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Fac/Perm/Co ID #	Date	Doc ID#
pc	6/13/09	DIN

Semi-Annual Groundwater Sampling and Analysis Report

Prepared for

Alexander County Closed Landfill
Taylorsville, North Carolina

December, 2003

Received
FEB 2004
Solid Waste Section

MESCO Project Number: G03003.0

Completed on February 10, 2004

Municipal Services Garner, NC
Engineering Company, P.A. 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.

February 10, 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

Re: Groundwater Assessment Monitoring Sampling and Analysis
Alexander County Closed Sanitary Landfill
MESCO Project No. G03003.0

Dear Mr. Rose:

Municipal Engineering Services Company, P.A. (MESCO), sampled the Alexander County Closed Sanitary Landfill for Appendix I list of constituents for all monitoring locations on December 11 & 12, 2003. Environmental Conservation Laboratories, Inc. of Cary, North Carolina completed the lab analyses, the results of which 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 table (Table 1) summarizes those constituents that exceeded the Standard.

Table 1. Exceedance Summary

Well	Lead	Benzene	Chloroform
MW-1A	x		
MW-1B			x
MW-3		x	
MW-11		x	

x = concentration greater than groundwater standard

Inorganic constituents were detected in all monitoring locations with the exception of MW-12D and SW-4R. Volatile Organic Compounds (VOCs) were found in several of the compliance wells in concentrations generally lower than the previous sampling event. The detected VOCs continue to be primarily chlorinated compounds such as 1,1-dichloroethane, cis-1,2-dichloroethene, as well as benzene and xylene. Benzene apparently continues to migrate in a northwest direction as evidenced by its consistent detections within MW-3 and MW-11. As previously speculated the monitoring wells located in the general north portion, may have been impacted by leachate originating from the uncapped portion of the landfill primarily via previous overland flow. A precipitation event occurred the day prior to this sampling event and "streams" of surface water originating from the closed landfill area were visible. This overland flow followed 2 well defined separate paths leading directly adjacent to both the MW-11 and MW-12 sites in a northeast direction. The water appeared to be very clean compared to the runoff noticed prior to the county finishing the cohesive cap renovation in the northeast closed landfill region. A grab sample was

PO Box 97, Garner, North Carolina 27529 (919) 772-5393
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obtained from the overland flow very near MW-12. The water sample labeled as "SW-BY MW-12" contained no VOC detections. The lack of VOCs within the runoff may indicate that the cohesive cap is currently retarding the leachate from escaping the toe of the slopes; therefore groundwater conditions are expected to improve.

MW-12D contained 2 VOCs during the previous events; however neither metals nor VOCs were detected during this event. MW-17, located downgradient from MW-15, contained a concentration of 1,1-dichloroethane well below the MCL. Xylene, which commonly originates as a discarded solvent, was detected within MW-11, MW-12, MW-14, MW-3, MW-6, MW-8, as well as background wells MW-1A, MW-1, and MW-1B. However, all xylene detections were barely above the PQL and well below the MCL. The background area, located at the south property line, continues to contain several VOC detections. Recently installed background well MW-1B contained xylene and levels of chloroform above the Standard. This is the premier of VOC detections within this specific well. According to formulated equipotential contours in the background vicinity the groundwater appears to be moving in a south direction from MW-1 to MW-1B. This scenario is highly suspect since a groundwater divide in this particular location is unlikely.

MESCO completed the enclosed potentiometric map with groundwater elevations on the day of sampling, flow rates and direction. Chain of Custody sheets as well as field sampling data sheets have also been included. The site will continue assessment monitoring and will again be sampled in June of 2004. If you have any questions or comments 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. John Byrd
Alexander County

Exceedance Scan
Alexander County Closed Landfill

Well ID	Parameter Name [1]	Sample Date	Result	Unit	PQL [2]	MCL [3]	Exceedance
MW-1	Cobalt, total	12/11/2003	0.014	mg/L	0.01	-	
MW-1	Zinc, total	12/11/2003	0.14	mg/L	0.05	2.1	
MW-1A	Chromium, total	12/11/2003	0.018	mg/L	0.01	0.05	
MW-1A	Cobalt, total	12/11/2003	0.1	mg/L	0.01	-	
MW-1A	**Lead, total**	**12/11/2003**	**0.019**	**mg/L**	**0.01**	**0.015**	**0.004**
MW-1A	Zinc, total	12/11/2003	0.05	mg/L	0.05	2.1	
MW-1B	Cobalt, total	12/11/2003	0.038	mg/L	0.01	-	
MW-1B	Lead, total	12/11/2003	0.011	mg/L	0.01	0.015	
MW-1B	Zinc, total	12/11/2003	0.15	mg/L	0.05	2.1	
MW-3	Nickel, total	12/11/2003	0.064	mg/L	0.05	0.1	
MW-4R	Cadmium, total	12/12/2003	0.0021	mg/L	0.001	0.005	
MW-4R	Cobalt, total	12/12/2003	0.24	mg/L	0.01	-	
MW-5	Cadmium, total	12/12/2003	0.001	mg/L	0.001	0.005	
MW-6	Cobalt, total	12/11/2003	0.052	mg/L	0.01	-	
MW-7	Cadmium, total	12/11/2003	0.0013	mg/L	0.001	0.005	
MW-9	Cadmium, total	12/12/2003	0.001	mg/L	0.001	0.005	
MW-10	Cadmium, total	12/12/2003	0.0013	mg/L	0.001	0.005	
MW-11	Cadmium, total	12/11/2003	0.001	mg/L	0.001	0.005	
MW-11	Chromium, total	12/11/2003	0.01	mg/L	0.01	0.05	
MW-11	Cobalt, total	12/11/2003	0.12	mg/L	0.01	-	
MW-11	Zinc, total	12/11/2003	0.07	mg/L	0.05	2.1	
MW-13	Cadmium, total	12/11/2003	0.002	mg/L	0.001	0.005	
MW-13	Zinc, total	12/11/2003	0.07	mg/L	0.05	2.1	
MW-14	Cadmium, total	12/11/2003	0.001	mg/L	0.001	0.005	
MW-14	Cobalt, total	12/11/2003	0.087	mg/L	0.01	-	
MW-15	Cadmium, total	12/12/2003	0.0021	mg/L	0.001	0.005	
MW-15	Lead, total	12/12/2003	0.013	mg/L	0.01	0.015	
MW-17	Chromium, total	12/12/2003	0.011	mg/L	0.01	0.05	
MW-17	Cobalt, total	12/12/2003	0.023	mg/L	0.01	-	
MW-17	Lead, total	12/12/2003	0.014	mg/L	0.01	0.015	
SW-3	Cadmium, total	12/12/2003	0.001	mg/L	0.001	0.005	
SW-5	Cobalt, total	12/12/2003	0.012	mg/L	0.01	-	
MW-1	1,1-Dichloroethane	12/11/2003	6.2	ug/L	5	700	
MW-1	Carbon disulfide	12/11/2003	170	ug/L	100	-	
MW-1	cis-1,2-Dichloroethene	12/11/2003	8.8	ug/L	5	70	
MW-1	Xylene	12/11/2003	5.1	ug/L	5	530	
MW-11	1,4-Dichlorobenzene	12/11/2003	8.3	ug/L	5	75	
MW-11	**Benzene**	**12/11/2003**	**6.4**	**ug/L**	**5**	**1**	**5.4**
MW-11	cis-1,2-Dichloroethene	12/11/2003	42	ug/L	5	70	
MW-11	Xylene	12/11/2003	5.1	ug/L	5	530	
MW-12	1,1-Dichloroethane	12/11/2003	5.4	ug/L	5	700	
MW-12	1,4-Dichlorobenzene	12/11/2003	5.7	ug/L	5	75	
MW-12	cis-1,2-Dichloroethene	12/11/2003	11	ug/L	5	70	
MW-12	Xylene	12/11/2003	5.2	ug/L	5	530	
MW-13	Carbon disulfide	12/11/2003	130	ug/L	100	-	
MW-14	1,4-Dichlorobenzene	12/11/2003	5.5	ug/L	5	75	
MW-14	cis-1,2-Dichloroethene	12/11/2003	14	ug/L	5	70	
MW-14	Xylene	12/11/2003	5.1	ug/L	5	530	
MW-15	1,1-Dichloroethane	12/12/2003	13	ug/L	5	700	

Well ID	Parameter Name [1]	Sample Date	Result	Unit	PQL [2]	MCL [3]	Exceedance
MW-17	1,1-Dichloroethane	12/12/2003	12	ug/L	5	700	
MW-1A	Acetone	12/11/2003	200	ug/L	200	700	
MW-1A	Xylene	12/11/2003	5.6	ug/L	5	530	
MW-1B	**Chloroform**	**12/11/2003**	**8.4**	**ug/L**	**5**	**0.19**	**8.21**
MW-1B	Xylene	12/11/2003	5.5	ug/L	5	530	
MW-3	1,4-Dichlorobenzene	12/11/2003	7.5	ug/L	5	75	
MW-3	**Benzene**	**12/11/2003**	**7.9**	**ug/L**	**5**	**1**	**6.9**
MW-3	cis-1,2-Dichloroethene	12/11/2003	20	ug/L	5	70	
MW-3	Xylene	12/11/2003	18.6	ug/L	5	530	
MW-4R	1,1-Dichloroethane	12/12/2003	7.4	ug/L	5	700	
MW-4R	cis-1,2-Dichloroethene	12/12/2003	17	ug/L	5	70	
MW-5	cis-1,2-Dichloroethene	12/12/2003	13	ug/L	5	70	
MW-6	Xylene	12/11/2003	5.2	ug/L	5	530	
MW-7	1,1-Dichloroethane	12/11/2003	8.2	ug/L	5	700	
MW-7	cis-1,2-Dichloroethene	12/11/2003	6.1	ug/L	5	70	
MW-8	Xylene	12/12/2003	5	ug/L	5	530	
MW-9	cis-1,2-Dichloroethene	12/12/2003	10	ug/L	5	70	

[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
Alexander County Closed Sanitary Landfill

Monitoring Well	Hydraulic Conductivity (cm/sec)	Effective Porosity (%)	Hydraulic Gradient	Flow Rate (ft/yr)	Flow Direction	Water Table Depth (ft)	Water Table Elev. (ft)
MW-1	5.60E-05	1%	0.05	269.8	N0W	35.77	1044.77
MW-1A	5.60E-05	1%	0.03	150.9	S0W	46.42	1038.94
MW-3	3.90E-06	1%	0.33	134.0	N13W	25.62	999.11
MW-4R	4.90E-04	15%	0.05	166.2	N11W	16.05	996.59
MW-5	6.40E-05	15%	0.05	20.4	N36W	41.07	1010.19
MW-6	2.40E-05	1%	0.30	740.6	N45E	34.1	976.69
MW-7	1.60E-06	1%	0.07	10.8	N0W	40.95	968.29
MW-8	1.30E-05	1%	0.09	119.6	N52E	9.95	1012.06
MW-9	-		0.08	-	N24W	12.01	984.26
MW-10	-		0.06	-	N2E	37.75	1003.05
MW-11	-		0.24	-	N18W	41.62	970.34
MW-12	-		0.06	-	N2E	53.28	954.07
MW-13	-		0.04	-	N45E	40.95	963.61
MW-14	-		0.08	-	S59E	39.45	957.99
MW-15	-		0.09	-	N50E	24.25	999.19

NOTE: All values for hydraulic conductivity obtained from GAI Consultants Sampling Report (April, 1995).
Hydrologic Gradient taken from the December 11 & 12 , 2003 sampling event.

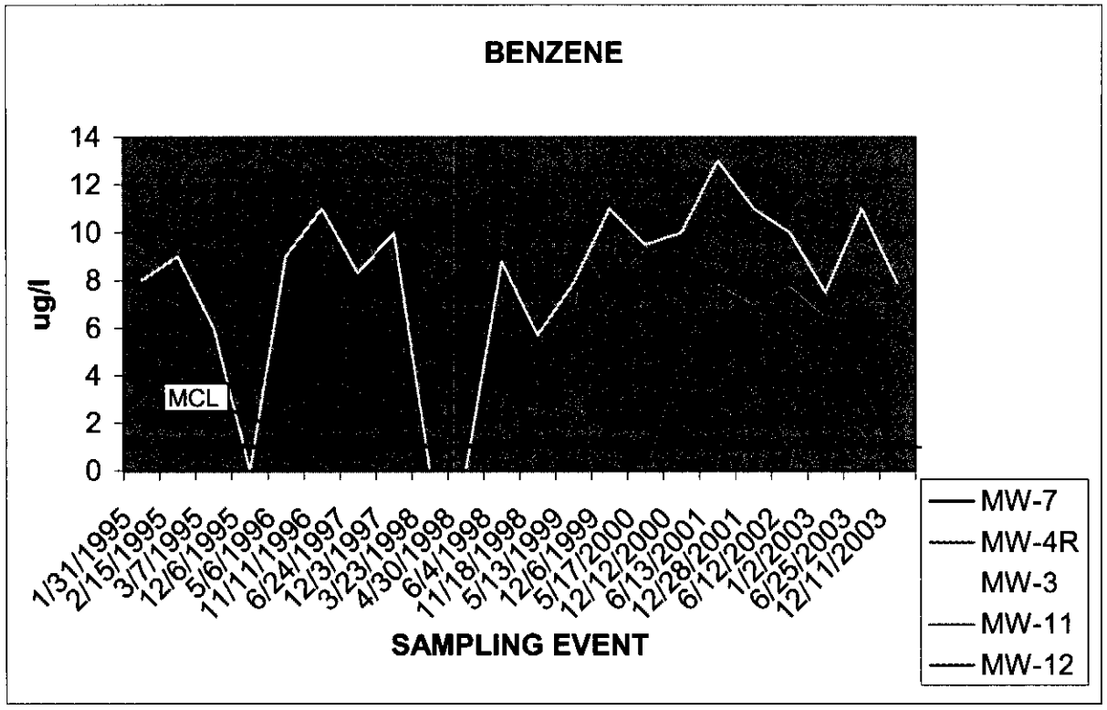
Flow rate (Q) is defined by the equation:

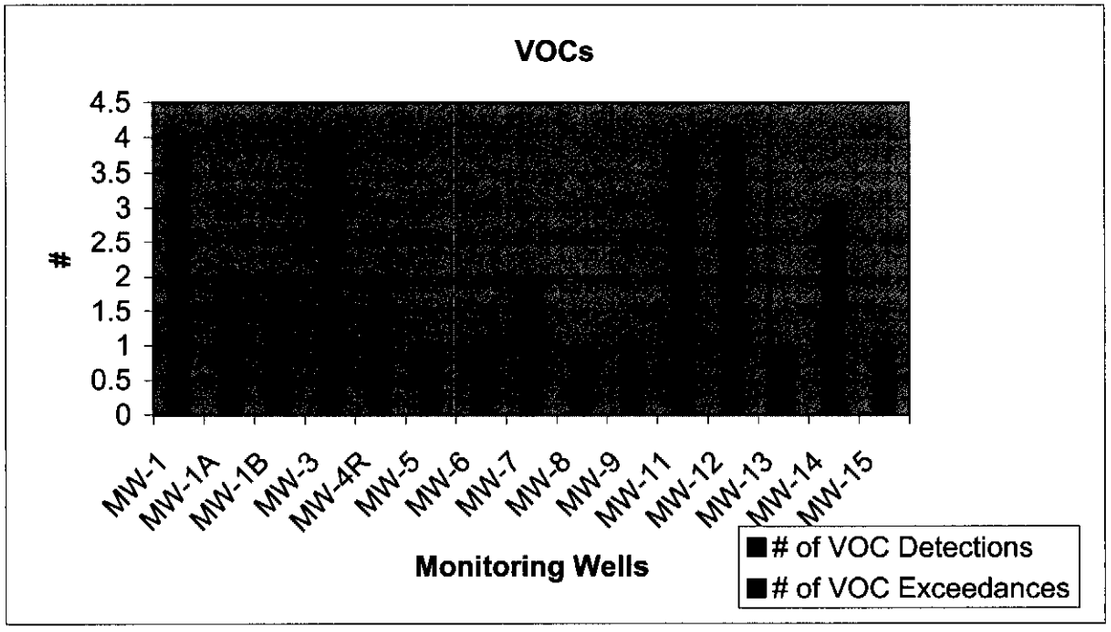
where

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

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

Histograms for Select Constituents (VOCs)
Alexander County Closed Sanitary Landfill





Hydrologic Properties at Monitoring Well Locations
Alexander County Closed Sanitary Landfill
December 11 & 12, 2003 Sampling Event

WELL #	TOP OF PIPE ELEVATION (FT)	WATER TABLE DEPTH (FT)	WATER TABLE ELEVATION (FT)
MW-1	1080.54	35.77	1044.77
MW-1A	1085.36	46.42	1038.94
MW-1B		41.64	
MW-3	1024.73	25.62	999.11
MW-4R	1012.64	16.05	996.59
MW-5	1051.26	41.07	1010.19
MW-6	1010.79	34.10	976.69
MW-7	1009.24	40.95	968.29
MW-8	1022.01	9.95	1012.06
MW-9	996.27	12.01	984.26
MW-10	1040.8	37.75	1003.05
MW-11	1011.96	41.62	970.34
MW-12	1007.35	53.28	954.07
MW-12D		50.40	
MW-13	1004.56	40.95	963.61
MW-14	997.44	39.45	957.99
MW-15	1023.44	24.25	999.19
MW-17		13.20	

Sampling Data Sheet

Project: Alexander Co. Closed Landfill

Samplers: Jonathon 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
EB		9:55	–									–
EB		10:00	–									–
TB	Enco Filled		–									–
MW-12D	12/11/03	10:15	50.40		25	Bailer		6.53	16.9	110	clear	102.5
MW-12	12/11/03	11:00	53.28		7.5	↓		6.74	17.3	230	S.T	66.5
MW-3		11:45	25.62		4.5	↓		7.01	17.4	260	clear	33
MW-11		12:30	41.62		8	↓		6.93	16.7	240	S.T	56
MW-6		1:20	34.10		4.5	↓		6.88	16.9	160	clear	41
MW-13		1:45	40.95		10.5	↓		7.00	16.6	130	clear	60.5
MW-14		2:20	39.45		Baled Dry	↓		6.99	16.7	150	clear	40.5
MW-2	No Sample Damaged					—						–
MW-7		3:00	40.95		7	Bailer		6.81	16.9	140	clear	53
MW-1[illegible]		3:30	35.77		3	Bailer		6.93	16.7	140	clear	40
MW-1B		4:05	41.64		3	↓		7.02	16.3	160	P.T	45
MW-[illegible]1A		4:45	46.42		Baled Dry	↓		7.01	16.4	140	P.T	43
MW-5	12/12/03	8:00	46.07		Pumped Dry	↓ Pump		7.04	16.4	160	S.T	48.8
MW-10		8:35	37.[illegible]		Pumped Bailer	Pump		7.03	16.6	110	clear	91
SW-5		8:50	–		Dip	Dip		7.00	2.9	80	clear	–

Comments

(828) 627-8042

Sampling Data Sheet

Project: Alexander Co. Closed 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-4R	12/12/03	9:30	16.05		3	Pump		6.73	16.3	160	Clear	20.5
MW-9		10:15	12.01		Pumped Dry	Pumped			15.8		clear	34.5
SW-3		10:40	—		—	Dip		6.99	3.2	60	clear	—
MW-15		11:30	24.25		6.5	Pump		6.89	16.2	180	clear	35
MW-17		12:15	13.20		5.5	Bailer		6.91	16.3	210	Turb'd	22.3
MW-8		1:40	9.95		9.5	Pump		7.03	16.2	170	clear	27.5
SW-4	Not Sent	12:30	per Kohei 12/15/03			Dip					clear	—
SW-1R		2:45	—		—	Dip		7.03	3.1	100	clear	—

Comments

417) 2506

919 329 6885

Sampling Data Sheet

Project: Alexander Co. Closed 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
SW By MW-12	12/11/03	10:00	—		—			7.07	9.6	160	Clear	—

Comments

QSARF # P12641

P1264

ENVIRONMENTAL CONSERVATION LABORATORIES

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

10207 General Drive
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	PROJECT NO.	P.O. NUMBER
Alexander Co. Closed LF	G03003.0	

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

CLIENT NAME	CLIENT PROJECT MANAGER
Municipal Engineering Services	Jonathan Pfohl

CLIENT ADDRESS (CITY, STATE, ZIP): 1140 Benson Road Garner, NC 27529

PAGE 1 OF 2

☒ 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: 8260B-AP, 8010, AS-8260B-AP, 4P-8260B-AP, NP-8260B-AP, 8260-AP-NP

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED							REMARKS
1	12/4/03	[illegible]	X		EB [redacted]		X									3							[illegible]
2		[illegible]	X		FB [redacted]		X									3							[illegible]
3		[illegible]			TB [redacted]		X									3							[illegible]
4		4:45	X		MW-[redacted]1A		X								1	3							
5		11:00			MW-12		X								1	3							
6		[illegible]			MW-3		X								1	3							
7		12:30			MW-11		X								1	3							
8		[illegible]			MW-6		X								1	3							
9		[illegible]			MW-8		X								1	3							
10		[illegible]			MW-14		X								1	3							
11		3:00			MW-7		X								1	3							
12		[illegible]			MW-12D (MS/MSD)		X								1	6							
13		3:30			MW-1		X								1	3							
14		[illegible]			MW-13		X								1	3							

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
			[signature]	12/5/03	1:40	[signature]	12/5/03	11:40
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
☐ Jacksonville ☐ Orlando			☐ YES ☐ NO		

QSARF # P12041

PEG4

ENVIRONMENTAL CONSERVATION LABORATORIES

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Cary, North Carolina 27513
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ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	P.O. NUMBER
Alexander Co. Closed LF	G03003.0	

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

CLIENT NAME	CLIENT PROJECT MANAGER
Municipal Engineering Services	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: _____

SAMPLE 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										REMARKS
																PRESERVATIVE								
																NUMBER OF CONTAINERS SUBMITTED								
1	5/12/03	8:00	X		MW-5		X									1	3							
2		8:35			MW-10		X									1	3							
3		8:50			SW-5	X	X									1	3							
4		9:30			MW-4R		X									1	3							
5		[illegible]			MW-9		X									1	3							
6		[illegible]			SW-3	X	X									1	3							
7		11:30			MW-15		X									1	3							
8		[illegible]			MW-17		X									1	3							
9		[illegible]			MW-8		X									1	3							
10		[illegible]			SW-4R	X	X									1	3							
11					EQUIPMENT BLANK		X									1	3							
12					FIELD BLANK		X									1	3							
13					TRIP BLANK		X									1	3							
14					MW-		X									1	3							

SAMPLE KIT PREPARED BY: ☐JACKSONVILLE ☐ORLANDO	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
				5/12/03	11:40		5/12/03	11:40
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
☐ Jacksonville ☐ Orlando			☐ YES ☐ NO		

QSARF #_____

ENVIRONMENTAL CONSERVATION LABORATORIES

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

10207 General Drive
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	PROJECT NO.	P.O. NUMBER	PAGE 1 OF 1
Alexander Co. Closed L.F	603063.0		

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

CLIENT NAME	CLIENT PROJECT MANAGER
Municipal Engineering	Jonathan Pfohl

CLIENT ADDRESS (CITY, STATE, ZIP): 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: Arg - NC, Arg - NC ZSC

PRESERVATIVE

NUMBER OF CONTAINERS SUBMITTED

SAMPLE STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER										REMARKS
1	12/11/03	10:00	X		SW By MW-12	X										X								[illegible]
2																								
3																								
4																								
5																								
6																								
7																								
8																								
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]	[illegible]	1:40	[signature]	12/11/03	11:40
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) ☐ Jacksonville ☐ Orlando	DATE	TIME	CUSTODY INTACT ☐ YES ☐ NO	ENCO LOG NO.	REMARKS
					[illegible]

Laboratory Data

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 # : CRY15084
DATE SUBMITTED: December 15, 2003
DATE REPORTED : December 19, 2003

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G03003.0

Alexander Co. Closed LF

CRY15084-1	: EB		@ 09:55	(12/11/03)
CRY15084-2	: FB		@ 10:00	(12/11/03)
CRY15084-3	: TB		@ 00:00	(12/11/03)
CRY15084-4	: MW-1A		@ 16:45	(12/11/03)
CRY15084-5	: MW-12		@ 11:00	(12/11/03)
CRY15084-6	: MW-3		@ 11:45	(12/11/03)
CRY15084-7	: MW-11		@ 12:30	(12/11/03)
CRY15084-8	: MW-6		@ 13:20	(12/11/03)
CRY15084-9	: MW-13		@ 13:45	(12/11/03)
CRY15084-10	: MW-14		@ 14:20	(12/11/03)
CRY15084-11	: MW-7		@ 15:00	(12/11/03)
CRY15084-12	: MW-12D	(MS/MSD)	@ 10:15	(12/11/03)

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

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

REPORT # : CRY15084
DATE SUBMITTED: December 15, 2003
DATE REPORTED : December 19, 2003

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G03003.0

Alexander Co. Closed LF

CRY15084-13	: MW-1	@ 15:30 (12/11/03)
CRY15084-14	: MW-1B	@ 16:05 (12/11/03)
CRY15084-15	: MW-5	@ 08:00 (12/12/03)
CRY15084-16	: MW-10	@ 08:35 (12/12/03)
CRY15084-17	: SW-5	@ 08:50 (12/12/03)
CRY15084-18	: MW-4R	@ 09:30 (12/12/03)
CRY15084-19	: MW-9	@ 10:15 (12/12/03)
CRY15084-20	: SW-3	@ 10:40 (12/12/03)
CRY15084-21	: MW-15	@ 11:30 (12/12/03)
CRY15084-22	: MW-17	@ 12:15 (12/12/03)
CRY15084-23	: MW-8	@ 13:40 (12/12/03)
CRY15084-24	: SW-4R	@ 14:45 (12/12/03)

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 (July, 1999). 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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	EB	FB	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 # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	EB	FB	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	80	73-138
D8-Toluene	85	86	77-118
Bromofluorobenzene	120	123	70-130
Date Analyzed	12/16/03 16:37	12/16/03 17:08	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	TB	MW-1A		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	**200**	D1	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.
D1 = Analyte value determined from a 1:2 dilution.

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	TB	MW-1A	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	**5.6**	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	78	73-138
D8-Toluene	85	87	77-118
Bromofluorobenzene	120	118	70-130
Date Analyzed	12/16/03 17:39	12/17/03 10:21	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TB	MW-1A	Units
Antimony	6010	NR	0.030 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Arsenic	6010	NR	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Barium	6010	NR	0.50 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Beryllium	6010	NR	0.0020 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Cadmium	6010	NR	0.0010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Chromium	6010	NR	**0.018**	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Cobalt	6010	NR	**0.10**	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Copper	6010	NR	0.20 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	TB	MW-1A	Units
Lead	6010	NR	**0.019**	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Nickel	6010	NR	0.050 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Selenium	6010	NR	0.020 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Silver	6010	NR	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Thallium	6010	NR	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Vanadium	6010	NR	0.040 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				
Zinc	6010	NR	**0.050**	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-12	MW-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	**5.4**	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	**11**	**20**	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	**7.9**	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-12	MW-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	**10**	ug/L
o-Xylene	**5.2**	**8.6**	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	**5.7**	**7.5**	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	76	78	73-138
D8-Toluene	85	87	77-118
Bromofluorobenzene	120	120	70-130
Date Analyzed	12/18/03 11:59	12/17/03 11:24	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-12	MW-3	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-12	MW-3	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	**0.064**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-11	MW-6	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	**42**	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	**6.4**	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-6	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	**5.1**	**5.2**	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	**8.3**	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	76	73-138
D8-Toluene	91	86	77-118
Bromofluorobenzene	120	122	70-130
Date Analyzed	12/17/03 11:55	12/17/03 12:26	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-11	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	**0.0010**	0.0010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	**0.010** J	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	**0.12**	**0.052**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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).

ENCO LABORATORIES
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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-11	MW-6	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	**0.070**	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-13	MW-14	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	**130**	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	**14**	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-13	MW-14	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	**5.1**	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	**5.5**	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	76	78	73-138
D8-Toluene	86	89	77-118
Bromofluorobenzene	116	122	70-130
Date Analyzed	12/17/03 12:57	12/17/03 13:28	

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

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DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13	MW-14	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	**0.0020**	**0.0010**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	0.010 U	**0.087**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-13	MW-14	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	**0.070**	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-7	MW-12D (MS/MSD)	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	**8.2**	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	**6.1**	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.

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REPORT # : CRY15084
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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	MW-7	MW-12D (MS/MSD)	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	82	73-138
D8-Toluene	83	86	77-118
Bromofluorobenzene	113	121	70-130
Date Analyzed	12/17/03 13:59	12/16/03 16:07	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7	MW-12D (MS/MSD)	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	**0.0013**	0.0010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7	MW-12D (MS/MSD)	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-1	MW-1B	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	**170**	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	**6.2**	5.0 U	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	**8.8**	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	**8.4**	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-1	MW-1B	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	**5.1**	**5.5**	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	82	73-138
D8-Toluene	90	84	77-118
Bromofluorobenzene	121	119	70-130
Date Analyzed	12/17/03 14:30	12/17/03 15:01	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-1B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	**0.014**	**0.038**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-1B	Units
Lead	6010	0.010 U	**0.011**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	**0.14**	**0.15**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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REPORT # : CRY15084
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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-5	MW-10	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	**13**	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-5	MW-10	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	79	73-138
D8-Toluene	85	87	77-118
Bromofluorobenzene	115	115	70-130
Date Analyzed	12/17/03 15:32	12/17/03 16:03	

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

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REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-10	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	**0.0010**	**0.0013**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

ENCO LABORATORIES
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PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-10	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	SW-5	MW-4R	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	**7.4**	ug/L
Vinyl Acetate	50 U	50 U	ug/L
c-1,2-Dichloroethene	5.0 U	**17**	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	SW-5	MW-4R	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	77	78	73-138
D8-Toluene	90	85	77-118
Bromofluorobenzene	118	110	70-130
Date Analyzed	12/17/03 16:34	12/17/03 17:05	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-5	MW-4R	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	0.0010 U	**0.0021**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	**0.012**	**0.24**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-5	MW-4R	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

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DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-9	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	**10**	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-9	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	78	80	73-138
D8-Toluene	83	84	77-118
Bromofluorobenzene	116	110	70-130
Date Analyzed	12/17/03 17:36	12/17/03 18:07	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-3	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cadmium	6010	**0.0010**	**0.0010**	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-3	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared		12/17/03 16:56	12/17/03 16:56	
Date Analyzed				

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-15	MW-17	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	**13**	**12**	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-15	MW-17	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	74	74	73-138
D8-Toluene	89	93	77-118
Bromofluorobenzene	117	118	70-130
Date Analyzed	12/18/03 09:24	12/18/03 09:55	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-15	MW-17	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Cadmium	6010	**0.0021**	0.0010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Chromium	6010	0.010 U	**0.011**	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Cobalt	6010	0.010 U	**0.023**	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Lead	6010	**0.013**	**0.014**	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	

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

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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-15	MW-17	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	MW-8	SW-4R	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	SW-4R	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**	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	76	77	73-138
D8-Toluene	90	84	77-118
Bromofluorobenzene	114	116	70-130
Date Analyzed	12/18/03 10:57	12/18/03 11:28	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8	SW-4R	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	

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

ENCO LABORATORIES
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DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8	SW-4R	Units
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		12/18/03 10:24	12/18/03 10:24	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

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.

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PROJECT NAME : Alexander Co. Closed LF

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	74	74	73-138
D8-Toluene	87	87	77-118
Bromofluorobenzene	128	128	70-130
Date Analyzed	12/16/03 09:27	12/16/03 09:27	

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

ENCO LABORATORIES
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REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Barium	6010	0.50 U	0.50 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Chromium	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Copper	6010	0.20 U	0.20 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		

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

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RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Lead	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Nickel	6010	0.050 U	0.050 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Selenium	6010	0.020 U	0.020 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Silver	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Thallium	6010	0.010 U	0.010 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		
Zinc	6010	0.050 U	0.050 U	mg/L
Date Prepared			12/17/03 16:56	
Date Analyzed		12/18/03 10:24		

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

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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.

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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	78	78	73-138
D8-Toluene	89	89	77-118
Bromofluorobenzene	130	130	70-130
Date Analyzed	12/17/03 09:51	12/17/03 09:51	

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

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.

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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	77	77	73-138
D8-Toluene	86	86	77-118
Bromofluorobenzene	124	124	70-130
Date Analyzed	12/18/03 08:53	12/18/03 08:53	

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 MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I,8260				
1,1-Dichloroethene	87/ 86/ 91	36-177	1	30
Benzene	85/ 90/ 90	53-150	6	23
Trichloroethene	72/ 76/ 83	64-124	5	25
Toluene	93/ 94/ 95	40-161	1	23
Chlorobenzene	90/ 91/ 93	44-128	1	22
EPA Method APPENDIX I,8260				
1,1-Dichloroethene	64/ 62/106	36-177	3	30
Benzene	83/ 82/ 90	53-150	1	23
Trichloroethene	83/ 78/ 78	64-124	6	25
Toluene	92/ 99/ 90	40-161	7	23
Chlorobenzene	89/ 92/ 86	44-128	3	22
TOTAL METALS				
Antimony, 6010	104/105/106	38-138	<1	30
Antimony, 6010	107/106/101	38-138	<1	30
Arsenic, 6010	102/104/104	64-126	2	12
Arsenic, 6010	97/ 96/ 91	64-126	1	12
Barium, 6010	100/102/101	74-119	2	11
Barium, 6010	92/ 93/ 88	74-119	1	11
Beryllium, 6010	105/107/105	70-131	2	21
Beryllium, 6010	99/ 97/ 91	70-131	2	21
Cadmium, 6010	107/109/108	68-121	2	12
Cadmium, 6010	100/ 98/ 94	68-121	2	12
Chromium, 6010	107/109/108	73-120	2	17

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

ENCO LABORATORIES
REPORT # : CRY15084
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Chromium, 6010	98/ 97/ 92	73-120	1	17
Cobalt, 6010	109/111/112	76-120	2	17
Cobalt, 6010	100/ 98/ 93	76-120	2	17
Copper, 6010	104/106/105	75-123	2	16
Copper, 6010	94/ 95/ 89	75-123	1	16
Lead, 6010	107/109/108	68-126	2	19
Lead, 6010	98/ 97/ 92	68-126	1	19
Nickel, 6010	105/107/105	64-126	2	12
Nickel, 6010	98/ 96/ 91	64-126	2	12
Selenium, 6010	99/100/102	65-129	1	10
Selenium, 6010	93/ 92/ 90	65-129	1	10
Silver, 6010	111/112/114	69-121	<1	12
Silver, 6010	109/107/101	69-121	2	12
Thallium, 6010	105/107/106	67-135	2	13
Thallium, 6010	97/ 97/ 92	67-135	<1	13
Vanadium, 6010	106/108/107	71-130	2	16
Vanadium, 6010	98/ 96/ 91	71-130	2	16
Zinc, 6010	109/110/110	63-131	<1	24
Zinc, 6010	102/ 99/ 94	63-131	3	24

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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 # : CRY15083
DATE SUBMITTED: December 15, 2003
DATE REPORTED : December 19, 2003

ATTENTION: Jonathan Pfohl

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

REFERENCE: G03003.0

Alexander Co. Closed LF

12/11/03

CRY15083-1 : SW BY MW-12 @ 10:00

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 (July, 1999). 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

ENCO LABORATORIES
REPORT # : CRY15083
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 - VOLATILE ORGANICS	SW BY MW-12	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
c-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
t-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 # : CRY15083
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I,8260 (cont.) - VOLATILE ORGANICS	SW BY MW-12	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	76	77	73-138
D8-Toluene	90	86	77-118
Bromofluorobenzene	115	124	70-130
Date Analyzed	12/18/03 12:30	12/18/03 08:53	

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.

ENCO LABORATORIES
REPORT # : CRY15083
DATE REPORTED: December 19, 2003
REFERENCE : G03003.0
PROJECT NAME : Alexander Co. Closed LF

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I,8260				
1,1-Dichloroethene	87/ 86/ 91	36-177	1	30
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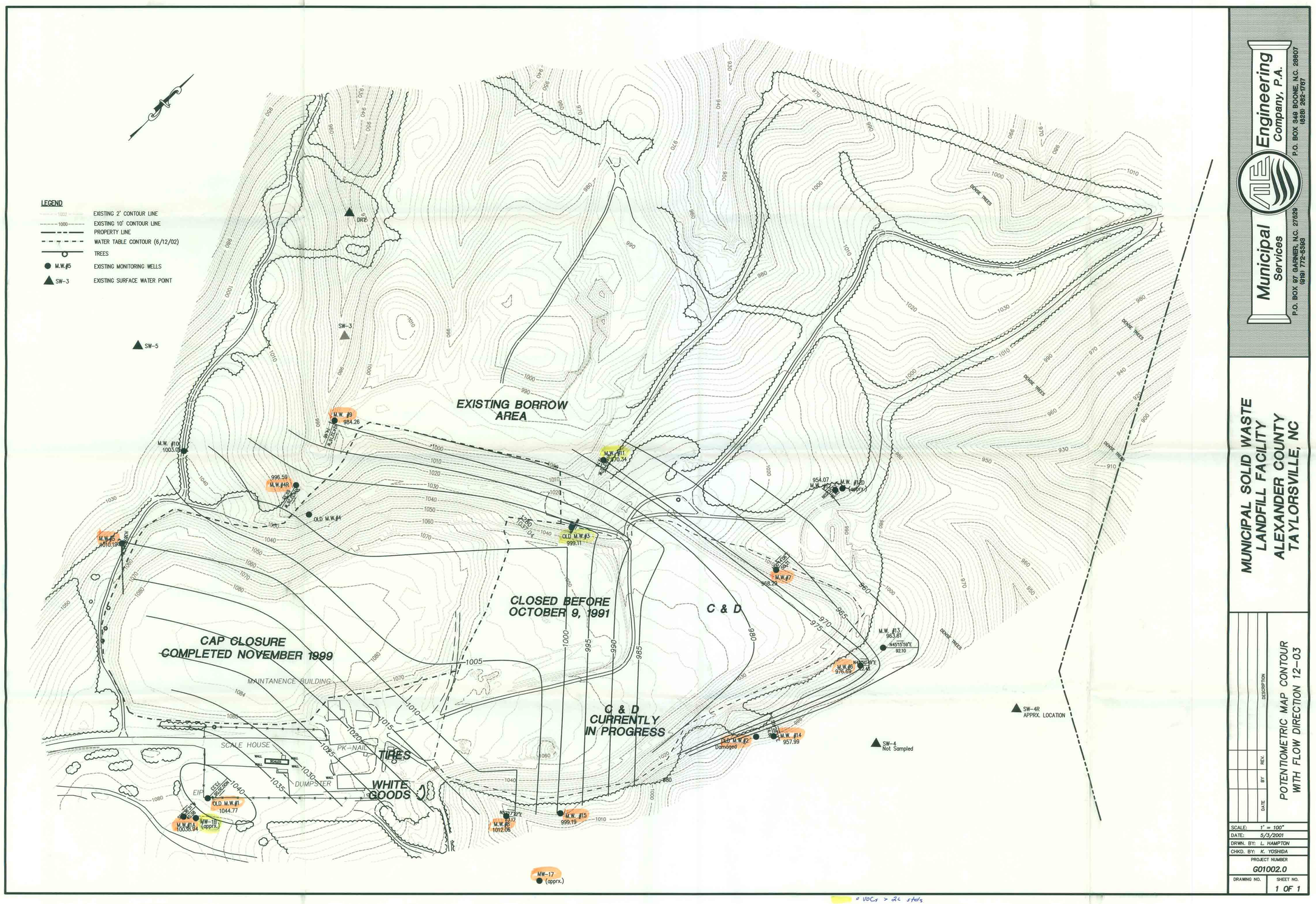

Engineering Company, P.A.
P.O. BOX 349 BOONE, N.C. 28607
(828) 262-1767

Municipal Services
P.O. BOX 97 GARNER, N.C. 27529
(919) 772-9393

MUNICIPAL SOLID WASTE LANDFILL FACILITY ALEXANDER COUNTY TAYLORSVILLE, NC

DATE	BY	REV.	DESCRIPTION

POTENTIOMETRIC MAP CONTOUR WITH FLOW DIRECTION 12-03

SCALE:	1' = 100'
DATE:	5/3/2001
DRWN. BY:	L. HAMPTON
CHKD. BY:	K. YOSHIDA
PROJECT NUMBER	G01002.0
DRAWING NO.	SHEET NO. 1 OF 1

= VOCs > 2L stds
= VOCs < 2L stds.

Received FEB 2004 Solid Waste Section