RCO 2489

P0472

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1-13-04

Semi-Annual Groundwater Sampling and Analysis Report

Prepared for

Iredell County Landfills, all active
Statesville, North Carolina

January, 2004

Received
APR 2004
Waste Management

4-30-04

Per Wayne Sullivan:

- Still plan to pressure test leachate line.
- New water line to be installed to supply dog pound next to old closed LF.

MESCO Project Number: G04013.0

Completed on April 20, 2004

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

OPERATION/CONSTRUCTION MANAGERS

Municipal Services

CIVIL/SANITARY ENGINEERS

Engineering Company, P.A.

April 20, 2004

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

Received
APR 2004
Waste Management

Re: Groundwater Sampling and Analysis
Iredell County Subtitle D Lined Landfill
MESCO Project No. G04013.0

Dear Mr. Rose:

Municipal Engineering Company, P.A. (MESCO) sampled the Iredell County Subtitle D Lined Landfill for the Appendix I list of constituents on January 13 & 14, 2004. The landfill facility consists of Phases 1, 2, 3, C&D, along with the Phase 3 Forcemain and a leachate lagoon. Environmental Conservation Laboratories, Inc. of Cary, North Carolina completed the laboratory analysis. The results are included herein.

All detected constituents were analyzed for regulatory exceedance with reference to North Carolina Groundwater Standards. The results are shown in the enclosed table titled "Exceedance Scan". The following tables summarize those constituents that exceeded the Standard.

Table 1. Exceedance Summary (Metals & VOCs)

Well	Barium	Cadmium	Chromium	Lead	Nickel	PCE	TCE	DCM
MW-2		x						
MW-4A					x			
MW-7		x		x				
MW-12			x	x				
MW-13B						x	x	x
MW-14A	x							
MW-16				x				

x = concentration greater than standard

Inorganic compounds (Metals) continue to be detected in all monitoring wells but the concentrations have decreased in general compared to the previous sampling event. The phase 3 wells were purged via a submersible pump in an effort to decrease the amount of sediment in the wells. The metal concentrations have generally decreased within the wells following using the pump compared to the previous baseline samples extracted via the baler method. The water samples obtained from the phase 3 monitoring wells have become less turbid after each of the last 2 sampling events therefore the metals have also decreased.

Volatile Organic Constituents (VOCs) were detected again within MW-9R, MW-13B and a premier detection within MW-12. MW-13B contained 3 VOCs in concentrations in exceedance of the Standard. This was the fourth consecutive sampling event VOCs have been found within this location. Levels of

PO Box 97, Garner, North Carolina 27529 (919) 772-5393
PO Box 828, Morehead City, NC 28557 (252) 726-9481 PO Box 349, Boone, North Carolina 28607 (828) 262-1767

PCE and TCE have remained stable or decreased slightly as levels of the daughter product dichloromethane has increased in comparison to the previous sampling event. These concentration trends may be indicative of natural degradation which is to be expected to occur over time. This area has been investigated and an assessment report was completed and turned in on February 23, 2004. In summary the report concludes that the contamination of the aquifer in the MW-13B area has likely been caused by a surface leachate infiltration event and not due to a breach in the liner system. A slug test was conducted upon MW-13B to aid in the flow rate determination of the aquifer and the results will be submitted after the calculations are finalized. The deeper counterpart MW-13A was found free of all organic constituents indicating that the contaminates have not traveled vertically in the immediate vicinity.

MW-9R, which historically has contained elevated VOC concentrations, apparently continues to undergo natural attenuation. Cis-1,2-Dichloroethene was the only VOC detected within MW-9R. MW-9RR, located slightly downgradient of MW-9R contained no VOCs making it likely that the VOC source is isolated.

Background monitoring well MW-1B and surface water SW-4 were dry during this sampling event therefore no samples were obtained. Water levels were obtained from several other existing piezometers to increase the data set thus improve the potentiometric map.

MESCO completed the enclosed potentiometric map with groundwater elevations on the day of sampling, flow rates and direction. The field data sheet and chain of custody is also enclosed. Statistical analyses will be conducted shortly on all detected constituents for inter-well and intra-well comparisons, and the results will be submitted to the Section upon completion.

A new phase 2 of the C&D landfill is pending permit issuance. This portion of the C&D landfill contains 1 upstream surface water (SW-6), 4 compliance wells (MW-22, MW-23, MW-24S, and MW-24) as well as background MW-1C. The Monitoring wells were sampled for the complete Appendix I list of constituents on April 14, 2004 as part of the pre-operational requirement. These monitoring sites will be sampled simultaneously with all of the others during the routine January/July sampling events.

The landfills will continue detection monitoring and will be sampled for the complete Appendix I list of constituents again in July 2004. 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. Ron Weatherman
Iredell County

Exceedance Scan
Iredell County Subtitle D Landfill, Phases 1,2, C&D

Well ID	Parameter Name [1]	Sample Date	Result	Unit	PQL [2]	MCL [3]	Exceedance
MW-1A	Cadmium, total	1/13/2004	0.0018	mg/L	0.001	0.005	
MW-1A	Cobalt, total	1/13/2004	0.011	mg/L	0.01	-	
MW-1C	Zinc, total	1/13/2004	0.06	mg/L	0.05	2.1	
MW-2	Beryllium, total	1/14/2004	0.0032	mg/L	0.002	-	
MW-2	**Cadmium, total**	**1/14/2004**	**0.011**	**mg/L**	**0.001**	**0.005**	**0.006**
MW-2	Cobalt, total	1/14/2004	0.022	mg/L	0.01	-	
MW-2	Lead, total	1/14/2004	0.01	mg/L	0.01	0.015	
MW-3A	Cobalt, total	1/14/2004	0.012	mg/L	0.01	-	
MW-4A	Cadmium, total	1/13/2004	0.0017	mg/L	0.001	0.005	
MW-4A	Chromium, total	1/13/2004	0.028	mg/L	0.01	0.05	
MW-4A	Cobalt, total	1/13/2004	0.057	mg/L	0.01	-	
MW-4A	**Nickel, total**	**1/13/2004**	**0.27**	**mg/L**	**0.05**	**0.1**	**0.17**
MW-4A	Vanadium	1/13/2004	0.058	mg/L	0.04	-	
MW-4A	Zinc, total	1/13/2004	0.11	mg/L	0.05	2.1	
MW-4B	Chromium, total	1/13/2004	0.018	mg/L	0.01	0.05	
MW-4B	Cobalt, total	1/13/2004	0.027	mg/L	0.01	-	
MW-4B	Zinc, total	1/13/2004	0.07	mg/L	0.05	2.1	
MW-6B	Cadmium, total	1/14/2004	0.0014	mg/L	0.001	0.005	
MW-6B	Chromium, total	1/14/2004	0.011	mg/L	0.01	0.05	
MW-7	Barium, total	1/14/2004	0.81	mg/L	0.5	2	
MW-7	Beryllium, total	1/14/2004	0.004	mg/L	0.002	-	
MW-7	**Cadmium, total**	**1/14/2004**	**0.0077**	**mg/L**	**0.001**	**0.005**	**0.0027**
MW-7	Cobalt, total	1/14/2004	0.018	mg/L	0.01	-	
MW-7	**Lead, total**	**1/14/2004**	**0.044**	**mg/L**	**0.01**	**0.015**	**0.029**
MW-7	Zinc, total	1/14/2004	0.1	mg/L	0.05	2.1	
MW-8	Chromium, total	1/14/2004	0.014	mg/L	0.01	0.05	
MW-8	Zinc, total	1/14/2004	0.06	mg/L	0.05	2.1	
MW-9R	Barium, total	1/13/2004	0.55	mg/L	0.5	2	
MW-9R	Cadmium, total	1/13/2004	0.0012	mg/L	0.001	0.005	
MW-9R	Cobalt, total	1/13/2004	0.022	mg/L	0.01	-	
MW-9R	Vanadium	1/13/2004	0.044	mg/L	0.04	-	
MW-9RR	Barium, total	1/13/2004	0.53	mg/L	0.5	2	
MW-9RR	Beryllium, total	1/13/2004	0.0034	mg/L	0.002	-	
MW-9RR	Cobalt, total	1/13/2004	0.026	mg/L	0.01	-	
MW-9RR	Lead, total	1/13/2004	0.01	mg/L	0.01	0.015	
MW-9RR	Zinc, total	1/13/2004	0.08	mg/L	0.05	2.1	
MW-10R	Barium, total	1/13/2004	0.78	mg/L	0.5	2	
MW-10R	Lead, total	1/13/2004	0.013	mg/L	0.01	0.015	
MW-12	Barium, total	1/13/2004	0.9	mg/L	0.5	2	
MW-12	Beryllium, total	1/13/2004	0.0045	mg/L	0.002	-	
MW-12	Cadmium, total	1/13/2004	0.0021	mg/L	0.001	0.005	
MW-12	**Chromium, total**	**1/13/2004**	**0.058**	**mg/L**	**0.01**	**0.05**	**0.008**
MW-12	Cobalt, total	1/13/2004	0.059	mg/L	0.01	-	
MW-12	**Lead, total**	**1/13/2004**	**0.024**	**mg/L**	**0.01**	**0.015**	**0.009**
MW-12	Vanadium	1/13/2004	0.12	mg/L	0.04	-	
MW-12	Zinc, total	1/13/2004	0.14	mg/L	0.05	2.1	
MW-13A	Cadmium, total	1/14/2004	0.0012	mg/L	0.001	0.005	
MW-13B	Barium, total	1/14/2004	1.2	mg/L	0.5	2	
MW-13B	Beryllium, total	1/14/2004	0.0055	mg/L	0.002	-	

Well ID	Parameter Name [1]	Sample Date	Result	Unit	PQL [2]	MCL [3]	Exceedance
MW-13B	Chromium, total	1/14/2004	0.01	mg/L	0.01	0.05	
MW-13B	Cobalt, total	1/14/2004	0.013	mg/L	0.01	-	
MW-13B	Lead, total	1/14/2004	0.011	mg/L	0.01	0.015	
MW-14A	**Barium, total**	**1/14/2004**	**2.1**	**mg/L**	**0.5**	**2**	**0.1**
MW-14A	Beryllium, total	1/14/2004	0.008	mg/L	0.002	-	
MW-14A	Cobalt, total	1/14/2004	0.016	mg/L	0.01	-	
MW-14A	Lead, total	1/14/2004	0.01	mg/L	0.01	0.015	
MW-14A	Zinc, total	1/14/2004	0.12	mg/L	0.05	2.1	
MW-14B	Chromium, total	1/14/2004	0.011	mg/L	0.01	0.05	
MW-16	Barium, total	1/13/2004	0.55	mg/L	0.5	2	
MW-16	Beryllium, total	1/13/2004	0.0021	mg/L	0.002	-	
MW-16	Chromium, total	1/13/2004	0.01	mg/L	0.01	0.05	
MW-16	Cobalt, total	1/13/2004	0.015	mg/L	0.01	-	
MW-16	**Lead, total**	**1/13/2004**	**0.018**	**mg/L**	**0.01**	**0.015**	**0.003**
MW-16	Zinc, total	1/13/2004	0.09	mg/L	0.05	2.1	
SW-3	Zinc, total	1/13/2004	0.53	mg/L	0.05	2.1	
FORCEMAIN	Cadmium	1/14/2004	0.0019	mg/L	0.001		
FORCEMAIN	Chromium	1/14/2004	0.01	mg/L	0.01		
FORCEMAIN	Cobalt	1/14/2004	0.016	mg/L	0.01		
FORCEMAIN	Lead	1/14/2004	0.013	mg/L	0.01		
LAGOON	Cadmium	1/14/2004	0.002	mg/L	0.001		
LAGOON	Cobalt	1/14/2004	0.045	mg/L	0.01		
LAGOON	Lead	1/14/2004	0.01	mg/L	0.01		
FORCEMAIN	Toluene	1/14/2004	370	ug/L	100		
LAGOON	2-Butanone	1/14/2004	14000	ug/L	10000		
MW-12	Toluene	1/13/2004	180	ug/L	5	1000	
MW-13B	**Dichloromethane**	**1/14/2004**	**26**	**ug/L**	**10**	**5**	**21**
MW-13B	**Tetrachloroethylene**	**1/14/2004**	**9.9**	**ug/L**	**5**	**0.7**	**9.2**
MW-13B	**Trichloroethylene**	**1/14/2004**	**14**	**ug/L**	**5**	**2.8**	**11.2**
MW-9R	cis-1,2-Dichloroethene	1/13/2004	23	ug/L	5	70	

[1] Table only contains detected constituents.

[2] PQL = Practical Quantitation Limit

[3] MCL = Maximum Contaminant Level (North Carolina Groundwater Standard)

Exceedance Scan
Iredell County Subtitle D Landfill (Phase 3)

Well ID	Parameter Name [1]	Sample Date	Result	Unit	PQL [2]	MCL [3]	Exceedance
MW-17	Cadmium, total	1/14/2004	0.0012	mg/L	0.001	0.005	
MW-19S	Cadmium, total	1/14/2004	0.0031	mg/L	0.001	0.005	
MW-19S	Cobalt, total	1/14/2004	0.058	mg/L	0.01	-	
MW-20	Cadmium, total	1/14/2004	0.0012	mg/L	0.001	0.005	
MW-21D	Cadmium, total	1/14/2004	0.004	mg/L	0.001	0.005	
MW-21S	Cadmium, total	1/14/2004	0.0011	mg/L	0.001	0.005	
SW-5	Cadmium, total	1/14/2004	0.0012	mg/L	0.001	0.005	

[1] Table only contains detected constituents.
[2] PQL = Practical Quantitation Limit
[3] MCL = Maximum Contaminant Level (North Carolina Groundwater Standard)

Hydrologic Properties at Monitoring Well Locations
Iredell County Subtitle D Landfill

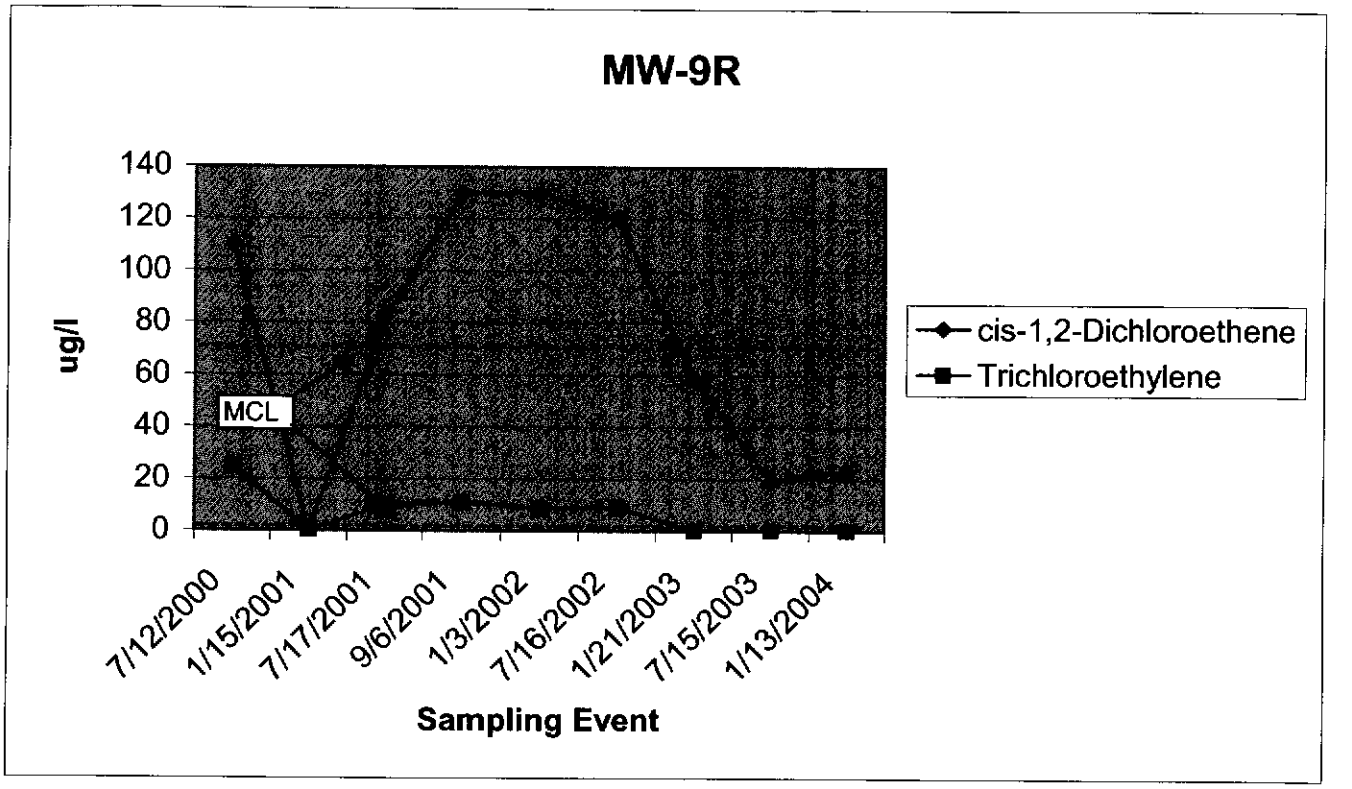
Monitoring Well	Hydraulic Conductivity	Effective Porosity (%)	Hydraulic Gradient	Flow Rate (ft/yr)	Flow Direction	Water Table Depth (ft)	Water Table Elev. (ft)
MW-2	5.00E-04	20%	0.04	104	N45W	8.75	788.87
MW-3A	2.00E-04	20%	0.03	30	N52W	8.47	783.63
MW-3B	2.00E-04	20%	0.03	30	N53W	7.59	783.02
MW-4A	7.00E-05	5%	0.04	55	N11W	26.25	796.45
MW-6A	7.00E-05	15%	0.05	24	N52E	17.92	775.08
MW-7	2.00E-04	15%	0.01	13	N47E	8.75	789.48
MW-8	1.00E-04	15%	0.03	19	N74E	19.1	778.3
MW-9R	2.00E-04	15%	0.08	109	S88E	12.67	794.52
MW-9RR	1.53E-04	15%	0.24	249	S88E	17.94	788.22
MW-10R	9.00E-05	15%	0.04	26	N75E	23.1	797.64
MW-11	1.30E-05	21%	0.05	3	N56E	11.72	809.74
MW-12	3.90E-06	20%	1.16	23.3	N26E	16.79	788.85
MW-13B	5.30E-06	21%	0.07	2	N44E	35.36	782.74
MW-14A	1.20E-05	21%	0.03	2	N51E	36.99	781.55
MW-16	4.65E-04	15%	0.06	183	N76E	11.17	782.97
P2-1S	1.42E-04	15%	0.07	66	N31E	22.61	835.75
P2-10S	2.38E-04	15%	0.11	187	N37E	25.68	784.74
MW-17	3.73E-05	21.70%	0.02	4	S34E	37.28	817.07
MW-18	7.43E-04	21.70%	0.01	46	S33E	8.21	792.51
MW-19S	4.54E-04	21.70%	0.02	39	S68E	6.31	787.28
MW-19D	2.81E-03	21.70%	n/a	n/a	S68E	8.35	787.46
MW-20	9.50E-04	21.70%	0.01	47	S87E	5.51	790.42
MW-21S	1.67E-05	21.70%	0.02	2	S73E	33.57	790.40
MW-21D	9.08E-07	21.70%	n/a	n/a	S73E	31.26	791.50

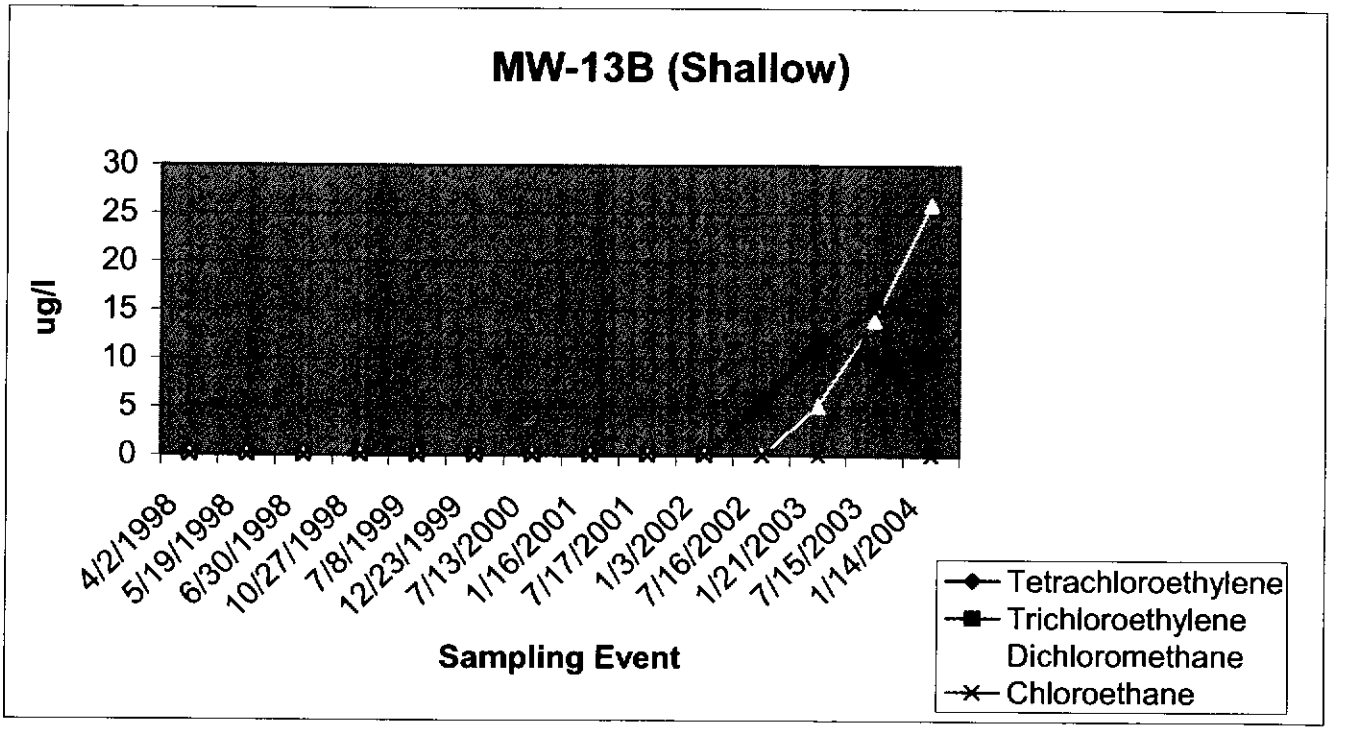
NOTE: MW-9 & MW-10 were replaced by MW-9R and MW-10R but the same values for hydraulic conductivity and effective porosity were used.
Values for hydraulic conductivity on all wells and peizometers determined via slug test by MESCO
Hydrologic Gradient taken from the Jan. 13-14, 2004 sampling event.

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

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

Time Series Plots for Select Constituents
Iredell County Subtitle D Landfill





Sampling Data Sheet

Project: Iredell County Subtitle D Landfill

Samplers: Jonathan Pfohl

Monitoring Point	Sample Date	Sample Time	Sampling Parameters					Water Quality Parameters				
			Depth to Water	Reference Point	Volume Purged	Sample Type	Sampling Depth	pH	Temp.	Specific Cond.	Turbidity	Total Depth
MW-1C	1/13/04	9:10	22.60		7	Pump	could only pump to 26.8	6.97	15.4	120	M.T	34
MW-1A		9:40	22.29		Pumped Dry	Pump	Bottom	7.01	15.3	100	Clear	40
MW-1B	No Sample		Dry	—	—	—	—	—	—	—	—	21
CD-7	No Sample		12.25	—	—	—						
MW-10R		10:30	23.10		Bailed Dry	Bailer		6.93	15.7	90	Turbid	25
MW-9RR		11:00	17.94	Bubbles —	Bailed Dry	Bailer		6.86	15.6	180	M.T	
MW-9R		11:35	12.67		Bailed Dry	Bailer		6.97	15.6	200	M.T	20
CD-8M	NS	—	9.85									
CD-8S	NS	—	9.88									
CD-8D	NS	—	9.32									
DP-1	NS	—	5.05									
DP-2	NS	—	2.95	outside 2.95								
MW-16	1/13/04	12:00	11.17		5	Bailer		6.91	15.3	100	M.T	20
SW-3		12:30	—		—			7.03	4.2	60	Clear	
MW-11		1:10	11.72		Bailed Dry	Bailer		6.93	15.4	160	S.T	23
SW-4	NS	—	DRY		—						—	—
MW-12	1/13/04	2:30	16.79		Bailed Dry	Bailer					S.Gray	25
MW-4A	1/13/04	3:30	26.25		Pump Dry	Pump					S.T	26

Comments

PZ-2

PZ-1S 42.21 N.S

PZ-1D 42.03 N.S

PZ-10S 25.68 N.S

PZ-10D 27.48 N.S

PZ-1S 22.61 N.S.

Sampling Data Sheet

Municipal Services Engineering Company

Project: Iredell County Subtitle D Landfill

Samplers: Jonathan Pfohl

Monitoring Point	Sample Date	Sample Time	Sampling Parameters: Depth to Water	Reference Point	Volume Purged	Sample Type	Sampling Depth	Water Quality Parameters: pH	Temp.	Specific Cond.	Turbidity	Total Depth
MW-4B	1/13/04	4:00	29.05		Pumped Dry	Pump		6.91	15.2	140	S.T	37
MW-15	DRY	~~4:30~~	DRY	N.S							—	44
MW-14A	1/14/04	7:10	36.99		Baled Dry	Baler		6.96	16.0	140		~~58~~ 538
MW-14B		8:00	36.72	Left when Looking cell	10	Baler		6.26	16.0	60	Clear	~~38~~ 58.5
P2-19	N.S		32.50			-						
MW-3B	1/14/04	8:25	7.59			Pump	Bottom				clear	25.5
MW-3A	1/14/04	9:00	8.47	constriction Towards Bottom	Baled Dry	Baler	Bottom				S.T	12.4
MW-2		9:35	8.75		Baled Dry	Baler		6.93	15.8	170	S.T	13.8
SW-1		9:55	—		—			6.93	4.7	100	clear	—
MW-6A		10:20	17.92		~~Baled~~ Pumped Dry	~~Baler~~ Pump					S.T	24.5
MW-6B		11:00	21.24		Baled Dry	Baler					clear	38
MW-8		11:30	19.10		Baled Dry	Baler					M.T	28
MW-7		12:05	8.75		Baled Dry	Baler					Very Turbid	24
MW-13A		1:00	35.86	can't Pump Dry		Pump					Clear	64
MW-13B		1:35	35.36		Baled Dry	Baler				410	S.T	39
Forcemain	1/14/04	4:50	-	valve	-							
Lagoon	1/14/04	5:00	-	invert	-							
SW-2	1/14/04	5:10	—	Golf Course	-	Dip		7.03	4.6	80	Clear	—

Comments

Pinnacle CD-5	NS	16.69
CD-3	NS	32.23
CD-6	NS	8.51
CD-1	NS	22.01
CD-4	NS	28.03

Sampling Data Sheet

Project: Iredell County Subtitle D Landfill (Phase 3 Baseline)

Samplers: Jonathan Pfohl

Monitoring Point	Sample Date	Sample Time	Sampling Parameters					Water Quality Parameters				
			Depth to Water	Reference Point	Volume Purged	Sample Type	Sampling Depth	pH	Temp.	Specific Cond.	Turbidity	Total Depth
MW-17	1/14/04	2:00	37.28		12 gallons	Pump water		7.06	15.28	110	clear	23
MW-21D		2:30	31.26	sulfur smell	15 gallons	Pump		6.88	15.10	160	clear	138.25
MW-21S		3:10	33.57		Pumped Dry 3X's	Pump		7.03	15.23	190	S.T	41
MW-19S		3:45	6.31		9 gallons	Pump		6.93	15.36	180	S.T	20
MW-19D		4:30	8.35		12 gallons	Pump		6.99	15.18	100	clear	59
MW-18	1/15/04	7:40	8.21		15 gallons	Pump		6.93	15.31	160	clear	20
MW-20		8:15	5.51		15 gallons	Pump		7.03	14.93	120	clear	20
SW-5		8:30	—		—	Dip		7.03	4.7	60	clear	—
P-4	NS	—	20.27								—	
P-9S	NS	—	24.38								—	
P-9D	NS	—	24.19	Repaired							—	

Comments Re Baseline #2 (using Pump.) - Samples less Turbid than previous Pump event.

Laboratory Analysis Results
Phases 1, 2, and C&D

Environmental Conservation Laboratories, Inc.
1015 Passport Way
Cary, North Carolina 27513-2042
919 / 677-1669
Fax 919 / 677-9846
www.encolabs.com

ENCO Laboratories

CLIENT : Municipal Engineering Services
ADDRESS: 1140 Benson Road
Garner, NC 27529

REPORT # : CRY15190
DATE SUBMITTED: January 16, 2004
DATE REPORTED : January 23, 2004

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G040013.0

Iredell County Lined LF

CRY15190-1	: MW-13B (MS/MSD)	@ 13:35	(01/14/04)
CRY15190-2	: MW-1C	@ 09:10	(01/13/04)
CRY15190-3	: MW-1A	@ 09:40	(01/13/04)
CRY15190-4	: MW-10R	@ 10:30	(01/13/04)
CRY15190-5	: MW-9RR	@ 11:00	(01/13/04)
CRY15190-6	: MW-9R	@ 11:35	(01/13/04)
CRY15190-7	: MW-16	@ 12:00	(01/13/04)
CRY15190-8	: SW-3	@ 12:30	(01/13/04)
CRY15190-9	: MW-11	@ 13:10	(01/13/04)
CRY15190-10	: MW-12	@ 14:30	(01/13/04)
CRY15190-11	: MW-4A	@ 15:30	(01/13/04)
CRY15190-12	: MW-4B	@ 16:00	(01/13/04)

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ENCO Laboratories

CLIENT : Municipal Engineering Services
ADDRESS: 1140 Benson Road
Garner, NC 27529

REPORT # : CRY15190
DATE SUBMITTED: January 16, 2004
DATE REPORTED : January 23, 2004

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G040013.0

Iredell County Lined LF

CRY15190-13	: MW-14A	@ 07:10 (01/14/04)
CRY15190-14	: MW-14B	@ 08:00 (01/14/04)
CRY15190-15	: MW-3B	@ 08:25 (01/14/04)
CRY15190-16	: MW-3A	@ 09:00 (01/14/04)
CRY15190-17	: MW-2	@ 09:35 (01/14/04)
CRY15190-18	: SW-1	@ 09:55 (01/14/04)
CRY15190-19	: MW-6A	@ 10:20 (01/14/04)
CRY15190-20	: MW-6B	@ 11:10 (01/14/04)
CRY15190-21	: MW-8	@ 11:30 (01/14/04)
CRY15190-22	: MW-7	@ 12:05 (01/14/04)
CRY15190-23	: MW-13A	@ 13:00 (01/14/04)
CRY15190-25	: SW-2	@ 17:10 (01/14/04)

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. This data has been produced in accordance with NELAC Standards (May, 2001). This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

PROJECT MANAGER Chuck Smith
Chuck Smith

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-13B (MS/MSD)	MW-1C	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	**26**	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	**14**	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
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PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-13B (MS/MSD)	MW-1C	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	**9.9**	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	87	79	73-138
D8-Toluene	103	99	77-118
Bromofluorobenzene	100	106	70-130
Date Analyzed	01/20/04 12:43	01/20/04 00:42	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13B (MS/MSD)	MW-1C	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Barium	6010	**1.2**	0.50 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Beryllium	6010	**0.0055**	0.0020 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/22/04 09:47	01/22/04 10:11	
Chromium	6010	**0.010**	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Cobalt	6010	**0.013**	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Lead	6010	**0.011**	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13B (MS/MSD)	MW-1C	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	
Zinc	6010	0.050 U	**0.060**	mg/L
Date Analyzed		01/21/04 21:14	01/21/04 21:57	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-1A	MW-10R	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-1A	MW-10R	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	83	73-138
D8-Toluene	98	102	77-118
Bromofluorobenzene	107	106	70-130
Date Analyzed	01/20/04 01:07	01/20/04 01:32	

U = Compound was analyzed for but not detected to the level shown.

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DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1A	MW-10R	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Barium	6010	0.50 U	**0.78**	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Cadmium	6010	**0.0018**	0.0010 U	mg/L
Date Analyzed		01/22/04 10:16	01/22/04 10:20	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Cobalt	6010	**0.011**	0.010 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Lead	6010	0.010 U	**0.013**	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1A	MW-10R	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 22:06	01/21/04 22:14	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-9RR	MW-9R	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	**23**	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-9RR	MW-9R	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	82	81	73-138
D8-Toluene	101	99	77-118
Bromofluorobenzene	106	105	70-130
Date Analyzed	01/20/04 01:58	01/20/04 02:23	

U = Compound was analyzed for but not detected to the level shown.

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DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9RR	MW-9R	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Barium	6010	**0.53**	**0.55**	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Beryllium	6010	**0.0034**	0.0020 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Cadmium	6010	0.0010 U	**0.0012**	mg/L
Date Analyzed		01/22/04 10:25	01/22/04 10:30	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Cobalt	6010	**0.026**	**0.022**	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Lead	6010	**0.010**	0.010 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9RR	MW-9R	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Vanadium	6010	0.040 U	**0.044**	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	
Zinc	6010	**0.080**	0.050 U	mg/L
Date Analyzed		01/21/04 22:23	01/21/04 22:32	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-16	SW-3	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-16	SW-3	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	80	73-138
D8-Toluene	99	98	77-118
Bromofluorobenzene	105	106	70-130
Date Analyzed	01/20/04 02:48	01/20/04 03:14	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-16	SW-3	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Barium	6010	**0.55**	0.50 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Beryllium	6010	**0.0021**	0.0020 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/22/04 10:35	01/22/04 10:39	
Chromium	6010	**0.010**	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Cobalt	6010	**0.015**	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Lead	6010	**0.018**	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-16	SW-3	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	
Zinc	6010	**0.090**	**0.53**	mg/L
Date Analyzed		01/21/04 22:40	01/21/04 22:49	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-11	MW-12	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-11	MW-12	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	**180**	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	79	81	73-138
D8-Toluene	99	98	77-118
Bromofluorobenzene	106	106	70-130
Date Analyzed	01/20/04 03:40	01/20/04 04:06	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-11	MW-12	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Barium	6010	0.50 U	**0.90**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Beryllium	6010	0.0020 U	**0.0045**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Cadmium	6010	0.0010 U	**0.0021**	mg/L
Date Analyzed		01/22/04 10:44	01/22/04 11:08	
Chromium	6010	0.010 U	**0.058**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Cobalt	6010	0.010 U	**0.059**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Lead	6010	0.010 U	**0.024**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-11	MW-12	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Vanadium	6010	0.040 U	**0.12**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	
Zinc	6010	0.050 U	**0.14**	mg/L
Date Analyzed		01/21/04 22:58	01/21/04 23:24	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-4A	MW-4B	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-4A	MW-4B	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	82	82	73-138
D8-Toluene	100	99	77-118
Bromofluorobenzene	104	106	70-130
Date Analyzed	01/20/04 04:31	01/20/04 04:57	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-4A	MW-4B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Cadmium	6010	**0.0017**	0.0010 U	mg/L
Date Analyzed		01/22/04 11:12	01/22/04 11:17	
Chromium	6010	**0.028**	**0.018**	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Cobalt	6010	**0.057**	**0.027**	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Nickel	6010	**0.27**	0.050 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-4A	MW-4B	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Vanadium	6010	**0.058**	0.040 U	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	
Zinc	6010	**0.11**	**0.070**	mg/L
Date Analyzed		01/21/04 23:32	01/21/04 23:41	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-14A	MW-14B	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-14A	MW-14B	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	84	84	73-138
D8-Toluene	102	102	77-118
Bromofluorobenzene	110	109	70-130
Date Analyzed	01/20/04 05:23	01/20/04 05:48	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-14A	MW-14B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Barium	6010	**2.1**	0.50 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Beryllium	6010	**0.0080**	0.0020 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/22/04 11:22	01/22/04 11:27	
Chromium	6010	0.010 U	**0.011**	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Cobalt	6010	**0.016**	0.010 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Lead	6010	**0.010** J	0.010 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	

U = Compound was analyzed for but not detected to the level shown.
J = Analyte detected; value is between the Method Detection Level (MDL) and the Method Quantitation Level (MQL).

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-14A	MW-14B	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	
Zinc	6010	**0.12**	0.050 U	mg/L
Date Analyzed		01/21/04 23:50	01/21/04 23:58	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-3B	MW-3A	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-3B	MW-3A	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	79	73-138
D8-Toluene	100	99	77-118
Bromofluorobenzene	104	108	70-130
Date Analyzed	01/20/04 06:14	01/20/04 06:40	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3B	MW-3A	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/22/04 11:31	01/22/04 11:36	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Cobalt	6010	0.010 U	**0.012**	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	

U = Compound was analyzed for but not detected to the level shown.

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PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3B	MW-3A	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:07	01/22/04 00:16	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-2	SW-1	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-2	SW-1	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	81	79	73-138
D8-Toluene	101	100	77-118
Bromofluorobenzene	105	105	70-130
Date Analyzed	01/20/04 07:06	01/20/04 07:32	

U = Compound was analyzed for but not detected to the level shown.

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REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-2	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Beryllium	6010	**0.0032**	0.0020 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Cadmium	6010	**0.011**	0.0010 U	mg/L
Date Analyzed		01/22/04 11:41	01/22/04 11:45	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Cobalt	6010	**0.022**	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Lead	6010	**0.010**	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-2	SW-1	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:24	01/22/04 00:33	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-6A	MW-6B	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-6A	MW-6B	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	79	73-138
D8-Toluene	103	98	77-118
Bromofluorobenzene	108	106	70-130
Date Analyzed	01/20/04 07:58	01/20/04 08:23	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-6A	MW-6B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Cadmium	6010	0.0010 U	**0.0014**	mg/L
Date Analyzed		01/22/04 11:50	01/22/04 12:12	
Chromium	6010	0.010 U	**0.011**	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-6A	MW-6B	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 00:42	01/22/04 01:08	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-8	MW-7	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	MW-8	MW-7	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	85	84	73-138
D8-Toluene	104	104	77-118
Bromofluorobenzene	100	101	70-130
Date Analyzed	01/21/04 07:36	01/21/04 08:01	

U = Compound was analyzed for but not detected to the level shown.

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DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8	MW-7	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Barium	6010	0.50 U	**0.81**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Beryllium	6010	0.0020 U	**0.0040**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Cadmium	6010	0.0010 U	**0.0077**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Chromium	6010	**0.014**	0.010 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Cobalt	6010	0.010 U	**0.018**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Lead	6010	0.010 U	**0.044**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	

U = Compound was analyzed for but not detected to the level shown.

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REPORT # : CRY15190
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PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8	MW-7	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	
Zinc	6010	**0.060**	**0.10**	mg/L
Date Analyzed		01/22/04 18:01	01/22/04 18:27	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-13A	SW-2	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-13A	SW-2	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	85	85	73-138
D8-Toluene	102	103	77-118
Bromofluorobenzene	97	97	70-130
Date Analyzed	01/21/04 08:27	01/21/04 08:53	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13A	SW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Cadmium	6010	**0.0012**	0.0010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13A	SW-2	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 18:36	01/22/04 18:44	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	79	87	73-138
D8-Toluene	98	104	77-118
Bromofluorobenzene	104	103	70-130
Date Analyzed	01/20/04 00:15	01/20/04 11:53	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/22/04 09:38	01/22/04 14:18	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15190
DATE REPORTED: January 23, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 20:56	01/22/04 14:18	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) -

VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	87	89	73-138
D8-Toluene	104	106	77-118
Bromofluorobenzene	103	107	70-130
Date Analyzed	01/20/04 11:53	01/21/04 00:16	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	LAB BLANK	Units
Chloromethane	10 U	ug/L
Vinyl Chloride	10 U	ug/L
Bromomethane	10 U	ug/L
Chloroethane	10 U	ug/L
Trichlorofluoromethane	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	ug/L
Acetone	100 U	ug/L
Iodomethane	10 U	ug/L
Carbon Disulfide	100 U	ug/L
Methylene Chloride	10 U	ug/L
Acrylonitrile	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	ug/L
Vinyl Acetate	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	ug/L
2-Butanone	100 U	ug/L
Bromochloromethane	5.0 U	ug/L
Chloroform	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	ug/L
Carbon tetrachloride	10 U	ug/L
1,2-Dichloroethane	5.0 U	ug/L
Benzene	5.0 U	ug/L
Trichloroethene	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	LAB BLANK	Units
Dibromomethane	10 U	ug/L
Bromodichloromethane	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	ug/L
4-Methyl-2-Pentanone	100 U	ug/L
Toluene	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	ug/L
Tetrachloroethene	5.0 U	ug/L
2-Hexanone	50 U	ug/L
Dibromochloromethane	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	ug/L
Chlorobenzene	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	ug/L
Ethylbenzene	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	ug/L
o-Xylene	5.0 U	ug/L
Styrene	10 U	ug/L
Bromoform	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	ug/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	89	73-138
D8-Toluene	106	77-118
Bromofluorobenzene	107	70-130
Date Analyzed	01/21/04 00:16	

U = Compound was analyzed for but not detected to the level shown.

LABORATORY CERTIFICATIONS

Laboratory Certification: NCDENR:591

All analyses reported with this project were analyzed by the facility indicated unless identified below.

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method APPENDIX I,8260					
1,1-Dichloroethene	69/ 67/ 64	64-139	36-177	4	30
Benzene	86/ 79/ 77	76-114	53-150	2	23
Trichloroethene	91/ 84/ 83	74-118	64-124	1	25
Toluene	88/ 83/ 84	77-117	40-161	1	23
Chlorobenzene	100/ 94/ 94	76-118	44-128	<1	22
EPA Method APPENDIX I,8260					
1,1-Dichloroethene	84/ 86/ 79	64-139	36-177	8	30
Benzene	89/ 88/ 86	76-114	53-150	2	23
Trichloroethene	99/ 97/ 90	74-118	64-124	7	25
Toluene	93/ 92/ 92	77-117	40-161	<1	23
Chlorobenzene	104/104/101	76-118	44-128	3	22
EPA Method APPENDIX I,8260					
1,1-Dichloroethene	80/ 84/ 82	64-139	36-177	2	30
Benzene	88/ 88/ 89	76-114	53-150	1	23
Trichloroethene	99/ 94/ 94	74-118	64-124	<1	25
Toluene	93/ 83/ 92	77-117	40-161	10	23
Chlorobenzene	100/102/ 99	76-118	44-128	3	22
TOTAL METALS					
Antimony, 6010	89/ 78/ 72	82-119	38-138	8	30
Antimony, 6010	99/ 72/ 76	82-119	38-138	5	30
Arsenic, 6010	104/ 95/ 91	82-117	64-126	4	12
Arsenic, 6010	102/ 84/ 87	82-117	64-126	4	12

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
Barium, 6010	104/ 83/ 75	72-125	74-119	10	11
Barium, 6010	102/ 90/ 77	72-125	74-119	16	11
Beryllium, 6010	111/ 99/ 93	75-121	70-131	6	21
Beryllium, 6010	105/ 91/ 93	75-121	70-131	2	21
Cadmium, 6010	99/ 93/ 90	72-120	68-121	3	12
Cadmium, 6010	100/ 85/ 87	72-120	68-121	2	12
Chromium, 6010	108/ 95/ 90	78-119	73-120	5	17
Chromium, 6010	102/ 87/ 90	78-119	73-120	3	17
Cobalt, 6010	108/ 96/ 91	76-117	76-120	5	17
Cobalt, 6010	101/ 87/ 89	76-117	76-120	2	17
Copper, 6010	106/ 95/ 92	80-117	75-123	3	16
Copper, 6010	103/ 85/ 89	80-117	75-123	4	16
Lead, 6010	106/ 96/ 93	72-121	68-126	3	19
Lead, 6010	101/ 84/ 87	72-121	68-126	4	19
Nickel, 6010	106/ 94/ 89	78-116	64-126	5	12
Nickel, 6010	100/ 86/ 88	78-116	64-126	2	12
Selenium, 6010	102/ 93/ 90	82-119	65-129	3	10
Selenium, 6010	101/ 83/ 86	82-119	65-129	4	10
Silver, 6010	94/ 82/ 77	80-128	69-121	6	12
Silver, 6010	100/ 75/ 78	80-128	69-121	4	12
Thallium, 6010	105/ 97/ 95	79-118	67-135	2	13
Thallium, 6010	102/ 84/ 87	79-118	67-135	4	13
Vanadium, 6010	108/ 95/ 90	78-117	71-130	5	16
Vanadium, 6010	102/ 87/ 90	78-117	71-130	3	16
Zinc, 6010	110/ 98/ 92	80-120	63-131	6	24
Zinc, 6010	101/ 90/ 90	80-120	63-131	<1	24

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QSARF # P12080

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ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
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Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Iredell County Lined LF
PROJECT NO.: G040013.0
P.O. NUMBER:
PROJECT LOC. (State): NC
SAMPLER(s) NAME: Jonathan Pfohl
PH: (919)-772-5393
FAX: (919)-772-1176
CLIENT NAME: Municipal Engineering Services
CLIENT PROJECT MANAGER: Jonathan Pfohl
CLIENT ADDRESS (CITY, STATE, ZIP): 1140 Benson Road Garner, NC 27529

PAGE 2 OF 2

☒ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER		NC,CO,CP,AP, NC,CL,AP,NC,N,AP,AP,NC,NC,AP,1,NC	NITRATE:300,SULFATE:300	PHOSPHORUS:365.4/T	COD	BOD			REMARKS
																PRESERVATIVE							
																NUMBER OF CONTAINERS SUBMITTED							
1	1/14/04	7:10	X		MW-14A		X									1	3	0	0	0	0	0	
2		8:00			MW-14B		X									1	3	0	0	0	0	0	
3		8:25			MW-3B		X									1	3	0	0	0	0	0	
4		9:00			MW-3A		X									1	3	0	0	0	0	0	
5		9:35			MW-2		X									1	3	0	0	0	0	0	
6		9:55			SW-1	X	X									1	3	0	0	0	0	0	
7		10:20			MW-6A		X									1	3	0	0	0	0	0	
8		11:00			MW-6B		X									1	3	0	0	0	0	0	
9		11:30			MW-8		X									1	3	0	0	0	0	0	
10		12:05			MW-7		X									1	3	0	0	0	0	0	
11		1:00			MW-13A		X									1	3	0	0	0	0	0	
~~12~~		~~1:35~~			~~MW-13B~~		~~X~~									~~1~~	~~3~~	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	Per J. Pfohl, Remove From COC. CS 1/14/04
13		5:10			MW-SW-2	X	X									1	3	0	0	0	0	0	
14							X									1	3	0	0	0	0	0	

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
				1/16/04	1:30		1/16/04	13:30
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
Byron ☐ Jacksonville ☐ Orlando	1/16/04	15:28	☒ YES ☐ NO	C4115190	

QSARF # P12080

P12

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
Ph. (904) 296-3007 • Fax (904) 296-6210

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1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Iredell County Lined LF
PROJECT NO.: G040013.0
P.O. NUMBER:
PROJECT LOC. (State): NC
SAMPLER(s) NAME: Jonathan Pfohl
PHONE: (919)-772-5393
FAX: (919)-772-1176
CLIENT NAME: Municipal Engineering Services
CLIENT PROJECT MANAGER: Jonathan Pfohl
CLIENT ADDRESS (CITY, STATE, ZIP): 1140 Benson Road Garner, NC 27529

PAGE 1 OF 2

[X] STANDARD REPORT DELIVERY
[ ] EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

MATRIX TYPE: SURFACE WATER, GROUND WATER, WASTEWATER, DRINKING WATER, SOIL/SOLID/SEDIMENT, NONAQUEOUS LIQUID (oil, solvent, etc.), AIR, SLUDGE, OTHER

REQUIRED ANALYSIS / PRESERVATIVE / NUMBER OF CONTAINERS SUBMITTED

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	NC, CO-AP, NC, CLAP-NC, CR-AP, AP-NC, SB-AP, NC	8260-AP1-NC	NITRATE300, SULFATE300, SS	PHOSPHORUS365.4/T	COD	BOD		REMARKS
1	On Separate		C-O-C		LAGOON		X								1	3	1	1	1	1	0	Sent to Orlando
2	On Separate		C-O-C		FORCEMAIN		X								1	3	1	1	1	1	0	Sent to Orlando
3	1/14/04	1:35	X		MW-13B (MS/MSD)		X								1	6	0	0	0	0	1	
4	1/13/04	9:10			MW-1C		X								1	3	0	0	0	0	0	
5		9:40			MW-1A		X								1	3	0	0	0	0	0	
6		10:30			MW-10R		X								1	3	0	0	0	0	0	
7		11:00			MW-9RR		X								1	3	0	0	0	0	0	
8		11:35			MW-9R		X								1	3	0	0	0	0	0	
9		12:00			MW-16		X								1	3	0	0	0	0	0	
10		12:30			SW-3	X	[illegible]								1	3	0	0	0	0	0	
11		1:10			MW-11		X								1	3	0	0	0	0	0	
12		2:30			MW-12		X								1	3	0	0	0	0	0	
13		3:30			MW-4A		X								1	3	0	0	0	0	0	
14		4:00			MW-4B		X								1	3	0	0	0	0	0	

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☐ ORLANDO			[signature]	1/16/04	1:30	[signature]	1/16/03	13:30
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE) [signature]	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
[signature] ☐ Jacksonville ☒ Cary ☐ Orlando	1/16/04	15:28	☒ YES ☐ NO	CNF15190	

Laboratory Analysis Results
Leachate Lagoon & Forcemain

Environmental Conservation Laboratories, Inc.
10207 General Drive
Orlando, Florida 32824-8529
407 / 826-5314
Fax 407 / 850-6945
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ENCO Laboratories

DHRS Certification No. E83182

CLIENT : Municipal Engineering Services
ADDRESS: 1140 Benson Road
Garner, NC 27529

REPORT # : ORL30313
DATE SUBMITTED: January 15, 2004
DATE REPORTED : January 26, 2004

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G040013.0

IREDELL COUNTY LINED LF

01/14/04

ORL30313-1 : LAGOON @ 17:00
ORL30313-2 : FORCEMAIN @ 16:50

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. This data has been produced in accordance with NELAC Standards (May, 2001). This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

PROJECT MANAGER Jody Goostree
Jody Goostree

ENCO LABORATORIES
REPORT # : ORL30313
DATE REPORTED: January 26, 2004
REFERENCE : G040013.0
PROJECT NAME : IREDELL COUNTY LINED LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	LAGOON			FORCEMAIN			Units
Chloromethane	1000	U	D1	200	U	D2	ug/L
Vinyl Chloride	1000	U	D1	200	U	D2	ug/L
Bromomethane	1000	U	D1	200	U	D2	ug/L
Chloroethane	1000	U	D1	200	U	D2	ug/L
Trichlorofluoromethane	500	U	D1	100	U	D2	ug/L
1,1-Dichloroethene	500	U	D1	100	U	D2	ug/L
Acetone	10000	U	D1	2000	U	D2	ug/L
Iodomethane	1000	U	D1	200	U	D2	ug/L
Carbon Disulfide	10000	U	D1	2000	U	D2	ug/L
Methylene Chloride	1000	U	D1	200	U	D2	ug/L
Acrylonitrile	20000	U	D1	4000	U	D2	ug/L
t-1,2-Dichloroethene	500	U	D1	100	U	D2	ug/L
1,1-Dichloroethane	500	U	D1	100	U	D2	ug/L
Vinyl Acetate	5000	U	D1	1000	U	D2	ug/L
c-1,2-Dichloroethene	500	U	D1	100	U	D2	ug/L
2-Butanone	**14000**		D1	2000	U	D2	ug/L
Bromochloromethane	500	U	D1	100	U	D2	ug/L
Chloroform	500	U	D1	100	U	D2	ug/L
1,1,1-Trichloroethane	500	U	D1	100	U	D2	ug/L
Carbon tetrachloride	1000	U	D1	200	U	D2	ug/L
Benzene	500	U	D1	100	U	D2	ug/L
1,2-Dichloroethane	500	U	D1	100	U	D2	ug/L
Trichloroethene	500	U	D1	100	U	D2	ug/L
1,2-Dichloropropane	500	U	D1	100	U	D2	ug/L
Dibromomethane	1000	U	D1	200	U	D2	ug/L

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:100 dilution.
D2 = Analyte value determined from a 1:20 dilution.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	LAGOON			FORCEMAIN			Units
Bromodichloromethane	500	U	D1	100	U	D2	ug/L
c-1,3-Dichloropropene	1000	U	D1	200	U	D2	ug/L
4-Methyl-2-Pentanone	10000	U	D1	2000	U	D2	ug/L
Toluene	500	U	D1	**370**		D2	ug/L
t-1,3-Dichloropropene	1000	U	D1	200	U	D2	ug/L
1,1,2-Trichloroethane	500	U	D1	100	U	D2	ug/L
Tetrachloroethene	500	U	D1	100	U	D2	ug/L
2-Hexanone	5000	U	D1	1000	U	D2	ug/L
Dibromochloromethane	500	U	D1	100	U	D2	ug/L
1,2-Dibromoethane	500	U	D1	100	U	D2	ug/L
Chlorobenzene	500	U	D1	100	U	D2	ug/L
1,1,1,2-Tetrachloroethane	500	U	D1	100	U	D2	ug/L
Ethylbenzene	500	U	D1	100	U	D2	ug/L
m-Xylene & p-Xylene	500	U	D1	100	U	D2	ug/L
o-Xylene	500	U	D1	100	U	D2	ug/L
Styrene	1000	U	D1	200	U	D2	ug/L
Bromoform	500	U	D1	100	U	D2	ug/L
1,1,2,2-Tetrachloroethane	500	U	D1	100	U	D2	ug/L
1,2,3-Trichloropropane	1500	U	D1	300	U	D2	ug/L
t-1,4-Dichloro-2-Butene	10000	U	D1	2000	U	D2	ug/L
1,4-Dichlorobenzene	500	U	D1	100	U	D2	ug/L
1,2-Dichlorobenzene	500	U	D1	100	U	D2	ug/L
1,2-Dibromo-3-Chloropropane	2500	U	D1	500	U	D2	ug/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	93	101	52-149
D8-Toluene	87	88	70-132
Bromofluorobenzene	78	81	60-135
Date Analyzed	01/21/04 16:50	01/21/04 17:33	

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:100 dilution.
D2 = Analyte value determined from a 1:20 dilution.

ENCO LABORATORIES
REPORT # : ORL30313
DATE REPORTED: January 26, 2004
REFERENCE : G040013.0
PROJECT NAME : IREDELL COUNTY LINED LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAGOON	FORCEMAIN	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Cadmium	6010	**0.0020**	**0.0019**	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Cobalt	6010	**0.045**	**0.016**	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Lead	6010	0.010 U	**0.013**	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : ORL30313
DATE REPORTED: January 26, 2004
REFERENCE : G040013.0
PROJECT NAME : IREDELL COUNTY LINED LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAGOON	FORCEMAIN	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/22/04 15:26	01/22/04 15:35	

EPA METHOD 300 - Anions by IC	LAGOON	FORCEMAIN	Units
Nitrate-N	0.10 U	0.10 U	mg/L
Sulfate	2.0 U	2.0 U	mg/L
Date Analyzed	01/16/04 14:48	01/16/04 15:08	

MISCELLANEOUS	METHOD	LAGOON	FORCEMAIN	Units
BOD	405.1	**34** J	**4.0** J	mg/L
Date Prepared		01/15/04 05:35	01/15/04 05:35	
Date Analyzed		01/20/04 18:20	01/20/04 18:20	
COD	410.4	**240**	**190**	mg/L
Date Analyzed		01/15/04 09:40	01/15/04 09:40	

J = Estimated value; sample under-depleted.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : ORL30313
DATE REPORTED: January 26, 2004
REFERENCE : G040013.0
PROJECT NAME : IREDELL COUNTY LINED LF

RESULTS OF ANALYSIS

MISCELLANEOUS	METHOD	LAGOON	FORCEMAIN	Units
Phosphorus, Total	365.4	**0.52**	**0.72**	mg/L
Date Analyzed		01/19/04 10:54	01/19/04 10:55	
Total Susp. Solids	160.2	**68**	**180**	mg/L
Date Analyzed		01/16/04 09:00	01/16/04 09:00	

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	LAB BLANK	Units
Chloromethane	10 U	ug/L
Vinyl Chloride	10 U	ug/L
Bromomethane	10 U	ug/L
Chloroethane	10 U	ug/L
Trichlorofluoromethane	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	ug/L
Acetone	100 U	ug/L
Iodomethane	10 U	ug/L
Carbon Disulfide	100 U	ug/L
Methylene Chloride	10 U	ug/L
Acrylonitrile	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	ug/L
Vinyl Acetate	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	ug/L
2-Butanone	100 U	ug/L
Bromochloromethane	5.0 U	ug/L
Chloroform	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	ug/L
Carbon tetrachloride	10 U	ug/L
Benzene	5.0 U	ug/L
1,2-Dichloroethane	5.0 U	ug/L
Trichloroethene	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	ug/L
Dibromomethane	10 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) - APPENDIX I VOLATILE COMPOUNDS	LAB BLANK	Units
Bromodichloromethane	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	ug/L
4-Methyl-2-Pentanone	100 U	ug/L
Toluene	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	ug/L
Tetrachloroethene	5.0 U	ug/L
2-Hexanone	50 U	ug/L
Dibromochloromethane	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	ug/L
Chlorobenzene	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	ug/L
Ethylbenzene	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	ug/L
o-Xylene	5.0 U	ug/L
Styrene	10 U	ug/L
Bromoform	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	ug/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	93	52-149
D8-Toluene	84	70-132
Bromofluorobenzene	82	60-135
Date Analyzed	01/21/04 12:27	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	Units
Antimony	6010	0.030 U	mg/L
Date Analyzed		01/22/04 14:18	
Arsenic	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Barium	6010	0.50 U	mg/L
Date Analyzed		01/22/04 14:18	
Beryllium	6010	0.0020 U	mg/L
Date Analyzed		01/22/04 14:18	
Cadmium	6010	0.0010 U	mg/L
Date Analyzed		01/22/04 14:18	
Chromium	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Cobalt	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Copper	6010	0.20 U	mg/L
Date Analyzed		01/22/04 14:18	
Lead	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Nickel	6010	0.050 U	mg/L
Date Analyzed		01/22/04 14:18	
Selenium	6010	0.020 U	mg/L
Date Analyzed		01/22/04 14:18	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	Units
Silver	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Thallium	6010	0.010 U	mg/L
Date Analyzed		01/22/04 14:18	
Vanadium	6010	0.040 U	mg/L
Date Analyzed		01/22/04 14:18	
Zinc	6010	0.050 U	mg/L
Date Analyzed		01/22/04 14:18	

EPA METHOD 300 - Anions by IC	LAB BLANK	Units
Nitrate-N	0.10 U	mg/L
Sulfate	2.0 U	mg/L
Date Analyzed	01/16/04 13:05	

MISCELLANEOUS	METHOD	LAB BLANK	Units
BOD	405.1	2.0 U	mg/L
Date Prepared		01/15/04 05:35	
Date Analyzed		01/20/04 18:20	
COD	410.4	10 U	mg/L
Date Analyzed		01/15/04 09:40	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : ORL30313
DATE REPORTED: January 26, 2004
REFERENCE : G040013.0
PROJECT NAME : IREDELL COUNTY LINED LF

RESULTS OF ANALYSIS

MISCELLANEOUS	METHOD	LAB BLANK	Units
Phosphorus, Total	365.4	0.020 U	mg/L
Date Analyzed		01/19/04 10:32	
Total Susp. Solids	160.2	2.0 U	mg/L
Date Analyzed		01/16/04 09:00	

U = Compound was analyzed for but not detected to the level shown.

LABORATORY CERTIFICATIONS

Laboratory Certification: NCDENR:424

All analyses reported with this project were analyzed by the facility indicated unless identified below.

PARAMETER	LAB CERT #'s
Silver,	NCDENR:591
Arsenic,	NCDENR:591
Barium,	NCDENR:591
Beryllium,	NCDENR:591
Cadmium,	NCDENR:591
Cobalt,	NCDENR:591
Chromium, Total,	NCDENR:591
Copper,	NCDENR:591
Nickel,	NCDENR:591
Lead,	NCDENR:591
Antimony,	NCDENR:591
Selenium,	NCDENR:591
Thallium,	NCDENR:591
Vanadium,	NCDENR:591
Zinc,	NCDENR:591

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method APPENDIX I, 8260					
1,1-Dichloroethene	113/111/139	49-156	36-185	22	34
Benzene	88/105/102	64-132	65-143	3	25
Trichloroethene	85/ 98/114	66-130	51-152	15	28
Toluene	85/109/ 98	58-132	62-144	11	24
Chlorobenzene	83/100/112	68-135	64-140	11	23
TOTAL METALS					
Antimony, 6010	99/ 72/ 76	82-119	38-138	5	30
Arsenic, 6010	102/ 84/ 87	82-117	64-126	4	12
Barium, 6010	102/ 90/ 77	72-125	74-119	16 *	11
Beryllium, 6010	105/ 91/ 93	75-121	70-131	2	21
Cadmium, 6010	100/ 85/ 87	72-120	68-121	2	12
Chromium, 6010	102/ 87/ 90	78-119	73-120	3	17
Cobalt, 6010	101/ 87/ 89	76-117	76-120	2	17
Copper, 6010	103/ 85/ 89	80-117	75-123	4	16
Lead, 6010	101/ 84/ 87	72-121	68-126	4	19
Nickel, 6010	100/ 86/ 88	78-116	64-126	2	12
Selenium, 6010	101/ 83/ 86	82-119	65-129	4	10
Silver, 6010	100/ 75/ 78	80-128	69-121	4	12
Thallium, 6010	102/ 84/ 87	79-118	67-135	4	13
Vanadium, 6010	102/ 87/ 90	78-117	71-130	3	16
Zinc, 6010	101/ 90/ 90	80-120	63-131	<1	24

* = Data does not meet established RPD criteria. MS/MSD fall within acceptable criteria established by laboratory.
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method 300					
Nitrate-N	100/100/100	90-110	40-152	<1	23
Sulfate	99/ 94/ 93	90-110	47-148	1	25
MISCELLANEOUS					
BOD, 405.1	96/ NA/ NA	85-115	NA	NA	NA
COD, 410.4	109/105/105	89-112	84-122	<1	18
Phosphorus, Total, 365.4	103/ */ *	87-114	74-121	*	11
Total Susp. Solids, 160.2	101/ NA/ NA	82-119	NA	NA	NA

* = Confirmed high concentration of target analyte in the original sample.
< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
NA = Not applicable
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QSARF # P12081

PK1

ENVIRONMENTAL CONSERVATION LABORATORIES

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1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Iredell County Lined LF
PROJECT NO.: G040013.0
P.O. NUMBER:
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Jonathan Pfohl
PHONE: (919)-772-5393
FAX: (919)-772-1176

CLIENT NAME: Municipal Engineering Services
CLIENT PROJECT MANAGER: Jonathan Pfohl
CLIENT ADDRESS (CITY, STATE, ZIP): 1140 Benson Road Garner, NC 27529

☒ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:

MATRIX TYPE: SURFACE WATER, GROUND WATER, WASTEWATER, DRINKING WATER, SOIL/SOLID/SEDIMENT, NONAQUEOUS LIQUID (oil, solvent, etc.), AIR, SLUDGE, OTHER

REQUIRED ANALYSIS / PRESERVATIVE / NUMBER OF CONTAINERS SUBMITTED

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER		NC,CD-AP-NC,CU-AP-NC,NI-AP-NC,SB-AP-NC	1260-AP1-NC	Nitrate 300, Sulfate 300, SS	Phosphorus 65,9,11	COD	BOD			REMARKS
1	1/14/04	5:00	X		LAGOON ~~MW~~		X									1	3	1	1	1	1			
2	1/14/04	4:50	X		Forcemain ~~MW~~		X									1	3	1	1	1	1			
3					~~MW~~		X									1	3							
4					~~MW~~		X									1	3							
5					~~MW~~		X									1	3							
6					~~MW~~		X									1	3							
7					~~MW~~		X									1	3							
8					~~MW~~		X									1	3							
9																								
10																								
11																								
12																								
13																								
14																								

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
			[signature]	1/14/04	5:00			
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
Dana Leiseman ☐ Jacksonville ☒ Orlando	1-14 15-04	08:55	☒ YES ☐ NO	0r1-30313	Sent via Fed Ex to ENCO Orlando

1-15-04

Laboratory Analysis Results
Phase 3

Environmental Conservation Laboratories, Inc.
1015 Passport Way
Cary, North Carolina 27513-2042
919 / 677-1669
Fax 919 / 677-9846
www.encolabs.com

ENCO Laboratories

CLIENT : Municipal Engineering Services
ADDRESS: 1140 Benson Road
Garner, NC 27529

REPORT # : CRY15191
DATE SUBMITTED: January 16, 2004
DATE REPORTED : January 22, 2004

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G040013.0

Iredell County Lined LF

01/14/04

CRY15191-1	: MW-17	@ 14:00
CRY15191-2	: MW-21S	@ 14:30
CRY15191-3	: MW-21D	@ 15:10
CRY15191-4	: MW-19S	@ 15:45
CRY15191-5	: MW-19D	@ 16:30
CRY15191-6	: MW-18	@ 07:40
CRY15191-7	: MW-20	@ 08:15
CRY15191-8	: SW-5	@ 08:30

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. This data has been produced in accordance with NELAC Standards (May, 2001). This report shall not be reproduced except in full, without the written approval of the laboratory. Results for these procedures apply only to the samples as submitted.

PROJECT MANAGER Chuck Smith
Chuck Smith

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-17	MW-21S	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15191
DATE REPORTED: January 22, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-17	MW-21S	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	86	87	73-138
D8-Toluene	102	102	77-118
Bromofluorobenzene	102	101	70-130
Date Analyzed	01/22/04 00:57	01/22/04 01:23	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-17	MW-21S	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Cadmium	6010	**0.0012**	**0.0011**	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15191
DATE REPORTED: January 22, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-17	MW-21S	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:10	01/21/04 18:19	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-21D	MW-19S	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-21D	MW-19S	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	85	86	73-138
D8-Toluene	102	100	77-118
Bromofluorobenzene	100	94	70-130
Date Analyzed	01/22/04 01:49	01/22/04 02:15	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-21D	MW-19S	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Cadmium	6010	**0.0040**	**0.0031**	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Cobalt	6010	0.010 U	**0.058**	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-21D	MW-19S	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:27	01/21/04 18:36	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-19D	MW-18	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-19D	MW-18	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	88	86	73-138
D8-Toluene	105	100	77-118
Bromofluorobenzene	100	98	70-130
Date Analyzed	01/22/04 02:42	01/22/04 03:07	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-19D	MW-18	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-19D	MW-18	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 18:45	01/21/04 18:53	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-20	SW-5	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-20	SW-5	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	84	86	73-138
D8-Toluene	104	101	77-118
Bromofluorobenzene	100	102	70-130
Date Analyzed	01/22/04 03:33	01/22/04 03:58	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15191
DATE REPORTED: January 22, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-20	SW-5	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Cadmium	6010	**0.0012**	**0.0012**	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-20	SW-5	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		01/21/04 19:02	01/21/04 19:11	

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Chloromethane	10 U	10 U	ug/L
Vinyl Chloride	10 U	10 U	ug/L
Bromomethane	10 U	10 U	ug/L
Chloroethane	10 U	10 U	ug/L
Trichlorofluoromethane	5.0 U	5.0 U	ug/L
1,1-Dichloroethene	5.0 U	5.0 U	ug/L
Acetone	100 U	100 U	ug/L
Iodomethane	10 U	10 U	ug/L
Carbon Disulfide	100 U	100 U	ug/L
Methylene Chloride	10 U	10 U	ug/L
Acrylonitrile	200 U	200 U	ug/L
t-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
1,1-Dichloroethane	5.0 U	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	5.0 U	ug/L
2-Butanone	100 U	100 U	ug/L
Bromochloromethane	5.0 U	5.0 U	ug/L
Chloroform	5.0 U	5.0 U	ug/L
1,1,1-Trichloroethane	5.0 U	5.0 U	ug/L
Carbon tetrachloride	10 U	10 U	ug/L
1,2-Dichloroethane	5.0 U	5.0 U	ug/L
Benzene	5.0 U	5.0 U	ug/L
Trichloroethene	5.0 U	5.0 U	ug/L
1,2-Dichloropropane	5.0 U	5.0 U	ug/L

U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	LAB BLANK	LAB BLANK	Units
Dibromomethane	10 U	10 U	ug/L
Bromodichloromethane	5.0 U	5.0 U	ug/L
c-1,3-Dichloropropene	10 U	10 U	ug/L
4-Methyl-2-Pentanone	100 U	100 U	ug/L
Toluene	5.0 U	5.0 U	ug/L
t-1,3-Dichloropropene	10 U	10 U	ug/L
1,1,2-Trichloroethane	5.0 U	5.0 U	ug/L
Tetrachloroethene	5.0 U	5.0 U	ug/L
2-Hexanone	50 U	50 U	ug/L
Dibromochloromethane	5.0 U	5.0 U	ug/L
1,2-Dibromoethane	5.0 U	5.0 U	ug/L
Chlorobenzene	5.0 U	5.0 U	ug/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
Ethylbenzene	5.0 U	5.0 U	ug/L
m-Xylene & p-Xylene	5.0 U	5.0 U	ug/L
o-Xylene	5.0 U	5.0 U	ug/L
Styrene	10 U	10 U	ug/L
Bromoform	5.0 U	5.0 U	ug/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	ug/L
1,2,3-Trichloropropane	15 U	15 U	ug/L
t-1,4-Dichloro-2-Butene	100 U	100 U	ug/L
1,4-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dichlorobenzene	5.0 U	5.0 U	ug/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	ug/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	87	85	73-138
D8-Toluene	100	101	77-118
Bromofluorobenzene	96	101	70-130
Date Analyzed	01/21/04 11:15	01/21/04 23:40	

U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15191
DATE REPORTED: January 22, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Antimony	6010	0.030 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Arsenic	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Barium	6010	0.50 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Beryllium	6010	0.0020 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Cadmium	6010	0.0010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Chromium	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Cobalt	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Copper	6010	0.20 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Lead	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Nickel	6010	0.050 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Selenium	6010	0.020 U	NR	mg/L
Date Analyzed		01/21/04 16:38		

NR = Analysis not requested for this sample.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : CRY15191
DATE REPORTED: January 22, 2004
REFERENCE : G040013.0
PROJECT NAME : Iredell County Lined LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Silver	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Thallium	6010	0.010 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Vanadium	6010	0.040 U	NR	mg/L
Date Analyzed		01/21/04 16:38		
Zinc	6010	0.050 U	NR	mg/L
Date Analyzed		01/21/04 16:38		

NR = Analysis not requested for this sample.
U = Compound was analyzed for but not detected to the level shown.

LABORATORY CERTIFICATIONS

Laboratory Certification: NCDENR:591

All analyses reported with this project were analyzed by the facility indicated unless identified below.

QUALITY CONTROL DATA

Parameter	% RECOVERY LCS/MS/MSD	LCS LIMITS	MS/MSD LIMITS	RPD MS/MSD	RPD LIMITS
EPA Method APPENDIX I,8260					
1,1-Dichloroethene	82/ 79/ 79	64-139	36-177	<1	30
Benzene	87/ 89/ 88	76-114	53-150	1	23
Trichloroethene	97/ 93/ 91	74-118	64-124	2	25
Toluene	92/ 92/ 92	77-117	40-161	<1	23
Chlorobenzene	100/101/101	76-118	44-128	<1	22
TOTAL METALS					
Antimony, 6010	106/104/ 98	82-119	38-138	6	30
Arsenic, 6010	101/102/ 97	82-117	64-126	5	12
Barium, 6010	104/104/ 99	72-125	74-119	5	11
Beryllium, 6010	106/108/103	75-121	70-131	5	21
Cadmium, 6010	104/106/102	72-120	68-121	4	12
Chromium, 6010	102/104/100	78-119	73-120	4	17
Cobalt, 6010	103/104/ 99	76-117	76-120	5	17
Copper, 6010	104/102/ 97	80-117	75-123	5	16
Lead, 6010	102/103/ 98	72-121	68-126	5	19
Nickel, 6010	102/104/ 99	78-116	64-126	5	12
Selenium, 6010	99/100/ 95	82-119	65-129	5	10
Silver, 6010	108/108/105	80-128	69-121	3	12
Thallium, 6010	102/103/ 99	79-118	67-135	4	13
Vanadium, 6010	103/105/100	78-117	71-130	5	16
Zinc, 6010	103/108/104	80-120	63-131	4	24

< = Less Than
MS = Matrix Spike
MSD = Matrix Spike Duplicate
LCS = Laboratory Control Standard
RPD = Relative Percent Difference

QSARF #_____

ENVIRONMENTAL CONSERVATION LABORATORIES

4810 Executive Park Court, Suite 211
Jacksonville, Florida 32216-6069
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Orlando, Florida 32824-8529
Ph. (407) 826-5314 • Fax (407) 850-6945

1015 Passport Way
Cary, North Carolina 27513
Ph. (919) 677-1669 • Fax (919) 677-9846

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Iredell Co. Lined L.F (Phase3)
PROJECT NO.: G040013.0
P.O. NUMBER:
PAGE 1 OF 1
PROJECT LOC. (State): NC
SAMPLER(s) NAME: Jonathan Pfohl
PHONE: 772-5393
FAX: 772-1176
CLIENT NAME: MESCO
CLIENT PROJECT MANAGER: Jonathan Pfohl
CLIENT ADDRESS (CITY, STATE, ZIP): 11140 Benson Rd. Garner NC 27529

☒ STANDARD REPORT DELIVERY
☐ EXPEDITED REPORT DELIVERY (surcharge)
Date Due:_____

MATRIX TYPE / REQUIRED ANALYSIS / PRESERVATIVE / NUMBER OF CONTAINERS SUBMITTED

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID (oil, solvent, etc.)	AIR	SLUDGE	OTHER		App IVOCs	NC App I Metals							REMARKS
1	1/14/04	2:00	X		MW-17		X									X	X							
2	↓	2:30	↓		MW-21S		↓									↓	↓							
3	↓	3:10	↓		MW-21D		↓									↓	↓							
4	↓	3:45	↓		MW-19S		↓									↓	↓							
5	↓	4:30	↓		MW-19D		↓									↓	↓							
6	1/15/04	7:40	↓		MW-18		↓									↓	↓							
7	↓	8:15	↓		MW-20		↓									↓	↓							
8	↓	8:30	X		SW-5	X										↓	↓							
9																								
10																								
11																								
12																								
13																								
14																								

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
			[signature]	1/16/04	1:30	[signature]	1/16/04	13:30
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
RECEIVED BY (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	ENCO LOG NO.	REMARKS
[signature] ☐ Jacksonville ☐ Orlando	1/16/04	15:56	☒YES ☐ NO	CRY15191	