 18:06	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 18:06	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 18:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 18:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 18:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 18:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 18:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 18:06	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 18:06	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 18:06	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-28 **Lab ID: 9249223011** Collected: 07/23/09 14:40 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 18:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 18:06	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 18:06	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 18:06	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 18:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 18:06	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 18:06	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 18:06	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 18:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 18:06	127-18-4	
Toluene	**0.70J**	ug/L	1.0	0.26	1		07/29/09 18:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 18:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 18:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 18:06	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 18:06	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 18:06	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 18:06	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 18:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 18:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 18:06	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 18:06	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 18:06	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/29/09 18:06	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 18:06	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		07/29/09 18:06	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-29 **Lab ID: 9249223012** Collected: 07/23/09 17:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:23	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:23	7440-38-2	
Barium	**53.3J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:23	7440-39-3	
Beryllium	**1.0**	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:23	7440-41-7	
Cadmium	**1.5**	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:23	7440-43-9	
Chromium	**5.1J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:23	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:23	7440-48-4	
Copper	**1.4J**	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:23	7440-50-8	
Lead	**4.5J**	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:23	7439-92-1	
Nickel	**2.7J**	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:23	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:23	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:23	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:23	7440-28-0	
Vanadium	**6.7J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:23	7440-62-2	
Zinc	**8.9J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:23	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 18:25	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 18:25	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 18:25	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 18:25	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 18:25	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 18:25	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 18:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 18:25	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 18:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 18:25	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 18:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 18:25	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 18:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 18:25	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 18:25	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 18:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 18:25	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 18:25	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 18:25	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 18:25	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 18:25	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 18:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 18:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 18:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 18:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 18:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 18:25	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 18:25	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 18:25	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

Sample: MW-29 **Lab ID: 9249223012** Collected: 07/23/09 17:30 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 18:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 18:25	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 18:25	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 18:25	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 18:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 18:25	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 18:25	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 18:25	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 18:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 18:25	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 18:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 18:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 18:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 18:25	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 18:25	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 18:25	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 18:25	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 18:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 18:25	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 18:25	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 18:25	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/29/09 18:25	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/29/09 18:25	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 18:25	17060-07-0	
Toluene-d8 (S)	100	%	70-120		1		07/29/09 18:25	2037-26-5	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: MPRP/4816 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9249223002, 9249223003, 9249223004, 9249223005, 9249223006, 9249223007, 9249223008, 9249223009, 9249223010, 9249223011, 9249223012

METHOD BLANK: 314249 Matrix: Water
Associated Lab Samples: 9249223002, 9249223003, 9249223004, 9249223005, 9249223006, 9249223007, 9249223008, 9249223009, 9249223010, 9249223011, 9249223012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	08/02/09 03:54	
Arsenic	ug/L	ND	10.0	08/02/09 03:54	
Barium	ug/L	ND	100	08/02/09 03:54	
Beryllium	ug/L	ND	1.0	08/02/09 03:54	
Cadmium	ug/L	ND	1.0	08/02/09 03:54	
Chromium	ug/L	ND	10.0	08/02/09 03:54	
Cobalt	ug/L	ND	10.0	08/02/09 03:54	
Copper	ug/L	ND	10.0	08/02/09 03:54	
Lead	ug/L	ND	10.0	08/02/09 03:54	
Nickel	ug/L	ND	50.0	08/02/09 03:54	
Selenium	ug/L	ND	10.0	08/02/09 03:54	
Silver	ug/L	ND	10.0	08/02/09 03:54	
Thallium	ug/L	ND	5.5	08/02/09 03:54	
Vanadium	ug/L	ND	25.0	08/02/09 03:54	
Zinc	ug/L	ND	10.0	08/02/09 03:54	

LABORATORY CONTROL SAMPLE: 314250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	495	99	80-120	
Arsenic	ug/L	500	493	99	80-120	
Barium	ug/L	500	480	96	80-120	
Beryllium	ug/L	500	493	99	80-120	
Cadmium	ug/L	500	509	102	80-120	
Chromium	ug/L	500	522	104	80-120	
Cobalt	ug/L	500	509	102	80-120	
Copper	ug/L	500	474	95	80-120	
Lead	ug/L	500	503	101	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	486	97	80-120	
Silver	ug/L	250	245	98	80-120	
Thallium	ug/L	500	467	93	80-120	
Vanadium	ug/L	500	494	99	80-120	
Zinc	ug/L	500	504	101	80-120	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

MATRIX SPIKE SAMPLE: 314251

Parameter	Units	9249227014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	492	98	75-125	
Arsenic	ug/L	3.9J	500	498	99	75-125	
Barium	ug/L	86.5J	500	561	95	75-125	
Beryllium	ug/L	0.45J	500	506	101	75-125	
Cadmium	ug/L	0.54J	500	508	101	75-125	
Chromium	ug/L	4.9J	500	527	104	75-125	
Cobalt	ug/L	ND	500	499	100	75-125	
Copper	ug/L	15.5	500	498	96	75-125	
Lead	ug/L	ND	500	496	99	75-125	
Nickel	ug/L	5.5J	500	512	101	75-125	
Selenium	ug/L	ND	500	490	98	75-125	
Silver	ug/L	ND	250	245	98	75-125	
Thallium	ug/L	ND	500	457	91	75-125	
Vanadium	ug/L	22.1J	500	517	99	75-125	
Zinc	ug/L	19.3	500	533	103	75-125	

SAMPLE DUPLICATE: 314252

Parameter	Units	9249032001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		25	
Arsenic	ug/L	ND	ND		25	
Barium	ug/L	136	137	.7	25	
Beryllium	ug/L	ND	ND		25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	ND	ND		25	
Cobalt	ug/L	10.2	10.3	1	25	
Copper	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	
Nickel	ug/L	28.9	28.9J	0	25	
Selenium	ug/L	ND	ND		25	
Silver	ug/L	ND	ND		25	
Thallium	ug/L	ND	ND		25	
Vanadium	ug/L	ND	1.3J		25	
Zinc	ug/L	25.7	21.8	16	25	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: MSV/7753
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9249223001

METHOD BLANK: 313676
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/26/09 12:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	07/26/09 12:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,1-Dichloroethane	ug/L	ND	5.0	07/26/09 12:21	
1,1-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	07/26/09 12:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/26/09 12:21	
1,2-Dichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,3-Dichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/26/09 12:21	
2-Butanone (MEK)	ug/L	ND	100	07/26/09 12:21	
2-Hexanone	ug/L	ND	50.0	07/26/09 12:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	07/26/09 12:21	
Acetone	ug/L	ND	100	07/26/09 12:21	
Acrylonitrile	ug/L	ND	200	07/26/09 12:21	
Benzene	ug/L	ND	1.0	07/26/09 12:21	
Bromochloromethane	ug/L	ND	3.0	07/26/09 12:21	
Bromodichloromethane	ug/L	ND	1.0	07/26/09 12:21	
Bromoform	ug/L	ND	3.0	07/26/09 12:21	
Bromomethane	ug/L	ND	10.0	07/26/09 12:21	
Carbon disulfide	ug/L	ND	100	07/26/09 12:21	
Carbon tetrachloride	ug/L	ND	1.0	07/26/09 12:21	
Chlorobenzene	ug/L	ND	3.0	07/26/09 12:21	
Chloroethane	ug/L	ND	10.0	07/26/09 12:21	
Chloroform	ug/L	ND	5.0	07/26/09 12:21	
Chloromethane	ug/L	ND	1.0	07/26/09 12:21	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/26/09 12:21	
Dibromochloromethane	ug/L	ND	3.0	07/26/09 12:21	
Dibromomethane	ug/L	ND	10.0	07/26/09 12:21	
Ethylbenzene	ug/L	ND	1.0	07/26/09 12:21	
Iodomethane	ug/L	ND	10.0	07/26/09 12:21	
m&p-Xylene	ug/L	ND	2.0	07/26/09 12:21	
Methylene Chloride	ug/L	ND	2.0	07/26/09 12:21	
o-Xylene	ug/L	ND	1.0	07/26/09 12:21	
Styrene	ug/L	ND	1.0	07/26/09 12:21	
Tetrachloroethene	ug/L	ND	1.0	07/26/09 12:21	
Toluene	ug/L	ND	1.0	07/26/09 12:21	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

METHOD BLANK: 313676 Matrix: Water

Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/26/09 12:21	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/26/09 12:21	
Trichloroethene	ug/L	ND	1.0	07/26/09 12:21	
Trichlorofluoromethane	ug/L	ND	1.0	07/26/09 12:21	
Vinyl acetate	ug/L	ND	50.0	07/26/09 12:21	
Vinyl chloride	ug/L	ND	1.0	07/26/09 12:21	
Xylene (Total)	ug/L	ND	5.0	07/26/09 12:21	
1,2-Dichloroethane-d4 (S)	%	100	79-120	07/26/09 12:21	
4-Bromofluorobenzene (S)	%	92	87-109	07/26/09 12:21	
Dibromofluoromethane (S)	%	110	85-115	07/26/09 12:21	
Toluene-d8 (S)	%	100	70-120	07/26/09 12:21	

LABORATORY CONTROL SAMPLE: 313677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.5	105	83-125	
1,1,1-Trichloroethane	ug/L	50	65.2	130	80-129	L0
1,1,2,2-Tetrachloroethane	ug/L	50	50.8	102	73-127	
1,1,2-Trichloroethane	ug/L	50	49.7	99	77-123	
1,1-Dichloroethane	ug/L	50	70.4	141	76-129	L0
1,1-Dichloroethene	ug/L	50	54.8	110	78-146	
1,2,3-Trichloropropane	ug/L	50	49.2	98	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	52.2	104	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.5	101	82-126	
1,2-Dichloroethane	ug/L	50	55.8	112	72-126	
1,2-Dichloropropane	ug/L	50	49.1	98	80-127	
1,3-Dichloropropane	ug/L	50	49.3	99	79-124	
1,4-Dichlorobenzene	ug/L	50	50.6	101	79-125	
2-Butanone (MEK)	ug/L	100	109	109	50-134	
2-Hexanone	ug/L	100	97.5	98	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.3J	93	70-131	
Acetone	ug/L	100	107	107	50-146	
Acrylonitrile	ug/L	250	259	104	66-124	
Benzene	ug/L	50	50.3	101	78-128	
Bromochloromethane	ug/L	50	61.2	122	73-124	
Bromodichloromethane	ug/L	50	50.6	101	81-125	
Bromoform	ug/L	50	54.0	108	71-125	
Bromomethane	ug/L	50	68.0	136	50-150	
Carbon disulfide	ug/L	50	54.8J	110	54-150	
Carbon tetrachloride	ug/L	50	56.7	113	81-137	
Chlorobenzene	ug/L	50	51.8	104	82-126	
Chloroethane	ug/L	50	52.2	104	69-140	
Chloroform	ug/L	50	57.2	114	77-129	
Chloromethane	ug/L	50	45.9	92	54-139	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

LABORATORY CONTROL SAMPLE: 313677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	55.7	111	76-133	
cis-1,3-Dichloropropene	ug/L	50	51.2	102	76-127	
Dibromochloromethane	ug/L	50	54.5	109	77-125	
Dibromomethane	ug/L	50	50.1	100	77-125	
Ethylbenzene	ug/L	50	51.0	102	80-127	
Iodomethane	ug/L	100	109	109	65-172	
m&p-Xylene	ug/L	100	101	101	82-127	
Methylene Chloride	ug/L	50	60.2	120	67-133	
o-Xylene	ug/L	50	50.0	100	83-124	
Styrene	ug/L	50	50.8	102	80-130	
Tetrachloroethene	ug/L	50	49.8	100	78-128	
Toluene	ug/L	50	49.9	100	76-126	
trans-1,2-Dichloroethene	ug/L	50	52.4	105	78-134	
trans-1,3-Dichloropropene	ug/L	50	51.0	102	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	51.4J	103	51-140	
Trichloroethene	ug/L	50	50.3	101	79-127	
Trichlorofluoromethane	ug/L	50	51.6	103	76-148	
Vinyl acetate	ug/L	100	81.5	82	50-150	
Vinyl chloride	ug/L	50	49.7	99	67-143	
Xylene (Total)	ug/L	150	151	100	83-125	
1,2-Dichloroethane-d4 (S)	%			107	79-120	
4-Bromofluorobenzene (S)	%			94	87-109	
Dibromofluoromethane (S)	%			112	85-115	
Toluene-d8 (S)	%			99	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 313698 313699

Parameter	Units	9249226001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	57.0	64.6	113	128	60-150	13	30	
Benzene	ug/L	3.9	50	50	48.8	55.1	90	103	74-136	12	30	
Chlorobenzene	ug/L	ND	50	50	45.4	52.1	91	104	79-135	14	30	
Toluene	ug/L	2.0	50	50	44.3	50.7	85	97	73-131	13	30	
Trichloroethene	ug/L	19.3	50	50	63.7	70.4	89	102	73-131	10	30	
1,2-Dichloroethane-d4 (S)	%						111	111	79-120			
4-Bromofluorobenzene (S)	%						87	86	87-109			M0
Dibromofluoromethane (S)	%						119	118	85-115			M0,S0
Toluene-d8 (S)	%						99	99	70-120			

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WET/9152
QC Batch Method: EPA 9040
Analysis Method: EPA 9040
Analysis Description: 9040 pH
Associated Lab Samples: 9249223001

SAMPLE DUPLICATE: 313518

Parameter	Units	9248932003 Result	Dup Result	RPD	Max RPD	Qualifiers
pH	Std. Units	6.1	6.1	0	20	H6

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WETA/5548
QC Batch Method: ASTM D516-90
Analysis Method: ASTM D516-90
Analysis Description: ASTM D516-90 Sulfate Water
Associated Lab Samples: 9249223001

METHOD BLANK: 313895
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	ug/L	ND	5000	07/28/09 13:34	

LABORATORY CONTROL SAMPLE: 313896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	ug/L	20000	18400	92	90-110	

MATRIX SPIKE SAMPLE: 313897

Parameter	Units	9248854001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	ug/L	30.5 mg/L	20000	45200	73	75-125	M0

MATRIX SPIKE SAMPLE: 313907

Parameter	Units	9249067005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	ug/L	ND	20000	24500	107	75-125	

SAMPLE DUPLICATE: 313906

Parameter	Units	9248854002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfate	ug/L	33.7 mg/L	34000	1	20	

SAMPLE DUPLICATE: 313908

Parameter	Units	9249067006 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfate	ug/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WET/9136
QC Batch Method: SM 5210B
Analysis Method: SM 5210B
Analysis Description: 5210B BOD, 5 day
Associated Lab Samples: 9249223001

METHOD BLANK: 312800
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	ND	2.0	07/28/09 18:00	

LABORATORY CONTROL SAMPLE: 312801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	195	98	84-115	

SAMPLE DUPLICATE: 312802

Parameter	Units	9249272006 Result	Dup Result	RPD	Max RPD	Qualifiers
BOD, 5 day	mg/L	186	219	16	20	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: MSV/7784 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9249223002, 9249223003, 9249223004, 9249223005, 9249223006, 9249223007, 9249223008, 9249223009, 9249223010, 9249223011, 9249223012

METHOD BLANK: 314831 Matrix: Water
Associated Lab Samples: 9249223002, 9249223003, 9249223004, 9249223005, 9249223006, 9249223007, 9249223008, 9249223009, 9249223010, 9249223011, 9249223012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/29/09 12:44	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	07/29/09 12:44	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,1-Dichloroethane	ug/L	ND	5.0	07/29/09 12:44	
1,1-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	07/29/09 12:44	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/29/09 12:44	
1,2-Dichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,3-Dichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/29/09 12:44	
2-Butanone (MEK)	ug/L	ND	100	07/29/09 12:44	
2-Hexanone	ug/L	ND	50.0	07/29/09 12:44	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	07/29/09 12:44	
Acetone	ug/L	ND	100	07/29/09 12:44	
Acrylonitrile	ug/L	ND	200	07/29/09 12:44	
Benzene	ug/L	ND	1.0	07/29/09 12:44	
Bromochloromethane	ug/L	ND	3.0	07/29/09 12:44	
Bromodichloromethane	ug/L	ND	1.0	07/29/09 12:44	
Bromoform	ug/L	ND	3.0	07/29/09 12:44	
Bromomethane	ug/L	ND	10.0	07/29/09 12:44	
Carbon disulfide	ug/L	ND	100	07/29/09 12:44	
Carbon tetrachloride	ug/L	ND	1.0	07/29/09 12:44	
Chlorobenzene	ug/L	ND	3.0	07/29/09 12:44	
Chloroethane	ug/L	ND	10.0	07/29/09 12:44	
Chloroform	ug/L	ND	5.0	07/29/09 12:44	
Chloromethane	ug/L	ND	1.0	07/29/09 12:44	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/29/09 12:44	
Dibromochloromethane	ug/L	ND	3.0	07/29/09 12:44	
Dibromomethane	ug/L	ND	10.0	07/29/09 12:44	
Ethylbenzene	ug/L	ND	1.0	07/29/09 12:44	
Iodomethane	ug/L	ND	10.0	07/29/09 12:44	
m&p-Xylene	ug/L	ND	2.0	07/29/09 12:44	
Methylene Chloride	ug/L	ND	2.0	07/29/09 12:44	
o-Xylene	ug/L	ND	1.0	07/29/09 12:44	
Styrene	ug/L	ND	1.0	07/29/09 12:44	
Tetrachloroethene	ug/L	ND	1.0	07/29/09 12:44	

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(704)875-9092

QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

METHOD BLANK: 314831 Matrix: Water

Associated Lab Samples: 9249223002, 9249223003, 9249223004, 9249223005, 9249223006, 9249223007, 9249223008, 9249223009, 9249223010, 9249223011, 9249223012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Toluene	ug/L	ND	1.0	07/29/09 12:44	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/29/09 12:44	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/29/09 12:44	
Trichloroethene	ug/L	ND	1.0	07/29/09 12:44	
Trichlorofluoromethane	ug/L	ND	1.0	07/29/09 12:44	
Vinyl acetate	ug/L	ND	50.0	07/29/09 12:44	
Vinyl chloride	ug/L	ND	1.0	07/29/09 12:44	
Xylene (Total)	ug/L	ND	5.0	07/29/09 12:44	
1,2-Dichloroethane-d4 (S)	%	108	79-120	07/29/09 12:44	
4-Bromofluorobenzene (S)	%	99	87-109	07/29/09 12:44	
Dibromofluoromethane (S)	%	100	85-115	07/29/09 12:44	
Toluene-d8 (S)	%	100	70-120	07/29/09 12:44	

LABORATORY CONTROL SAMPLE: 314832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.7	113	83-125	
1,1,1-Trichloroethane	ug/L	50	61.0	122	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	56.2	112	73-127	
1,1,2-Trichloroethane	ug/L	50	55.3	111	77-123	
1,1-Dichloroethane	ug/L	50	69.0	138	76-129	L0
1,1-Dichloroethene	ug/L	50	54.3	109	78-146	
1,2,3-Trichloropropane	ug/L	50	54.5	109	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	48.0	96	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	55.4	111	81-125	
1,2-Dichlorobenzene	ug/L	50	56.6	113	82-126	
1,2-Dichloroethane	ug/L	50	56.9	114	72-126	
1,2-Dichloropropane	ug/L	50	55.9	112	80-127	
1,3-Dichloropropane	ug/L	50	55.0	110	79-124	
1,4-Dichlorobenzene	ug/L	50	55.4	111	79-125	
2-Butanone (MEK)	ug/L	100	98.0J	98	50-134	
2-Hexanone	ug/L	100	106	106	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-131	
Acetone	ug/L	100	108	108	50-146	
Acrylonitrile	ug/L	250	253	101	66-124	
Benzene	ug/L	50	55.4	111	78-128	
Bromochloromethane	ug/L	50	56.7	113	73-124	
Bromodichloromethane	ug/L	50	54.3	109	81-125	
Bromoform	ug/L	50	49.0	98	71-125	
Bromomethane	ug/L	50	67.8	136	50-150	
Carbon disulfide	ug/L	50	48.0J	96	54-150	
Carbon tetrachloride	ug/L	50	60.9	122	81-137	
Chlorobenzene	ug/L	50	56.2	112	82-126	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

LABORATORY CONTROL SAMPLE: 314832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloroethane	ug/L	50	48.5	97	69-140	
Chloroform	ug/L	50	55.6	111	77-129	
Chloromethane	ug/L	50	40.4	81	54-139	
cis-1,2-Dichloroethene	ug/L	50	55.0	110	76-133	
cis-1,3-Dichloropropene	ug/L	50	57.1	114	76-127	
Dibromochloromethane	ug/L	50	53.9	108	77-125	
Dibromomethane	ug/L	50	60.5	121	77-125	
Ethylbenzene	ug/L	50	55.6	111	80-127	
Iodomethane	ug/L	100	102	102	65-172	
m&p-Xylene	ug/L	100	112	112	82-127	
Methylene Chloride	ug/L	50	61.4	123	67-133	
o-Xylene	ug/L	50	55.3	111	83-124	
Styrene	ug/L	50	55.9	112	80-130	
Tetrachloroethene	ug/L	50	55.2	110	78-128	
Toluene	ug/L	50	54.0	108	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.3	103	78-134	
trans-1,3-Dichloropropene	ug/L	50	58.0	116	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	60.3J	121	51-140	
Trichloroethene	ug/L	50	55.7	111	79-127	
Trichlorofluoromethane	ug/L	50	48.8	98	76-148	
Vinyl acetate	ug/L	100	76.8	77	50-150	
Vinyl chloride	ug/L	50	46.1	92	67-143	
Xylene (Total)	ug/L	150	167	111	83-125	
1,2-Dichloroethane-d4 (S)	%			103	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			99	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 314833 314834

Parameter	Units	9249227020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	55.6	58.2	111	116	60-150	5	30	
Benzene	ug/L	ND	50	50	50.0	54.9	100	110	74-136	9	30	
Chlorobenzene	ug/L	ND	50	50	48.6	53.6	97	107	79-135	10	30	
Toluene	ug/L	ND	50	50	48.4	53.6	97	107	73-131	10	30	
Trichloroethene	ug/L	0.91J	50	50	49.5	54.6	97	107	73-131	10	30	
1,2-Dichloroethane-d4 (S)	%						110	110	79-120			
4-Bromofluorobenzene (S)	%						96	96	87-109			
Dibromofluoromethane (S)	%						102	103	85-115			
Toluene-d8 (S)	%						100	101	70-120			

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WETA/5528
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 9249223001

METHOD BLANK: 312826
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	ug/L	ND	100	07/23/09 22:27	

LABORATORY CONTROL SAMPLE: 312827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	ug/L	5000	5170	103	90-110	

MATRIX SPIKE SAMPLE: 312828

Parameter	Units	9249312001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	ug/L	ND	5000	5190	104	90-110	

MATRIX SPIKE SAMPLE: 312829

Parameter	Units	9249312002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	ug/L	ND	5000	5160	103	90-110	

SAMPLE DUPLICATE: 312830

Parameter	Units	9249212001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	ug/L	5.6 mg/L	5580	.4	20	

SAMPLE DUPLICATE: 312831

Parameter	Units	9249312003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	ug/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WETA/5525
QC Batch Method: EPA 365.1
Analysis Method: EPA 365.1
Analysis Description: 365.1 Phosphorus, Total
Associated Lab Samples: 9249223001

METHOD BLANK: 312557
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphorus	ug/L	ND	100	07/25/09 07:32	

LABORATORY CONTROL SAMPLE: 312558

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphorus	ug/L	1000	989	99	90-110	

MATRIX SPIKE SAMPLE: 312559

Parameter	Units	9248552005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phosphorus	ug/L	ND	1000	979	95	90-110	

MATRIX SPIKE SAMPLE: 312560

Parameter	Units	9248438008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phosphorus	ug/L	349 mg/L	1000	340000	-932	90-110	M0

SAMPLE DUPLICATE: 312561

Parameter	Units	9248585001 Result	Dup Result	RPD	Max RPD	Qualifiers
Phosphorus	ug/L	5.0 mg/L	4920	.6	20	

SAMPLE DUPLICATE: 312562

Parameter	Units	9248632003 Result	Dup Result	RPD	Max RPD	Qualifiers
Phosphorus	ug/L	0.59 mg/L	614	4	20	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: WETA/5534
QC Batch Method: SM 5220D
Analysis Method: SM 5220D
Analysis Description: 5220D COD
Associated Lab Samples: 9249223001

METHOD BLANK: 313251
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	ug/L	ND	25000	07/24/09 16:10	

LABORATORY CONTROL SAMPLE: 313252

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	ug/L	750000	801000	107	90-110	

MATRIX SPIKE SAMPLE: 313289

Parameter	Units	9249389001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	ug/L	38.8 mg/L	750000	773000	98	75-125	

MATRIX SPIKE SAMPLE: 313290

Parameter	Units	9249389002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	ug/L	129 mg/L	750000	864000	98	75-125	

SAMPLE DUPLICATE: 313291

Parameter	Units	9249389003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	ug/L	53.6 mg/L	40700	27	20	R1

SAMPLE DUPLICATE: 313292

Parameter	Units	9249389004 Result	Dup Result	RPD	Max RPD	Qualifiers
Chemical Oxygen Demand	ug/L	53.7 mg/L	58300	8	20	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

QC Batch: MPRP/4794
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9249223001

METHOD BLANK: 312162
Matrix: Water
Associated Lab Samples: 9249223001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	07/25/09 01:48	
Arsenic	ug/L	ND	10.0	07/25/09 01:48	
Barium	ug/L	ND	100	07/25/09 01:48	
Beryllium	ug/L	ND	1.0	07/25/09 01:48	
Cadmium	ug/L	ND	1.0	07/25/09 01:48	
Chromium	ug/L	0.57J	10.0	07/25/09 01:48	
Cobalt	ug/L	ND	10.0	07/25/09 01:48	
Copper	ug/L	ND	10.0	07/25/09 01:48	
Lead	ug/L	ND	10.0	07/25/09 01:48	
Nickel	ug/L	ND	50.0	07/25/09 01:48	
Selenium	ug/L	ND	10.0	07/25/09 01:48	
Silver	ug/L	ND	10.0	07/25/09 01:48	
Thallium	ug/L	ND	5.5	07/25/09 01:48	
Vanadium	ug/L	ND	25.0	07/25/09 01:48	
Zinc	ug/L	6.1J	10.0	07/25/09 01:48	

LABORATORY CONTROL SAMPLE: 312163

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	430	86	80-120	
Arsenic	ug/L	500	425	85	80-120	
Barium	ug/L	500	404	81	80-120	
Beryllium	ug/L	500	439	88	80-120	
Cadmium	ug/L	500	438	88	80-120	
Chromium	ug/L	500	447	89	80-120	
Cobalt	ug/L	500	433	87	80-120	
Copper	ug/L	500	399	80	80-120	
Lead	ug/L	500	438	88	80-120	
Nickel	ug/L	500	443	89	80-120	
Selenium	ug/L	500	416	83	80-120	
Silver	ug/L	250	210	84	80-120	
Thallium	ug/L	500	402	80	80-120	
Vanadium	ug/L	500	425	85	80-120	
Zinc	ug/L	500	432	86	80-120	

MATRIX SPIKE SAMPLE: 312164

Parameter	Units	9248993001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	461	92	75-125	
Arsenic	ug/L	2.8J	500	474	94	75-125	

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QUALITY CONTROL DATA

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

MATRIX SPIKE SAMPLE: 312164

Parameter	Units	9248993001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	235	500	654	84	75-125	
Beryllium	ug/L	0.16J	500	466	93	75-125	
Cadmium	ug/L	1.1	500	457	91	75-125	
Chromium	ug/L	6.2J	500	467	92	75-125	
Cobalt	ug/L	14.8	500	459	89	75-125	
Copper	ug/L	ND	500	417	83	75-125	
Lead	ug/L	ND	500	449	90	75-125	
Nickel	ug/L	2.9J	500	455	90	75-125	
Selenium	ug/L	ND	500	458	91	75-125	
Silver	ug/L	0.36J	250	221	88	75-125	
Thallium	ug/L	ND	500	410	82	75-125	
Vanadium	ug/L	2.5J	500	449	89	75-125	
Zinc	ug/L	13.1	500	458	89	75-125	

SAMPLE DUPLICATE: 312165

Parameter	Units	9248993002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		25	
Arsenic	ug/L	6.4J	6.6J	3	25	
Barium	ug/L	56.9J	54.6J	4	25	
Beryllium	ug/L	0.48J	0.46J		25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	1.2J	1.3J		25	
Cobalt	ug/L	ND	ND		25	
Copper	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	
Nickel	ug/L	ND	ND		25	
Selenium	ug/L	ND	ND		25	
Silver	ug/L	0.75J	0.70J		25	
Thallium	ug/L	3.4J	ND		25	
Vanadium	ug/L	2.6J	2.6J		25	
Zinc	ug/L	5.0J	7.0J		25	

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QUALIFIERS

Project: IREDELL CO MSWLF, PH 3 & 4
Pace Project No.: 9249223

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

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

ANALYTE QUALIFIERS

H6	Analysis initiated more than 15 minutes after sample collection.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
M0	Matrix spike recovery was outside laboratory control limits.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
Z2	Analyte present in the associated method blank above the detection limit.

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August 06, 2009

Mr. Jonathan Pfohl
Municipal Engineering Services
PO Box 97
Garner, NC 27529

RE: Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Dear Mr. Pfohl:
Enclosed are the analytical results for sample(s) received by the laboratory between July 22, 2009 and July 24, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

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

Sincerely,

Bonnie McKee

Bonnie McKee

bonnie.mckee@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Charlotte Certification IDs

Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84

Asheville Certification IDs

Connecticut Certification #: PH-0106
Virginia Certification #: 00072
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
West Virginia Certification #: 356
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095
Florida/NELAP Certification #: E87648
North Carolina Wastewater Certification #: 40

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SAMPLE SUMMARY

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9249225001	**SW-1**	Water	07/21/09 14:50	07/22/09 16:40
9249225002	**SW-2**	Water	07/21/09 15:15	07/22/09 16:40
9249225003	**SW-5**	Water	07/23/09 14:10	07/24/09 14:00

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SAMPLE ANALYTE COUNT

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9249225001	**SW-1**	EPA 6010	SHB	15	PASI-A
		EPA 8260	AW	54	PASI-C
9249225002	**SW-2**	EPA 6010	SHB	15	PASI-A
		EPA 8260	AW	54	PASI-C
9249225003	**SW-5**	EPA 6010	SHB	15	PASI-A
		EPA 8260	MCK	54	PASI-C

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-1 **Lab ID: 9249225001** Collected: 07/21/09 14:50 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/24/09 11:55	07/25/09 03:32	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/24/09 11:55	07/25/09 03:32	7440-38-2	
Barium	**19.5J**	ug/L	100	0.20	1	07/24/09 11:55	07/25/09 03:32	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/24/09 11:55	07/25/09 03:32	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/24/09 11:55	07/25/09 03:32	7440-43-9	
Chromium	**1.3J**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:32	7440-47-3	Z2
Cobalt	ND	ug/L	10.0	0.60	1	07/24/09 11:55	07/25/09 03:32	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/24/09 11:55	07/25/09 03:32	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/24/09 11:55	07/25/09 03:32	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/24/09 11:55	07/25/09 03:32	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/24/09 11:55	07/25/09 03:32	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/24/09 11:55	07/25/09 03:32	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/24/09 11:55	07/25/09 03:32	7440-28-0	
Vanadium	**1.3J**	ug/L	25.0	0.20	1	07/24/09 11:55	07/25/09 03:32	7440-62-2	
Zinc	**2.7J**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:32	7440-66-6	Z2
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/26/09 13:56	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/26/09 13:56	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/26/09 13:56	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/26/09 13:56	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/26/09 13:56	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/26/09 13:56	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/26/09 13:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/26/09 13:56	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/26/09 13:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/26/09 13:56	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/26/09 13:56	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/26/09 13:56	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/26/09 13:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/26/09 13:56	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/26/09 13:56	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/26/09 13:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/26/09 13:56	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/26/09 13:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/26/09 13:56	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/26/09 13:56	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/26/09 13:56	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/26/09 13:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/26/09 13:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/26/09 13:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/26/09 13:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/26/09 13:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/26/09 13:56	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/26/09 13:56	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/26/09 13:56	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-1 **Lab ID: 9249225001** Collected: 07/21/09 14:50 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/26/09 13:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/26/09 13:56	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/26/09 13:56	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/26/09 13:56	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/26/09 13:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/26/09 13:56	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/26/09 13:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/26/09 13:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/26/09 13:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/26/09 13:56	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/26/09 13:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/26/09 13:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/26/09 13:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/26/09 13:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/26/09 13:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/26/09 13:56	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/26/09 13:56	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/26/09 13:56	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/26/09 13:56	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/26/09 13:56	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/26/09 13:56	95-47-6	
4-Bromofluorobenzene (S)	90	%	87-109		1		07/26/09 13:56	460-00-4	
Dibromofluoromethane (S)	111	%	85-115		1		07/26/09 13:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	103	%	79-120		1		07/26/09 13:56	17060-07-0	
Toluene-d8 (S)	98	%	70-120		1		07/26/09 13:56	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-2 **Lab ID: 9249225002** Collected: 07/21/09 15:15 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/24/09 11:55	07/25/09 03:35	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/24/09 11:55	07/25/09 03:35	7440-38-2	
Barium	**17.8J**	ug/L	100	0.20	1	07/24/09 11:55	07/25/09 03:35	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/24/09 11:55	07/25/09 03:35	7440-41-7	
Cadmium	**1.0**	ug/L	1.0	0.50	1	07/24/09 11:55	07/25/09 03:35	7440-43-9	
Chromium	**0.76J**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:35	7440-47-3	Z2
Cobalt	ND	ug/L	10.0	0.60	1	07/24/09 11:55	07/25/09 03:35	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/24/09 11:55	07/25/09 03:35	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/24/09 11:55	07/25/09 03:35	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/24/09 11:55	07/25/09 03:35	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/24/09 11:55	07/25/09 03:35	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/24/09 11:55	07/25/09 03:35	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/24/09 11:55	07/25/09 03:35	7440-28-0	
Vanadium	**1.4J**	ug/L	25.0	0.20	1	07/24/09 11:55	07/25/09 03:35	7440-62-2	
Zinc	**3.7J**	ug/L	10.0	0.40	1	07/24/09 11:55	07/25/09 03:35	7440-66-6	Z2
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/26/09 14:20	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/26/09 14:20	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/26/09 14:20	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/26/09 14:20	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/26/09 14:20	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/26/09 14:20	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/26/09 14:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/26/09 14:20	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/26/09 14:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/26/09 14:20	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/26/09 14:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/26/09 14:20	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/26/09 14:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/26/09 14:20	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/26/09 14:20	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/26/09 14:20	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/26/09 14:20	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/26/09 14:20	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/26/09 14:20	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/26/09 14:20	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/26/09 14:20	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/26/09 14:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/26/09 14:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/26/09 14:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/26/09 14:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/26/09 14:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/26/09 14:20	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/26/09 14:20	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/26/09 14:20	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-2 **Lab ID: 9249225002** Collected: 07/21/09 15:15 Received: 07/22/09 16:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/26/09 14:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/26/09 14:20	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/26/09 14:20	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/26/09 14:20	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/26/09 14:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/26/09 14:20	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/26/09 14:20	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/26/09 14:20	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/26/09 14:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/26/09 14:20	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/26/09 14:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/26/09 14:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/26/09 14:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/26/09 14:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/26/09 14:20	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/26/09 14:20	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/26/09 14:20	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/26/09 14:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/26/09 14:20	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/26/09 14:20	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/26/09 14:20	95-47-6	
4-Bromofluorobenzene (S)	87	%	87-109		1		07/26/09 14:20	460-00-4	
Dibromofluoromethane (S)	112	%	85-115		1		07/26/09 14:20	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	79-120		1		07/26/09 14:20	17060-07-0	
Toluene-d8 (S)	99	%	70-120		1		07/26/09 14:20	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-5 **Lab ID: 9249225003** Collected: 07/23/09 14:10 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/28/09 13:00	08/02/09 05:40	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/28/09 13:00	08/02/09 05:40	7440-38-2	
Barium	**19.7J**	ug/L	100	0.20	1	07/28/09 13:00	08/02/09 05:40	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/28/09 13:00	08/02/09 05:40	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/28/09 13:00	08/02/09 05:40	7440-43-9	
Chromium	**0.67J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:40	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/28/09 13:00	08/02/09 05:40	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/28/09 13:00	08/02/09 05:40	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/28/09 13:00	08/02/09 05:40	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/28/09 13:00	08/02/09 05:40	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/28/09 13:00	08/02/09 05:40	7782-49-2	
Silver	ND	ug/L	10.0	0.10	1	07/28/09 13:00	08/02/09 05:40	7440-22-4	
Thallium	ND	ug/L	5.5	3.0	1	07/28/09 13:00	08/02/09 05:40	7440-28-0	
Vanadium	**1.3J**	ug/L	25.0	0.20	1	07/28/09 13:00	08/02/09 05:40	7440-62-2	
Zinc	**3.0J**	ug/L	10.0	0.40	1	07/28/09 13:00	08/02/09 05:40	7440-66-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/29/09 19:41	67-64-1	
Acrylonitrile	ND	ug/L	200	1.9	1		07/29/09 19:41	107-13-1	
Benzene	ND	ug/L	1.0	0.25	1		07/29/09 19:41	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/29/09 19:41	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/29/09 19:41	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/29/09 19:41	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/29/09 19:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/29/09 19:41	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/29/09 19:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/29/09 19:41	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/29/09 19:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/29/09 19:41	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/29/09 19:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/29/09 19:41	74-87-3	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/29/09 19:41	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/29/09 19:41	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/29/09 19:41	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/29/09 19:41	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/29/09 19:41	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/29/09 19:41	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/29/09 19:41	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/29/09 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/29/09 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/29/09 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/29/09 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/29/09 19:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/29/09 19:41	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/29/09 19:41	142-28-9	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/29/09 19:41	10061-01-5	

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ANALYTICAL RESULTS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

Sample: SW-5 **Lab ID: 9249225003** Collected: 07/23/09 14:10 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/29/09 19:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/29/09 19:41	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/29/09 19:41	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/29/09 19:41	74-88-4	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/29/09 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/29/09 19:41	108-10-1	
Styrene	ND	ug/L	1.0	0.26	1		07/29/09 19:41	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/29/09 19:41	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/29/09 19:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/29/09 19:41	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/29/09 19:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/29/09 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/29/09 19:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/29/09 19:41	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/29/09 19:41	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/29/09 19:41	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/29/09 19:41	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/29/09 19:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/29/09 19:41	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/29/09 19:41	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/29/09 19:41	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/29/09 19:41	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/29/09 19:41	1868-53-7	
1,2-Dichloroethane-d4 (S)	109	%	79-120		1		07/29/09 19:41	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		07/29/09 19:41	2037-26-5	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

QC Batch: MPRP/4816
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9249225003

METHOD BLANK: 314249
Matrix: Water
Associated Lab Samples: 9249225003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	08/02/09 03:54	
Arsenic	ug/L	ND	10.0	08/02/09 03:54	
Barium	ug/L	ND	100	08/02/09 03:54	
Beryllium	ug/L	ND	1.0	08/02/09 03:54	
Cadmium	ug/L	ND	1.0	08/02/09 03:54	
Chromium	ug/L	ND	10.0	08/02/09 03:54	
Cobalt	ug/L	ND	10.0	08/02/09 03:54	
Copper	ug/L	ND	10.0	08/02/09 03:54	
Lead	ug/L	ND	10.0	08/02/09 03:54	
Nickel	ug/L	ND	50.0	08/02/09 03:54	
Selenium	ug/L	ND	10.0	08/02/09 03:54	
Silver	ug/L	ND	10.0	08/02/09 03:54	
Thallium	ug/L	ND	5.5	08/02/09 03:54	
Vanadium	ug/L	ND	25.0	08/02/09 03:54	
Zinc	ug/L	ND	10.0	08/02/09 03:54	

LABORATORY CONTROL SAMPLE: 314250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	495	99	80-120	
Arsenic	ug/L	500	493	99	80-120	
Barium	ug/L	500	480	96	80-120	
Beryllium	ug/L	500	493	99	80-120	
Cadmium	ug/L	500	509	102	80-120	
Chromium	ug/L	500	522	104	80-120	
Cobalt	ug/L	500	509	102	80-120	
Copper	ug/L	500	474	95	80-120	
Lead	ug/L	500	503	101	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	486	97	80-120	
Silver	ug/L	250	245	98	80-120	
Thallium	ug/L	500	467	93	80-120	
Vanadium	ug/L	500	494	99	80-120	
Zinc	ug/L	500	504	101	80-120	

MATRIX SPIKE SAMPLE: 314251

Parameter	Units	9249227014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	492	98	75-125	
Arsenic	ug/L	3.9J	500	498	99	75-125	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

MATRIX SPIKE SAMPLE: 314251

Parameter	Units	9249227014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	86.5J	500	561	95	75-125	
Beryllium	ug/L	0.45J	500	506	101	75-125	
Cadmium	ug/L	0.54J	500	508	101	75-125	
Chromium	ug/L	4.9J	500	527	104	75-125	
Cobalt	ug/L	ND	500	499	100	75-125	
Copper	ug/L	15.5	500	498	96	75-125	
Lead	ug/L	ND	500	496	99	75-125	
Nickel	ug/L	5.5J	500	512	101	75-125	
Selenium	ug/L	ND	500	490	98	75-125	
Silver	ug/L	ND	250	245	98	75-125	
Thallium	ug/L	ND	500	457	91	75-125	
Vanadium	ug/L	22.1J	500	517	99	75-125	
Zinc	ug/L	19.3	500	533	103	75-125	

SAMPLE DUPLICATE: 314252

Parameter	Units	9249032001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		25	
Arsenic	ug/L	ND	ND		25	
Barium	ug/L	136	137	.7	25	
Beryllium	ug/L	ND	ND		25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	ND	ND		25	
Cobalt	ug/L	10.2	10.3	1	25	
Copper	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	
Nickel	ug/L	28.9	28.9J	0	25	
Selenium	ug/L	ND	ND		25	
Silver	ug/L	ND	ND		25	
Thallium	ug/L	ND	ND		25	
Vanadium	ug/L	ND	1.3J		25	
Zinc	ug/L	25.7	21.8	16	25	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

QC Batch: MSV/7753 | Analysis Method: EPA 8260
QC Batch Method: EPA 8260 | Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9249225001, 9249225002

METHOD BLANK: 313676 | Matrix: Water
Associated Lab Samples: 9249225001, 9249225002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/26/09 12:21	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	07/26/09 12:21	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,1-Dichloroethane	ug/L	ND	5.0	07/26/09 12:21	
1,1-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	07/26/09 12:21	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/26/09 12:21	
1,2-Dichloroethane	ug/L	ND	1.0	07/26/09 12:21	
1,2-Dichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,3-Dichloropropane	ug/L	ND	1.0	07/26/09 12:21	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/26/09 12:21	
2-Butanone (MEK)	ug/L	ND	100	07/26/09 12:21	
2-Hexanone	ug/L	ND	50.0	07/26/09 12:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	07/26/09 12:21	
Acetone	ug/L	ND	100	07/26/09 12:21	
Acrylonitrile	ug/L	ND	200	07/26/09 12:21	
Benzene	ug/L	ND	1.0	07/26/09 12:21	
Bromochloromethane	ug/L	ND	3.0	07/26/09 12:21	
Bromodichloromethane	ug/L	ND	1.0	07/26/09 12:21	
Bromoform	ug/L	ND	3.0	07/26/09 12:21	
Bromomethane	ug/L	ND	10.0	07/26/09 12:21	
Carbon disulfide	ug/L	ND	100	07/26/09 12:21	
Carbon tetrachloride	ug/L	ND	1.0	07/26/09 12:21	
Chlorobenzene	ug/L	ND	3.0	07/26/09 12:21	
Chloroethane	ug/L	ND	10.0	07/26/09 12:21	
Chloroform	ug/L	ND	5.0	07/26/09 12:21	
Chloromethane	ug/L	ND	1.0	07/26/09 12:21	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/26/09 12:21	
Dibromochloromethane	ug/L	ND	3.0	07/26/09 12:21	
Dibromomethane	ug/L	ND	10.0	07/26/09 12:21	
Ethylbenzene	ug/L	ND	1.0	07/26/09 12:21	
Iodomethane	ug/L	ND	10.0	07/26/09 12:21	
m&p-Xylene	ug/L	ND	2.0	07/26/09 12:21	
Methylene Chloride	ug/L	ND	2.0	07/26/09 12:21	
o-Xylene	ug/L	ND	1.0	07/26/09 12:21	
Styrene	ug/L	ND	1.0	07/26/09 12:21	
Tetrachloroethene	ug/L	ND	1.0	07/26/09 12:21	
Toluene	ug/L	ND	1.0	07/26/09 12:21	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/26/09 12:21	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

METHOD BLANK: 313676 Matrix: Water

Associated Lab Samples: 9249225001, 9249225002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/26/09 12:21	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/26/09 12:21	
Trichloroethene	ug/L	ND	1.0	07/26/09 12:21	
Trichlorofluoromethane	ug/L	ND	1.0	07/26/09 12:21	
Vinyl acetate	ug/L	ND	50.0	07/26/09 12:21	
Vinyl chloride	ug/L	ND	1.0	07/26/09 12:21	
Xylene (Total)	ug/L	ND	5.0	07/26/09 12:21	
1,2-Dichloroethane-d4 (S)	%	100	79-120	07/26/09 12:21	
4-Bromofluorobenzene (S)	%	92	87-109	07/26/09 12:21	
Dibromofluoromethane (S)	%	110	85-115	07/26/09 12:21	
Toluene-d8 (S)	%	100	70-120	07/26/09 12:21	

LABORATORY CONTROL SAMPLE: 313677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	52.5	105	83-125	
1,1,1-Trichloroethane	ug/L	50	65.2	130	80-129	L0
1,1,2,2-Tetrachloroethane	ug/L	50	50.8	102	73-127	
1,1,2-Trichloroethane	ug/L	50	49.7	99	77-123	
1,1-Dichloroethane	ug/L	50	70.4	141	76-129	L0
1,1-Dichloroethene	ug/L	50	54.8	110	78-146	
1,2,3-Trichloropropane	ug/L	50	49.2	98	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	52.2	104	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	50.7	101	81-125	
1,2-Dichlorobenzene	ug/L	50	50.5	101	82-126	
1,2-Dichloroethane	ug/L	50	55.8	112	72-126	
1,2-Dichloropropane	ug/L	50	49.1	98	80-127	
1,3-Dichloropropane	ug/L	50	49.3	99	79-124	
1,4-Dichlorobenzene	ug/L	50	50.6	101	79-125	
2-Butanone (MEK)	ug/L	100	109	109	50-134	
2-Hexanone	ug/L	100	97.5	98	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.3J	93	70-131	
Acetone	ug/L	100	107	107	50-146	
Acrylonitrile	ug/L	250	259	104	66-124	
Benzene	ug/L	50	50.3	101	78-128	
Bromochloromethane	ug/L	50	61.2	122	73-124	
Bromodichloromethane	ug/L	50	50.6	101	81-125	
Bromoform	ug/L	50	54.0	108	71-125	
Bromomethane	ug/L	50	68.0	136	50-150	
Carbon disulfide	ug/L	50	54.8J	110	54-150	
Carbon tetrachloride	ug/L	50	56.7	113	81-137	
Chlorobenzene	ug/L	50	51.8	104	82-126	
Chloroethane	ug/L	50	52.2	104	69-140	
Chloroform	ug/L	50	57.2	114	77-129	
Chloromethane	ug/L	50	45.9	92	54-139	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

LABORATORY CONTROL SAMPLE: 313677

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	55.7	111	76-133	
cis-1,3-Dichloropropene	ug/L	50	51.2	102	76-127	
Dibromochloromethane	ug/L	50	54.5	109	77-125	
Dibromomethane	ug/L	50	50.1	100	77-125	
Ethylbenzene	ug/L	50	51.0	102	80-127	
Iodomethane	ug/L	100	109	109	65-172	
m&p-Xylene	ug/L	100	101	101	82-127	
Methylene Chloride	ug/L	50	60.2	120	67-133	
o-Xylene	ug/L	50	50.0	100	83-124	
Styrene	ug/L	50	50.8	102	80-130	
Tetrachloroethene	ug/L	50	49.8	100	78-128	
Toluene	ug/L	50	49.9	100	76-126	
trans-1,2-Dichloroethene	ug/L	50	52.4	105	78-134	
trans-1,3-Dichloropropene	ug/L	50	51.0	102	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	51.4J	103	51-140	
Trichloroethene	ug/L	50	50.3	101	79-127	
Trichlorofluoromethane	ug/L	50	51.6	103	76-148	
Vinyl acetate	ug/L	100	81.5	82	50-150	
Vinyl chloride	ug/L	50	49.7	99	67-143	
Xylene (Total)	ug/L	150	151	100	83-125	
1,2-Dichloroethane-d4 (S)	%			107	79-120	
4-Bromofluorobenzene (S)	%			94	87-109	
Dibromofluoromethane (S)	%			112	85-115	
Toluene-d8 (S)	%			99	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 313698 313699

Parameter	Units	9249226001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	57.0	64.6	113	128	60-150	13	30	
Benzene	ug/L	3.9	50	50	48.8	55.1	90	103	74-136	12	30	
Chlorobenzene	ug/L	ND	50	50	45.4	52.1	91	104	79-135	14	30	
Toluene	ug/L	2.0	50	50	44.3	50.7	85	97	73-131	13	30	
Trichloroethene	ug/L	19.3	50	50	63.7	70.4	89	102	73-131	10	30	
1,2-Dichloroethane-d4 (S)	%						111	111	79-120			
4-Bromofluorobenzene (S)	%						87	86	87-109			M0
Dibromofluoromethane (S)	%						119	118	85-115			M0,S0
Toluene-d8 (S)	%						99	99	70-120			

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(704)875-9092

QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

QC Batch: MSV/7784
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9249225003

METHOD BLANK: 314831
Matrix: Water
Associated Lab Samples: 9249225003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/29/09 12:44	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	07/29/09 12:44	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,1-Dichloroethane	ug/L	ND	5.0	07/29/09 12:44	
1,1-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	07/29/09 12:44	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/29/09 12:44	
1,2-Dichloroethane	ug/L	ND	1.0	07/29/09 12:44	
1,2-Dichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,3-Dichloropropane	ug/L	ND	1.0	07/29/09 12:44	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/29/09 12:44	
2-Butanone (MEK)	ug/L	ND	100	07/29/09 12:44	
2-Hexanone	ug/L	ND	50.0	07/29/09 12:44	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	07/29/09 12:44	
Acetone	ug/L	ND	100	07/29/09 12:44	
Acrylonitrile	ug/L	ND	200	07/29/09 12:44	
Benzene	ug/L	ND	1.0	07/29/09 12:44	
Bromochloromethane	ug/L	ND	3.0	07/29/09 12:44	
Bromodichloromethane	ug/L	ND	1.0	07/29/09 12:44	
Bromoform	ug/L	ND	3.0	07/29/09 12:44	
Bromomethane	ug/L	ND	10.0	07/29/09 12:44	
Carbon disulfide	ug/L	ND	100	07/29/09 12:44	
Carbon tetrachloride	ug/L	ND	1.0	07/29/09 12:44	
Chlorobenzene	ug/L	ND	3.0	07/29/09 12:44	
Chloroethane	ug/L	ND	10.0	07/29/09 12:44	
Chloroform	ug/L	ND	5.0	07/29/09 12:44	
Chloromethane	ug/L	ND	1.0	07/29/09 12:44	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/29/09 12:44	
Dibromochloromethane	ug/L	ND	3.0	07/29/09 12:44	
Dibromomethane	ug/L	ND	10.0	07/29/09 12:44	
Ethylbenzene	ug/L	ND	1.0	07/29/09 12:44	
Iodomethane	ug/L	ND	10.0	07/29/09 12:44	
m&p-Xylene	ug/L	ND	2.0	07/29/09 12:44	
Methylene Chloride	ug/L	ND	2.0	07/29/09 12:44	
o-Xylene	ug/L	ND	1.0	07/29/09 12:44	
Styrene	ug/L	ND	1.0	07/29/09 12:44	
Tetrachloroethene	ug/L	ND	1.0	07/29/09 12:44	
Toluene	ug/L	ND	1.0	07/29/09 12:44	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/29/09 12:44	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

METHOD BLANK: 314831 Matrix: Water

Associated Lab Samples: 9249225003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/29/09 12:44	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/29/09 12:44	
Trichloroethene	ug/L	ND	1.0	07/29/09 12:44	
Trichlorofluoromethane	ug/L	ND	1.0	07/29/09 12:44	
Vinyl acetate	ug/L	ND	50.0	07/29/09 12:44	
Vinyl chloride	ug/L	ND	1.0	07/29/09 12:44	
Xylene (Total)	ug/L	ND	5.0	07/29/09 12:44	
1,2-Dichloroethane-d4 (S)	%	108	79-120	07/29/09 12:44	
4-Bromofluorobenzene (S)	%	99	87-109	07/29/09 12:44	
Dibromofluoromethane (S)	%	100	85-115	07/29/09 12:44	
Toluene-d8 (S)	%	100	70-120	07/29/09 12:44	

LABORATORY CONTROL SAMPLE: 314832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.7	113	83-125	
1,1,1-Trichloroethane	ug/L	50	61.0	122	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	56.2	112	73-127	
1,1,2-Trichloroethane	ug/L	50	55.3	111	77-123	
1,1-Dichloroethane	ug/L	50	69.0	138	76-129	L0
1,1-Dichloroethene	ug/L	50	54.3	109	78-146	
1,2,3-Trichloropropane	ug/L	50	54.5	109	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	48.0	96	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	55.4	111	81-125	
1,2-Dichlorobenzene	ug/L	50	56.6	113	82-126	
1,2-Dichloroethane	ug/L	50	56.9	114	72-126	
1,2-Dichloropropane	ug/L	50	55.9	112	80-127	
1,3-Dichloropropane	ug/L	50	55.0	110	79-124	
1,4-Dichlorobenzene	ug/L	50	55.4	111	79-125	
2-Butanone (MEK)	ug/L	100	98.0J	98	50-134	
2-Hexanone	ug/L	100	106	106	58-138	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-131	
Acetone	ug/L	100	108	108	50-146	
Acrylonitrile	ug/L	250	253	101	66-124	
Benzene	ug/L	50	55.4	111	78-128	
Bromochloromethane	ug/L	50	56.7	113	73-124	
Bromodichloromethane	ug/L	50	54.3	109	81-125	
Bromoform	ug/L	50	49.0	98	71-125	
Bromomethane	ug/L	50	67.8	136	50-150	
Carbon disulfide	ug/L	50	48.0J	96	54-150	
Carbon tetrachloride	ug/L	50	60.9	122	81-137	
Chlorobenzene	ug/L	50	56.2	112	82-126	
Chloroethane	ug/L	50	48.5	97	69-140	
Chloroform	ug/L	50	55.6	111	77-129	
Chloromethane	ug/L	50	40.4	81	54-139	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

LABORATORY CONTROL SAMPLE: 314832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	55.0	110	76-133	
cis-1,3-Dichloropropene	ug/L	50	57.1	114	76-127	
Dibromochloromethane	ug/L	50	53.9	108	77-125	
Dibromomethane	ug/L	50	60.5	121	77-125	
Ethylbenzene	ug/L	50	55.6	111	80-127	
Iodomethane	ug/L	100	102	102	65-172	
m&p-Xylene	ug/L	100	112	112	82-127	
Methylene Chloride	ug/L	50	61.4	123	67-133	
o-Xylene	ug/L	50	55.3	111	83-124	
Styrene	ug/L	50	55.9	112	80-130	
Tetrachloroethene	ug/L	50	55.2	110	78-128	
Toluene	ug/L	50	54.0	108	76-126	
trans-1,2-Dichloroethene	ug/L	50	51.3	103	78-134	
trans-1,3-Dichloropropene	ug/L	50	58.0	116	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	60.3J	121	51-140	
Trichloroethene	ug/L	50	55.7	111	79-127	
Trichlorofluoromethane	ug/L	50	48.8	98	76-148	
Vinyl acetate	ug/L	100	76.8	77	50-150	
Vinyl chloride	ug/L	50	46.1	92	67-143	
Xylene (Total)	ug/L	150	167	111	83-125	
1,2-Dichloroethane-d4 (S)	%			103	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			99	85-115	
Toluene-d8 (S)	%			100	70-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 314833 314834

Parameter	Units	9249227020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	55.6	58.2	111	116	60-150	5	30	
Benzene	ug/L	ND	50	50	50.0	54.9	100	110	74-136	9	30	
Chlorobenzene	ug/L	ND	50	50	48.6	53.6	97	107	79-135	10	30	
Toluene	ug/L	ND	50	50	48.4	53.6	97	107	73-131	10	30	
Trichloroethene	ug/L	0.91J	50	50	49.5	54.6	97	107	73-131	10	30	
1,2-Dichloroethane-d4 (S)	%						110	110	79-120			
4-Bromofluorobenzene (S)	%						96	96	87-109			
Dibromofluoromethane (S)	%						102	103	85-115			
Toluene-d8 (S)	%						100	101	70-120			

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

QC Batch: MPRP/4794
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9249225001, 9249225002

METHOD BLANK: 312162
Matrix: Water
Associated Lab Samples: 9249225001, 9249225002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	07/25/09 01:48	
Arsenic	ug/L	ND	10.0	07/25/09 01:48	
Barium	ug/L	ND	100	07/25/09 01:48	
Beryllium	ug/L	ND	1.0	07/25/09 01:48	
Cadmium	ug/L	ND	1.0	07/25/09 01:48	
Chromium	ug/L	0.57J	10.0	07/25/09 01:48	
Cobalt	ug/L	ND	10.0	07/25/09 01:48	
Copper	ug/L	ND	10.0	07/25/09 01:48	
Lead	ug/L	ND	10.0	07/25/09 01:48	
Nickel	ug/L	ND	50.0	07/25/09 01:48	
Selenium	ug/L	ND	10.0	07/25/09 01:48	
Silver	ug/L	ND	10.0	07/25/09 01:48	
Thallium	ug/L	ND	5.5	07/25/09 01:48	
Vanadium	ug/L	ND	25.0	07/25/09 01:48	
Zinc	ug/L	6.1J	10.0	07/25/09 01:48	

LABORATORY CONTROL SAMPLE: 312163

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	430	86	80-120	
Arsenic	ug/L	500	425	85	80-120	
Barium	ug/L	500	404	81	80-120	
Beryllium	ug/L	500	439	88	80-120	
Cadmium	ug/L	500	438	88	80-120	
Chromium	ug/L	500	447	89	80-120	
Cobalt	ug/L	500	433	87	80-120	
Copper	ug/L	500	399	80	80-120	
Lead	ug/L	500	438	88	80-120	
Nickel	ug/L	500	443	89	80-120	
Selenium	ug/L	500	416	83	80-120	
Silver	ug/L	250	210	84	80-120	
Thallium	ug/L	500	402	80	80-120	
Vanadium	ug/L	500	425	85	80-120	
Zinc	ug/L	500	432	86	80-120	

MATRIX SPIKE SAMPLE: 312164

Parameter	Units	9248993001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	461	92	75-125	
Arsenic	ug/L	2.8J	500	474	94	75-125	

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QUALITY CONTROL DATA

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

MATRIX SPIKE SAMPLE: 312164

Parameter	Units	9248993001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	ug/L	235	500	654	84	75-125	
Beryllium	ug/L	0.16J	500	466	93	75-125	
Cadmium	ug/L	1.1	500	457	91	75-125	
Chromium	ug/L	6.2J	500	467	92	75-125	
Cobalt	ug/L	14.8	500	459	89	75-125	
Copper	ug/L	ND	500	417	83	75-125	
Lead	ug/L	ND	500	449	90	75-125	
Nickel	ug/L	2.9J	500	455	90	75-125	
Selenium	ug/L	ND	500	458	91	75-125	
Silver	ug/L	0.36J	250	221	88	75-125	
Thallium	ug/L	ND	500	410	82	75-125	
Vanadium	ug/L	2.5J	500	449	89	75-125	
Zinc	ug/L	13.1	500	458	89	75-125	

SAMPLE DUPLICATE: 312165

Parameter	Units	9248993002 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		25	
Arsenic	ug/L	6.4J	6.6J	3	25	
Barium	ug/L	56.9J	54.6J	4	25	
Beryllium	ug/L	0.48J	0.46J		25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	1.2J	1.3J		25	
Cobalt	ug/L	ND	ND		25	
Copper	ug/L	ND	ND		25	
Lead	ug/L	ND	ND		25	
Nickel	ug/L	ND	ND		25	
Selenium	ug/L	ND	ND		25	
Silver	ug/L	0.75J	0.70J		25	
Thallium	ug/L	3.4J	ND		25	
Vanadium	ug/L	2.6J	2.6J		25	
Zinc	ug/L	5.0J	7.0J		25	

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QUALIFIERS

Project: IREDELL CO SUB D LF SURFACE
Pace Project No.: 9249225

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

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

ANALYTE QUALIFIERS

L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
M0	Matrix spike recovery was outside laboratory control limits.
S0	Surrogate recovery outside laboratory control limits.
Z2	Analyte present in the associated method blank above the detection limit.

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August 06, 2009

Mr. Jonathan Pfohl
Municipal Engineering Services
PO Box 97
Garner, NC 27529

RE: Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Dear Mr. Pfohl:
Enclosed are the analytical results for sample(s) received by the laboratory on July 24, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

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

Sincerely,

Bonnie McKee

Bonnie McKee

bonnie.mckee@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Charlotte Certification IDs

Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 990060003
South Carolina Certification #: 990060001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706
New Jersey Certification #: NC012
Louisiana/LELAP Certification #: 04034
Kentucky UST Certification #: 84

Asheville Certification IDs

Connecticut Certification #: PH-0106
Virginia Certification #: 00072
Tennessee Certification #: 2980
South Carolina Certification #: 99030001
South Carolina Bioassay Certification #: 99030002
Pennsylvania Certification #: 68-03578
West Virginia Certification #: 356
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
Louisiana/LELAP Certification #: 03095
Florida/NELAP Certification #: E87648
North Carolina Wastewater Certification #: 40

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SAMPLE SUMMARY

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Lab ID	Sample ID	Matrix	Date Collected	Date Received
9249402001	**EB**	Water	07/23/09 07:10	07/24/09 14:00
9249402002	**FB**	Water	07/23/09 07:15	07/24/09 14:00
9249402003	**TB**	Water	07/23/09 00:00	07/24/09 14:00

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SAMPLE ANALYTE COUNT

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9249402001	**EB**	EPA 6010	SHB	16	PASI-A
		EPA 7470	SAJ	1	PASI-A
		EPA 8260	MCK	65	PASI-C
9249402002	**FB**	EPA 8260	MCK	65	PASI-C
9249402003	**TB**	EPA 8260	MCK	65	PASI-C

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: EB **Lab ID: 9249402001** Collected: 07/23/09 07:10 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6010 ICP Groundwater	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	ug/L	6.0	2.6	1	07/30/09 10:30	07/31/09 21:31	7440-36-0	
Arsenic	ND	ug/L	10.0	2.7	1	07/30/09 10:30	07/31/09 21:31	7440-38-2	
Barium	**22.2J**	ug/L	100	0.20	1	07/30/09 10:30	07/31/09 21:31	7440-39-3	
Beryllium	ND	ug/L	1.0	0.10	1	07/30/09 10:30	07/31/09 21:31	7440-41-7	
Cadmium	ND	ug/L	1.0	0.50	1	07/30/09 10:30	07/31/09 21:31	7440-43-9	
Chromium	ND	ug/L	10.0	0.40	1	07/30/09 10:30	07/31/09 21:31	7440-47-3	
Cobalt	ND	ug/L	10.0	0.60	1	07/30/09 10:30	07/31/09 21:31	7440-48-4	
Copper	ND	ug/L	10.0	0.30	1	07/30/09 10:30	07/31/09 21:31	7440-50-8	
Lead	ND	ug/L	10.0	4.0	1	07/30/09 10:30	07/31/09 21:31	7439-92-1	
Nickel	ND	ug/L	50.0	1.7	1	07/30/09 10:30	07/31/09 21:31	7440-02-0	
Selenium	ND	ug/L	10.0	3.8	1	07/30/09 10:30	07/31/09 21:31	7782-49-2	
Silver	**0.39J**	ug/L	10.0	0.10	1	07/30/09 10:30	07/31/09 21:31	7440-22-4	Z2
Thallium	ND	ug/L	5.5	3.0	1	07/30/09 10:30	07/31/09 21:31	7440-28-0	
Tin	ND	ug/L	5.0	1.8	1	07/30/09 10:30	07/31/09 21:31	7440-31-5	
Vanadium	**0.41J**	ug/L	25.0	0.20	1	07/30/09 10:30	07/31/09 21:31	7440-62-2	
Zinc	**3.7J**	ug/L	10.0	0.40	1	07/30/09 10:30	07/31/09 21:31	7440-66-6	Z2
7470 Mercury	Analytical Method: EPA 7470 Preparation Method: EPA 7470								
Mercury	ND	ug/L	0.20	0.070	1	07/28/09 14:35	07/29/09 11:40	7439-97-6	
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/31/09 09:35	67-64-1	
Acrolein	ND	ug/L	10.0	1.6	1		07/31/09 09:35	107-02-8	
Acrylonitrile	ND	ug/L	200	1.9	1		07/31/09 09:35	107-13-1	
Allyl chloride	ND	ug/L	2.0	1.5	1		07/31/09 09:35	107-05-1	
Benzene	ND	ug/L	1.0	0.25	1		07/31/09 09:35	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/31/09 09:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/31/09 09:35	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/31/09 09:35	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/31/09 09:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/31/09 09:35	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/31/09 09:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/31/09 09:35	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/31/09 09:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/31/09 09:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/31/09 09:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/31/09 09:35	74-87-3	
Chloroprene	ND	ug/L	5.0	0.27	1		07/31/09 09:35	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/31/09 09:35	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/31/09 09:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/31/09 09:35	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/31/09 09:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/31/09 09:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		07/31/09 09:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/31/09 09:35	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/31/09 09:35	110-57-6	

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: EB **Lab ID: 9249402001** Collected: 07/23/09 07:10 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/31/09 09:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/31/09 09:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/31/09 09:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/31/09 09:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/31/09 09:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/31/09 09:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/31/09 09:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		07/31/09 09:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		07/31/09 09:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/31/09 09:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/31/09 09:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/31/09 09:35	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/31/09 09:35	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/31/09 09:35	74-88-4	
Isobutanol	ND	ug/L	100	35.0	1		07/31/09 09:35	78-83-1	
Methacrylonitrile	ND	ug/L	10.0	0.93	1		07/31/09 09:35	126-98-7	
Methylene Chloride	**1.3J**	ug/L	2.0	0.97	1		07/31/09 09:35	75-09-2	
Methyl methacrylate	ND	ug/L	2.0	2.0	1		07/31/09 09:35	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/31/09 09:35	108-10-1	
Naphthalene	ND	ug/L	1.0	0.24	1		07/31/09 09:35	91-20-3	
Propionitrile	ND	ug/L	20.0	3.6	1		07/31/09 09:35	107-12-0	
Styrene	ND	ug/L	1.0	0.26	1		07/31/09 09:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/31/09 09:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/31/09 09:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/31/09 09:35	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/31/09 09:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/31/09 09:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/31/09 09:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/31/09 09:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/31/09 09:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/31/09 09:35	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/31/09 09:35	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/31/09 09:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/31/09 09:35	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/31/09 09:35	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/31/09 09:35	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/31/09 09:35	460-00-4	
Dibromofluoromethane (S)	102	%	85-115		1		07/31/09 09:35	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	79-120		1		07/31/09 09:35	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		07/31/09 09:35	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: FB **Lab ID: 9249402002** Collected: 07/23/09 07:15 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/31/09 09:54	67-64-1	
Acrolein	ND	ug/L	10.0	1.6	1		07/31/09 09:54	107-02-8	
Acrylonitrile	ND	ug/L	200	1.9	1		07/31/09 09:54	107-13-1	
Allyl chloride	ND	ug/L	2.0	1.5	1		07/31/09 09:54	107-05-1	
Benzene	ND	ug/L	1.0	0.25	1		07/31/09 09:54	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/31/09 09:54	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/31/09 09:54	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/31/09 09:54	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/31/09 09:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/31/09 09:54	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/31/09 09:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/31/09 09:54	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/31/09 09:54	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/31/09 09:54	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/31/09 09:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/31/09 09:54	74-87-3	
Chloroprene	ND	ug/L	5.0	0.27	1		07/31/09 09:54	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/31/09 09:54	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/31/09 09:54	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/31/09 09:54	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/31/09 09:54	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/31/09 09:54	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		07/31/09 09:54	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/31/09 09:54	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/31/09 09:54	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/31/09 09:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/31/09 09:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/31/09 09:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/31/09 09:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/31/09 09:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/31/09 09:54	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/31/09 09:54	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		07/31/09 09:54	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		07/31/09 09:54	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/31/09 09:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/31/09 09:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/31/09 09:54	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/31/09 09:54	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/31/09 09:54	74-88-4	
Isobutanol	ND	ug/L	100	35.0	1		07/31/09 09:54	78-83-1	
Methacrylonitrile	ND	ug/L	10.0	0.93	1		07/31/09 09:54	126-98-7	
Methylene Chloride	**1.2J**	ug/L	2.0	0.97	1		07/31/09 09:54	75-09-2	
Methyl methacrylate	ND	ug/L	2.0	2.0	1		07/31/09 09:54	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/31/09 09:54	108-10-1	
Naphthalene	ND	ug/L	1.0	0.24	1		07/31/09 09:54	91-20-3	
Propionitrile	ND	ug/L	20.0	3.6	1		07/31/09 09:54	107-12-0	

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: FB **Lab ID: 9249402002** Collected: 07/23/09 07:15 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Styrene	ND	ug/L	1.0	0.26	1		07/31/09 09:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/31/09 09:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/31/09 09:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/31/09 09:54	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/31/09 09:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/31/09 09:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/31/09 09:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/31/09 09:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/31/09 09:54	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/31/09 09:54	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/31/09 09:54	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/31/09 09:54	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/31/09 09:54	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/31/09 09:54	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/31/09 09:54	95-47-6	
4-Bromofluorobenzene (S)	98	%	87-109		1		07/31/09 09:54	460-00-4	
Dibromofluoromethane (S)	101	%	85-115		1		07/31/09 09:54	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120		1		07/31/09 09:54	17060-07-0	
Toluene-d8 (S)	103	%	70-120		1		07/31/09 09:54	2037-26-5	

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: TB **Lab ID: 9249402003** Collected: 07/23/09 00:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Acetone	ND	ug/L	100	2.2	1		07/31/09 10:13	67-64-1	
Acrolein	ND	ug/L	10.0	1.6	1		07/31/09 10:13	107-02-8	
Acrylonitrile	ND	ug/L	200	1.9	1		07/31/09 10:13	107-13-1	
Allyl chloride	ND	ug/L	2.0	1.5	1		07/31/09 10:13	107-05-1	
Benzene	ND	ug/L	1.0	0.25	1		07/31/09 10:13	71-43-2	
Bromochloromethane	ND	ug/L	3.0	0.17	1		07/31/09 10:13	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.18	1		07/31/09 10:13	75-27-4	
Bromoform	ND	ug/L	3.0	0.26	1		07/31/09 10:13	75-25-2	
Bromomethane	ND	ug/L	10.0	0.29	1		07/31/09 10:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	0.96	1		07/31/09 10:13	78-93-3	
Carbon disulfide	ND	ug/L	100	1.2	1		07/31/09 10:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.25	1		07/31/09 10:13	56-23-5	
Chlorobenzene	ND	ug/L	3.0	0.23	1		07/31/09 10:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.54	1		07/31/09 10:13	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		07/31/09 10:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.11	1		07/31/09 10:13	74-87-3	
Chloroprene	ND	ug/L	5.0	0.27	1		07/31/09 10:13	126-99-8	
1,2-Dibromo-3-chloropropane	ND	ug/L	13.0	2.5	1		07/31/09 10:13	96-12-8	
Dibromochloromethane	ND	ug/L	3.0	0.21	1		07/31/09 10:13	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.27	1		07/31/09 10:13	106-93-4	
Dibromomethane	ND	ug/L	10.0	0.21	1		07/31/09 10:13	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.30	1		07/31/09 10:13	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.24	1		07/31/09 10:13	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.33	1		07/31/09 10:13	106-46-7	
trans-1,4-Dichloro-2-butene	ND	ug/L	100	1.0	1		07/31/09 10:13	110-57-6	
1,1-Dichloroethane	ND	ug/L	5.0	0.32	1		07/31/09 10:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		07/31/09 10:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.56	1		07/31/09 10:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.19	1		07/31/09 10:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.49	1		07/31/09 10:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.27	1		07/31/09 10:13	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.28	1		07/31/09 10:13	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.13	1		07/31/09 10:13	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.49	1		07/31/09 10:13	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.13	1		07/31/09 10:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.26	1		07/31/09 10:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.30	1		07/31/09 10:13	100-41-4	
2-Hexanone	ND	ug/L	50.0	0.46	1		07/31/09 10:13	591-78-6	
Iodomethane	ND	ug/L	10.0	0.32	1		07/31/09 10:13	74-88-4	
Isobutanol	ND	ug/L	100	35.0	1		07/31/09 10:13	78-83-1	
Methacrylonitrile	ND	ug/L	10.0	0.93	1		07/31/09 10:13	126-98-7	
Methylene Chloride	ND	ug/L	2.0	0.97	1		07/31/09 10:13	75-09-2	
Methyl methacrylate	ND	ug/L	2.0	2.0	1		07/31/09 10:13	80-62-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	0.33	1		07/31/09 10:13	108-10-1	
Naphthalene	ND	ug/L	1.0	0.24	1		07/31/09 10:13	91-20-3	
Propionitrile	ND	ug/L	20.0	3.6	1		07/31/09 10:13	107-12-0	

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ANALYTICAL RESULTS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

Sample: TB **Lab ID: 9249402003** Collected: 07/23/09 00:00 Received: 07/24/09 14:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 8260								
Styrene	ND	ug/L	1.0	0.26	1		07/31/09 10:13	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.33	1		07/31/09 10:13	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	3.0	0.40	1		07/31/09 10:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.46	1		07/31/09 10:13	127-18-4	
Toluene	ND	ug/L	1.0	0.26	1		07/31/09 10:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.48	1		07/31/09 10:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.29	1		07/31/09 10:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.47	1		07/31/09 10:13	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.20	1		07/31/09 10:13	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.41	1		07/31/09 10:13	96-18-4	
Vinyl acetate	ND	ug/L	50.0	0.35	1		07/31/09 10:13	108-05-4	
Vinyl chloride	ND	ug/L	1.0	0.62	1		07/31/09 10:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.66	1		07/31/09 10:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.66	1		07/31/09 10:13	1330-20-7	
o-Xylene	ND	ug/L	1.0	0.23	1		07/31/09 10:13	95-47-6	
4-Bromofluorobenzene (S)	97	%	87-109		1		07/31/09 10:13	460-00-4	
Dibromofluoromethane (S)	100	%	85-115		1		07/31/09 10:13	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	79-120		1		07/31/09 10:13	17060-07-0	
Toluene-d8 (S)	102	%	70-120		1		07/31/09 10:13	2037-26-5	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

QC Batch: MERP/2291
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury
Associated Lab Samples: 9249402001

METHOD BLANK: 313901
Matrix: Water
Associated Lab Samples: 9249402001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.20	07/29/09 11:10	

LABORATORY CONTROL SAMPLE: 313902

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	2.5	2.4	98	80-120	

MATRIX SPIKE SAMPLE: 313903

Parameter	Units	9249227015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	ND	2.5	2.5	101	75-125	

SAMPLE DUPLICATE: 313904

Parameter	Units	9249227016 Result	Dup Result	RPD	Max RPD	Qualifiers
Mercury	ug/L	ND	ND		25	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

QC Batch: MPRP/4834
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET NC Groundwater
Associated Lab Samples: 9249402001

METHOD BLANK: 315144
Matrix: Water
Associated Lab Samples: 9249402001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	ug/L	ND	6.0	07/31/09 21:24	
Arsenic	ug/L	ND	10.0	07/31/09 21:24	
Barium	ug/L	ND	100	07/31/09 21:24	
Beryllium	ug/L	ND	1.0	07/31/09 21:24	
Cadmium	ug/L	ND	1.0	07/31/09 21:24	
Chromium	ug/L	ND	10.0	07/31/09 21:24	
Cobalt	ug/L	ND	10.0	07/31/09 21:24	
Copper	ug/L	ND	10.0	07/31/09 21:24	
Lead	ug/L	ND	10.0	07/31/09 21:24	
Nickel	ug/L	ND	50.0	07/31/09 21:24	
Selenium	ug/L	ND	10.0	07/31/09 21:24	
Silver	ug/L	0.32J	10.0	07/31/09 21:24	
Thallium	ug/L	ND	5.5	07/31/09 21:24	
Tin	ug/L	ND	5.0	07/31/09 21:24	
Vanadium	ug/L	ND	25.0	07/31/09 21:24	
Zinc	ug/L	4.6J	10.0	07/31/09 21:24	

LABORATORY CONTROL SAMPLE: 315145

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	500	515	103	80-120	
Arsenic	ug/L	500	506	101	80-120	
Barium	ug/L	500	522	104	80-120	
Beryllium	ug/L	500	534	107	80-120	
Cadmium	ug/L	500	501	100	80-120	
Chromium	ug/L	500	522	104	80-120	
Cobalt	ug/L	500	516	103	80-120	
Copper	ug/L	500	519	104	80-120	
Lead	ug/L	500	503	101	80-120	
Nickel	ug/L	500	509	102	80-120	
Selenium	ug/L	500	514	103	80-120	
Silver	ug/L	250	256	102	80-120	
Thallium	ug/L	500	483	97	80-120	
Tin	ug/L	500	505	101	80-120	
Vanadium	ug/L	500	517	103	80-120	
Zinc	ug/L	500	511	102	80-120	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

MATRIX SPIKE SAMPLE: 315146

Parameter	Units	9249402001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Antimony	ug/L	ND	500	515	103	75-125	
Arsenic	ug/L	ND	500	505	101	75-125	
Barium	ug/L	22.2J	500	540	104	75-125	
Beryllium	ug/L	ND	500	527	105	75-125	
Cadmium	ug/L	ND	500	491	98	75-125	
Chromium	ug/L	ND	500	517	103	75-125	
Cobalt	ug/L	ND	500	507	101	75-125	
Copper	ug/L	ND	500	520	104	75-125	
Lead	ug/L	ND	500	494	99	75-125	
Nickel	ug/L	ND	500	499	100	75-125	
Selenium	ug/L	ND	500	506	101	75-125	
Silver	ug/L	0.39J	250	255	102	75-125	
Thallium	ug/L	ND	500	476	95	75-125	
Tin	ug/L	ND	500	499	100	75-125	
Vanadium	ug/L	0.41J	500	516	103	75-125	
Zinc	ug/L	3.7J	500	507	101	75-125	

SAMPLE DUPLICATE: 315147

Parameter	Units	9249441001 Result	Dup Result	RPD	Max RPD	Qualifiers
Antimony	ug/L	ND	ND		25	
Arsenic	ug/L	ND	ND		25	
Barium	ug/L	44.7J	44.3J	.9	25	
Beryllium	ug/L	ND	ND		25	
Cadmium	ug/L	ND	ND		25	
Chromium	ug/L	ND	ND		25	
Cobalt	ug/L	ND	ND		25	
Copper	ug/L	0.98J	2.4J		25	
Lead	ug/L	ND	ND		25	
Nickel	ug/L	4.6J	4.7J		25	
Selenium	ug/L	ND	ND		25	
Silver	ug/L	0.43J	0.37J		25	
Thallium	ug/L	ND	ND		25	
Tin	ug/L	ND	ND		25	
Vanadium	ug/L	0.30J	0.23J		25	
Zinc	ug/L	15.5	20.3	27	25	R1

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

QC Batch: MSV/7813 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV Low Level
Associated Lab Samples: 9249402001, 9249402002, 9249402003

METHOD BLANK: 316003 Matrix: Water
Associated Lab Samples: 9249402001, 9249402002, 9249402003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	07/31/09 08:57	
1,1,1-Trichloroethane	ug/L	ND	1.0	07/31/09 08:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	3.0	07/31/09 08:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	07/31/09 08:57	
1,1-Dichloroethane	ug/L	ND	5.0	07/31/09 08:57	
1,1-Dichloroethene	ug/L	ND	5.0	07/31/09 08:57	
1,1-Dichloropropene	ug/L	ND	1.0	07/31/09 08:57	
1,2,3-Trichloropropane	ug/L	ND	1.0	07/31/09 08:57	
1,2-Dibromo-3-chloropropane	ug/L	ND	13.0	07/31/09 08:57	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	07/31/09 08:57	
1,2-Dichlorobenzene	ug/L	ND	5.0	07/31/09 08:57	
1,2-Dichloroethane	ug/L	ND	1.0	07/31/09 08:57	
1,2-Dichloropropane	ug/L	ND	1.0	07/31/09 08:57	
1,3-Dichlorobenzene	ug/L	ND	1.0	07/31/09 08:57	
1,3-Dichloropropane	ug/L	ND	1.0	07/31/09 08:57	
1,4-Dichlorobenzene	ug/L	ND	1.0	07/31/09 08:57	
2,2-Dichloropropane	ug/L	ND	1.0	07/31/09 08:57	
2-Butanone (MEK)	ug/L	ND	100	07/31/09 08:57	
2-Hexanone	ug/L	ND	50.0	07/31/09 08:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	07/31/09 08:57	
Acetone	ug/L	ND	100	07/31/09 08:57	
Acrolein	ug/L	ND	10.0	07/31/09 08:57	
Acrylonitrile	ug/L	ND	200	07/31/09 08:57	
Allyl chloride	ug/L	ND	2.0	07/31/09 08:57	
Benzene	ug/L	ND	1.0	07/31/09 08:57	
Bromochloromethane	ug/L	ND	3.0	07/31/09 08:57	
Bromodichloromethane	ug/L	ND	1.0	07/31/09 08:57	
Bromoform	ug/L	ND	3.0	07/31/09 08:57	
Bromomethane	ug/L	ND	10.0	07/31/09 08:57	
Carbon disulfide	ug/L	ND	100	07/31/09 08:57	
Carbon tetrachloride	ug/L	ND	1.0	07/31/09 08:57	
Chlorobenzene	ug/L	ND	3.0	07/31/09 08:57	
Chloroethane	ug/L	ND	10.0	07/31/09 08:57	
Chloroform	ug/L	ND	5.0	07/31/09 08:57	
Chloromethane	ug/L	ND	1.0	07/31/09 08:57	
Chloroprene	ug/L	ND	5.0	07/31/09 08:57	
cis-1,2-Dichloroethene	ug/L	ND	5.0	07/31/09 08:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	07/31/09 08:57	
Dibromochloromethane	ug/L	ND	3.0	07/31/09 08:57	
Dibromomethane	ug/L	ND	10.0	07/31/09 08:57	
Ethylbenzene	ug/L	ND	1.0	07/31/09 08:57	
Iodomethane	ug/L	ND	10.0	07/31/09 08:57	
Isobutanol	ug/L	ND	100	07/31/09 08:57	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

METHOD BLANK: 316003 Matrix: Water

Associated Lab Samples: 9249402001, 9249402002, 9249402003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/L	ND	2.0	07/31/09 08:57	
Methacrylonitrile	ug/L	ND	10.0	07/31/09 08:57	
Methyl methacrylate	ug/L	ND	2.0	07/31/09 08:57	
Methylene Chloride	ug/L	5.3	2.0	07/31/09 08:57	C9
Naphthalene	ug/L	ND	1.0	07/31/09 08:57	
o-Xylene	ug/L	ND	1.0	07/31/09 08:57	
Propionitrile	ug/L	ND	20.0	07/31/09 08:57	
Styrene	ug/L	ND	1.0	07/31/09 08:57	
Tetrachloroethene	ug/L	ND	1.0	07/31/09 08:57	
Toluene	ug/L	ND	1.0	07/31/09 08:57	
trans-1,2-Dichloroethene	ug/L	ND	5.0	07/31/09 08:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	07/31/09 08:57	
trans-1,4-Dichloro-2-butene	ug/L	ND	100	07/31/09 08:57	
Trichloroethene	ug/L	ND	1.0	07/31/09 08:57	
Trichlorofluoromethane	ug/L	ND	1.0	07/31/09 08:57	
Vinyl acetate	ug/L	ND	50.0	07/31/09 08:57	
Vinyl chloride	ug/L	ND	1.0	07/31/09 08:57	
Xylene (Total)	ug/L	ND	5.0	07/31/09 08:57	
1,2-Dichloroethane-d4 (S)	%	107	79-120	07/31/09 08:57	
4-Bromofluorobenzene (S)	%	98	87-109	07/31/09 08:57	
Dibromofluoromethane (S)	%	101	85-115	07/31/09 08:57	
Toluene-d8 (S)	%	101	70-120	07/31/09 08:57	

LABORATORY CONTROL SAMPLE: 316004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	58.0	116	83-125	
1,1,1-Trichloroethane	ug/L	50	62.0	124	80-129	
1,1,2,2-Tetrachloroethane	ug/L	50	52.8	106	73-127	
1,1,2-Trichloroethane	ug/L	50	57.1	114	77-123	
1,1-Dichloroethane	ug/L	50	72.4	145	76-129	L0
1,1-Dichloroethene	ug/L	50	54.3	109	78-146	
1,1-Dichloropropene	ug/L	50	54.5	109	79-134	
1,2,3-Trichloropropane	ug/L	50	56.4	113	72-125	
1,2-Dibromo-3-chloropropane	ug/L	50	44.2	88	65-128	
1,2-Dibromoethane (EDB)	ug/L	50	57.2	114	81-125	
1,2-Dichlorobenzene	ug/L	50	56.5	113	82-126	
1,2-Dichloroethane	ug/L	50	58.2	116	72-126	
1,2-Dichloropropane	ug/L	50	58.5	117	80-127	
1,3-Dichlorobenzene	ug/L	50	55.6	111	82-124	
1,3-Dichloropropane	ug/L	50	55.1	110	79-124	
1,4-Dichlorobenzene	ug/L	50	56.3	113	79-125	
2,2-Dichloropropane	ug/L	50	48.6	97	58-140	
2-Butanone (MEK)	ug/L	100	109	109	50-134	
2-Hexanone	ug/L	100	112	112	58-138	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

LABORATORY CONTROL SAMPLE: 316004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Methyl-2-pentanone (MIBK)	ug/L	100	108	108	70-131	
Acetone	ug/L	100	110	110	50-146	
Acrolein	ug/L	250	188	75	55-143	
Acrylonitrile	ug/L	250	271	108	66-124	
Allyl chloride	ug/L	50	45.5	91	73-141	
Benzene	ug/L	50	58.1	116	78-128	
Bromochloromethane	ug/L	50	53.7	107	73-124	
Bromodichloromethane	ug/L	50	54.5	109	81-125	
Bromoform	ug/L	50	48.4	97	71-125	
Bromomethane	ug/L	50	64.2	128	50-150	
Carbon disulfide	ug/L	50	48.4J	97	54-150	
Carbon tetrachloride	ug/L	50	62.3	125	81-137	
Chlorobenzene	ug/L	50	58.8	118	82-126	
Chloroethane	ug/L	50	51.6	103	69-140	
Chloroform	ug/L	50	56.4	113	77-129	
Chloromethane	ug/L	50	44.1	88	54-139	
Chloroprene	ug/L	50	46.2	92	71-142	
cis-1,2-Dichloroethene	ug/L	50	56.0	112	76-133	
cis-1,3-Dichloropropene	ug/L	50	54.6	109	76-127	
Dibromochloromethane	ug/L	50	53.8	108	77-125	
Dibromomethane	ug/L	50	62.4	125	77-125	
Ethylbenzene	ug/L	50	57.8	116	80-127	
Iodomethane	ug/L	100	91.0	91	65-172	
Isobutanol	ug/L	1000	1240	124	50-150	
m&p-Xylene	ug/L	100	115	115	82-127	
Methacrylonitrile	ug/L	500	564	113	70-128	
Methyl methacrylate	ug/L	50	51.7	103	79-122	
Methylene Chloride	ug/L	50	66.6	133	67-133	
Naphthalene	ug/L	50	57.3	115	52-136	
o-Xylene	ug/L	50	56.6	113	83-124	
Propionitrile	ug/L	500	615	123	65-129	
Styrene	ug/L	50	57.2	114	80-130	
Tetrachloroethene	ug/L	50	57.7	115	78-128	
Toluene	ug/L	50	56.5	113	76-126	
trans-1,2-Dichloroethene	ug/L	50	53.4	107	78-134	
trans-1,3-Dichloropropene	ug/L	50	55.1	110	75-125	
trans-1,4-Dichloro-2-butene	ug/L	50	53.5J	107	51-140	
Trichloroethene	ug/L	50	63.1	126	79-127	
Trichlorofluoromethane	ug/L	50	50.0	100	76-148	
Vinyl acetate	ug/L	100	53.1	53	50-150	
Vinyl chloride	ug/L	50	52.0	104	67-143	
Xylene (Total)	ug/L	150	171	114	83-125	
1,2-Dichloroethane-d4 (S)	%			101	79-120	
4-Bromofluorobenzene (S)	%			101	87-109	
Dibromofluoromethane (S)	%			98	85-115	
Toluene-d8 (S)	%			99	70-120	

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QUALITY CONTROL DATA

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 316005 316006

Parameter	Units	9248992014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	50	50	66.1	64.4	132	129	60-150	3	30	
Benzene	ug/L	ND	50	50	62.1	61.6	124	123	74-136	.8	30	
Chlorobenzene	ug/L	ND	50	50	60.6	61.1	121	122	79-135	.8	30	
Toluene	ug/L	0.73J	50	50	62.8	61.3	124	121	73-131	2	30	
Trichloroethene	ug/L	ND	50	50	59.8	59.6	120	119	73-131	.4	30	
1,2-Dichloroethane-d4 (S)	%						107	107	79-120			
4-Bromofluorobenzene (S)	%						98	97	87-109			
Dibromofluoromethane (S)	%						101	99	85-115			
Toluene-d8 (S)	%						102	101	70-120			

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QUALIFIERS

Project: IREDELL CO. MSWLF-BLANKS
Pace Project No.: 9249402

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

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

ANALYTE QUALIFIERS

C9	Common Laboratory Contaminant.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
R1	RPD value was outside control limits.
Z2	Analyte present in the associated method blank above the detection limit.

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