LAWGIBB GROUP

May 15, 2000

Mr. Larry Rose
North Carolina Department of Natural Resources
Solid Waste Section
P.O. Box 2687
Raleigh, North Carolina 27611

Subject: **Report of Semi-Annual Water Quality Monitoring**
Series 2 – April 2000
Swepsonville Landfill
Graham, Alamance County, North Carolina
LAW Project 30440-9-0124

Dear Mr. Rose:

On behalf of Alamance County, Law Engineering and Environmental Services, Inc. (LAW) is pleased to present this Report of Semi-Annual Water Quality Monitoring for the above referenced site. This report summarizes the field activities, analytical results, and statistical analysis from the semi-annual sampling event performed in April 2000.

The surface water and groundwater samples were collected in general accordance with the North Carolina Department of Natural Resources (NCDENR) North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Carin Lee Kromm, G.I.T
Project Geologist

Mark I. Miller, L.G.
Principal Geologist
Licensed NC 1715

NORTH CAROLINA LICENSED SEAL 1715 GEOLOGIST MARK IVES MILLER

Attachments

LAW Engineering and Environmental Services, Inc.
7347-E West Friendly Avenue • Greensboro, NC 27410
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1.0 PROJECT BACKGROUND

Law Engineering and Environmental Services, Inc. (LAW) was contracted by Alamance County to conduct water quality monitoring at the Swepsonville Landfill. The Swepsonville Landfill is located in Graham, North Carolina (Figure 1).

Prior to LAW's April 2000 and October 1999 sampling event, BPA Environmental & Engineering, Inc. (BPA) conducted semi-annual water quality monitoring events for the existing eleven monitoring wells and collected two surface water samples (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7A, MW-7B, MW-8A, MW-8B, MW-9, SW-1 and SW-2) from October 1995 until March 1999. Groundwater samples from the previous monitoring events were analyzed for Appendix I constituents, which included volatile organic compounds (VOCs) and metals including mercury.

2.0 FIELD ACTIVITIES

Between April 12 and April 17, 2000, LAW conducted the first semi-annual sampling event for 2000 at the Swepsonville Landfill. The field activities were performed in general accordance with the requirements of the North Carolina Department of Natural Resources (NCDENR), North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637. A total of eleven monitoring wells, and two surface water locations were sampled as part of this monitoring event (Figure 2).

Prior to sampling, the depth-to-groundwater was measured in the eleven monitoring wells using an electric water level indicator. The water level indicator was decontaminated between uses according to the following procedure:

- washed with potable water and phosphate-free detergent solution;
- rinsed with potable water; and
- rinsed with distilled water.

The depth-to-groundwater measurements were not converted to groundwater elevations because survey data indicated that only the top of the steel outer protective casing was surveyed and depth-to-water measurements were previously referenced to the top of the PVC riser casing.

The dissolved oxygen (DO), temperature, pH, and specific conductivity of the groundwater and surface water samples were measured in the field using a YSI combination meter. The pH of the groundwater was also measured in the field using a Cole Parmer pH meter. These measurements are presented in Table 1.

The monitoring wells were purged by bailing an equivalent of five casing volumes of water from the wells or to dryness using a one-liter capacity disposable Teflon™ bailer. The water samples were collected in laboratory-decontaminated bottles. The sample containers were labeled with identifying numbers and information, preserved on ice, and shipped to Prism Laboratories, Inc., a North Carolina licensed laboratory, located in Charlotte, North Carolina for analysis.

The groundwater samples from the monitoring wells and surface water samples were analyzed for Appendix I constituents which included volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (USEPA) Method 8260B and metals using USEPA Method

6010. Mercury was analyzed using USEPA Method 245.1. Laboratory reports and chain-of-custody documentation are included in the Appendix.

3.0 ANALYTICAL RESULTS

3.1. Groundwater Analytical Results

The groundwater analytical results were compared to the North Carolina groundwater quality standards established in NCDENR Title15A NCAC Subchapter 2L Section .0202, Groundwater Quality Standards (2L Groundwater Quality Standards). The detected groundwater analytical results are summarized in Table 2.

Seven chlorinated VOCs were detected in the groundwater samples. Of these VOCs, five were detected above their respective 2L Groundwater Quality Standards. As shown on Table 1, cis-1,2-dichloroethene (cis- 1,2-DCE) was detected in groundwater samples from monitoring well MW-4 at a concentration of 390 µg/l, which exceeds the 2L Groundwater Quality Standard of 70 µg/l. 1,1-DCE was detected in the MW-2 groundwater sample at a concentration of 9 µg/l, exceeding the 2L Groundwater Quality Standard of 7 µg/l. Tetrachloroethene (a.k.a. perchloroethylene or PCE) was detected in groundwater samples collected from monitoring wells MW-2 (15 µg/l), and MW-4 (61µg/l) at concentrations which exceed the 2L Groundwater Quality Standard of 0.7 µg/l. Trichloroethene (TCE) was also detected in groundwater samples collected from monitoring wells MW-2 (17 µg/l) and MW-4 (51 µg/l) at concentrations exceeding the 2L Groundwater Quality Standard of 2.8 µg/l. Vinyl chloride was detected in the groundwater sample from MW-4 (35 µg/l) at a concentration which exceeds the 2L Groundwater Quality Standard of 0.015 µg/l. Other VOCs were detected in wells MW-2 and MW-4 at concentrations below their respective 2L Groundwater Quality Standards. No VOCs were detected in wells MW-1, MW-3, MW-5, MW-6, MW-7A and B, MW-8A and B, or MW-9.

Seven metals were detected in groundwater samples collected at the site. Of those metals, only cadmium was detected in all of the eleven monitoring wells sampled; the cadmium concentration of 0.006 mg/l measured in the groundwater sample from well MW-2 slightly exceeded the 2L Groundwater Quality Standard for cadmium of 0.005 mg/l. Lead was detected in one of the eleven monitoring wells sampled; the lead concentration of 0.016 mg/l measured in the groundwater sample from well MW-5 slightly exceeded the 2L Groundwater Quality Standard for lead of 0.015 mg/l.

3.2. Surface Water Analytical Results

The surface water analytical results were compared to the North Carolina surface water quality standards established in NCDENR Title15A NCAC Subchapter 2B Section .0202, Surface Water Quality Standards (2B Surface Water Quality Standards). The detected surface water analytical results are also summarized in Table 2. No VOCs were detected in the surface water samples; however, zinc was detected in SW-2 (0.061 mg/l). Although there is no established concentration for zinc under 2B Surface Water Quality Standards for Human Health, the detected concentration of zinc in surface water slightly exceeds the 2B Surface Water Quality Standard for Freshwater Aquatic Life of 0.05 mg/l.

4.0 CONCLUSIONS

Based on the analytical data described above, the following conclusions are presented:

- Five VOCs (cis-1,2-DCE, 1,1-DCE, PCE, TCE, and VC) were detected at concentrations which exceed their respective 2L Groundwater Quality Standards. 1,1-Dicholorethane and Cholorethane were also detected in one groundwater sample; however, concentrations were below their respective 2L Groundwater Quality Standards of 700 µg/l and 2800 µg/l. Chloroethane has not been detected previously. Other detected VOC concentrations appear to have decreased since the October 1999 sampling event, with the exception of VC, which has increased.

- Cadmium was detected in several monitoring wells, and one concentration was detected in excess of the 2L Groundwater Quality Standard. The concentrations of cadmium in the April 2000 sampling event have increased in the majority of the wells in which cadmium was detected in the October 1999 sampling event; and

- With the exception of zinc detected in one surface water sample, Appendix I VOCs and Appendix I total metals were not detected in the surface water samples.

The next semi-annual water quality monitoring event is scheduled for October 2000.

TABLES

Table 1
Groundwater and Surface Water Field Parameters
Swepsonville Landfill
Series 2 - March 2000

Well Number	Total Well Depth (feet TOC)	Date	Depth to Groundwater (feet TOC)	pH (SU)	Temperature (°C)	Specific Conductivity (mS)
MW-1	33.00	10/15/99	22.78	5.46	17.3	106.800
		4/12/00	20.04	4.52	17.2	103.000
MW-2	29.90	10/15/99	26.31	6.22	17.6	245.50
		4/17/00	24.04	5.01	22.0	0.60
MW-3	24.10	10/15/99	7.30	6.13	N/A	106.6
		4/12/00	7.24	6.74	14.6	67.3
MW-4	50.00	10/16/99	30.34	6.27	16.8	451.6
		4/12/00	32.20	5.61	18.1	643.0
MW-5	19.00	10/16/99	N/A	6.24	17.3	153.4
		4/12/00	8.16	7.20	16.3	198.5
MW-6	50.00	10/16/99	20.78	6.30	16.6	129.6
		4/12/00	19.75	6.20	17.6	132.0
MW-7A	64.02	10/18/99	23.98	6.47	14.4	121.2
		4/12/00	20.49	5.57	15.1	132.0
MW-7B	31.05	10/18/99	22.33	6.26	16.2	83.5
		4/12/00	18.25	5.31	15.5	97.1
MW-8A	65.00	10/18/99	23.42	6.20	17.8	5.19
		4/17/00	20.68	5.27	15.4	45.80
MW-8B	26.00	10/18/99	23.90	5.95	16.8	38.2
		4/17/00	21.83	5.05	15.8	30.2
MW-9	27.50	10/15/99	15.30	6.12	15.6	41.01
		4/17/00	12.60	4.66	19.5	27.00
SW-1	N/A	10/18/99	N/A	7.43	16.4	72.14
		4/12/00	N/A	7.01	17.2	70.14
SW-2	N/A	10/15/99	N/A	7.26	17.2	74.06
		4/12/00	N/A	7.16	16.7	72.37

Prepared By: JAM Date: 5/15/00
Checked By: [illegible] Date: 5/15/00

Notes:

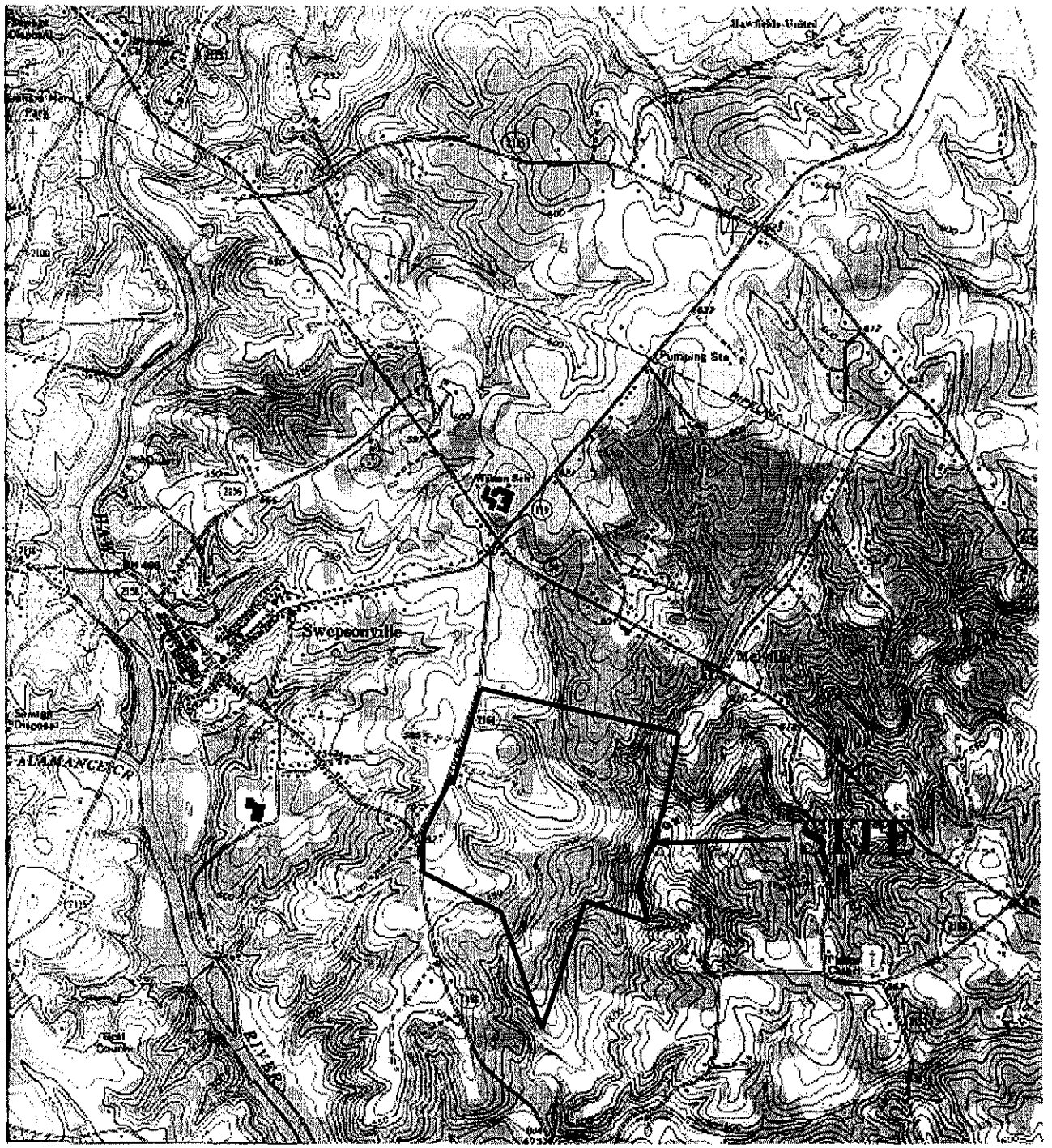
1) All data reported in feet above National Geodetic Vertical Datum (NGVD).

2) Top of casing elevations surveyed by Landmark Surveying, Inc.

N/A - Not Applicable

SU - Standard Units
mS - milli Siemens
TOC - Top of PVC riser casing

FIGURES



APPROXIMATE SITE LOCATION

APPROXIMATE SCALE

1000 500 0 1000

(IN FEET)

REF.: U.S.G.S. TOPOGRAPHIC MAP, MEBANE, N.C. QUADRANGLE, DATED 1969.

LAW

ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA

SITE LOCATION MAP

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

PROJECT NO.	30440-9-0124	FIGURE	1

APPENDIX

LABORATORY DATA AND CHAIN-OF-CUSTODY DOCUMENTATION

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:28	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:28	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:28	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:28	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:28	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:28	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:28	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:28	MSP
ZINC, TOTAL APPENDIX1	0.086	mg/L	0.05	6010	4/25/00 18:28	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 13:25	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 13:25	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 13:25	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:34	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
BARIUM, TOTAL APPENDIX1	1.0	mg/L	0.5	6010	4/25/00 18:34	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:34	MSP
CADMIUM, TOTAL APPENDIX1	0.006	mg/L	0.001	6010	4/25/00 18:34	MSP
CHROMIUM, TOTAL APPENDIX1	0.042	mg/L	0.01	6010	4/25/00 18:34	MSP
COBALT, TOTAL APPENDIX1	0.039	mg/L	0.01	6010	4/25/00 18:34	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:34	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:34	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:34	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
VANADIUM, TOTAL APPENDIX1	0.18	mg/L	0.04	6010	4/25/00 18:34	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 18:34	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 14:05	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 14:05	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 14:05	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
1,1-DICHLOROETHANE	57	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1-DICHLOROETHENE	9	ug/L	5	SW846-8260	4/25/00 14:05	MP
CIS-1,2-DICHLOROETHENE	18	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TETRACHLOROETHENE	15	ug/L	5	SW846-8260	4/25/00 14:05	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRICHLOROETHENE	17	ug/L	5	SW846-8260	4/25/00 14:05	MP

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:39	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:39	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:39	MSP
ZINC, TOTAL APPENDIX1	0.053	mg/L	0.05	6010	4/25/00 18:39	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 14:51	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 14:51	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 14:51	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:44	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:44	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:44	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:44	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
COBALT, TOTAL APPENDIX1	0.071	mg/L	0.01	6010	4/25/00 18:44	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:44	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:44	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:44	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:44	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:44	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 15:45	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 15:45	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 15:45	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CHLOROETHANE	15	ug/L	10	SW846-8260	4/25/00 15:45	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
1,1-DICHLOROETHANE	43	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CIS-1,2-DICHLOROETHENE	390	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TETRACHLOROETHENE	61	ug/L	5	SW846-8260	4/25/00 15:45	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRICHLOROETHENE	51	ug/L	5	SW846-8260	4/25/00 15:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
VINYL CHLORIDE	35	ug/L	10	SW846-8260	4/25/00 15:45	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:50	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:50	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:50	MSP
CADMIUM, TOTAL APPENDIX1	0.004	mg/L	0.001	6010	4/25/00 18:50	MSP
CHROMIUM, TOTAL APPENDIX1	0.042	mg/L	0.01	6010	4/25/00 18:50	MSP
COBALT, TOTAL APPENDIX1	0.026	mg/L	0.01	6010	4/25/00 18:50	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:50	MSP
LEAD, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	4/25/00 18:50	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:50	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:50	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
VANADIUM, TOTAL APPENDIX1	0.13	mg/L	0.04	6010	4/25/00 18:50	MSP
ZINC, TOTAL APPENDIX1	0.097	mg/L	0.05	6010	4/25/00 18:50	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 16:38	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 16:38	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 16:38	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:55	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:55	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:55	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 18:55	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:55	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:55	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:55	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:55	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:55	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 17:36	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 17:36	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 17:36	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:24	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:24	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:24	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 19:24	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:24	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:24	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:24	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:24	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:24	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 18:16	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 18:16	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 18:16	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:39	MSP
CADMIUM, TOTAL APPENDIX1	0.005	mg/L	0.001	6010	4/25/00 19:39	MSP
CHROMIUM, TOTAL APPENDIX1	0.019	mg/L	0.01	6010	4/25/00 19:39	MSP
COBALT, TOTAL APPENDIX1	0.029	mg/L	0.01	6010	4/25/00 19:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
VANADIUM, TOTAL APPENDIX1	0.12	mg/L	0.04	6010	4/25/00 19:39	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 19:39	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 18:57	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 18:57	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 18:57	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:45	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:45	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:45	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 19:45	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:45	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:45	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:45	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:45	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:45	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 15:44	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 15:44	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 15:44	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:50	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:50	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:50	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 19:50	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:50	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:50	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:50	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:50	MSP
ZINC, TOTAL APPENDIX1	0.068	mg/L	0.05	6010	4/25/00 19:50	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 16:31	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 16:31	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 16:31	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

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PRISM LABORATORIES, INC.

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5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:55	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:55	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:55	MSP
CADMIUM, TOTAL APPENDIX1	0.003	mg/L	0.001	6010	4/25/00 19:55	MSP
CHROMIUM, TOTAL APPENDIX1	0.022	mg/L	0.01	6010	4/25/00 19:55	MSP
COBALT, TOTAL APPENDIX1	0.058	mg/L	0.01	6010	4/25/00 19:55	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:55	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:55	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:55	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
VANADIUM, TOTAL APPENDIX1	0.058	mg/L	0.04	6010	4/25/00 19:55	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 19:55	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 17:28	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 17:28	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 17:28	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

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Lab Report

PRISM LABORATORIES, INC.

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5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 20:00	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 20:00	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 20:00	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	4/25/00 20:00	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 20:00	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:00	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 20:00	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 20:00	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:00	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 19:38	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 19:38	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 19:38	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 20:04	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 20:04	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 20:04	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	4/25/00 20:04	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 20:04	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:04	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 20:04	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 20:04	MSP
ZINC, TOTAL APPENDIX1	0.061	mg/L	0.05	6010	4/25/00 20:04	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 20:18	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 20:18	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 20:18	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB65969**
Login Group: 8626F14
Sample Collection Date/Time: 4/19/00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 18:08	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 18:08	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 18:08	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB65969**
Login Group: 8626F14
Sample Collection Date/Time: 4/19/00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
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CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			✓
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: LAW ENGINEERING
Physical Address: 1347-C W. FRIENDLY AVE, GREENSBORO, NC 27410
Phone: 336-294-4271 Fax: 336-294-4277
P.O.#/Billing Reference: 30400069
Project Name: Swepsonville Landfill

REPORT TO: Name: CARIN KROUMA
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA, GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: App IX VOC	SOTO App IX Metals					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-1	4/12/00	1230	Water	VOA	3		HCl	✓								65735
MW-1	4/12/00	1230	Water	P	1		HNO_3		✓							↓
MW-2	4/17/00	1100	Water	VOA	3		HCl	✓								65736
MW-2	4/17/00	1100	Water	P	1		HNO_3		✓							↓
MW-3	4/12/00	1630	Water	VOA	3		HCl	✓								65737
MW-3	4/12/00	1630	Water	P	1		HNO_3		✓							↓
MW-4	4/12/00	1400	Water	VOA	3		HCl	✓								65738
MW-4	4/12/00	1400	Water	P	1		HNO_3		✓							↓
MW-5	4/12/00	1530	Water	VOA	3		HCl	✓								65739
MW-5	4/12/00	1530	Water	P	1		HNO_3		✓							↓

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: LAW Technician

Relinquished By: (Signature)	Received By: (Signature) [signature]	Date 04/19/00	Military/Hours 0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 8L960F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			✓
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: LAW ENGINEERING
Physical Address: 7347-C W. FRIENDLY AVE GREENSBORO NC 27410
Phone: 336-294-4221 Fax: 336-294-4227
P.O.#/Billing Reference: 304000169
Project Name: Swepsonville Landfill

REPORT TO: Name: Ms. CARIN KROMM
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ____ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ____
Sample Iced Upon Collection: Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 App 7 VOC	Metals						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-6	4/12/00	1100	Water	VOA	3		HCl	✓									65740
MW-6	4/12/00	1100	Water	P	1		HNO_3		✓								⊥
MW-7A	4/12/00	1150	Water	VOA	3		HCl	✓									65741
MW-7A	4/12/00	1150	Water	P	1		HNO_3		✓								⊥
MW-7B	4/12/00	1145	Water	VOA	3		HCl	✓									65742
MW-7B	4/12/00	1145	Water	P	1		HNO_3		✓								⊥
MW-8A	4/17/00	1000	Water	VOA	3		HCl	✓									65743
MW-8A	4/17/00	1000	Water	P	1		HNO_3		✓								⊥
MW-8B	4/17/00	0945	Water	VOA	3		HCl	✓									65744
MW-8B	4/17/00	0945	Water	P	1		HNO_3		✓								⊥

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: Law Technician

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
	[signature]	041900	0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 060216F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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Full Service Analytical & Environmental Solutions

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	NA
Samples INTACT upon arrival?	✓		
Received ON ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		✓
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

PRESS DOWN FIRMLY - 3 COPIES

Client: LAW ENGINEERING
Physical Address: 7347-E W. FRIENDLY AVE GREENSBORO, NC 27410
Phone: 336-294-4221 Fax: 336-294-4227
P.O.#/Billing Reference: 30400169
Project Name: Swepsonville Landfill

REPORT TO: Name: CARIN KROMM
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ____ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ____
Sample Iced Upon Collection: Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	App IV VOC Metals					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-9	4/17/00	1130	Water	VOA	3		HCl	✓								65745
MW-9	4/17/00	1130	Water	P	1		HNO_3		✓							1
SW-1	4/12/00	1030	Water	VOA	3		HCl	✓								65746
SW-1	4/12/00	1030	Water	P	1		HNO_3		✓							1
SW-2	4/12/00	1630	Water	VOA	3		HCl	✓								65747
SW-2	4/12/00	1630	Water	P	1		HNO_3		✓							1
TRIPBLANK	—	—	Water	VOA	3			✓								65969

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: Lab Technician

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
	C.V.J. Matthews	04/19/00	0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) C.V.J. Matthews	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 8606F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

FINAL REPORT COPY

LAWGIBB GROUP

February 28, 2000

Mr. Larry Rose
North Carolina Department of Natural Resources
Solid Waste Section
P.O. Box 2687
Raleigh, North Carolina 27611

Subject: **Report of Semi-Annual Water Quality Monitoring**
Series 1 – October 1999
Swepsonville Landfill
Graham, Alamance County, North Carolina
LAW Project 30440-9-0124

Dear Mr. Rose:

On behalf of Alamance County, Law Engineering and Environmental Services, Inc. (LAW) is pleased to present this Report of Semi-Annual Water Quality Monitoring for the above referenced site. This report summarizes the field activities, analytical results, and statistical analysis from the semi-annual sampling event performed in October 1999.

The surface water and groundwater samples were collected in general accordance with the North Carolina Department of Natural Resources (NCDENR) North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Carin Lee Kromm, G.I.T
Project Geologist

Mark I. Miller, L.G.
Principal Geologist
Licensed NC 1715

Attachments

MAR 2000
Section

LAW Engineering and Environmental Services, Inc.
7347 - E West Friendly Avenue
Greensboro, NC 27410
336-294-4221 • Fax: 336-294-4227

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APPENDIX

Laboratory Data and Chain-of-Custody Documentation

1.0 PROJECT BACKGROUND

Law Engineering and Environmental Services, Inc. (LAW) was contracted by Alamance County to conduct water quality monitoring at the Swepsonville Landfill. The Swepsonville Landfill is located in Graham, North Carolina (Figure 1).

Prior to LAW's October 1999 sampling event, BPA Environmental & Engineering, Inc. (BPA) conducted semi-annual water quality monitoring events for the existing eleven monitoring wells and collected two surface water samples (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7A, MW-7B, MW-8A, MW-8B, MW-9, SW-1 and SW-2) from October 1995 until March 1999. Groundwater samples from the previous monitoring events were analyzed for Appendix I constituents, which included volatile organic compounds (VOCs) and metals including mercury.

2.0 FIELD ACTIVITIES

Between October 13 and October 18, 1999, LAW conducted the second semi-annual sampling event for 1999 at the Swepsonville Landfill. The field activities were performed in general accordance with the requirements of the North Carolina Department of Natural Recourses (NCDENR) Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637. A total of eleven monitoring wells, and two surface water locations were sampled as part of this monitoring event (Figure 2).

Prior to sampling, the depth-to-groundwater was measured in the eleven monitoring using an electric water level indicator. The water level indicator was decontaminated between uses according to the following procedure:

- washed with potable water and phosphate-free detergent solution;
- rinsed with potable water; and
- rinsed with distilled water.

The depth-to-groundwater measurements were not converted to groundwater elevations because survey data indicated that only the top of the steel outer protective casing was surveyed and depth-to-water measurements were referenced to the top of the PVC riser casing.

The dissolved oxygen (DO), temperature, pH, and specific conductivity of the groundwater and surface water samples were measured in the field using a YSI combination meter. The pH of the groundwater was also measured in the field using a Cole Parmer pH meter. These measurements are presented in Table 1.

The monitoring wells were purged by bailing an equivalent of five casing volumes of water from the wells or to dryness using a one-liter capacity disposable Teflon™ bailer. The water samples were collected in laboratory-decontaminated bottles. The sample containers were labeled with identifying numbers and information, preserved on ice, and shipped to Prism Laboratories, Inc., a North Carolina licensed laboratory, located in Charlotte, North Carolina for analysis.

The groundwater samples from the monitoring wells and surface water samples were analyzed for Appendix I constituents which included volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (USEPA) Method 8260B and metals using USEPA Method

6010. Mercury was analyzed using USEPA Method 245.1 for analysis. Laboratory reports and chain-of-custody documentation are included in the Appendix.

3.0 ANALYTICAL RESULTS

3.1. Groundwater Analytical Results

The groundwater analytical results were compared to the North Carolina groundwater quality standards established in NCDENR Title15A NCAC Subchapter 2L Section .0202, Groundwater Quality Standards (2L Groundwater Quality Standards). The detected groundwater analytical results are summarized in Table 2.

Nine chlorinated VOCs were detected in the groundwater samples. Of these VOCs, six were detected above their respective 2L Groundwater Quality Standards. As shown on Table 1, cis-1,2-DCE was detected in groundwater samples from monitoring well MW-4 at a concentration of 410 µg/l, which exceeds the 2L Groundwater Quality Standard of 70 µg/l. 1,1-Dichlorethene (1,1-DCE) was detected in the MW-2 groundwater samples at a concentration of 23 µg/l, exceeding the 2L Groundwater Quality Standard of 7 µg/l. 1,2-Dichloropropane (1,2-DCP) was detected in the groundwater sample from monitoring well MW- 2 at a concentration of 8 µg/l, which exceeds the 2L Groundwater Quality Standard of 0.56 µg/l. Tetrachloroethene (a.k.a perchloroethylene or PCE) was detected in groundwater samples collected from monitoring wells MW-1 (9 µg/l), MW-2 (38 µg/l), and MW-4 (68 µg/l) at concentrations which exceed the 2L Groundwater Quality Standard of 0.7 ug/l. Trichloroethene (TCE) was also detected in groundwater samples collected from monitoring wells MW-2 (49 µg/l) and MW-4 (57 µg/l) at concentrations exceeding the 2L Groundwater Quality Standard of 2.8 µg/l. Vinyl chloride was detected in the groundwater sample from MW-4 (16 µg/l) at a concentration which exceeds the 2L Groundwater Quality Standard of 0.015 µg/l. 1,4-Dichlorobenzene (1,4-DCB) was also detected in the groundwater sample from MW-4 at a concentration of 7 µg/l; however, a 2L Groundwater Quality Standard has not been established for this compound. Other VOCs were detected in wells MW-2 and MW-4 at concentrations below their respective 2L Groundwater Quality Standards. No VOCs were detected in wells MW-3, MW-5, MW-6, MW-7A and B, MW-8A and B, or MW-9.

Ten metals were detected in groundwater samples collected at the site. Of those metals, only cadmium was detected in seven of the eleven monitoring wells sampled; the cadmium concentration of 0.006 mg/l measured in the groundwater sample from well MW-2 slightly exceeded the 2L Groundwater Quality Standard for cadmium of 0.005 mg/l.

3.2. Surface Water Analytical Results

The surface water analytical results were compared to the North Carolina surface water quality standards established in NCDENR Title15A NCAC Subchapter 2B Section .0202, Surface Water Quality Standards (2B Surface Water Quality Standards). The detected surface water analytical results are also summarized in Table 2. No VOCs or metals were detected in the surface water samples.

4.0 CONCLUSIONS

Based on the analytical data described above, the following conclusions are presented:

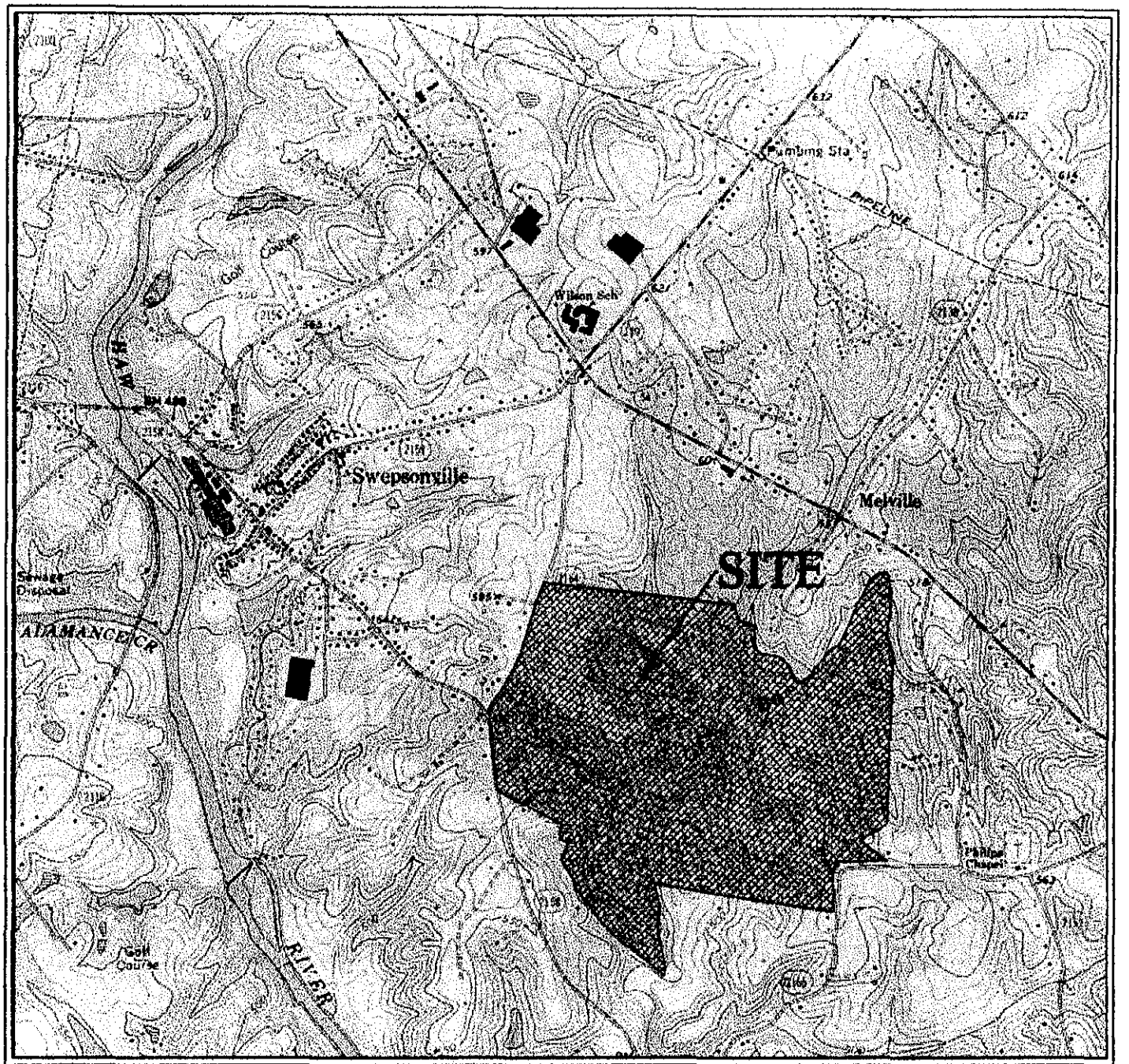
- Six VOCs (cis-1,2-DCE, 1,4 DCB, 1.1 DCE, 1,2-DCP, PCE, TCE, and VC) were detected at concentrations which exceed their respective 2L Groundwater Quality Standards. 1,4-DCB was also detected in one groundwater sample; however, a 2L Groundwater Quality Standard has not been established for this compound. 1,4-DCB, 1,2-DCP, and VC have not been detected previously. Other detected concentrations appear to have increased since the March 1999 sampling event.

- Cadmium was detected in several monitoring wells, and one concentration was detected in excess of the 2L Groundwater Quality Standard. The concentrations of cadmium in the October 1999 sampling event have decreased in the majority of the wells in which cadmium was detected in the March 1999 sampling event; and

- Appendix I VOCs or Appendix I total metals were not detected in the surface water samples.

The next semi-annual water quality monitoring event is scheduled for April 2000.

FIGURES



NORTH

MEBANE, N.C.
36079-A3-TF-024
1969
REVISED 1994
DMA 5156 III SE-SERIES V842

QUADRANGLE LOCATION

NOTE: SITE LOCATION IS APPROXIMATE.

CONTOUR INTERVALS 10 FEET

GRAPHIC SCALE FEET

2000 1000 0 2000 4000

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA

SITE LOCATION MAP
SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

DRAWN:	DATE: FEBRUARY 2000
DFT CHECK:	SCALE: 1: 24000
ENG CHECK:	JOB: 30440-9-0124
APPROVAL:	FIGURE: 1

TABLES

Table 1
Groundwater and Surface Water Field Parameters
Swepsonville Landfill
Series 1 - October 1999

Well Number	Total Well Depth (feet TOC)	Depth to Groundwater (feet TOC)	pH (SU)	Temperature (°C)	Specific Conductivity (mS)
MW-1	33.00	22.78	5.46	17.3	106.800
MW-2	29.90	26.31	6.22	17.6	245.50
MW-3	24.10	7.30	6.13	N/A	106.6
MW-4	50.00	30.34	6.27	16.8	451.6
MW-5	19.00	N/A	6.24	17.3	153.4
MW-6	50.00	20.78	6.30	16.6	129.6
MW-7A	64.02	23.98	6.47	14.4	121.2
MW-7B	31.05	22.33	6.26	16.2	83.5
MW-8A	65.00	23.42	6.20	17.8	5.19
MW-8B	26.00	23.90	5.95	16.8	38.2
MW-9	27.50	15.30	6.12	15.6	41.01
SW-1	N/A	N/A	7.43	16.4	72.14
SW-2	N/A	N/A	7.26	17.2	74.06

Prepared By: JM Date: 2/17/00
Checked By: CLK Date: 2/24/00

Notes:

1) All data reported in feet above National Geodetic Vertical Datum (NGVD).

2) Top of casing elevations surveyed by Landmark Surveying, Inc.

SU - Standard Units
N/A - Not Applicable
mS - milli Siemens
TOC - Top of PVC riser casing

Table 2
Summary of Groundwater and Surface Water Analytical Results
Swepsonville Landfill
Series 1 - October 1999

Parameter	MDL	Analytical Results														
Sample ID		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2	2L Ground-	2B Water
Depth (feet)		33.00	29.90	24.10	50.00	19.00	50.00	64.02	31.05	65.00	26.00	27.50	N/A	N/A	Water Quality	Quality
Collection Date		10/15/99	10/13/99	10/14/99	10/15/99	10/15/99	10/15/99	10/16/99	10/15/99	10/18/99	10/18/99	10/14/99	10/16/99	10/14/99	Standards	Standards
Appendix I Volatile Organic Compounds (µg/l):																
Cis-1,2-Dichloroethene	5	<5	45	<5	**410**	<5	<5	<5	<5	<5	<5	<5	<5	<5	70	NE
1,4-Dichlorobenzene	5	<5	<5	<5	**7**	<5	<5	<5	<5	<5	<5	<5	<5	<5	NE	NE
1,1-Dichloroethane	5	<5	170	<5	45	<5	<5	<5	<5	<5	<5	<5	<5	<5	700	NE
1,1-Dichloroethene	5	<5	**23**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	NE
1,2-Dichloropropane	5	<5	**8**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.56	NE
Tetrachloroethene	5	**9**	**38**	<5	**68**	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.7	NE
1,1,1-Trichloroethane	5	<5	9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	200	NE
Trichloroethene	5	<5	**49**	<5	**57**	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.8	NE
Vinyl Chloride	10	<10	<10	<10	**16**	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.015	NE
Appendix I Total Metals (mg/l):																
Arsenic	0.01	<0.010	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	0.05	NE
Barium	0.5	<0.5	0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	NE
Beryllium	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	NE	NE
Cadmium	0.001	<0.001	**0.006**	0.002	0.002	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.002	<0.001	<0.001	0.005	NE
Chromium	0.01	<0.01	0.066	0.024	<0.01	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01	<0.01	NE	NE
Cobalt	0.01	<0.01	0.049	0.016	0.072	0.012	<0.01	<0.01	<0.01	<0.01	0.012	0.11	<0.01	<0.01	NE	NE
Lead	0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.015	NE
Nickel	0.05	<0.05	0.062	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	NE
Vanadium	0.04	<0.04	0.22	0.061	0.14	0.059	<0.04	<0.04	<0.04	<0.04	<0.04	0.051	<0.04	<0.04	NE	NE
Zinc	0.05	<0.05	0.26	0.064	0.061	<0.05	<0.05	<0.05	<0.05	<0.05	0.071	0.093	<0.05	<0.05	2.10	NE

Notes:
BOLD - Concentration exceeds the 2L Groundwater Quality Standards or 2B Water Quality Criteria
MDL - Method Detection Limit
2B Surface Water Quality Standards, North Carolina Administrative Code Title 15A, NCDENR, Subchapter 2B, Classifications and Surface Water Quality Standards
2L Groundwater Quality Standard - North Carolina Administrative Code Title 15A, NCDENR, Subchapter 2L, Section .0200, Classifications and Water Quality Standards dated November 9, 1993 as ammended on April 14, 1998
NE - Not Established

Prepared By: JM Date: 2/14/00
Checked By: CLK Date: 2/24/00

APPENDIX

LABORATORY DATA AND CHAIN-OF-CUSTODY DOCUMENTATION

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 17:46	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 17:46	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 17:46	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 17:46	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 17:46	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 17:46	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 17:46	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 17:46	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 17:46	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 17:32	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 17:32	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 17:32	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 17:32	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TETRACHLOROETHENE	9	ug/L	5	8260	10/26/99 17:32	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 17:32	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:03	MSP
ARSENIC, TOTAL APPENDIX1	0.011	mg/L	0.01	6010	10/21/99 18:03	MSP
BARIUM, TOTAL APPENDIX1	0.89	mg/L	0.5	6010	10/21/99 18:03	MSP
BERYLLIUM, TOTAL APPENDIX1	0.002	mg/L	0.002	6010	10/21/99 18:03	MSP
CADMIUM, TOTAL APPENDIX1	0.006	mg/L	0.001	6010	10/21/99 18:03	MSP
CHROMIUM, TOTAL APPENDIX1	0.066	mg/L	0.01	6010	10/21/99 18:03	MSP
COBALT, TOTAL APPENDIX1	0.049	mg/L	0.01	6010	10/21/99 18:03	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:03	MSP
LEAD, TOTAL APPENDIX1	0.013	mg/L	0.01	6010	10/21/99 18:03	MSP
NICKEL, TOTAL APPENDIX1	0.062	mg/L	0.05	6010	10/21/99 18:03	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:03	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:03	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:03	MSP
VANADIUM, TOTAL APPENDIX1	0.22	mg/L	0.04	6010	10/21/99 18:03	MSP
ZINC, TOTAL APPENDIX1	0.26	mg/L	0.05	6010	10/21/99 18:03	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 14:29	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 14:29	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 14:29	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 14:29	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP

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Lab Report

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
1,1-DICHLOROETHANE	170	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1-DICHLOROETHENE	23	ug/L	5	8260	10/26/99 14:29	MP
CIS-1,2-DICHLOROETHENE	45	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROPROPANE	8	ug/L	5	8260	10/26/99 14:29	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TETRACHLOROETHENE	38	ug/L	5	8260	10/26/99 14:29	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,1-TRICHLOROETHANE	9	ug/L	5	8260	10/26/99 14:29	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRICHLOROETHENE	49	ug/L	5	8260	10/26/99 14:29	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 14:29	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 14:29	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:09	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:09	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:09	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 18:09	MSP
CHROMIUM, TOTAL APPENDIX1	0.024	mg/L	0.01	6010	10/21/99 18:09	MSP
COBALT, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	10/21/99 18:09	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:09	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:09	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:09	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
VANADIUM, TOTAL APPENDIX1	0.061	mg/L	0.04	6010	10/21/99 18:09	MSP
ZINC, TOTAL APPENDIX1	0.064	mg/L	0.05	6010	10/21/99 18:09	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 15:15	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 15:15	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 15:15	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 15:15	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 15:15	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 15:15	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:15	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:15	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:15	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 18:15	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
COBALT, TOTAL APPENDIX1	0.072	mg/L	0.01	6010	10/21/99 18:15	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:15	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:15	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:15	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
VANADIUM, TOTAL APPENDIX1	0.14	mg/L	0.04	6010	10/21/99 18:15	MSP
ZINC, TOTAL APPENDIX1	0.061	mg/L	0.05	6010	10/21/99 18:15	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 18:12	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 18:12	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 18:12	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 18:12	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	7	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
1,1-DICHLOROETHANE	45	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CIS-1,2-DICHLOROETHENE	410	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TETRACHLOROETHENE	68	ug/L	5	8260	10/26/99 18:12	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TRICHLOROETHENE	57	ug/L	5	8260	10/26/99 18:12	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 18:12	MP

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Lab Report

PRISM LABORATORIES, INC.
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11/4/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	16	ug/L	10	8260	10/26/99 18:12	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 18:12	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	11/2/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:21	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:21	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:21	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:21	MSP
CHROMIUM, TOTAL APPENDIX1	0.018	mg/L	0.01	6010	10/21/99 18:21	MSP
COBALT, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 18:21	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:21	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:21	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:21	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
VANADIUM, TOTAL APPENDIX1	0.059	mg/L	0.04	6010	10/21/99 18:21	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:21	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 18:53	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 18:53	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 18:53	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 18:53	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 18:53	MP

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Lab Report

PRISM LABORATORIES, INC.

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 18:53	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:27	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:27	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:27	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:27	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:27	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:27	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:27	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:27	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:27	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 19:33	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 19:33	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 19:33	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 19:33	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 19:33	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 19:33	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:33	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:33	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:33	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:33	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:33	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:33	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:33	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:33	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:33	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 20:54	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 20:54	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 20:54	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 20:54	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP

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Lab Report

PRISM LABORATORIES, INC.

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 20:54	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 20:54	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB45584**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 15:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:39	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:39	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:39	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:39	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 20:14	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 20:14	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 20:14	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 20:14	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB45584**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 15:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 20:14	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB45584**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 15:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 20:14	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Wes Scarlett

Purge Date October 13, 1998

Purge Time 3:19 pm to 3:28 pm

Sample Date October 13, 1998

Sample Time 3:30 pm

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	24.47 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	9.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.51 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	63.0°F
2)	Specific Conductance	88.6 μmhos
3)	pH	5.4
4)	Physical Appearance and Odor	Cloudy, tan, silty, no odor, rocks and grout bailed out of well

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Wes Scarlett

Purge Date October 13, 1998

Purge Time 1:59 pm to 2:00 pm

Sample Date October 13, 1998

Sample Time 2:20 pm

Weather Partly cloudy, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	26.95 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	2.35 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.38 gal.
4)	Volume of water removed prior to sampling	0.40 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	60.6°F
2)	Specific Conductance	159.6 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 1:25 pm to 1:35 pm

Sample Date October 13, 1998

Sample Time 1:40 pm

Weather Partly cloudy, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	11.34	ft.
2)	Depth to well bottom from measuring point	23.84	ft.
3)	Height of water column (h)	12.50	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.04	gal.
4)	Volume of water removed prior to sampling	6.1	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	61.9°F
2)	Specific Conductance	71.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett/Ken Vanhoy

Purge Date October 13, 1998

Purge Time 9:58 am to 10:10 am

Sample Date October 13, 1998

Sample Time 10:15 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	35.62 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	14.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.33 gal.
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.7°F
2)	Specific Conductance	360 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett/Ken Vanhoy

Purge Date October 13, 1998

Purge Time 9:30 am to 9:32 am

Sample Date October 13, 1998

Sample Time 9:40 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	15.82 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	3.59 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.59 gal.
4)	Volume of water removed prior to sampling	0.6 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	64.0°F
2)	Specific Conductance	113.6 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 10:30 am to 10:55 am

Sample Date October 13, 1998

Sample Time 11:00 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	21.39 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	31.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.1 gal.
4)	Volume of water removed prior to sampling	15.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.4°F
2)	Specific Conductance	99.9 μmhos
3)	pH	6.6
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 11:15 am to 11:59 am

Sample Date October 13, 1998

Sample Time 12:00 pm

Weather Cloudy, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	25.94	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	37.36	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.09	gal.
4)	Volume of water removed prior to sampling	18.3	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.6°F	
2)	Specific Conductance	99.3	μmhos
3)	pH	6.4	
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 11:18 am to 11:20 am

Sample Date October 13, 1998

Sample Time 11:30 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	26.45 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	6.01 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.98 gal.
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59.4°F
2)	Specific Conductance	104.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 8:25 am to 9:00 am

Sample Date October 13, 1998

Sample Time 9:05 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	24.68 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	38.67 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.30 gal.
4)	Volume of water removed prior to sampling	19.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	57.9°F
2)	Specific Conductance	45.3 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 13, 1998

Purge Time 8:30 am to 8:32 am

Sample Date October 13, 1998

Sample Time 8:40 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	24.05 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	1.65 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.27 gal.
4)	Volume of water removed prior to sampling	0.30 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58°F
2)	Specific Conductance	36.0 μmhos
3)	pH	5.3
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 2:55 pm to 3:04 pm

Sample Date October 13, 1998

Sample Time 3:05 pm

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	18.55 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	8.70 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.42 gal.
4)	Volume of water removed prior to sampling	4.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	62.6°F
2)	Specific Conductance	40.8 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date October 13, 1998

Source/Well SW-1

Time 10:45 am

Sampled by Ken Vanhoy

Weather Sunny, 65-70°F

Field Analysis

1)	Temperature		59.7°F
2)	Specific Conductance		79.9 μmhos
3)	pH		7.7
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Purge Date October 13, 1998

Time 1:15 pm

Weather Partly cloudy, 70-75°F

Field Analysis

1)	Temperature		59°F
2)	Specific Conductance		86.8 μmhos
3)	pH		7.1
4)	Physical Appearance and Odor	Clear, no odor	

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945
www.encolabs.com

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR3918
DATE SUBMITTED: October 15, 1998
DATE REPORTED : November 12, 1998

ATTENTION: Wes Scarlet

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance County/Swepsonville

10/13/98

#1	- MW-1	@ 15:30
#2	- MW-2	@ 14:20
#3	- MW-3	@ 13:40
#4	- MW-4	@ 10:15
#5	- MW-5	@ 09:40
#6	- MW-6	@ 11:00
#7	- MW-7A	@ 12:00
#8	- MW-7B	@ 11:30
#9	- MW-8A	@ 09:05
#10	- MW-8B	@ 08:40
#11	- MW-9	@ 15:05
#12	- SW-1	@ 10:45
#13	- SW-2	@ 13:15
#14	- TRIP BLANK	

PROJECT MANAGER Marcia C Terlep
Marcia C. Terlep

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	**15**	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	**140**	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**74**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**28**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**25**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**19**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	102	102	79-136
D8-Toluene	105	106	88-115
Bromofluorobenzene	96	98	72-132
Date Analyzed	10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	**0.55**	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0030**	**0.0060**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	**0.033**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.012**	**0.029**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

ENCO LABORATORIES
REPORT # : OR3918
DATE REPORTED: November 12, 1998
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	**0.012**	mg/L
Date Analyzed		10/23/98	10/29/98	
Vanadium	6010	**0.044**	**0.15**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.11**	**0.16**	mg/L
Date Analyzed		10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	**11**		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	**37**		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	**430**	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	**56**		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**74**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	96	107	79-136
D8-Toluene	100	106	88-115
Bromofluorobenzene	96	98	72-132
Date Analyzed	10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Arsenic	7060	**0.013**	0.010 U	mg/L
Date Analyzed		11/11/98	11/11/98	
Barium	6010	**0.84**	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.016**	**0.011**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.11**	**0.013**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.053**	**0.087**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	**0.22**	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	**0.0057**	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/27/98	10/27/98	
Thallium	7840	0.010 U	0.010 U	mg/L
Date Analyzed		11/12/98	11/12/98	
Vanadium	6010	**0.34**	**0.49**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.27**	**0.14**	mg/L
Date Analyzed		10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	102	91	79-136
D8-Toluene	101	93	88-115
Bromofluorobenzene	101	92	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/20/98	10/23/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0060**	**0.0010**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.042**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.022**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U *	0.010 U	mg/L
Date Analyzed		11/12/98	10/23/98	
Vanadium	6010	**0.13**	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.23**	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	105	101	79-136
D8-Toluene	107	102	88-115
Bromofluorobenzene	106	101	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		11/04/98	11/04/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	0.0010 U	**0.0050**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	**0.014**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	**0.021**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	0.010 U *	mg/L
Date Analyzed		10/23/98	11/12/98	
Vanadium	6010	0.040 U	**0.10**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	**0.14**	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	100	97	79-136
D8-Toluene	98	98	88-115
Bromofluorobenzene	95	96	72-132
Date Analyzed	10/21/98	10/21/98	

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

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RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		11/04/98	10/29/98	
Arsenic	6010	0.010 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/29/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	**0.0020**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0010**	**0.0050**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	**0.022**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	**0.28**	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	**0.020**	mg/L
Date Analyzed		10/23/98	10/29/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/29/98	
Thallium	6010	0.010 U	0.010 U *	mg/L
Date Analyzed		10/23/98	11/12/98	
Vanadium	6010	0.040 U	**0.044**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	**0.44**	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	97	104	79-136
D8-Toluene	92	103	88-115
Bromofluorobenzene	92	104	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/30/98	11/04/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	**0.74**	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0060**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.012**	0.0010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.11**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.14**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	**0.011**	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

ENCO LABORATORIES
REPORT # : OR3918
DATE REPORTED: November 12, 1998
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/98	10/20/98	
Thallium	6010	0.010 U *	0.010 U	mg/L
Date Analyzed		11/12/98	10/23/98	
Vanadium	6010	**0.25**	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.30**	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	SW-2	TRIP BLANK	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	SW-2	TRIP BLANK	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	97	103	79-136
D8-Toluene	98	97	88-115
Bromofluorobenzene	95	96	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	TRIP BLANK	Units
Antimony	6010	0.030 U	NR	mg/L
Date Analyzed		10/20/98		
Arsenic	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Barium	6010	0.50 U	NR	mg/L
Date Analyzed		10/20/98		
Beryllium	6010	0.0020 U	NR	mg/L
Date Analyzed		10/20/98		
Cadmium	6010	0.0010 U	NR	mg/L
Date Analyzed		10/20/98		
Chromium	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Cobalt	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Copper	6010	0.20 U	NR	mg/L
Date Analyzed		10/20/98		
Lead	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Mercury	7470	0.00050 U	NR	mg/L
Date Analyzed		10/20/98		
Nickel	6010	0.050 U	NR	mg/L
Date Analyzed		10/20/98		

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

ENCO LABORATORIES
REPORT # : OR3918
DATE REPORTED: November 12, 1998
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	TRIP BLANK	Units
Selenium	6010	0.020 U	NR	mg/L
Date Analyzed		10/20/98		
Silver	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Thallium	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Vanadium	6010	0.040 U	NR	mg/L
Date Analyzed		10/20/98		
Zinc	6010	**0.10**	NR	mg/L
Date Analyzed		10/20/98		

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	LAB BLANK	Units
Chloromethane	10 U	µg/L
Vinyl Chloride	10 U	µg/L
Bromomethane	10 U	µg/L
Chloroethane	10 U	µg/L
Trichlorofluoromethane	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	µg/L
Acetone	100 U	µg/L
Iodomethane	10 U	µg/L
Carbon Disulfide	100 U	µg/L
Methylene Chloride	10 U	µg/L
Acrylonitrile	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	µg/L
Vinyl Acetate	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	µg/L
2-Butanone	100 U	µg/L
Bromochloromethane	5.0 U	µg/L
Chloroform	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	µg/L
Carbon tetrachloride	10 U	µg/L
Benzene	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	µg/L
Trichloroethene	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	µg/L
Dibromomethane	10 U	µg/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	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	101	79-136
D8-Toluene	102	88-115
Bromofluorobenzene	100	72-132
Date Analyzed	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

ENCO LABORATORIES
REPORT # : OR3918
DATE REPORTED: November 12, 1998
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260 (MW-5,MW-6,MW-7A,MW-7B,MW-8A,MW-8B,MW-9,SW-1, SW-2,TRIP BLANK)				
1,1-Dichloroethene	149/135/144	58-140	10	18
Benzene	113/103/109	66-114	9	8
Trichloroethene	106/106/106	65-114	<1	10
Toluene	98/ 98/103	65-113	<1	8
Chlorobenzene	103/ 92/100	52-127	11	10
EPA Method 8260 (MW-1,MW-2,MW-3,MW-4)				
1,1-Dichloroethene	94/118/137	58-140	23	18
Benzene	104/122/ 96	66-114	16	8
Trichloroethene	71/ 91/ 95	65-114	25	10
Toluene	115/109/ 94	65-113	5	8
Chlorobenzene	95/111/ 93	52-127	16	10
Total Metals				
Antimony, 6010	93/ 92/ 95	38-138	1	30
Antimony, 6010	87/ 90/ 89	38-138	3	30
Arsenic, 6010	101/101/102	64-126	<1	12
Arsenic, 6010	97/101/100	64-126	4	12
Barium, 6010	98/ 97/ 97	74-119	1	11
Barium, 6010	95/ 95/ 95	74-119	<1	11

NC DHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals (Cont.)				
Beryllium, 6010	102/101/102	76-126	<1	12
Beryllium, 6010	100/102/100	76-126	2	12
Cadmium, 6010	97/ 96/ 99	68-121	1	12
Cadmium, 6010	97/ 97/ 96	68-121	<1	12
Chromium, 6010	98/ 97/100	73-120	1	10
Chromium, 6010	98/ 98/ 98	73-120	<1	10
Cobalt, 6010	97/ 95/ 98	76-120	2	17
Cobalt, 6010	96/ 97/ 96	76-120	1	17
Copper, 6010	100/ 98/102	75-123	2	11
Copper, 6010	99/100/101	75-123	1	11
Lead, 6010	98/ 97/ 99	68-126	1	19
Lead, 6010	94/ 95/ 96	68-126	1	19
Mercury, 7470	111/112/111	70-136	<1	12
Mercury, 7470	118/121/115	70-136	2	12
Nickel, 6010	101/ 99/102	64-126	2	12
Nickel, 6010	100/101/100	64-126	<1	12
Selenium, 6010	100/100/101	65-129	<1	10
Selenium, 6010	97/101/100	65-129	4	10
Silver, 6010	101/100/102	69-121	<1	12
Silver, 6010	100/100/100	69-121	<1	12
Thallium, 6010	99/ 98/106	67-135	1	13
Thallium, 6010	90/ 95/ 96	67-135	5	13
Vanadium, 6010	105/104/106	82-115	<1	16
Vanadium, 6010	105/106/104	82-115	<1	16
Zinc, 6010	97/ 96/100	63-131	1	24
Zinc, 6010	96/ 98/ 96	63-131	2	24

NC DHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QSARF #08361

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
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ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Swepsonville
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Ken Vanhoy
PHONE: 336 272 9713
FAX: 336 273 4057

CLIENT NAME: PPA Environmental & Engineering Inc
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, NC 27406-5143

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

REQUIRED ANALYSIS: App. I Volatiles; App. I Metals (Mercury)

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	HCl	HNO_3 ← PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED						REMARKS
1 MW-1	10/13/98	3:30 p.m.	✓				✓								2	1							
2 MW-2	10/13/98	2:20 p.m.	✓				✓								2	1							
3 MW-3	10/13/98	1:40 p.m.	✓				✓								2	1							
4 MW-4	10/13/98	10:15 A.m.	✓				✓								2	1							
5 MW-5	10/13/98	9:40 A.m.	✓				✓								2	1							
6 MW-6	10/13/98	11:00 A.m.	✓				✓								2	1							
7 MW-7A	10/13/98	12:00 p.m.	✓				✓								2	1							
8 MW-7B	10/13/98	11:30 A.m.	✓				✓								2	1							
9 MW-8A	10/13/98	9:05 A.m.	✓				✓								2	1							
10 MW-8B	10/13/98	8:40 A.m.	✓				✓								2	1							
11 MW-9	10/13/98	3:05 p.m.	✓				✓								2	1							
12 SW-1	10/13/98	10:45 A.m.	✓			✓									2	1							
13 SW-2	10/13/98	1:15 p.m.	✓			✓									2	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☒ ORLANDO			K Armstrong	10/13/98	2:40	Julia S. Jemiac (opened)	9/10/98	10:25 am
RELINQUISHED BY: (SIGNATURE) Ken Vanhoy	DATE 10/14/98	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		

c

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

November 19, 1998

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, October 1998." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

NOV 1998
Received
Solid Waste
Section

01-01
4-3-98

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1998

PREPARED FOR
ALAMANCE COUNTY

MAY 27, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1998

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on April 3, 1998. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of two inorganic constituents (chromium and lead in MW-3, MW-5, and MW-9) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Four inorganic constituents (barium, chromium, copper, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Two Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (cobalt and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of four volatile organic constituents (cis-1,2-dichloroethene in MW-4; tetrachloroethene and trichloroethene in MW-2 and MW-4; and vinyl chloride in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

No Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Land for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 3, 1998 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 3, 1998. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed six constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Chromium was detected in MW-3 at 0.070 ppm, MW-5 at 0.15 ppm, and MW-9 at 0.12 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-3 at 0.020 ppm, MW-5 at 0.042 ppm, and MW-9 at 0.036 ppm. The 2L Standard is 0.015 ppm.

- cis-1,2-Dichloroethene was detected in MW-4 at 250.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 5.1 ppb and MW-4 at 62.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 6.0 ppb and MW-4 at 35.0 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 15.0 ppb. The 2L Standard is 0.015 ppb.

The following six constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Barium was detected in MW-3 at 0.64 ppm, MW-5 at 0.84 ppm, and MW-9 at 0.67 ppm. The 2L Standard is 2.0 ppm.

- Chromium was detected in MW-2 at 0.019 ppm, MW-6 at 0.020 ppm, and MW-8B at 0.010 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-5 at 0.20 ppm. The 2L Standard is 1.0 ppm.

- Zinc was detected in MW-1 at 0.098 ppm, MW-2 at 0.092 ppm, MW-3 at 0.24 ppm, MW-4 at 0.11 ppm, MW-5 at 0.38 ppm, MW-6 at 0.069 ppm, MW-7A at 0.051 ppm, MW-8B at 0.21 ppm, and MW-9 at 0.32 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 19.0 ppb and MW-4 at 24.0 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 5.6 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following two potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Cobalt was detected in MW-2 at 0.018 ppm, MW-3 at 0.046 ppm, MW-4 at 0.031 ppm, MW-5 at 0.071 ppm, MW-6 at 0.013 ppm, MW-7B at 0.010 ppm, MW-8B at 0.031 ppm, and MW-9 at 0.14 ppm.

- Vanadium was detected in MW-2 at 0.053 ppm, MW-3 at 0.21 ppm, MW-5 at 0.48 ppm, MW-8B at 0.049 ppm, and MW-9 at 0.26 ppm.

5.2 Surface Water

The results of the laboratory analyses for Appendix I constituents in the surface water samples are summarized in Tables 2 and 3 and the complete laboratory reports are included in Appendix B. No inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
APRIL 3, 1998

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	59.0°F	57.0°F	53.0°F	60.0°F	53.0°F	57.5°F	59.9°F	60.1°F
Specific Conductance	88.4 μMHOs	151.6 μMHOs	102.0 μMHOs	483.0 μMHOs	108.0 μMHOs	107.0 μMHOs	87.7 μMHOs	78.6 μMHOs
pH	5.77	6.22	6.50	6.31	6.71	6.90	6.73	6.85

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.7°F	58.9°F	58.0°F	59.0°F	60.0°F
Specific Conductance	52.0 μMHOs	215.0 μMHOs	55.2 μMHOs	69.4 μMHOs	61.0 μMHOs
pH	6.52	7.14	7.17	6.88	7.19

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TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
APRIL 3, 1998

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	BQL	0.64	BQL	0.84	BQL	BQL	BQL	BQL	BQL	0.67	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	BQL	0.019	0.070	BQL	0.15	0.020	BQL	BQL	BQL	0.010	0.12	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	BQL	0.018	0.046	0.031	0.071	0.013	BQL	0.010	BQL	0.031	0.14	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	0.20	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	0.020	BQL	0.042	BQL	BQL	BQL	BQL	BQL	0.036	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	BQL	0.053	0.21	BQL	0.48	BQL	BQL	BQL	BQL	0.049	0.26	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.098	0.092	0.24	0.11	0.38	0.069	0.051	BQL	BQL	0.21	0.32	BQL	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 3, 1998

Purge Time 2:50 pm to 3:00 pm

Sample Date April 3, 1998

Sample Time 3:05 pm

Weather Light rain, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	20.30 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	13.45 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.19 gal.
4)	Volume of water removed prior to sampling	5.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59°F
2)	Specific Conductance	88.4 μmhos
3)	pH	5.77
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 3, 1998

Purge Time 2:10 pm to 2:15 pm

Sample Date April 3, 1998

Sample Time 2:20 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	23.11 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	6.19 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.01 gal.
4)	Volume of water removed prior to sampling	1.5 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	57.0°F
2)	Specific Conductance	151.6 μmhos
3)	pH	6.22
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 1:20 pm to 1:35 pm

Sample Date April 3, 1998

Sample Time 1:40 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	8.44 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	15.40 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.51 gal.
4)	Volume of water removed prior to sampling	7.6 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	53°F
2)	Specific Conductance	102 μmhos
3)	pH	6.50
4)	Physical Appearance and Odor	Orange, cloudy, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 3, 1998

Purge Time 12:40 pm to 12:48 pm

Sample Date April 3, 1998

Sample Time 12:50 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	32.72 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	17.18 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.80 gal.
4)	Volume of water removed prior to sampling	8.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60°F
2)	Specific Conductance	483 μmhos
3)	pH	6.31
4)	Physical Appearance and Odor	Clear, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 3, 1998

Purge Time 9:05 am to 9:10 am

Sample Date April 3, 1998

Sample Time 9:20 am

Weather Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	13.13 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	6.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.02 gal.
4)	Volume of water removed prior to sampling	1.1 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	53°F
2)	Specific Conductance	108 μmhos
3)	pH	6.71
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 9:45 am to 10:25 am

Sample Date April 3, 1998

Sample Time 10:30 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	19.29 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	33.38 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.44 gal.
4)	Volume of water removed prior to sampling	16.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	57.5°F
2)	Specific Conductance	107 μmhos
3)	pH	6.90
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 10:50 am to 11:39 am

Sample Date April 3, 1998

Sample Time 11:40 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	19.46 ft.
2)	Depth to well bottom from measuring point	63.30 ft.
3)	Height of water column (h)	43.84 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.15 gal.
4)	Volume of water removed prior to sampling	21.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.9°F
2)	Specific Conductance	87.7 μmhos
3)	pH	6.73
4)	Physical Appearance and Odor	Clear, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 3, 1998

Purge Time 10:45 am to 11:00 am

Sample Date April 3, 1998

Sample Time 11:15 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	17.38 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	15.08 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.46 gal.
4)	Volume of water removed prior to sampling	7.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.1°F
2)	Specific Conductance	78.6 μmhos
3)	pH	6.85
4)	Physical Appearance and Odor	Orange, silty, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 7:55 am to 8:40 am

Sample Date April 3, 1998

Sample Time 8:45 am

Weather Partly Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	19.55	ft.
2)	Depth to well bottom from measuring point	63.35	ft.
3)	Height of water column (h)	43.80	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.14	gal.
4)	Volume of water removed prior to sampling	21.5	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.7°F
2)	Specific Conductance	52 μmhos
3)	pH	6.52
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 3, 1998

Purge Time 8:10 am to 8:20 am

Sample Date April 3, 1998

Sample Time 8:30 am

Weather Partly Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	18.79 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	6.91 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.12 gal.
4)	Volume of water removed prior to sampling	3.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.9°F
2)	Specific Conductance	215 μmhos
3)	pH	7.14
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 2:35 pm to 2:45 pm

Sample Date April 3, 1998

Sample Time 2:50 am

Weather Light Rain, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	12.43 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	14.82 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.42 gal.
4)	Volume of water removed prior to sampling	7.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58°F
2)	Specific Conductance	55.2 μmhos
3)	pH	7.17
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date April 3, 1998

Source/Well SW-1

Time 10:00 am

Sampled by Ken Vanhoy

Weather Cloudy, 60-65°F

Field Analysis

1)	Temperature		59°F
2)	Specific Conductance		69.4 μmhos
3)	pH		6.88
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date April 3, 1998

Source/Well SW-2

Time 1:25 pm

Sampled by Ken Vanhoy

Weather Cloudy, 60-65°F

Field Analysis

1)	Temperature		60°F
2)	Specific Conductance		61.0 μmhos
3)	pH		7.19
4)	Physical Appearance and Odor	Clear, no odor	

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

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR1929
DATE SUBMITTED: April 7, 1998
DATE REPORTED : April 29, 1998

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Swepsonville Alamance County

04/03/98

#1 - MW-1 @ 15:05
#2 - MW-2 @ 14:20
#3 - MW-3 @ 13:40
#4 - MW-4 @ 12:50
#5 - MW-5 @ 09:20
#6 - MW-6 @ 10:30
#7 - MW-7A @ 11:40
#8 - MW-7B @ 11:15
#9 - MW-8A @ 08:45
#10 - MW-8B @ 08:30
#11 - MW-9 @ 14:50
#12 - SW-1 @ 10:00
#13 - SW-2 @ 13:25

LABORATORY MANAGER David J. Vesey

RESULTS OF ANALYSIS

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APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**19**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**5.6**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**6.0**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**5.1**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	98	94	79-136
D8-Toluene	104	99	88-115
Bromofluorobenzene	94	91	72-132
Date Analyzed	04/08/98	04/08/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Chromium	6010	0.010 U	**0.019**	mg/L
Date Analyzed		04/15/98	04/15/98	
Cobalt	6010	0.010 U	**0.018**	mg/L
Date Analyzed		04/15/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Vanadium	6010	0.040 U	**0.053**	mg/L
Date Analyzed		04/15/98	04/15/98	
Zinc	6010	**0.098**	**0.092**	mg/L
Date Analyzed		04/15/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	**15**		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	**24**		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	**250**	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	**35**		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

D1 = Analyte value determined from a 1:2.5 dilution.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	62	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	94	96	79-136
D8-Toluene	99	102	88-115
Bromofluorobenzene	89	89	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Barium	6010	**0.64**	0.50 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Beryllium	6010	0.020 U	0.002 U	mg/L
Date Analyzed		04/23/98	04/15/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Chromium	6010	**0.070**	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Cobalt	6010	**0.046**	**0.031**	mg/L
Date Analyzed		04/15/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Lead	6010	**0.020**	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.040 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Thallium	6010	0.10 U	0.020 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Vanadium	6010	**0.21**	0.040 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Zinc	6010	**0.24**	**0.11**	mg/L
Date Analyzed		04/15/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	99	103	79-136
D8-Toluene	104	107	88-115
Bromofluorobenzene	92	99	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	**0.84**	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.020 U	0.002 U	mg/L
Date Analyzed		04/23/98	04/16/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	**0.15**	**0.020**	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	**0.071**	**0.013**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	**0.20**	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	**0.042**	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.20 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.020 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	**0.48**	0.040 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	**0.38**	**0.069**	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	101	96	79-136
D8-Toluene	105	105	88-115
Bromofluorobenzene	97	96	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	0.010 U	**0.010**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	**0.051**	0.050 U	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	97	103	79-136
D8-Toluene	85	107	88-115
Bromofluorobenzene	91	97	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.002 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/23/98	
Cadmium	6010	0.001 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	0.010 U	**0.010**	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	0.010 U	**0.031**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.010 U	0.10 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.010 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	0.040 U	**0.049**	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	0.050 U	**0.21**	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	102	98	79-136
D8-Toluene	104	102	88-115
Bromofluorobenzene	93	91	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/24/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Barium	6010	**0.67**	0.50 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Chromium	6010	**0.12**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Cobalt	6010	**0.14**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Lead	6010	**0.036**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.10 U	0.050 U	mg/L
Date Analyzed		04/27/98	04/27/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.20 U	0.040 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/24/98	
Thallium	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Vanadium	6010	**0.26**	0.040 U	mg/L
Date Analyzed		04/24/98	04/24/98	
Zinc	6010	**0.32**	0.050 U	mg/L
Date Analyzed		04/16/98	04/24/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

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

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

EPA METHOD 8260 - GC/MS	SW-2	LAB BLANK #1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	92	95	79-136
D8-Toluene	98	100	88-115
Bromofluorobenzene	86	94	72-132
Date Analyzed	04/09/98	04/08/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK #1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/24/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/27/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK #1	Units
Selenium	6010	0.040 U	0.020 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/24/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

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

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	LAB BLANK #2	Units
Bromodichloromethane	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	97	79-136
D8-Toluene	101	88-115
Bromofluorobenzene	94	72-132
Date Analyzed	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	LAB BLANK #2	Units
Antimony	6010	0.030 U	mg/L
Date Analyzed		04/20/98	
Arsenic	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Barium	6010	0.50 U	mg/L
Date Analyzed		04/15/98	
Beryllium	6010	0.002 U	mg/L
Date Analyzed		04/15/98	
Cadmium	6010	0.001 U	mg/L
Date Analyzed		04/15/98	
Chromium	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Cobalt	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Copper	6010	0.20 U	mg/L
Date Analyzed		04/15/98	
Lead	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Mercury	7470	0.0005 U	mg/L
Date Analyzed		04/14/98	
Nickel	6010	0.050 U	mg/L
Date Analyzed		04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	LAB BLANK #2	Units
Selenium	6010	0.020 U	mg/L
Date Analyzed		04/15/98	
Silver	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Thallium	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Vanadium	6010	0.040 U	mg/L
Date Analyzed		04/15/98	
Zinc	6010	0.050 U	mg/L
Date Analyzed		04/15/98	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260	(MW-4,MW-6,MW-7A,MW-7B,MW-8A,MW-8B,MW-9,SW-1,SW-2)			
1,1-Dichloroethene	104/104/ 94	56-136	<1	19
Benzene	94/ 93/ 95	66-115	1	8
Trichloroethene	93/ 91/ 93	68-110	2	8
Toluene	90/ 90/ 95	68-110	<1	9
Chlorobenzene	88/ 90/ 94	50-131	2	9
EPA Method APPENDIX I, 8260	(MW-1,MW-2,MW-3,MW-4,MW-5)			
1,1-Dichloroethene	104/104/ 87	56-136	<1	19
Benzene	94/ 93/ 90	66-115	1	8
Trichloroethene	93/ 91/ 88	68-110	2	8
Toluene	90/ 90/ 89	68-110	<1	9
Chlorobenzene	88/ 90/ 90	50-131	2	9
Total Metals				
Antimony, 6010	99/ 98/107	38-138	1	30
Antimony, 6010	116/117/115	38-138	<1	30
Arsenic, 6010	105/105/110	64-126	<1	12
Arsenic, 6010	107/105/104	64-126	2	12
Barium, 6010	104/103/103	74-119	<1	11
Barium, 6010	98/ 99/100	74-119	1	11
Beryllium, 6010	106/105/104	76-126	<1	12
Beryllium, 6010	102/102/102	76-126	<1	12
Cadmium, 6010	102/103/105	68-121	<1	12
Cadmium, 6010	98/ 98/100	68-121	<1	12

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals (Cont.)				
Chromium, 6010	96/ 95/ 95	73-120	1	10
Chromium, 6010	92/ 92/ 93	73-120	<1	10
Cobalt, 6010	106/105/106	76-120	<1	17
Cobalt, 6010	98/ 99/102	76-120	1	17
Copper, 6010	103/109/102	75-123	6	11
Copper, 6010	108/107/100	75-123	<1	11
Lead, 6010	105/107/104	68-126	2	19
Lead, 6010	98/ 98/ 99	68-126	<1	19
Mercury, 7470	104/109/104	70-136	5	12
Mercury, 7470	104/104/104	70-136	<1	12
Nickel, 6010	94/ 96/ 94	64-126	2	12
Nickel, 6010	88/ 88/ 90	64-126	<1	12
Selenium, 6010	99/ 98/101	65-129	1	10
Selenium, 6010	91/ 91/ 93	65-129	<1	10
Silver, 6010	113/110/112	69-121	3	12
Silver, 6010	109/108/110	69-121	<1	12
Thallium, 6010	100/ 99/ 99	67-135	1	13
Thallium, 6010	89/ 88/ 94	67-135	1	13
Vanadium, 6010	106/104/104	82-115	2	16
Vanadium, 6010	102/101/101	82-115	<1	16
Zinc, 6010	103/101/101	63-131	2	24
Zinc, 6010	90/ 90/ 96	63-131	<1	24

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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.

QSARF # 07431

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
Ph. (407) 826-5314 • Fax (407) 850-6945

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	P.O. NUMBER
SWEPSONVILLE ALAMANCE COUNTY	0170.010	0170.010

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Julia Geniac / Ken Vanhoy
PHONE: 336 272 9713
FAX: 336 273 4057
CLIENT NAME: BPA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, North Carolina 27406-5159

REQUIRED ANALYSIS: Appendix I Volatiles; Appendix I metals plus Mercury

PAGE 1 OF 1

☑ 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	HCl	HNO_3							REMARKS
															PRESERVATIVE								
															NUMBER OF CONTAINERS SUBMITTED								
1 MW-1	4-3-98	3:05 p.m.	✓				✓								3	1							
2 MW-2	4-3-98	2:20 p.m.	✓				✓								3	1							
3 MW-3	4-3-98	1:40 p.m.	✓				✓								3	1							
4 MW-4	4-3-98	12:50 p.m.	✓				✓								3	1							
5 MW-5	4-3-98	9:20 a.m.	✓				✓								3	1							
6 MW-6	4-3-98	10:30 a.m.	✓				✓								3	1							
7 MW-7A	4-3-98	11:40 a.m.	✓				✓								3	1							
8 MW-7B	4-3-98	11:15 a.m.	✓				✓								3	1							
9 MW-8A	4-3-98	8:45 a.m.	✓				✓								3	1							
10 MW-8B	4-3-98	8:30 a.m.	✓				✓								3	1							
11 MW-9	4-3-98	2:50 p.m.	✓				✓								3	1							
12 SW-1	4-3-98	10:00 Am	✓			✓									3	1							
13 SW-2	4-3-98	1:25 p.m.	✓			✓									3	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☑ ORLANDO — Dueawa	3/27/98	11:00 Am	Dueawa / Enco	3/27/98	11:00 Am	Julia Geniac (opened)	3/27/98	1:40 pm
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Ken Vanhoy	4/6/98	9:15 AM						
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
Kevin Casey ☐ Jacksonville ☑ Orlando	4/7/98	11:00 AM	☑ YES ☐ NO	OR1929	

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

May 27, 1998

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1998." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

MAY 1998
Received
Solid Waste
Section

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

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3.0 SCOPE OF WORK 2

4.0 METHODS EMPLOYED 2
- 4.1 Monitoring Well Sampling 2
- 4.2 Stream Sampling 3

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- 5.1 Groundwater 3
- 5.2 Surface Water 5

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Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, April 8, 1997

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, April 8, 1997

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, April 8, 1997

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1997

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on [redacted]. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of five inorganic constituents (barium in MW-7B, cadmium in MW-7B, chromium in MW-3, MW-7B and MW-9, lead in MW-3 and MW-7B, and Nickel in MW-7B) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Eight inorganic constituents (arsenic, barium, cadmium, chromium, copper, lead, nickel, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of three volatile organic constituents ([redacted] and t[redacted] exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. [redacted]

No inorganic or volatile organic constituents were detected in the surface water samples collected from two locations on the creek that flows along the east/southeast boundary of the landfill disposal area.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water at eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

This sampling task included sampling eleven monitoring wells and two locations on a nearby stream for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 8, 1997. The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by IEA, Inc., a North Carolina certified laboratory located in Cary, North Carolina. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 8, 1997. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed eight constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Barium was detected in MW-7B at 2.320 ppm. The 2L Standard is 2.0 ppm.
- Cadmium was detected in MW-7B at 0.00661 ppm. The 2L Standard is 0.005 ppm.
- Chromium was detected in MW-3 at 0.137 ppm, MW-7B at 0.141 ppm, and MW-9 at 0.0766 ppm. The 2L Standard is 0.05 ppm.
- Lead was detected in MW-3 at 0.0179 ppm and MW-7B at 0.0221 ppm. The 2L Standard is 0.015 ppm.
- Nickel was detected in MW-7B at 0.109 ppm. The 2L Standard is 0.1 ppm.

- cis-1,2-Dichloroethene was detected in MW-4 at 400.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-4 at 70.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-4 at 43.0 ppb. The 2L Standard is 2.8 ppb.

The following nine constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.0101 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-3 at 1.280 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-3 at 0.00238 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-1 at 0.0105 ppm, MW-2 at 0.021 ppm, MW-5 at 0.0464 ppm, MW-6 at 0.0483 ppm, and MW-8B at 0.013 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-3 at 0.250 ppm and MW-7B at 0.265 ppm. The 2L Standard is 1.0 ppm.

- Lead was detected in MW-9 at 0.0148 ppm. The 2L Standard is 0.015 ppm.

- Nickel was detected in MW-3 at 0.0721 ppm and MW-9 at 0.0571 ppm. The 2L Standard is 0.1 ppm.

- Zinc was detected in MW-1 at 0.0864 ppm, MW-2 at 0.0814 ppm, MW-3 at 0.353 ppm, MW-5 at 0.0657 ppm, MW-6 at 0.104 ppm, MW-7B at 0.858 ppm, MW-8A at 0.0508 ppm, MW-8B at 0.174 ppm, and MW-9 at 0.199 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 14.0 ppb and in MW-4 at 35.0 ppb. The 2L Standard is 700 ppb.

No 2L Standards have been set for the following three potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.0021 ppm, MW-3 at 0.00425 ppm, MW-7B at 0.00936 ppm, and MW-9 at 0.00416 ppm.

- Cobalt was detected in MW-2 at 0.0121 ppm, MW-3 at 0.0577 ppm, MW-4 at 0.0192 ppm, MW-6 at 0.0132 ppm, MW-7B at 0.165 ppm, MW-8B at 0.014 ppm, and MW-9 at 0.117 ppm.

- Vanadium was detected in MW-2 at 0.0732 ppm, MW-3 at 0.395 ppm, MW-5 at 0.0420 ppm, MW-6 at 0.0531 ppm, MW-7B at 0.766 ppm, MW-8B at 0.0413 ppm, and MW-9 at 0.161 ppm.

5.2 Surface Water

There were no inorganic or volatile organic constituents detected in either of the surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

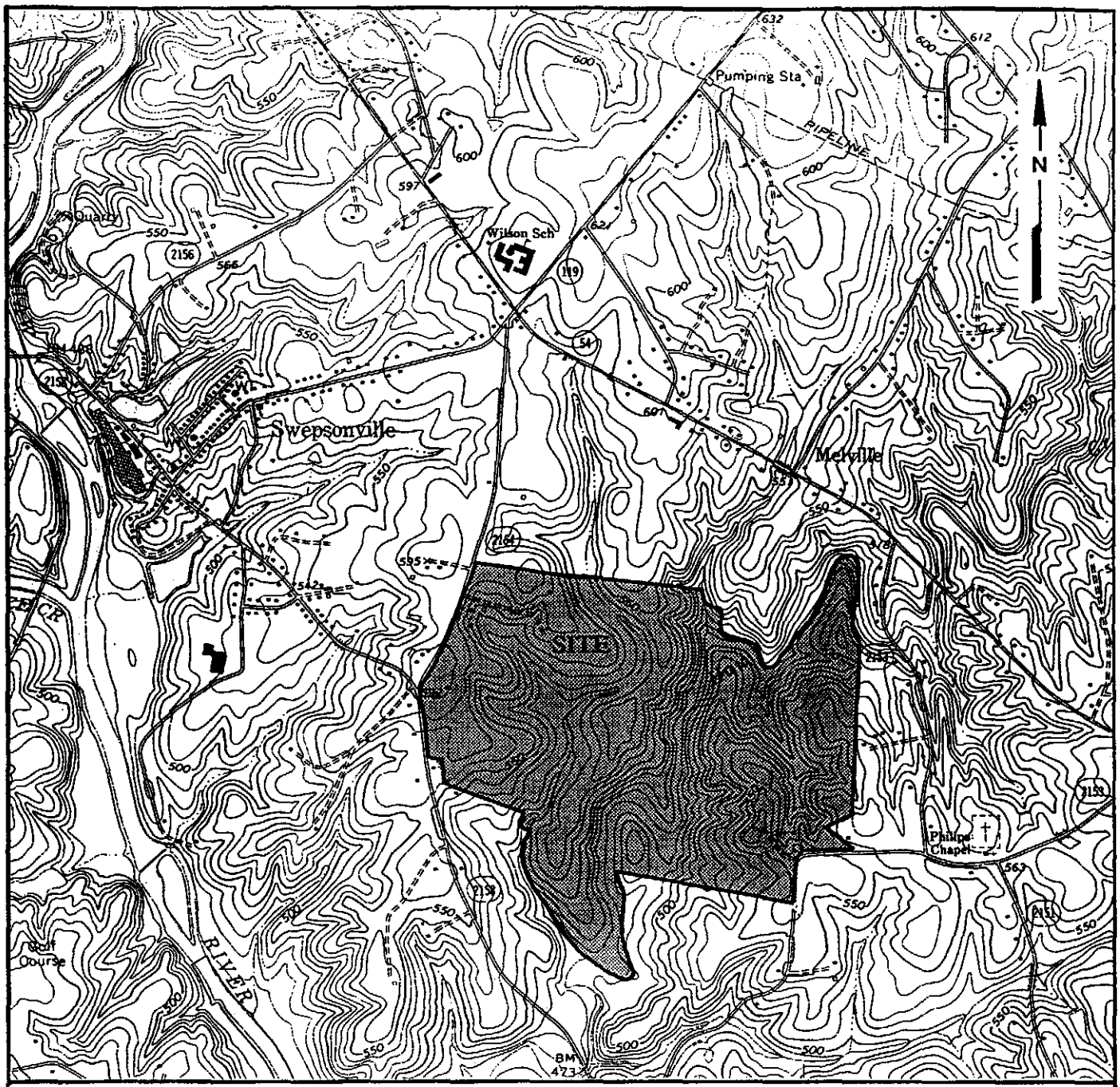
North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 4, 1994).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA
APRIL 8, 1997

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	64.2 °F	61.2 °F	59.2 °F	61.3 °F	52.9 °F	58.0 °F	57.6 °F	58.6 °F
Specific Conductance	93.3 μMHOs	132 μMHOs	63.5 μMHOs	522 μMHOs	66.3 μMHOs	6.6 μMHOs	109 μMHOs	64.3 μMHOs
pH	6.0	6.5	5.0	6.5	6.0	7.0	6.0	5.5

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.9 °F	60.3 °F	66.1 °F	56.2 °F	59.0 °F
Specific Conductance	35 μMHOs	18 μMHOs	39.3 μMHOs	60.1 μMHOs	87.0 μMHOs
pH	6.0	6.0	6.0	6.0	6.0

C:\123R23\SWEP4971.WK1



MEBANE QUADRANGLE
NORTH CAROLINA
USGS 7.5 MINUTE TOPOGRAPHIC SERIES
1969

1000 0 2000 3000
SCALE IN FEET

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

BPA Environmental & Engineering, Inc.

SITE LOCATION MAP

FIGURE 1

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 3:55 pm to 4:15 pm

Sample Date April 8, 1997

Sample Time 4:20 pm

Weather Sunny, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	21.04 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	12.71 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.07 gal.
4)	Volume of water removed prior to sampling	6.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.2°F
2)	Specific Conductance	93.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 4:38 pm to 4:42 pm

Sample Date April 8, 1997

Sample Time 4:45 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	23.84	ft.
2)	Depth to well bottom from measuring point	29.30	ft.
3)	Height of water column (h)	5.46	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.89	gal.
4)	Volume of water removed prior to sampling	1.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	61.2°F
2)	Specific Conductance	132 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 1:05 pm to 1:20 pm

Sample Date April 8, 1997

Sample Time 1:30 pm

Weather Clear, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	9.64 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	14.20 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.31 gal.
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.2°F
2)	Specific Conductance	63.5 μmhos
3)	pH	5.0
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 12:10 pm to 12:20 pm

Sample Date April 8, 1997

Sample Time 12:30 pm

Weather Clear, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	33.70 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	16.20 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.64 gal.
4)	Volume of water removed prior to sampling	8.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	61.3°F
2)	Specific Conductance	522 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1997

Purge Time 8:15 am to 8:20 am

Sample Date April 8, 1997

Sample Time 8:30 am/11:40 am

Weather Clear, 40-50°F

Water Level and Well Data

1)	Depth to water from measuring point	14.67 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	4.74 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.77 gal.
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	52.9°F
2)	Specific Conductance	66.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Orange, silty, no odor

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:45	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:45	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:45	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:45	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:45	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:45	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:45	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:45	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:45	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 22:15	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 22:15	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 22:15	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 22:15	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 22:15	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 22:15	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:51	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:51	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:51	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:51	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
COBALT, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 18:51	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:51	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:51	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:51	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:51	MSP
ZINC, TOTAL APPENDIX1	0.071	mg/L	0.05	6010	10/21/99 18:51	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 22:56	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 22:56	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 22:56	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 22:56	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 22:56	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 22:56	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:25	MSP
ARSENIC, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 20:25	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:25	MSP
BERYLLIUM, TOTAL APPENDIX1	0.002	mg/L	0.002	6010	10/21/99 20:25	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 20:25	MSP
CHROMIUM, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	10/21/99 20:25	MSP
COBALT, TOTAL APPENDIX1	0.11	mg/L	0.01	6010	10/21/99 20:25	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:25	MSP
LEAD, TOTAL APPENDIX1	0.011	mg/L	0.01	6010	10/21/99 20:25	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:25	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:25	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:25	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:25	MSP
VANADIUM, TOTAL APPENDIX1	0.051	mg/L	0.04	6010	10/21/99 20:25	MSP
ZINC, TOTAL APPENDIX1	0.093	mg/L	0.05	6010	10/21/99 20:25	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 16:00	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 16:00	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 16:00	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 16:00	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 16:00	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 16:00	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:42	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:42	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 20:42	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 20:42	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:42	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:42	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:42	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 20:42	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:42	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 21:35	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 21:35	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 21:35	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 21:35	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP

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Lab Report

PRISM LABORATORIES, INC.

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 21:35	MP

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 21:35	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:47	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:47	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 20:47	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 20:47	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:47	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:47	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:47	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 20:47	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:47	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 16:45	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 16:45	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 16:45	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 16:45	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP

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Lab Report

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 16:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 16:45	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB45590**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ACETONE	Not detected	ug/L	20	8260	10/26/99 23:37	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 23:37	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 23:37	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 23:37	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB45590**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 23:37	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp ____			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client ____
Physical Address ____
Phone ____ **Fax** ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible]	[illegible]	13 30							✓		✓					
[illegible]	10/15/99	13 30							✓		✓					
[illegible]	10/15/99	14 10							✓		✓					
[illegible]	10/15/99	12 30							✓		✓					
[illegible]	10/15/99	11 45							✓		✓					
[illegible]	10/15/99	14 00							✓		✓					
[illegible]	10/15/99	11 15							✓		✓					
[illegible]	10/15/99	15 30							✓		✓					
[illegible]	10/15/99	15 15							✓		✓					
[illegible]	10/15/99	15 00							✓		✓					

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

***CONTAINER TYPE CODES:** A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

CUSTOMER COPY

CHAIN OF CUSTODY RECORD

PAGE ____ OF ____ QUOTE # ____

449 Springbrook Road ▲ Charlotte, NC 28217
P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

Full Service Analytical & Environmental Solutions

PRESS DOWN FIRMLY - 3 COPIES

	YES	NO	
Samples INTACT upon arrival?	____	____	____
Received ON WET ICE? Temp ____	____	____	____
PROPER PRESERVATIVES indicated?	____	____	____
Received WITHIN HOLDING TIMES?	____	____	____
CUSTODY SEALS INTACT?	____	____	____
VOLATILES rec'd W/OUT HEADSPACE?	____	____	____
PROPER CONTAINERS used?	____	____	____

Client ____
Physical Address ____
Phone ____ **Fax** ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVA-TIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible]	[illegible]	10:30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
[illegible]	[illegible]	11:00														
[illegible]	[illegible]	11:30														
[illegible]																

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

***CONTAINER TYPE CODES:** A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

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01-01

4-8-99

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

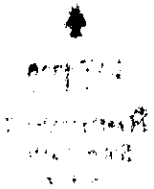
PREPARED FOR
ALAMANCE COUNTY

MAY 13, 1999

MAY 1999
Received
Solid Waste
Section

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159



SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

PREPARED FOR
ALAMANCE COUNTY

MAY 13, 1999

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

I hereby certify this 13th day of May 1999, that this report was prepared by me or under my direct supervision.

Julia I. Geniac
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

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FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on April 8, 1999. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of three inorganic constituents (cadmium in MW-2, MW-5, and MW-9; chromium in MW-2, MW-5, and MW-9; and lead in MW-9) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Six inorganic constituents (arsenic, barium, cadmium, chromium, lead, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of four volatile organic constituents (1,1-dichloroethene in MW-2; cis-1,2-dichloroethene in MW-4; and tetrachloroethene and trichloroethene in MW-2 and MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

No Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Landfill and have them analyzed for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 8, 1999 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 8, 1999. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed seven constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Cadmium was detected in MW-2 at 0.011 ppm, MW-5 at 0.007 ppm, and MW-9 at 0.024 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-2 at 0.086 ppm, MW-5 at 0.074 ppm, and MW-9 at 0.26 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-9 at 0.032 ppm. The 2L Standard is 0.015 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 14.0 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 360.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 15.0 ppb and MW-4 at 56.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 20.0 ppb and MW-4 at 43.0 ppb. The 2L Standard is 2.8 ppb.

The following eight constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-9 at 0.011 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 1.1 ppm and MW-9 at 1.4 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-1 at 0.003 ppm, MW-3 at 0.003 ppm, MW-4 at 0.001 ppm, MW-7B at 0.001 ppm, and MW-8B at 0.002 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-1 at 0.012 ppm and MW-3 at 0.028 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-5 at 0.012 ppm. The 2L Standard is 0.015 ppm.

- Zinc was detected in MW-1 at 0.14 ppm, MW-2 at 0.30 ppm, MW-3 at 0.15 ppm, MW-4 at 0.096 ppm, MW-5 at 0.18 ppm, MW-7B at 0.063 ppm, MW-8B at 0.084 ppm, and MW-9 at 0.61 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 110.0 ppb and MW-4 at 53.0 ppb. The 2L Standard is 700.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 27.0 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following three potentially naturally occurring inorganic constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.002 ppm, MW-2 at 0.003 ppm, MW-5 at 0.002 ppm, and MW-9 at 0.014 ppm.

- Cobalt was detected in MW-1 at 0.017 ppm, MW-2 at 0.047 ppm, MW-3 at 0.011 ppm, MW-4 at 0.050 ppm, MW-5 at 0.031 ppm, and MW-9 at 0.33 ppm.

- Vanadium was detected in MW-1 at 0.046 ppm, MW-2 at 0.32 ppm, MW-3 at 0.071 ppm, MW-4 at 0.053 ppm, MW-5 at 0.22 ppm, and MW-9 at 0.49 ppm.

5.2 Surface Water

No inorganic or volatile organic constituents were found in detectable concentrations in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
APRIL 8, 1999

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	19.4 °C	18.0 °C	18.8 °C	21.0 °C	14.5 °C	16.9 °C	15.8 °C	17.0 °C
Specific Conductance	83.4 μMHOs	158.1 μMHOs	64.6 μMHOs	362 μMHOs	132.6 μMHOs	112.7 μMHOs	113.3 μMHOs	69.7 μMHOs
pH	5.5	6.0	6.2	6.1	6.3	6.3	6.4	5.9

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	14.9 °C	15.1 °C	18.0 °C	62 °F	63 °F
Specific Conductance	47.2 μMHOs	31.9 μMHOs	44.2 μMHOs	74.1 μMHOs	75.1 μMHOs
pH	6.7	5.6	6.2	7.5	7.2

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TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
APRIL 8, 1999

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.011	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	1.1	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.4	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	0.002	0.003	BQL	BQL	0.002	BQL	BQL	BQL	BQL	BQL	0.014	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	0.003	0.011	0.003	0.001	0.007	BQL	BQL	0.001	BQL	0.002	0.024	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	0.012	0.086	0.028	BQL	0.074	BQL	BQL	BQL	BQL	BQL	0.26	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	0.017	0.047	0.011	0.050	0.031	BQL	BQL	BQL	BQL	BQL	0.33	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	0.012	BQL	BQL	BQL	BQL	BQL	0.032	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL[1]	BQL[1]	BQL	BQL[1]	BQL[1]	BQL	BQL	BQL[1]	BQL	BQL	BQL	BQL[1]	*	x	0.01
Vanadium, Total	SW-846 6010	0.046	0.32	0.071	0.053	0.22	BQL	BQL	BQL	BQL	BQL	0.49	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.14	0.30	0.15	0.096	0.18	BQL	BQL	0.063	BQL	0.084	0.61	BQL	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents
- [1] Sample also analyzed by EPA Method 7841

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 3:08 pm to 3:23 pm

Sample Date April 8, 1999

Sample Time 3:25 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	21.71	ft.
2)	Depth to well bottom from measuring point	33.75	ft.
3)	Height of water column (h)	12.04	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.96	gal.
4)	Volume of water removed prior to sampling	5.9	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	19.4°C
2)	Specific Conductance	83.4 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Cloudy, tan, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 1:40 pm to 1:41 pm

Sample Date April 8, 1999

Sample Time 1:45 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	25.51	ft.
2)	Depth to well bottom from measuring point	29.30	ft.
3)	Height of water column (h)	3.79	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.62	gal.
4)	Volume of water removed prior to sampling	0.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	18.0°C
2)	Specific Conductance	158.1 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 1:08 pm to 1:20 pm

Sample Date April 8, 1999

Sample Time 1:25 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	8.32	ft.
2)	Depth to well bottom from measuring point	23.84	ft.
3)	Height of water column (h)	15.52	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.53	gal.
4)	Volume of water removed prior to sampling	7.6	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	18.8°C
2)	Specific Conductance	64.6 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 8, 1999

Purge Time 2:08 pm to 2:30 pm

Sample Date April 8, 1999

Sample Time 2:30 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	33.81	ft.
2)	Depth to well bottom from measuring point	49.90	ft.
3)	Height of water column (h)	16.09	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.62	gal.
4)	Volume of water removed prior to sampling	8.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	21.0°C
2)	Specific Conductance	362 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 8, 1999

Purge Time 9:58 am to 10:02 am

Sample Date April 8, 1999

Sample Time 10:05 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	9.38	ft.
2)	Depth to well bottom from measuring point	19.41	ft.
3)	Height of water column (h)	10.03	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.63	gal.
4)	Volume of water removed prior to sampling	1.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	14.5°C
2)	Specific Conductance	132.6 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 10:30 am to 11:00 am

Sample Date April 8, 1999

Sample Time 11:05 am

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	20.40	ft.
2)	Depth to well bottom from measuring point	52.67	ft.
3)	Height of water column (h)	32.27	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.26	gal.
4)	Volume of water removed prior to sampling	16.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	16.9°C
2)	Specific Conductance	112.7 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 11:20 am to 12:00 pm

Sample Date April 8, 1999

Sample Time 12:05 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	22.58	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	40.72	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.64	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	15.8°C
2)	Specific Conductance	113.3 μmhos
3)	pH	6.4
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 11:23 am to 11:33 am

Sample Date April 8, 1999

Sample Time 11:40 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	20.28	ft.
2)	Depth to well bottom from measuring point	32.46	ft.
3)	Height of water column (h)	12.18	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.99	gal.
4)	Volume of water removed prior to sampling	3.75	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	17.0°C
2)	Specific Conductance	69.7 μmhos
3)	pH	5.9
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 8:40 am to 9:30 am

Sample Date April 8, 1999

Sample Time 9:35 am

Weather Cloudy, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	22.74	ft.
2)	Depth to well bottom from measuring point	63.35	ft.
3)	Height of water column (h)	40.61	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.62	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	14.9°C
2)	Specific Conductance	47.2 μmhos
3)	pH	6.7
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 8:42 am to 8:46 am

Sample Date April 8, 1999

Sample Time 9:00 am

Weather Cloudy, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	22.09	ft.
2)	Depth to well bottom from measuring point	25.70	ft.
3)	Height of water column (h)	3.61	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.59	gal.
4)	Volume of water removed prior to sampling	1.0	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	15.1°C
2)	Specific Conductance	31.9 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 2:45 pm to 2:55 pm

Sample Date April 8, 1999

Sample Time 3:00 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	15.35	ft.
2)	Depth to well bottom from measuring point	27.25	ft.
3)	Height of water column (h)	11.90	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.94	gal.
4)	Volume of water removed prior to sampling	6.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	18.0°C
2)	Specific Conductance	44.2 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Date April 8, 1999

Source/Well SW-1

Time 10:35 am

Sampled by Ken Vanhoy

Weather Sunny, 70-75°F

FIELD ANALYSIS

1)	Temperature	62°F
2)	Specific Conductance	74.1 μmhos[b]
3)	pH	7.5
4)	Physical Appearance and Odor	Slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Date April 8, 1999

Source/Well SW-2

Time 12:55 pm

Sampled by Ken Vanhoy

Weather Partly cloudy, 75-80°F

FIELD ANALYSIS

1)	Temperature		63°F
2)	Specific Conductance		75.1 μmhos[b]
3)	pH		7.2
4)	Physical Appearance and Odor	Cloudy, no odor	

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

MAY 1999

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR6170
DATE SUBMITTED: April 9, 1999
DATE REPORTED : April 19, 1999
DATE AMENDED : May 12, 1999

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance County/Swepsonville

04/08/99

#1	- MW-1	@ 15:25
#2	- MW-2	@ 13:45
#3	- MW-3	@ 13:25
#4	- MW-4	@ 14:30
#5	- MW-5	@ 10:05
#6	- MW-6	@ 11:05
#7	- MW-7A	@ 12:05
#8	- MW-7B	@ 11:40
#9	- MW-8A	@ 09:35
#10	- MW-8B	@ 09:00
#11	- MW-9	@ 15:00
#12	- SW-1	@ 10:35
#13	- SW-2	@ 12:55

PROJECT MANAGER _____
David Vesey

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	**14**	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**110**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**27**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**20**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**15**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	94	90	52-149
D8-Toluene	86	84	70-132
Bromofluorobenzene	83	82	60-135
Date Analyzed	04/09/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	**1.1**	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.0020**	**0.0030**	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0030**	**0.011**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.012**	**0.086**	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.017**	**0.047**	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/16/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	NR	mg/L
Date Analyzed		04/15/99		
Thallium	7841	NR	0.010 U	mg/L
Date Analyzed			04/22/99	
Vanadium	6010	**0.046**	**0.32**	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.14**	**0.30**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Chloromethane	10 U	50 U	D1	µg/L
Vinyl Chloride	10 U	50 U	D1	µg/L
Bromomethane	10 U	50 U	D1	µg/L
Chloroethane	10 U	50 U	D1	µg/L
Trichlorofluoromethane	5.0 U	25 U	D1	µg/L
1,1-Dichloroethene	5.0 U	25 U	D1	µg/L
Acetone	100 U	500 U	D1	µg/L
Iodomethane	10 U	50 U	D1	µg/L
Carbon Disulfide	100 U	500 U	D1	µg/L
Methylene Chloride	10 U	50 U	D1	µg/L
Acrylonitrile	200 U	1000 U	D1	µg/L
t-1,2-Dichloroethene	5.0 U	25 U	D1	µg/L
1,1-Dichloroethane	5.0 U	**53**	D1	µg/L
Vinyl Acetate	50 U	250 U	D1	µg/L
c-1,2-Dichloroethene	5.0 U	**360**	D1	µg/L
2-Butanone	100 U	500 U	D1	µg/L
Bromochloromethane	5.0 U	25 U	D1	µg/L
Chloroform	5.0 U	25 U	D1	µg/L
1,1,1-Trichloroethane	5.0 U	25 U	D1	µg/L
Carbon tetrachloride	10 U	50 U	D1	µg/L
Benzene	5.0 U	25 U	D1	µg/L
1,2-Dichloroethane	5.0 U	25 U	D1	µg/L
Trichloroethene	5.0 U	**43**	D1	µg/L
1,2-Dichloropropane	5.0 U	25 U	D1	µg/L
Dibromomethane	10 U	50 U	D1	µg/L

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Bromodichloromethane	5.0 U	25 U	D1	µg/L
c-1,3-Dichloropropene	10 U	50 U	D1	µg/L
4-Methyl-2-Pentanone	100 U	500 U	D1	µg/L
Toluene	5.0 U	25 U	D1	µg/L
t-1,3-Dichloropropene	10 U	50 U	D1	µg/L
1,1,2-Trichloroethane	5.0 U	25 U	D1	µg/L
Tetrachloroethene	5.0 U	56	D1	µg/L
2-Hexanone	50 U	250 U	D1	µg/L
Dibromochloromethane	5.0 U	25 U	D1	µg/L
1,2-Dibromoethane	5.0 U	25 U	D1	µg/L
Chlorobenzene	5.0 U	25 U	D1	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	25 U	D1	µg/L
Ethylbenzene	5.0 U	25 U	D1	µg/L
m-Xylene & p-Xylene	5.0 U	25 U	D1	µg/L
o-Xylene	5.0 U	25 U	D1	µg/L
Styrene	10 U	50 U	D1	µg/L
Bromoform	5.0 U	25 U	D1	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	25 U	D1	µg/L
1,2,3-Trichloropropane	15 U	75 U	D1	µg/L
t-1,4-Dichloro-2-Butene	100 U	500 U	D1	µg/L
1,4-Dichlorobenzene	5.0 U	25 U	D1	µg/L
1,2-Dichlorobenzene	5.0 U	25 U	D1	µg/L
1,2-Dibromo-3-Chloropropane	25 U	120 U	D1	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	89	84	79-136
D8-Toluene	84	82	88-115
Bromofluorobenzene	85	81	72-132
Date Analyzed	04/09/99	04/09/99	

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0030**	**0.0010**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.028**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.011**	**0.050**	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/16/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	NR	0.010 U	mg/L
Date Analyzed			04/16/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	**0.071**	**0.053**	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.15**	**0.096**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	86	90	79-136
D8-Toluene	86	81	88-115
Bromofluorobenzene	82	83	72-132
Date Analyzed	04/09/99	04/09/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0070**	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.074**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.031**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	**0.012**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/16/99	04/14/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	7841	0.010 U	0.010 U	mg/L
Date Analyzed		04/22/99	04/22/99	
Vanadium	6010	**0.22**	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.18**	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	99	98	79-136
D8-Toluene	90	85	88-115
Bromofluorobenzene	88	84	72-132
Date Analyzed	04/10/99	04/10/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	**0.0010**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/99	04/16/99	
Vanadium	7841	0.010 U	0.010 U	mg/L
Date Analyzed		04/22/99	04/22/99	
Zinc	6010	0.050 U	**0.063**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	91	91	79-136
D8-Toluene	82	85	88-115
Bromofluorobenzene	82	85	72-132
Date Analyzed	04/10/99	04/10/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	**0.0020**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	NR	0.010 U	mg/L
Date Analyzed			04/16/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	0.050 U	**0.084**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

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

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	84	88	79-136
D8-Toluene	79	79	88-115
Bromofluorobenzene	76	76	72-132
Date Analyzed	04/10/99	04/10/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/16/99	04/14/99	
Arsenic	6010	**0.011**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	**1.4**	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.014**	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.024**	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.26**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.33**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	**0.032**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/99	04/15/99	
Vanadium	6010	**0.49**	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.61**	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	SW-2	LAB BLANK	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	SW-2	LAB BLANK	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	92	86	79-136
D8-Toluene	81	81	88-115
Bromofluorobenzene	80	81	72-132
Date Analyzed	04/10/99	04/09/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/99	04/14/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

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

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

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

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	94	79-136
D8-Toluene	82	88-115
Bromofluorobenzene	81	72-132
Date Analyzed	04/10/99	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260				
1,1-Dichloroethene	119/124/125	58-140	4	18
Benzene	147/136/136	66-114	8	8
Trichloroethene	88/ 95/ 84	65-114	8	10
Toluene	132/124/135	65-113	6	8
Chlorobenzene	99/106/ 95	52-127	7	10
Total Metals				
Antimony, 6010	94/ 95/ 96	38-138	1	30
Arsenic, 6010	102/101/101	64-126	<1	12
Barium, 6010	94/ 95/ 98	74-119	1	11
Beryllium, 6010	98/ 98/100	76-126	<1	12
Cadmium, 6010	94/ 94/ 98	68-121	<1	12
Chromium, 6010	95/ 96/ 99	73-120	1	10
Cobalt, 6010	92/ 93/ 96	76-120	1	17
Copper, 6010	100/103/ 97	75-123	3	11
Lead, 6010	96/ 95/ 99	68-126	1	19
Mercury, 7470	94/ 96/120	70-136	2	12
Mercury, 7470	113/114/120	70-136	<1	12
Mercury, 7470	117/117/122	70-136	<1	12
Mercury, 7470	107/109/105	70-136	2	12
Nickel, 6010	96/ 98/ 98	64-126	2	12
Selenium, 6010	99/100/102	65-129	1	10
Silver, 6010	90/ 92/ 94	69-121	2	12
Thallium, 6010	96/100/101	67-135	4	13
Thallium, 7841	94/ 89/ 91	69-153	5	15
Vanadium, 6010	94/ 95/ 96	82-115	1	16
Zinc, 6010	93/ 92/ 96	63-131	1	24

NC DEHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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.

QSAKT #

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
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ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Alamance G, SWEPSONVILLE
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Ken Van hoy, Julia Genac
PHONE: 336 272 9713
FAX: 336 273 4057

CLIENT NAME: BPA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett

CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, N.C. 27406-5159

☐ 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: HCl APP. I Vols; HNO3 APP. I Metals plus Mercury

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	HCl	HNO3							REMARKS
1 MW-1	4/8/99	3:25 p.m.	✓				✓								3	1							
2 MW-2	4/8/99	1:45 p.m.	✓				✓								3	1							
3 MW-3	4/8/99	1:25 p.m.	✓				✓								3	1							
4 MW-4	4/8/99	2:30 p.m.	✓				✓								3	1							
5 MW-5	4/8/99	10:05 a.m.	✓				✓								3	1							
6 MW-6	4/8/99	11:05 a.m.	✓				✓								3	1							
7 MW-7A	4/8/99	12:05 p.m.	✓				✓								3	1							
8 MW-7B	4/8/99	11:40 a.m.	✓				✓								3	1							
9 MW-8A	4/8/99	9:35 a.m.	✓				✓								3	1							
10 MW-8B	4/8/99	9:00 a.m.	✓				✓								3	1							
11 MW-9	4/8/99	3:00 p.m.	✓				✓								3	1							
12 SW-1	4/8/99	10:35 a.m.	✓			✓									3	1							
13 SW-2	4/8/99	12:55 p.m.	✓			✓									3	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☒ ORLANDO			K. Armstrong	4/16/99	5:25	Julia S. Genac / Ken Van hoy	4/9/99	2:00 pm
RELINQUISHED BY: (SIGNATURE) Julia S. Genac	DATE 4/8/99	TIME 5:00 pm	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
K. Armstrong ☐ Jacksonville ☐ Orlando	4-9-99	12:20	☒ YES ☐ NO	0R6176	

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

APR 1999
RECEIVED

ENCO Laboratories

DHRS Certification No. E83182

April 20, 1999

Mr. Wes Scarlett
BPA Environmental
2641-G Randleman Road
Greensboro, NC 27408

Login Number(SDG): OR6170
Project Number: 0170.010
Description: Alamance County / Swepsonville

Case Narrative:

Thirteen water samples were collected on April 8, 1999. All samples were received at ENCO Laboratories, Inc., on April 9, 1999 on wet ice and in good condition. All samples were analyzed as requested on the associated sample chain-of-custody forms.

The requests included analyses for the determination of 40 CFR, Pt. 258, Appendix I metals. The analyses were done by an "inductively coupled plasma" (ICP) technique following SW-846 EPA Method 6010 protocols. "Thallium", (Tl), is included in the list of metals determined by this method. Due to the nature of the samples analyzed, the laboratory noted spectral interferences which inhibited the accurate determination of the thallium result. The laboratory performed dilutions on the samples in order to provide method compliant data for the analyte in question. This removal of the interferences by dilution caused the resulting non-detect values to be elevated above the target MCL of 0.010 mg/L for Tl. The laboratory is in the process of re-analyzing the samples in question utilizing graphite furnace atomic absorption in an effort to provide data for the thallium results to the required level of detection.

All samples were extracted and analyzed within EPA specified holding times.

Should you have questions or require further information regarding this issue, please do not hesitate to contact the laboratory.

Environmental Conservation Laboratories, Inc.

David J. Vesey
Project Manager

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

May 13, 1999

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

MAY 1999
Received
Solid Waste
Section

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1999." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

01-01

10-13-98

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 19, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 19, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

I hereby certify this 19th day of November 1998, that this report was prepared by me or under my direct supervision.

Kenneth B. Vanhoy, P.G.
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

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1.0 EXECUTIVE SUMMARY 1

2.0 INTRODUCTION 2

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- 4.1 Monitoring Well Sampling 2
- 4.2 Stream Sampling 3

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- 5.1 Groundwater 3
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TABLES

Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, October 13, 1998

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, October 13, 1998

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, October 13, 1998

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on [redacted] All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of for inorganic constituents (cadmium in MW-2, MW-3, MW-4, MW-5, MW-7B, MW-8B, and MW-9; chromium in MW-3 and MW-9; lead in MW-8B; and mercury in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Seven inorganic constituents (arsenic, barium, cadmium, chromium, copper, lead, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Four Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, thallium, and vanadium) were detected in one or more of the monitoring well samples.

[redacted] Three volatile organic constituents (carbon disulfide; 1,1-dichloroethane, and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

One Appendix I inorganic constituent (zinc), for which no 15 NCAC 2B Standard has been established, was detected in surface water sample SW-2. No other Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Landfill and have them analyzed for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on October 13, 1998 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by

Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on October 13, 1998. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed nine constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Cadmium was detected in MW-2 at 0.006 ppm, MW-3 at 0.016 ppm, MW-4 at 0.011 ppm, MW-5 at 0.006 ppm, MW-7 at 0.005 ppm, MW-8B at 0.005 ppm, and MW-9 at 0.012 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-3 at 0.11 ppm and MW-9 at 0.11 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-8B at 0.020 ppm. The 2L Standard is 0.015 ppm.

- Mercury was detected in MW-4 at 0.0057 ppm. The 2L Standard is 0.0011 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 15 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 430 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 19 ppb and MW-4 at 74 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 25 ppb and MW-4 at 56 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 11.0 ppb. The 2L Standard is 0.015 ppb.

The following ten constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.013 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 0.55 ppm, MW-3 at 0.84 ppm, and MW-9 at 0.74 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-1 at 0.003 ppm, MW-6 at 0.001 ppm, and MW-8A at 0.001 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-2 at 0.033 ppm, MW-4 at 0.013 ppm, MW-5 at 0.042 ppm, and MW-7B at 0.014 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-4 at 0.22 ppm and MW-8B at 0.028 ppm. The 2L Standard is 1.0 ppm.

- Lead was detected in MW-9 at 0.011 ppm. The 2L Standard is 0.015 ppm.

- Zinc was detected in MW-1 at 0.11 ppm, MW-2 at 0.16 ppm, MW-3 at 0.27 ppm, MW-4 at 0.14 ppm, MW-5 at 0.23 ppm, MW-7B at 0.14 ppm, MW-8B at 0.44 ppm, and MW-9 at 0.30 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 74 ppb and MW-4 at 37 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 28 ppb. The 2L Standard is 70.0 ppb.

- Carbon Disulfide was detected in MW-2 at 140 ppb. The interim 2L Standard is 700 ppb.

No 2L Standards have been set for the following four potentially naturally occurring inorganic constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.002 ppm, MW-3 at 0.002 ppm, MW-8B at 0.002 ppm, and MW-9 at 0.006 ppm.

- Cobalt was detected in MW-1 at 0.012 ppm, MW-2 at 0.029 ppm, MW-3 at 0.053 ppm, MW-4 at 0.087 ppm, MW-5 at 0.022 ppm, MW-7B at 0.021 ppm, MW-8B at 0.022 ppm, and MW-9 at 0.14 ppm.

- Thallium was detected in MW-2 at 0.012 ppm.

- Vanadium was detected in MW-1 at 0.044 ppm, MW-2 at 0.15 ppm, MW-3 at 0.34 ppm, MW-4 at 0.49 ppm, MW-5 at 0.13 ppm, MW-7B at 0.10 ppm, MW-8B at 0.044 ppm, and MW-9 at 0.25 ppm.

5.2 Surface Water

The surface water sample analyses revealed one naturally occurring constituent (zinc in SW-2 at 0.10 ppm) for which no 15A NCAC 2B surface water standard exist. No other inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
OCTOBER 13, 1998

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	63.0°F	60.6°F	61.9°F	59.7°F	64.0°F	60.4°F	58.6°F	59.4°F
Specific Conductance	88.6 μMHOs	159.6 μMHOs	71.5 μMHOs	360.0 μMHOs	113.6 μMHOs	99.9 μMHOs	99.3 μMHOs	104.5 μMHOs
pH	5.4	6.1	6.2	6.0	6.3	6.6	6.4	6.2

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	57.9°F	58.0°F	62.6°F	59.7°F	59.0°F
Specific Conductance	45.3 μMHOs	36.0 μMHOs	40.8 μMHOs	79.9 μMHOs	86.8 μMHOs
pH	6.5	5.3	6.1	7.7	7.1

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TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
OCTOBER 13, 1998

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	0.013	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	0.55	0.84	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.74	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	0.002	BQL	0.002	BQL	BQL	BQL	BQL	BQL	BQL	0.002	0.006	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	0.003	0.006	0.016	0.011	0.006	0.001	BQL	0.005	0.001	0.005	0.012	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	BQL	0.033	0.11	0.013	0.042	BQL	BQL	0.014	BQL	BQL	0.11	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	0.012	0.029	0.053	0.087	0.022	BQL	BQL	0.021	BQL	0.022	0.14	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	0.22	BQL	BQL	BQL	BQL	BQL	0.28	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.02	0.011	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	0.0057	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	0.012	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	0.044	0.15	0.34	0.49	0.13	BQL	BQL	0.10	BQL	0.044	0.25	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.11	0.16	0.27	0.14	0.23	BQL	BQL	0.14	BQL	0.44	0.30	BQL	0.10	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 9:00 am to 9:45 am

Sample Date April 8, 1997

Sample Time 9:50 am

Weather Sunny, 50-55°F

Water Level and Well Data

1)	Depth to water from measuring point	19.91	ft.
2)	Depth to well bottom from measuring point	52.67	ft.
3)	Height of water column (h)	32.76	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.34	gal.
4)	Volume of water removed prior to sampling	17.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.0°F
2)	Specific Conductance	6.6 μmhos
3)	pH	7.0
4)	Physical Appearance and Odor	Slightly cloudy, milky, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 10:15 am to 11:30 am

Sample Date April 8, 1997

Sample Time 11:30 am

Weather Clear, 50-60°F

Water Level and Well Data

1)	Depth to water from measuring point	21.93	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	41.37	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.74	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	57.6°F
2)	Specific Conductance	109 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 10:40 am to 10:50 am

Sample Date April 8, 1997

Sample Time 11:00 am

Weather Clear, 50-60°F

Water Level and Well Data

1)	Depth to water from measuring point	19.97 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	12.49 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.04 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58.6°F
2)	Specific Conductance	64.3 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 5:30 pm to 6:35 pm

Sample Date April 8, 1997

Sample Time 6:45 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	20.05 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	43.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.06 gal.
4)	Volume of water removed prior to sampling	21.2 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.9°F
2)	Specific Conductance	35 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, light gray, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 5:30 pm to 5:45 pm

Sample Date April 8, 1997

Sample Time 5:50 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	19.40 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	6.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.03 gal.
4)	Volume of water removed prior to sampling	3.1 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.3°F
2)	Specific Conductance	18 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: Yes (No)

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 2:50 pm to 3:15 pm

Sample Date April 8, 1997

Sample Time 3:20 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	14.27 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	12.98 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.12 gal.
4)	Volume of water removed prior to sampling	8.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	66.1°F
2)	Specific Conductance	39.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Tan and orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-1

Sampled by Ken Vanhoy

Sample Date April 8, 1997

Sample Time 9:15 am

Weather Sunny, 50-55°F

Field Analysis

1)	Temperature		56.2°F
2)	Specific Conductance		60.1 μmhos
3)	pH		6.0
4)	Physical Appearance and Odor	Greenish-tan, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Sample Date April 8, 1997

Sample Time 1:45 am

Weather Sunny, 60-65°F

Field Analysis

1)	Temperature		59.0°F
2)	Specific Conductance		87.0 μmhos
3)	pH		6.0
4)	Physical Appearance and Odor	Clear, no odor	

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677 0090
Fax 919-677 8702

IEA
An Aquarion Company

April 23, 1997

APR 1997
RECEIVED

Wes Scarlett
BPA Environmental & Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27406

IEA Project No.: 631969/9704206
IEA Reference No.: W9704090
Client Project I.D.: 170.010 Swepsonville Landfill

Dear Mr. Scarlett,

Transmitted herewith are the results of analyses on 13 samples submitted to our laboratory.

The samples were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call me at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.

for Sue Mitchell
Project Manager

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677 0090
Fax 919-677 8702

IEA

An Aquarion Company

IEA-NORTH CAROLINA CERTIFICATIONS

Certifying State	Program Type	Lab ID #
Alabama	DW	40210
Arkansas	WW	None Provided
California	DW, WW, HW Radiolog.	1768
Connecticut	DW, WW	PH-0135
Kansas	DW, HW, WW	E-10158
Kentucky	DW	90049
Maryland	DW, Radiolog.	259
Massachusetts	DW, WW	M-NC039
New Jersey	DW, WW Radiolog.	67719 67681
New York	Radiolog.	11422
North Carolina	DW WW Radiolog.	DW 37720 WW 84 Rad 37720
South Carolina	DW,WW,HW	99021
Tennessee	DW UST App List	02914
Utah	Radiolog. RCRA	E-206 E-226
Virginia	DW	00179
West Virginia	DW	9908C
Wisconsin	WW	998051010

DW=Drinking Water WW=Wastewater HW=Hazardous Waste Radiolog.=Radiological

Rev11.03/97

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-01	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-01	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-02	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	14
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-02	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-03	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-3	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-03	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-3	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-04	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-4	Dilution Factor:	2.5
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	35
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	400
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-04	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-4	Dilution Factor:	2.5
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	70
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	43
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
Quantitation limit elevated due to sample dilution prior to analysis.
Sample diluted due to high concentration of target compounds present.

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-05	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-5	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-05	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-5	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-06	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-6	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-06	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-6	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-07	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-07	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-08	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-08	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-09	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-09	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-10	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-10	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-11	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-9	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-11	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-9	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-12	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-12	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-13	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-13	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/15/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLB)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/15/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLB)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-01, 02
Filename: 0415W03
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLD)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLD)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-03, 04, 05, 09, 10, 11
Filename: 0416W02
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLC)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLC)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-06, 07, 08, 9604213-06MS/MSD, VLCSLC
Filename: 0416L04
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLE)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLE)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-12, 13
Filename: 0417L03
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

IEA Project No.: 631-969
IEA Reference No: 9704213-06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	50	BQL	65	130	61-145
Trichloroethene	50	BQL	52	104	71-120
Benzene	50	BQL	61	122	76-127
Toluene	50	BQL	61	122	76-125
Chlorobenzene	50	BQL	61	122	75-130

	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	50	69	138	6	14	61-145
Trichloroethene	50	56	112	7	14	71-120
Benzene	50	66	132 *	8	11	76-127
Toluene	50	67	134 *	9	13	76-125
Chlorobenzene	50	68	136 *	11	13	75-130

Comments:
* The associated LCS met all quality control criteria as determined by the laboratory showing the instrument to be in control. The LCS data is provided with the report as supporting documentation.

FORM WAVOLMAS REV 012492

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Laboratory Control Spike (LCS)

IEA Project Number: 631-969
IEA Sample Number: 9704206
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Project I.D.: 170.010 Swepsonville Landfill
Sample Identification: VLCSLC

Date Analyzed: 04/16/97
Analysis By: Moore
Matrix: Water

Number	Compound	Amount Spiked (ug/L)	Amount Recovered (ug/L)	SLCS % REC	Control Limits Lower (%REC)	Upper (%REC)
1	Acetone	20	17.8	89	10	200
2	Acrylonitrile	100	80.0	80	10	200
3	Allyl Chloride	100	80.0	80	10	200
4	Benzene	20	16.7	84	10	200
5	Bromobenzene	20	17.0	85	10	200
6	Bromochloromethane	20	17.8	89	10	200
7	Bromodichloromethane	20	16.3	82	10	200
8	Bromoform	20	15.4	77	10	200
9	Bromomethane	20	33.2	166	10	200
10	2-Butanone	20	17.2	86	10	200
11	n-Butylbenzene	20	16.9	85	10	200
12	sec-Butylbenzene	20	17.1	86	10	200
13	tert-Butylbenzene	20	16.7	84	10	200
14	Carbon Disulfide	20	15.3	77	10	200
15	Carbon Tetrachloride	20	15.7	79	10	200
16	Chlorobenzene	20	17.6	88	10	200
17	Chlorodibromomethane	20	16.3	82	10	200
18	Chloroethane	20	21.2	106	10	200
19	2-Chloroethyl Vinyl Ether	20	16.0	80	10	200
20	Chloroform	20	18.1	91	10	200
21	Chloromethane	20	17.4	87	10	200
22	2-Chlorotoluene	20	17.5	88	10	200
23	4-Chlorotoluene	20	17.5	88	10	200
24	1,2-Dibromo-3-Chloropropane	20	16.9	85	10	200
25	1,2-Dibromoethane	20	16.8	84	10	200
26	Dibromomethane	20	18.3	92	10	200
27	1,2-Dichlorobenzene	20	17.3	87	10	200
28	1,3-Dichlorobenzene	20	17.4	87	10	200
29	1,4-Dichlorobenzene	20	17.5	88	10	200
30	1,3-Dichloropropane	20	18.6	93	10	200
31	2,2-Dichloropropane	20	17.3	87	10	200
32	1,1-Dichloropropene	20	17.2	86	10	200
33	cis-1,4-Dichloro-2-Butene	10	8.1	81	10	200
34	trans-1,4-Dichloro-2-Butene	10	8.5	85	10	200
35	Dichlorodifluoromethane	20	17.0	85	10	200
36	1,1-Dichloroethane	20	17.7	89	10	200
37	1,2-Dichloroethane	20	18.4	92	10	200
38	Hexachlorobutadiene	20	14.6	73	10	20
39	Isopropylbenzene	20	17.1	86	10	20

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Laboratory Control Spike (LCS)

IEA Project Number: 631-969
IEA Sample Number: 9704206
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Project I.D.: 170.010 Swepsonville Landfill
Sample Identification: VLCSLC

Date Analyzed: 04/16/97
Analysis By: Moore
Matrix: Water

Number	Compound	Amount Spiked (ug/L)	Amount Recovered (ug/L)	SLCS % REC	Control Limits Lower (%REC)	Upper (%REC)
40	1,1-Dichloroethene	20	17.3	87	10	200
41	cis-1,2-Dichloroethene	20	17.8	89	10	200
42	trans-1,2-Dichloroethene	20	17.3	87	10	200
43	1,2-Dichloropropane	20	16.7	84	10	200
44	cis-1,3-Dichloropropene	20	15.9	80	10	200
45	trans-1,3-Dichloropropene	20	16.6	83	10	200
46	Ethylbenzene	20	18.1	91	10	200
47	Ethyl Methacrylate	20	17.1	86	10	200
48	2-Hexanone	20	16.9	85	10	200
49	Iodomethane	20	16.7	84	10	200
50	p-Isopropyltoluene	20	17.1	86	10	200
51	Methacrylonitrile	20	17.1	86	10	200
52	Methylene Chloride	20	17.8	89	10	200
53	Methyl Methacrylate	20	16.6	83	10	200
54	4-Methyl-2-Pentanone	20	17.2	86	10	200
55	Methyl-tert-Butyl Ether	20	17.0	85	10	200
56	Naphthalene	20	11.9	60	10	200
57	Pentachloroethane	20	18.6	93	10	200
58	n-Propylbenzene	20	16.9	85	10	200
59	Styrene	20	17.8	89	10	200
60	1,1,1,2-Tetrachloroethane	20	17.7	89	10	200
61	1,1,2,2-Tetrachloroethane	20	18.4	92	10	200
62	Tetrachloroethene	20	16.2	81	10	200
63	Toluene	20	17.4	87	10	200
64	1,2,4-Trichlorobenzene	20	11.6	58	10	200
65	1,1,1-Trichloroethane	20	16.4	82	10	200
66	1,1,2-Trichloroethane	20	17.7	89	10	200
67	Trichloroethene	20	16.7	84	10	200
68	Trichlorofluoromethane	20	18.3	92	10	200
69	1,2,3-Trichlorobenzene	20	14.8	74	10	200
70	1,2,4-Trimethylbenzene	20	16.8	84	10	200
71	1,3,5-Trimethylbenzene	20	16.9	85	10	200
72	1,2,3-Trichloropropane	20	17.2	86	10	200
73	Vinyl Acetate	20	16.4	82	10	200
74	Vinyl Chloride	20	15.4	77	10	200
75	Xylenes (Total)	60	54.0	90	10	200

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
8260 WATER VOLATILE SURROGATE RECOVERY

IEA Project No.: 631-969

Sample ID	SURR 1	SURR 2	SURR 3
VBLKLB	108	102	100
9704206-01	109	104	101
9704206-02	108	103	101
VBLKLD	108	103	101
9704206-03	109	103	102
9704206-04	111	104	102
9704206-05	109	98	101
9704206-09	111	105	100
9704206-10	110	104	102
9704206-11	111	104	101
VBLKLC	108	102	100
9704206-06	109	103	100
9704206-07	109	107	100
9704206-08	108	102	103
9704213-06MS	107	102	100
9704213-06MSD	108	104	98
VLCSLC	110	116	100
VBLKLE	110	104	102
9704206-12	110	103	103
9704206-13	109	109	98

	QC Limits
S1 = Toluene-d8	(71-116)
S2 = 4-Bromofluorobenzene	(57-131)
S3 = 1,2-Dichloroethane-d4	(70-105)

Form 8260SUR.WK1 Rev. 110195

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206Ø1 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: Ø4/1Ø/97
Client Proj. I.D.: 17Ø.ØIØ Swepsonville Landfill Date Sampled: Ø4/Ø8/97
Sample I.D.: MW-1

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6Ø1Ø	3Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
ARSENIC	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
BARIUM	SW846 6Ø1Ø	5ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
BERYLLIUM	SW846 6Ø1Ø	2.ØØ	2.1Ø	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
CADMIUM	SW846 6Ø1Ø	1.ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
CHROMIUM	SW846 6Ø1Ø	1Ø.Ø	1Ø.5	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
COBALT	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
COPPER	SW846 6Ø1Ø	2ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
LEAD	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
MERCURY	SW846 747Ø	Ø.5ØØ	BQL	Ø4/15/97	Ø4/16/97	PW	R1Ø817	Ø4159701H
NICKEL	SW846 6Ø1Ø	5Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
SELENIUM	SW846 6Ø1Ø	2Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
SILVER	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
THALLIUM	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
VANADIUM	SW846 6Ø1Ø	4Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
ZINC	SW846 6Ø1Ø	5Ø.Ø	86.4	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420602 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-2

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	21.0	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	12.1	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	73.2	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	81.4	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420603 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-3

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	10.1	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	1280	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	4.25	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	2.38	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	137	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	57.7	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	250	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	17.9	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	72.1	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	395	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	353	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420604 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-4

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	19.2	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420605 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-5

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	46.4	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	42.0	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	65.7	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420606 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-6

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	48.3	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	13.2	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	53.1	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	104	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420607 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-7A

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420608 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-7B

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	2320	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	9.36	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	6.61	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	141	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	165	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	265	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	22.1	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	109	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	766	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	858	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206ø9 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: ø4/1ø/97
Client Proj. I.D.: 17ø.øø1ø Swepsonville Landfill Date Sampled: ø4/øø/97
Sample I.D.: MW-8A

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6ø1ø	3ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
ARSENIC	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
BARIUM	SW846 6ø1ø	5øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
BERYLLIUM	SW846 6ø1ø	2.øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
CADMIUM	SW846 6ø1ø	1.øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
CHROMIUM	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
COBALT	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
COPPER	SW846 6ø1ø	2øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
LEAD	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
MERCURY	SW846 747ø	ø.5øø	BQL	ø4/15/97	ø4/16/97	PW	R1ø817	ø4159ø1H
NICKEL	SW846 6ø1ø	5ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
SELENIUM	SW846 6ø1ø	2ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
SILVER	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
THALLIUM	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
VANADIUM	SW846 6ø1ø	4ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
ZINC	SW846 6ø1ø	5ø.ø	5ø.8	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420610 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-8B

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	13.0	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	14.0	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	41.3	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	174	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420611 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-9

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	4.16	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	76.6	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	117	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	14.8	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	57.1	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	161	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	199	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206 12 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: SW-1

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420613 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
lient Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: SW-2

arameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
NTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
RSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
HROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
OBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
OPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
EAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
ICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
HALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
INC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 631_969
Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Proj. I.D.: 170.010 Swepsonville Landfill
Sample Number: PBW 04119701P

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 631_969
Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC
lient Proj. I.D.: 170.010 Swepsonville Landfill
Sample Number: PBW 04159701H

arameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H

:orresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606,
970420607, 970420608, 970420609, 970420610, 970420611, 970420612,
970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F,
970422806F, 970422807F

:omments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
LABORATORY CONTROL SAMPLE

IEA Project #: 631_969
IEA Sample #: LCSW 04119701P
Matrix: WATER

Parameter	Method	Results (ug/l) True	Found	Limits Lower	Upper	% RCY	Date Analyzed	IEA Run	Prep Batch
ANTIMONY	SW846 6010	5000	4920	4000	6000	98.4	04/15/97	R10863	04119701P
ARSENIC	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
BARIUM	SW846 6010	5000	5090	4000	6000	102.	04/15/97	R10863	04119701P
BERYLLIUM	SW846 6010	5000	5190	4000	6000	104.	04/15/97	R10863	04119701P
CADMIUM	SW846 6010	5000	5110	4000	6000	102.	04/15/97	R10863	04119701P
CHROMIUM	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
COBALT	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
COPPER	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
LEAD	SW846 6010	5000	5050	4000	6000	101.	04/15/97	R10863	04119701P
NICKEL	SW846 6010	5000	5030	4000	6000	101.	04/15/97	R10863	04119701P
SELENIUM	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
SILVER	SW846 6010	500	491	400	600	98.2	04/15/97	R10863	04119701P
THALLIUM	SW846 6010	5000	5170	4000	6000	103.	04/15/97	R10863	04119701P
VANADIUM	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
ZINC	SW846 6010	5000	5460	4000	6000	109.	04/15/97	R10863	04119701P

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

EA Project #: 631_969
IEA Sample #: 970406604
Matrix: WATER

arameter	Method	Duplicate Analysis Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
NTIMONY	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
RSENIC	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ARIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ERYLLIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ADMIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
HROMIUM	SW846 6010	25.1	BQL		04/15/97	R10863	R10863	04119701P
OBALT	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
OPPER	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
EAD	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ICKEL	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ELENIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ILVER	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
HALLIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ANADIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
INC	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

orresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

omments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

IEA Project #: 631_969
IEA Sample #: 970420613
Matrix: WATER

Parameter	Method	Duplicate Analysis Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
MERCURY	SW846 7470	BQL	BQL		04/16/97	R10817	R10817	04159701H

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 631_969
IEA Sample #: 970406604
Matrix: WATER

Spike Results (ug/l)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
ANTIMONY	SW846 6010	500	BQL	417	83.5	04/15/97	R10863	R10863	04119701P
ARSENIC	SW846 6010	2000	BQL	1880	94.3	04/15/97	R10863	R10863	04119701P
BARIUM	SW846 6010	2000	BQL	1880	94.1	04/15/97	R10863	R10863	04119701P
BERYLLIUM	SW846 6010	50.0	BQL	47.8	95.6	04/15/97	R10863	R10863	04119701P
CADMIUM	SW846 6010	50.0	BQL	47.0	94.1	04/15/97	R10863	R10863	04119701P
CHROMIUM	SW846 6010	200	25.1	194	84.6	04/15/97	R10863	R10863	04119701P
COBALT	SW846 6010	500	BQL	460	92.1	04/15/97	R10863	R10863	04119701P
COPPER	SW846 6010	250	BQL	238	95.3	04/15/97	R10863	R10863	04119701P
LEAD	SW846 6010	500	BQL	473	94.6	04/15/97	R10863	R10863	04119701P
NICKEL	SW846 6010	500	BQL	474	94.8	04/15/97	R10863	R10863	04119701P
SELENIUM	SW846 6010	2000	BQL	1900	94.9	04/15/97	R10863	R10863	04119701P
SILVER	SW846 6010	50.0	BQL	47.8	95.5	04/15/97	R10863	R10863	04119701P
THALLIUM	SW846 6010	2000	BQL	1900	95.0	04/15/97	R10863	R10863	04119701P
VANADIUM	SW846 6010	500	BQL	474	94.8	04/15/97	R10863	R10863	04119701P
ZINC	SW846 6010	500	BQL	500	100.	04/15/97	R10863	R10863	04119701P

%R = ((SSR - SR) / SA) * 100 Control Limits: 75-125%

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 631_969
IEA Sample #: 970420613
Matrix: WATER

Spike Results (ug/l)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
MERCURY	SW846 7470	1.00	BQL	1.00	100.	04/16/97	R10817	R10817	04159701H

%R = ((SSR - SR) / SA) * 100 Control Limits: 75-125%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

:EA Project #: 631_969
IEA Sample #: 970406604S
Matrix: WATER

Spike Duplicate Results

Parameter	Method	Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
ANTIMONY	SW846 6010	417	445	6.42	04/15/97	R10863	R10863	04119701P
ARSENIC	SW846 6010	1880	1920	1.76	04/15/97	R10863	R10863	04119701P
BARIUM	SW846 6010	1880	1900	0.98	04/15/97	R10863	R10863	04119701P
BERYLLIUM	SW846 6010	47.8	48.6	1.67	04/15/97	R10863	R10863	04119701P
CADMIUM	SW846 6010	47.0	48.9	3.80	04/15/97	R10863	R10863	04119701P
CHROMIUM	SW846 6010	194	196	0.96	04/15/97	R10863	R10863	04119701P
COBALT	SW846 6010	460	470	1.98	04/15/97	R10863	R10863	04119701P
COPPER	SW846 6010	238	240	0.98	04/15/97	R10863	R10863	04119701P
LEAD	SW846 6010	473	483	2.02	04/15/97	R10863	R10863	04119701P
NICKEL	SW846 6010	474	483	1.84	04/15/97	R10863	R10863	04119701P
SELENIUM	SW846 6010	1900	1920	1.09	04/15/97	R10863	R10863	04119701P
SILVER	SW846 6010	47.8	48.3	1.04	04/15/97	R10863	R10863	04119701P
THALLIUM	SW846 6010	1900	1940	1.87	04/15/97	R10863	R10863	04119701P
VANADIUM	SW846 6010	474	482	1.66	04/15/97	R10863	R10863	04119701P
ZINC	SW846 6010	500	506	1.16	04/15/97	R10863	R10863	04119701P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

IEA Project #: 631_969
IEA Sample #: 970420613S
Matrix: WATER

Spike Duplicate Results

Parameter	Method	Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
MERCURY	SW846 7470	1.00	0.977	2.53	04/16/97	R10817	R10817	04159701H

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

IEA
An Aquarion Company
3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 81618

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☐ OTHER Landfill No

☐ STATE CERT. SPECIFY

Page 1 of 2

COMPANY/LOCATION: BFA Environmental Eng Inc.

PROJECT #	PROJECT NAME
170 010	Simpson NC Landfill

SAMPLERS: *(PLEASE PRINT)* Ken Vinsky, Julia I Geniac

SIGNATURE: Ken Vinsky, Julia I. Geniac

SAMPLE I.D. (28 CHARACTER MAXIMUM)	DATE	TIME	G/C	PRES.	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	MATRIX OTHER	REQUESTED PARAMETERS: 40 CFR 258 Appendix I	REQUESTED PARAMETERS: 40 CFR 258 Appendix II
mw-1	4/5/97	4:24p	G	✓	3		✓		✓	✓
mw-2	4/5	4:45p	G	✓	3		✓		✓	✓
mw-3	4/5	1:30p	G	✓	3		✓		✓	✓
mw-4	4/5	12:30p	G	✓	3		✓		✓	✓
mw-3	4/5	8:30A		✓	2		✓			✓
mw-5	4/5	11:40A		✓	1		✓		✓	
mw-6	4/5	11:50A		✓	3		✓		✓	✓
mw-7A	4/5	11:30A		✓	3		✓		✓	✓
mw-7B	4/5	11:00A		✓	3		✓		✓	✓

RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	4/4/97		Julia I. Geniac	4/7/97	
Julia I. Geniac	4/7/97	5:00pm	[signature]	4/10/97	0930

IEA QUOTE NO.	IEA PROJECT NO.
W970409D	631-969
PROJECT MANAGER (PLEASE PRINT)	**P.O. NO.**
Wes Scalott	170.010

RECEIVED FOR LAB BY: [signature]

REMARKS ON SAMPLE RECEIPT

☒ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT
☒ CHILLED ☐ SEE REMARKS

IEA REMARKS

RECEIPT TEMPERATURE= 2°C

FIELD REMARKS / COMMENTS

Please report using NC Rules

IEA
An Aquarion Company

3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 62941

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☑ OTHER N.C. Landfill

COMPANY: BPA Env. Eng. Inc

Page 2 of 2

PROJECT #: 170.010

PROJECT NAME: Simpsonville Landfill

SAMPLERS: (SIGNATURE) Kenneth V. Kay (Kenneth V. Kay) Julia I. Geniac

SAMPLE I.D.	DATE	TIME	GRAB	COMP	STATION LOCATION	# OF CONTAINERS	SOIL	WATER	App I metals	App I vol NC 524.2
mw-9A	4/9/97	6:45p		✓	Simpsonville L.F.	3		✓	✓	✓
mw-9B	4/9/97	5:15p		✓	Simpsonville L.F.	3		✓	✓	✓
mw-9	4/9/97	5:20p		✓	Simpsonville L.F.	3		✓	✓	✓
SW-1	4/9/97	9:15A		✓	Simpsonville L.F.	3		✓	✓	✓
SW-2	4/9/97	1:45p		✓	Simpsonville L.F.	3		✓	✓	✓

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
Julia I. Geniac	4/9/97	5:00 pm			
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY	DATE	TIME
			[illegible]	4/10/97	0930

IEA QUOTE NO.	IEA RUSH NO.
—	—
PROJECT MANAGER (PLEASE PRINT)	**P.O. NO.**
Wes Scott	170.010

REMARKS ON SAMPLE RECEIPT

☒ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT

LAB REMARKS: 2°C 631-969

FIELD REMARKS: Please report using N.C. PQLs

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(910) 272-9713

May 15, 1997

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1997." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

MAY 1997
Received
Solid Waste
Section

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1997

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 17, 1997

BPA Environmental & Engineering, Inc.

(910) 272-9713 2641-G Randleman Road, Greensboro, NC 27406

I hereby certify this 17th day of November 1997, that this report was prepared by me or under my direct supervision.

Julia I. Geniac
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

2.0 INTRODUCTION 2

3.0 SCOPE OF WORK 2

4.0 METHODS EMPLOYED 2
- 4.1 Monitoring Well Sampling 2
- 4.2 Stream Sampling 3

5.0 RESULTS 3
- 5.1 Groundwater 3
- 5.2 Surface Water 5

6.0 REFERENCES 6

TABLES

Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, October 7, 1997

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, October 7, 1997

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, October 7, 1997

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1997

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on October 7, 1997. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of one inorganic constituent (chromium in MW-3 and MW-6) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Five inorganic constituents (arsenic, barium, chromium, nickel, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of five volatile organic constituents (1,1-dichloroethene in MW-2; cis-1,2-dichloroethene in MW-4; tetrachloroethene in MW-2 and MW-4; trichloroethene in MW-2 and MW-4; and vinyl chloride in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

One Appendix I inorganic constituent for which no 15A NCAC 2B Standard for Class B,C surface waters has been established (zinc in SW-1) was detected in one surface water sample. No volatile organic constituents were detected in either of the two surface water samples.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

This sampling task included sampling eleven monitoring wells and two locations on a nearby stream for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on October 7, 1997. The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on October 7, 1997. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed six constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Chromium was detected in MW-3 at 0.076 ppm and MW-6 at 0.064 ppm. The 2L Standard is 0.05 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 8.0 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 220.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 9.9 ppb and MW-4 at 58.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 14.0 ppb and MW-4 at 39.0 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 12.0 ppb. The 2L Standard is 0.015 ppb

The following seven constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.016 ppm and MW-9 at 0.011 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 0.59 ppm and MW-3 at 0.76 ppm. The 2L Standard is 2.0 ppm.

- Chromium was detected in MW-1 at 0.011 ppm, MW-2 at 0.039 ppm, MW-5 at 0.019 ppm, MW-7A at 0.018 ppm, MW-7B at 0.016 ppm, and MW-8B at 0.026 ppm. The 2L Standard is 0.05 ppm.

- Nickel was detected in MW-3 at 0.063 ppm and MW-9 at 0.059 ppm. The 2L Standard is 0.1 ppm.

- Zinc was detected in MW-1 at 0.13 ppm, MW-2 at 0.18 ppm, MW-3 at 0.25 ppm, MW-5 at 0.27 ppm, MW-6 at 0.082 ppm, MW-7A at 0.052 ppm, MW-7B at 0.078 ppm, MW-8A at 0.076 ppm, MW-8B at 0.26 ppm, and MW-9 at 0.34 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 42.0 ppb and MW-4 at 24.0 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 13.0 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following three potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as standards for naturally occurring constituents.

- Beryllium was detected in MW-2 at 0.002 ppm, MW-3 at 0.002 ppm, MW-8B at 0.002 ppm, and MW-9 at 0.003 ppm.

- Cobalt was detected in MW-2 at 0.039 ppm, MW-3 at 0.066 ppm, MW-4 at 0.023 ppm, MW-5 at 0.011 ppm, MW-8B at 0.037 ppm, and MW-9 at 0.099 ppm.

- Vanadium was detected in MW-2 at 0.15 ppm, MW-5 at 0.042 ppm, and MW-9 at 0.13 ppm.

5.2 Surface Water

The results of the laboratory analyses for Appendix I constituents in the surface water samples are summarized in Tables 2 and 3 and the complete laboratory reports are included in Appendix B.

The following constituent was detected in one of the samples on the date the samples were collected. No 15A NCAC 2B Standards for Class B,C Surface Water has been set for this constituent.

- Zinc was detected in SW-1 at 0.64 ppm.

No other inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 4, 1994).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
OCTOBER 7, 1997

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	65.5°F	66.2°F	64.2°F	64.8°F	59.7°F	62.8°F	61.2°F	61.7°F
Specific Conductance	94.7 μMHOs	163.6 μMHOs	74.6 μMHOs	399 μMHOs	116.6 μMHOs	111.3 μMHOs	101.3 μMHOs	100.5 μMHOs
pH	5.1	5.4	5.9	5.6	5.6	6.4	6.2	6.2

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.6°F	58.8°F	67.5°F	65.4°F	68.2°F
Specific Conductance	48 μMHOs	35.7 μMHOs	44.7 μMHOs	128.4 μMHOs	158 μMHOs
pH	5.6	5.5	6.6	7.1	6.8

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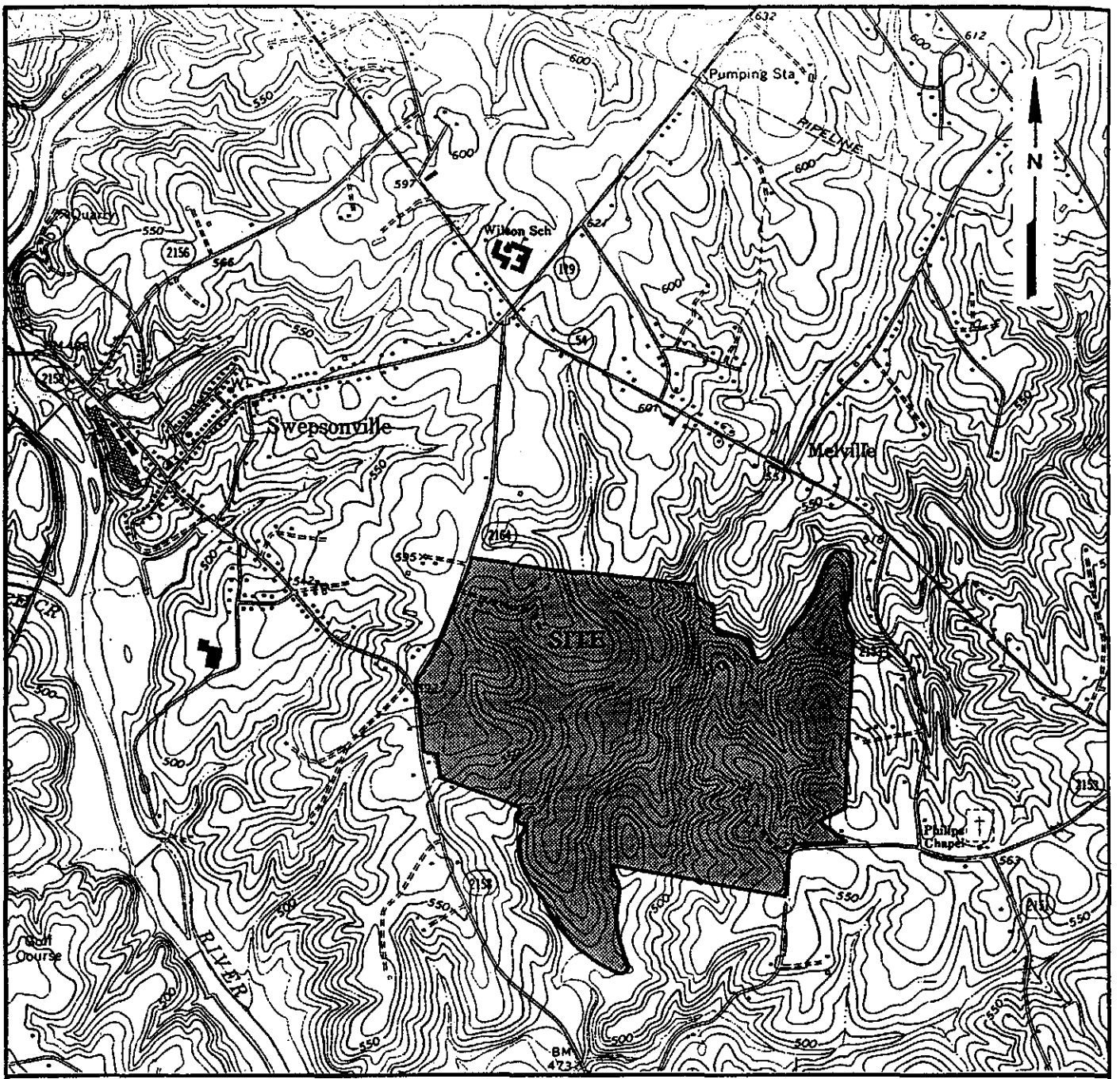
TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
OCTOBER 7, 1997

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	0.016	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.011	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	0.59	0.76	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	BQL	0.002	0.002	BQL	BQL	BQL	BQL	BQL	BQL	0.002	0.003	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	0.011	0.039	0.076	BQL	0.019	0.064	0.018	0.016	BQL	0.026	BQL	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	BQL	0.039	0.066	0.023	0.011	BQL	BQL	BQL	BQL	0.037	0.099	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	0.063	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.059	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	BQL	0.15	BQL	BQL	0.042	BQL	BQL	BQL	BQL	BQL	0.13	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.13	0.18	0.25	BQL	0.27	0.082	0.052	0.078	0.076	0.26	0.34	0.64	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

C:\123R23\SWP10972.WK1



MEBANE QUADRANGLE
NORTH CAROLINA
USGS 7.5 MINUTE TOPOGRAPHIC SERIES
1969

1000 0 2000 3000
SCALE IN FEET

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

BPA Environmental & Engineering, Inc.

SITE LOCATION MAP

FIGURE 1

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 3:55 pm to 4:10 pm

Sample Date October 7, 1997

Sample Time 4:15 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	24.57 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	9.18 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	1.50 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	65.5°F
2)	Specific Conductance	94.7 μmhos
3)	pH	5.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 3:00 pm to 3:05 pm

Sample Date October 7, 1997

Sample Time 3:15 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.93 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	2.37 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method		Teflon Bailer
2)	Sample Method		Teflon Bailer
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h)		–
	b) 4" well . . . . (v = 0.651 x h)		0.39 gal.
	c) 6" well . . . . (v = 1.5 x h)		
4)	Volume of water removed prior to sampling		0.5 gal.
5)	Was well purged DRY? (circle one)	(YES)	NO

Field Analysis

1)	Temperature	66.2°F
2)	Specific Conductance	163.6 μmhos
3)	pH	5.4
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 2:10 pm to 2:25 pm

Sample Date October 7, 1997

Sample Time 2:35 pm

Weather Clear, 85-90°F

Water Level and Well Data

1)	Depth to water from measuring point	11.14 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	12.70 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	
	b) 4" well . . . . (v = 0.651 x h)	2.07 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.2°F
2)	Specific Conductance	74.6 μmhos
3)	pH	5.9
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 1:30 pm to 1:50 pm

Sample Date October 7, 1997

Sample Time 1:50 pm

Weather Clear, 80-90°F

Water Level and Well Data

1)	Depth to water from measuring point	35.76 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	14.14 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	2.3 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.8°F
2)	Specific Conductance	399 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date October 7, 1997

Purge Time 10:15 am to 10:20 am

Sample Date October 7, 1997

Sample Time 10:30 am/4:30 pm

Weather Clear, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	16.79 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	2.62 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.43 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	.40 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59.7°F
2)	Specific Conductance	116.6 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 10:55 am to 11:30 am

Sample Date October 7, 1997

Sample Time 11:30 am

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	21.37 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	31.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	5.10 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	15.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	62.8°F
2)	Specific Conductance	111.3 μmhos
3)	pH	6.4
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 12:00 pm to 12:55 pm

Sample Date October 7, 1997

Sample Time 1:15 pm

Weather Clear, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.04 ft.
2)	Depth to well bottom from measuring point	63.30 ft.
3)	Height of water column (h)	37.26 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	6.07 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	18.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	61.2°F
2)	Specific Conductance	101.3 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 12:05 pm to 12:10 pm

Sample Date October 7, 1997

Sample Time 12:30 pm

Weather Clear, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.81 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	5.65 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.92 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	61.7°F
2)	Specific Conductance	100.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 9:05 am to 9:55 am

Sample Date October 7, 1997

Sample Time 10:00 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	24.55 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	38.80 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	6.32 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	19.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.6°F
2)	Specific Conductance	48 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 9:10 am to 9:12 am

Sample Date October 7, 1997

Sample Time 9:30 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	23.88 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	1.82 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.30 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	0.3 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58.8°F
2)	Specific Conductance	35.7 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: Yes (No)

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 3:35 pm to 3:45 pm

Sample Date October 7, 1997

Sample Time 3:50 pm

Weather Sunny, 80-90°F

Water Level and Well Data

1)	Depth to water from measuring point	18.33 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	8.92 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.45 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	67.5°F
2)	Specific Conductance	44.7 μmhos
3)	pH	6.6
4)	Physical Appearance and Odor	Tan and orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-1

Sampled by Ken Vanhoy

Sample Date October 7, 1997

Sample Time 11:00 am

Weather Sunny, 70-80°F

Field Analysis

1)	Temperature		65.4°F
2)	Specific Conductance		128.4 μmhos
3)	pH		7.1
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Sample Date October 7, 1997

Sample Time 2:20 pm

Weather Sunny, 85-90°F

Field Analysis

1)	Temperature		68.2°F
2)	Specific Conductance		158 μmhos
3)	pH		6.8
4)	Physical Appearance and Odor	Clear, no odor	

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

NOV 1997 RECEIVED

ENCO Laboratories
DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR9107
DATE SUBMITTED: October 9, 1997
DATE REPORTED : October 24, 1997
DATE AMENDED : November 3, 1997

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance CTY. Swepsonville

10/07/97

#1	- MW-1	@ 16:15
#2	- MW-2	@ 15:15
#3	- MW-3	@ 14:35
#4	- MW-4	@ 13:50
#5	- MW-5	@ 10:30
#6	- MW-6	@ 11:30
#7	- MW-7A	@ 13:15
#8	- MW-7B	@ 12:30
#9	- MW-8A	@ 10:00
#10	- MW-8B	@ 09:30
#11	- MW-9	@ 15:30
#12	- SW-1	@ 11:00
#13	- SW-2	@ 14:20
#14	- TRIP BLANK	

SENIOR CHEMIST Kath B. Brooks
Kathleen Brooks

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	8.0	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	42	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	13	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	14	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
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REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	9.9	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	101	94	79-136
D8-Toluene	114	115	88-115
Bromofluorobenzene	102	97	72-132
Date Analyzed	10/14/97	10/14/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	**0.59**	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	**0.002**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.011**	**0.039**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	**0.039**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

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Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/15/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	**0.15**	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.13**	**0.18**	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	12		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	24		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	220	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	39		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

D1 = Analyte value determined from a 1:2.5 dilution.
U = Compound was analyzed for but not detected to the level shown.

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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	58	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	100	98	79-136
D8-Toluene	113	107	88-115
Bromofluorobenzene	106	100	72-132
Date Analyzed	10/14/97	10/14/97	

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

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DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	**0.016**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	**0.76**	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	**0.002**	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.076**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	**0.066**	**0.023**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	**0.063**	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

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APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.400 U	0.400 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.25	0.050 U	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	98	101	79-136
D8-Toluene	113	110	88-115
Bromofluorobenzene	95	101	72-132
Date Analyzed	10/16/97	10/16/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.019**	**0.064**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	**0.011**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	**0.042**	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.27**	**0.082**	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

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RESULTS OF ANALYSIS

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APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	101	99	79-136
D8-Toluene	115	110	88-115
Bromofluorobenzene	99	100	72-132
Date Analyzed	10/16/97	10/16/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.018	0.016	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.052	0.078	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	90	92	79-136
D8-Toluene	112	111	88-115
Bromofluorobenzene	95	98	72-132
Date Analyzed	10/20/97	10/20/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	**0.002**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.010 U	**0.026**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	**0.037**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
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REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/15/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.076	0.26	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

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PROJECT NAME : Alamance CTY.
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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	97	79-136
D8-Toluene	97	93	88-115
Bromofluorobenzene	85	100	72-132
Date Analyzed	10/20/97	10/20/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.011	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.003	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.099	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.059	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	**0.13**	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.34**	**0.064**	mg/L
Date Analyzed		10/13/97	10/13/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

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

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

ENCO LABORATORIES
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RESULTS OF ANALYSIS

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APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	SW-2	LAB BLANK #1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	93	105	79-136
D8-Toluene	87	115	88-115
Bromofluorobenzene	92	104	72-132
Date Analyzed	10/20/97	10/14/97	

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

ENCO LABORATORIES
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PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

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APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

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APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
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PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

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

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

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APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	LAB BLANK #2	Units
Bromodichloromethane	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	94	79-136
D8-Toluene	110	88-115
Bromofluorobenzene	102	72-132
Date Analyzed	10/20/97	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260 (MW-1,MW-2,MW-3,MW-4)				
1,1-Dichloroethene	95/ 95/101	56-136	<1	19
Benzene	96/ 93/ 96	66-115	3	8
Trichloroethene	110/106/108	68-110	4	8
Toluene	98/ 94/ 98	68-110	4	9
Chlorobenzene	99/ 98/ 99	50-131	1	9
EPA Method APPENDIX I, 8260 (MW-4,MW-8A,MW-8B,MW-9,SW-1,SW-2)				
1,1-Dichloroethene	95/ 95/115	56-136	<1	19
Benzene	96/ 93/ 88	66-115	3	8
Trichloroethene	110/106/109	68-110	4	8
Toluene	98/ 94/ 95	68-110	4	9
Chlorobenzene	99/ 98/ 94	50-131	1	9
EPA Method APPENDIX I, 8260 (MW-5,MW-6,MW-7A,MW-7B)				
1,1-Dichloroethene	95/ 95/114	56-136	<1	19
Benzene	96/ 93/ 92	66-115	3	8
Trichloroethene	110/106/112	68-110	4	8
Toluene	98/ 94/ 96	68-110	4	9
Chlorobenzene	99/ 98/ 91	50-131	1	9

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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.

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals				
Antimony, 6010	106/ 96/103	38-138	10	30
Arsenic, 6010	106/100/101	64-126	6	12
Barium, 6010	104/ 99/103	74-119	5	11
Beryllium, 6010	107/ 96/105	76-126	11	12
Cadmium, 6010	106/101/105	68-121	5	12
Chromium, 6010	102/ 97/101	73-120	5	10
Cobalt, 6010	113/101/110	76-120	11	17
Copper, 6010	106/ 94/ 99	75-123	12	11
Lead, 6010	107/101/105	68-126	6	19
Nickel, 6010	116/103/112	64-126	12	12
Selenium, 6010	106/100/102	65-129	6	10
Silver, 6010	85/ 80/ 82	69-121	6	12
Thallium, 6010	106/ 96/103	67-135	10	13
Vanadium, 6010	108/ 96/105	82-115	12	16
Zinc, 6010	110/ 95/112	63-131	15	24
Zinc, 6010	101/ 99/101	63-131	2	24

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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QSARF # 0624

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
Ph. (407) 826-5314 • Fax (407) 850-6945

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Alamance County Sweepsville
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Julia Genac & Ken Vanhoy
PHONE: 910 272 9713
FAX: 910 273 4057
CLIENT NAME: BA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, NC 27406-5159

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

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

REQUIRED ANALYSIS: As supplied DI water; Appendix I Volatiles; Appendix I metals + Hg

PRESERVATIVE: AC | HNO3

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	As supplied DI water (AC)	Appendix I Volatiles (HNO3)	Appendix I metals + Hg	REMARKS
1 MW-1	10.7.97	4:15pm	✓				✓								3	1		
2 MW-2	10.7.97	3:15pm	✓				✓								3	1		
3 MW-3	10.7.97	2:35pm	✓				✓								3	1		
4 MW-4	10.7.97	1:50pm	✓				✓								3	1		
5 MW-5	10.7.97	10:30am/ 4:30pm	✓				✓								3	1		
6 MW-6	10.7.97	11:30am	✓				✓								3	1		
7 MW-7A	10.7.97	1:19pm	✓				✓								3	1		
8 MW-7B	10.7.97	12:34pm	✓				✓								3	1		
9 MW-8A	10.7.97	10:00am	✓				✓								3	1		
10 MW-8B	10.7.97	9:30am	✓				✓								3	1		
11 MW-9	10.7.97	3.50pm	✓				✓								3	1		
12 SW-1	10.7.97	11:00am	✓			✓									3	1		
13 SW-2	10.7.97	2:20pm	✓			✓									3	1		

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☑ ORLANDO			K. Armstrong	9/26/97	5:30	Julia S. Genac	9/26/97	9:00am
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Julia S. Genac	10/8/97	4:00pm						
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
D. Weaver ☐ Jacksonville ☑ Orlando	10/9/97	10:35am	☐ YES ☐ NO	OR9107	

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(910) 272-9713

November 18, 1997

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

NOV 1997
Received
Solid Waste
Section

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, October 1997." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 9:00 am to 9:45 am

Sample Date April 8, 1997

Sample Time 9:50 am

Weather Sunny, 50-55°F

Water Level and Well Data

1)	Depth to water from measuring point	19.91	ft.
2)	Depth to well bottom from measuring point	52.67	ft.
3)	Height of water column (h)	32.76	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.34	gal.
4)	Volume of water removed prior to sampling	17.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.0°F
2)	Specific Conductance	6.6 μmhos
3)	pH	7.0
4)	Physical Appearance and Odor	Slightly cloudy, milky, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 10:15 am to 11:30 am

Sample Date April 8, 1997

Sample Time 11:30 am

Weather Clear, 50-60°F

Water Level and Well Data

1)	Depth to water from measuring point	21.93	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	41.37	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.74	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	57.6°F
2)	Specific Conductance	109 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 10:40 am to 10:50 am

Sample Date April 8, 1997

Sample Time 11:00 am

Weather Clear, 50-60°F

Water Level and Well Data

1)	Depth to water from measuring point	19.97 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	12.49 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.04 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58.6°F
2)	Specific Conductance	64.3 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 5:30 pm to 6:35 pm

Sample Date April 8, 1997

Sample Time 6:45 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	20.05 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	43.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.06 gal.
4)	Volume of water removed prior to sampling	21.2 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.9°F
2)	Specific Conductance	35 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, light gray, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 5:30 pm to 5:45 pm

Sample Date April 8, 1997

Sample Time 5:50 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	19.40 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	6.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.03 gal.
4)	Volume of water removed prior to sampling	3.1 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.3°F
2)	Specific Conductance	18 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: Yes (No)

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 2:50 pm to 3:15 pm

Sample Date April 8, 1997

Sample Time 3:20 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	14.27 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	12.98 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.12 gal.
4)	Volume of water removed prior to sampling	8.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	66.1°F
2)	Specific Conductance	39.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Tan and orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-1

Sampled by Ken Vanhoy

Sample Date April 8, 1997

Sample Time 9:15 am

Weather Sunny, 50-55°F

Field Analysis

1)	Temperature		56.2°F
2)	Specific Conductance		60.1 μmhos
3)	pH		6.0
4)	Physical Appearance and Odor	Greenish-tan, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Sample Date April 8, 1997

Sample Time 1:45 am

Weather Sunny, 60-65°F

Field Analysis

1)	Temperature		59.0°F
2)	Specific Conductance		87.0 μmhos
3)	pH		6.0
4)	Physical Appearance and Odor	Clear, no odor	

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677 0090
Fax 919-677 8702

IEA
An Aquarion Company

April 23, 1997

APR 1997
RECEIVED

Wes Scarlett
BPA Environmental & Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27406

IEA Project No.: 631969/9704206
IEA Reference No.: W9704090
Client Project I.D.: 170.010 Swepsonville Landfill

Dear Mr. Scarlett,

Transmitted herewith are the results of analyses on 13 samples submitted to our laboratory.

The samples were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call me at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.

for Sue Mitchell
Project Manager

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677 0090
Fax 919-677 8702

IEA

An Aquarion Company

IEA-NORTH CAROLINA CERTIFICATIONS

Certifying State	Program Type	Lab ID #
Alabama	DW	40210
Arkansas	WW	None Provided
California	DW, WW, HW Radiolog.	1768
Connecticut	DW, WW	PH-0135
Kansas	DW, HW, WW	E-10158
Kentucky	DW	90049
Maryland	DW, Radiolog.	259
Massachusetts	DW, WW	M-NC039
New Jersey	DW, WW Radiolog.	67719 67681
New York	Radiolog.	11422
North Carolina	DW WW Radiolog.	DW 37720 WW 84 Rad 37720
South Carolina	DW,WW,HW	99021
Tennessee	DW UST App List	02914
Utah	Radiolog. RCRA	E-206 E-226
Virginia	DW	00179
West Virginia	DW	9908C
Wisconsin	WW	998051010

DW=Drinking Water WW=Wastewater HW=Hazardous Waste Radiolog.=Radiological

Rev11.03/97

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-01	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-01	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-02	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	14
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-02	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-03	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-3	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-03	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-3	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-04	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-4	Dilution Factor:	2.5
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	35
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	400
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-04	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-4	Dilution Factor:	2.5
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	70
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	43
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
Quantitation limit elevated due to sample dilution prior to analysis.
Sample diluted due to high concentration of target compounds present.

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Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-05	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-5	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-05	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-5	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

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Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-06	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-6	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-06	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-6	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-07	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-07	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-08	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-08	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	MW-7B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-09	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-09	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8A	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-10	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-10	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-8B	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentratio (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-11	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-9	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-11	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	MW-9	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-12	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-12	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-1	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-13	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
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Appendix I Target List

IEA Project Number:	631-969	Date Received:	04/10/97
IEA Sample Number:	9704206-13	Date Sampled:	04/08/97
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	SW-2	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/15/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLB)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/15/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLB)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-01, 02
Filename: 0415W03
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLD)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Crewes
Sample Identification:	QC Blank (VBLKLD)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-03, 04, 05, 09, 10, 11
Filename: 0416W02
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLC)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/16/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLC)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-06, 07, 08, 9604213-06MS/MSD, VLCSLC
Filename: 0416L04
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLE)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	100	BQL
2	Acrylonitrile	200	BQL
3	Benzene	5	BQL
4	Bromochloromethane	5	BQL
5	Bromodichloromethane	5	BQL
6	Bromoform	5	BQL
7	Bromomethane	10	BQL
8	2-Butanone	100	BQL
9	Carbon Disulfide	100	BQL
10	Carbon Tetrachloride	10	BQL
11	Chlorobenzene	5	BQL
12	Chlorodibromomethane	5	BQL
13	Chloroethane	10	BQL
14	Chloroform	5	BQL
15	Chloromethane	10	BQL
16	1,2-Dibromo-3-Chloropropane	25	BQL
17	1,2-Dibromoethane	5	BQL
18	Dibromomethane	10	BQL
19	1,2-Dichlorobenzene	5	BQL
20	1,4-Dichlorobenzene	5	BQL
21	trans-1,4-Dichloro-2-Butene	100	BQL
22	1,1-Dichloroethane	5	BQL
23	1,2-Dichloroethane	5	BQL
24	1,1-Dichloroethene	5	BQL
25	cis-1,2-Dichloroethene	5	BQL
26	trans-1,2-Dichloroethene	5	BQL
27	1,2-Dichloropropane	5	BQL
28	cis-1,3-Dichloropropene	10	BQL
29	trans-1,3-Dichloropropene	10	BQL
30	Ethylbenzene	5	BQL
31	2-Hexanone	50	BQL
32	Iodomethane	10	BQL
33	Methylene Chloride	10	BQL
34	4-Methyl-2-Pentanone	100	BQL
35	Styrene	10	BQL
36	1,1,1,2-Tetrachloroethane	5	BQL
37	1,1,2,2-Tetrachloroethane	5	BQL

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Appendix I Target List

IEA Project Number:	631-969	Date Received:	N/A
IEA Sample Number:	9704206	Date Sampled:	N/A
Client Name:	BPA ENVIRONMENTAL & ENG., INC	Date Analyzed:	04/17/97
Client Project I.D.:	170.010 Swepsonville Landfill	Analysis By:	Moore
Sample Identification:	QC Blank (VBLKLE)	Dilution Factor:	1.0
Matrix:	Water		

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
38	Tetrachloroethene	5	BQL
39	Toluene	5	BQL
40	1,1,1-Trichloroethane	5	BQL
41	1,1,2-Trichloroethane	5	BQL
42	Trichloroethene	5	BQL
43	Trichlorofluoromethane	5	BQL
44	1,2,3-Trichloropropane	15	BQL
45	Vinyl Acetate	50	BQL
46	Vinyl Chloride	10	BQL
47	Xylenes (Total)	5	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Samples: 9704206-12, 13
Filename: 0417L03
FORM APPI8260 Rev. 060195

Industrial & Environmental Analysts, Inc. (IEA)
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

IEA Project No.: 631-969
IEA Reference No: 9704213-06

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	50	BQL	65	130	61-145
Trichloroethene	50	BQL	52	104	71-120
Benzene	50	BQL	61	122	76-127
Toluene	50	BQL	61	122	76-125
Chlorobenzene	50	BQL	61	122	75-130

	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	50	69	138	6	14	61-145
Trichloroethene	50	56	112	7	14	71-120
Benzene	50	66	132 *	8	11	76-127
Toluene	50	67	134 *	9	13	76-125
Chlorobenzene	50	68	136 *	11	13	75-130

Comments:
* The associated LCS met all quality control criteria as determined by the laboratory showing the instrument to be in control. The LCS data is provided with the report as supporting documentation.

FORM WAVOLMAS REV 012492

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Laboratory Control Spike (LCS)

IEA Project Number: 631-969
IEA Sample Number: 9704206
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Project I.D.: 170.010 Swepsonville Landfill
Sample Identification: VLCSLC

Date Analyzed: 04/16/97
Analysis By: Moore
Matrix: Water

Number	Compound	Amount Spiked (ug/L)	Amount Recovered (ug/L)	SLCS % REC	Control Limits Lower (%REC)	Upper (%REC)
1	Acetone	20	17.8	89	10	200
2	Acrylonitrile	100	80.0	80	10	200
3	Allyl Chloride	100	80.0	80	10	200
4	Benzene	20	16.7	84	10	200
5	Bromobenzene	20	17.0	85	10	200
6	Bromochloromethane	20	17.8	89	10	200
7	Bromodichloromethane	20	16.3	82	10	200
8	Bromoform	20	15.4	77	10	200
9	Bromomethane	20	33.2	166	10	200
10	2-Butanone	20	17.2	86	10	200
11	n-Butylbenzene	20	16.9	85	10	200
12	sec-Butylbenzene	20	17.1	86	10	200
13	tert-Butylbenzene	20	16.7	84	10	200
14	Carbon Disulfide	20	15.3	77	10	200
15	Carbon Tetrachloride	20	15.7	79	10	200
16	Chlorobenzene	20	17.6	88	10	200
17	Chlorodibromomethane	20	16.3	82	10	200
18	Chloroethane	20	21.2	106	10	200
19	2-Chloroethyl Vinyl Ether	20	16.0	80	10	200
20	Chloroform	20	18.1	91	10	200
21	Chloromethane	20	17.4	87	10	200
22	2-Chlorotoluene	20	17.5	88	10	200
23	4-Chlorotoluene	20	17.5	88	10	200
24	1,2-Dibromo-3-Chloropropane	20	16.9	85	10	200
25	1,2-Dibromoethane	20	16.8	84	10	200
26	Dibromomethane	20	18.3	92	10	200
27	1,2-Dichlorobenzene	20	17.3	87	10	200
28	1,3-Dichlorobenzene	20	17.4	87	10	200
29	1,4-Dichlorobenzene	20	17.5	88	10	200
30	1,3-Dichloropropane	20	18.6	93	10	200
31	2,2-Dichloropropane	20	17.3	87	10	200
32	1,1-Dichloropropene	20	17.2	86	10	200
33	cis-1,4-Dichloro-2-Butene	10	8.1	81	10	200
34	trans-1,4-Dichloro-2-Butene	10	8.5	85	10	200
35	Dichlorodifluoromethane	20	17.0	85	10	200
36	1,1-Dichloroethane	20	17.7	89	10	200
37	1,2-Dichloroethane	20	18.4	92	10	200
38	Hexachlorobutadiene	20	14.6	73	10	20
39	Isopropylbenzene	20	17.1	86	10	20

Industrial & Environmental Analysts, Inc. (IEA)
GC/MS PURGEABLES SW-846 METHOD 8260
Laboratory Control Spike (LCS)

IEA Project Number: 631-969
IEA Sample Number: 9704206
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Project I.D.: 170.010 Swepsonville Landfill
Sample Identification: VLCSLC

Date Analyzed: 04/16/97
Analysis By: Moore
Matrix: Water

Number	Compound	Amount Spiked (ug/L)	Amount Recovered (ug/L)	SLCS % REC	Control Limits Lower (%REC)	Upper (%REC)
40	1,1-Dichloroethene	20	17.3	87	10	200
41	cis-1,2-Dichloroethene	20	17.8	89	10	200
42	trans-1,2-Dichloroethene	20	17.3	87	10	200
43	1,2-Dichloropropane	20	16.7	84	10	200
44	cis-1,3-Dichloropropene	20	15.9	80	10	200
45	trans-1,3-Dichloropropene	20	16.6	83	10	200
46	Ethylbenzene	20	18.1	91	10	200
47	Ethyl Methacrylate	20	17.1	86	10	200
48	2-Hexanone	20	16.9	85	10	200
49	Iodomethane	20	16.7	84	10	200
50	p-Isopropyltoluene	20	17.1	86	10	200
51	Methacrylonitrile	20	17.1	86	10	200
52	Methylene Chloride	20	17.8	89	10	200
53	Methyl Methacrylate	20	16.6	83	10	200
54	4-Methyl-2-Pentanone	20	17.2	86	10	200
55	Methyl-tert-Butyl Ether	20	17.0	85	10	200
56	Naphthalene	20	11.9	60	10	200
57	Pentachloroethane	20	18.6	93	10	200
58	n-Propylbenzene	20	16.9	85	10	200
59	Styrene	20	17.8	89	10	200
60	1,1,1,2-Tetrachloroethane	20	17.7	89	10	200
61	1,1,2,2-Tetrachloroethane	20	18.4	92	10	200
62	Tetrachloroethene	20	16.2	81	10	200
63	Toluene	20	17.4	87	10	200
64	1,2,4-Trichlorobenzene	20	11.6	58	10	200
65	1,1,1-Trichloroethane	20	16.4	82	10	200
66	1,1,2-Trichloroethane	20	17.7	89	10	200
67	Trichloroethene	20	16.7	84	10	200
68	Trichlorofluoromethane	20	18.3	92	10	200
69	1,2,3-Trichlorobenzene	20	14.8	74	10	200
70	1,2,4-Trimethylbenzene	20	16.8	84	10	200
71	1,3,5-Trimethylbenzene	20	16.9	85	10	200
72	1,2,3-Trichloropropane	20	17.2	86	10	200
73	Vinyl Acetate	20	16.4	82	10	200
74	Vinyl Chloride	20	15.4	77	10	200
75	Xylenes (Total)	60	54.0	90	10	200

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
8260 WATER VOLATILE SURROGATE RECOVERY

IEA Project No.: 631-969

Sample ID	SURR 1	SURR 2	SURR 3
VBLKLB	108	102	100
9704206-01	109	104	101
9704206-02	108	103	101
VBLKLD	108	103	101
9704206-03	109	103	102
9704206-04	111	104	102
9704206-05	109	98	101
9704206-09	111	105	100
9704206-10	110	104	102
9704206-11	111	104	101
VBLKLC	108	102	100
9704206-06	109	103	100
9704206-07	109	107	100
9704206-08	108	102	103
9704213-06MS	107	102	100
9704213-06MSD	108	104	98
VLCSLC	110	116	100
VBLKLE	110	104	102
9704206-12	110	103	103
9704206-13	109	109	98

	QC Limits
S1 = Toluene-d8	(71-116)
S2 = 4-Bromofluorobenzene	(57-131)
S3 = 1,2-Dichloroethane-d4	(70-105)

Form 8260SUR.WK1 Rev. 110195

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206Ø1 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: Ø4/1Ø/97
Client Proj. I.D.: 17Ø.ØIØ Swepsonville Landfill Date Sampled: Ø4/Ø8/97
Sample I.D.: MW-1

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6Ø1Ø	3Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
ARSENIC	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
BARIUM	SW846 6Ø1Ø	5ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
BERYLLIUM	SW846 6Ø1Ø	2.ØØ	2.1Ø	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
CADMIUM	SW846 6Ø1Ø	1.ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
CHROMIUM	SW846 6Ø1Ø	1Ø.Ø	1Ø.5	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
COBALT	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
COPPER	SW846 6Ø1Ø	2ØØ	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
LEAD	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
MERCURY	SW846 747Ø	Ø.5ØØ	BQL	Ø4/15/97	Ø4/16/97	PW	R1Ø817	Ø4159701H
NICKEL	SW846 6Ø1Ø	5Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
SELENIUM	SW846 6Ø1Ø	2Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
SILVER	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
THALLIUM	SW846 6Ø1Ø	1Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
VANADIUM	SW846 6Ø1Ø	4Ø.Ø	BQL	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P
ZINC	SW846 6Ø1Ø	5Ø.Ø	86.4	Ø4/11/97	Ø4/15/97	FXW	R1Ø863	Ø4119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420602 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-2

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	21.0	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	12.1	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	73.2	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	81.4	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420603 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-3

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	10.1	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	1280	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	4.25	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	2.38	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	137	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	57.7	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	250	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	17.9	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	72.1	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	395	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	353	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420604 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-4

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	19.2	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420605 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-5

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	46.4	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	42.0	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	65.7	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420606 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-6

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	48.3	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	13.2	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	53.1	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	104	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420607 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-7A

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420608 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-7B

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	2320	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	9.36	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	6.61	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	141	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	165	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	265	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	22.1	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	109	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	766	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	858	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206ø9 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: ø4/1ø/97
Client Proj. I.D.: 17ø.øø1ø Swepsonville Landfill Date Sampled: ø4/øø/97
Sample I.D.: MW-8A

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6ø1ø	3ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
ARSENIC	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
BARIUM	SW846 6ø1ø	5øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
BERYLLIUM	SW846 6ø1ø	2.øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
CADMIUM	SW846 6ø1ø	1.øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
CHROMIUM	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
COBALT	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
COPPER	SW846 6ø1ø	2øø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
LEAD	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
MERCURY	SW846 747ø	ø.5øø	BQL	ø4/15/97	ø4/16/97	PW	R1ø817	ø4159ø1H
NICKEL	SW846 6ø1ø	5ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
SELENIUM	SW846 6ø1ø	2ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
SILVER	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
THALLIUM	SW846 6ø1ø	1ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
VANADIUM	SW846 6ø1ø	4ø.ø	BQL	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P
ZINC	SW846 6ø1ø	5ø.ø	5ø.8	ø4/11/97	ø4/15/97	FXW	R1ø863	ø4119ø1P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420610 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-8B

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	13.0	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	14.0	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	41.3	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	174	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420611 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: MW-9

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	4.16	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	76.6	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	117	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	14.8	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	57.1	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	161	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	199	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 9704206 12 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
Client Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: SW-1

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
MERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report

IEA Project #: 631_969
IEA Sample #: 970420613 Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC Date Received: 04/10/97
lient Proj. I.D.: 170.010 Swepsonville Landfill Date Sampled: 04/08/97
Sample I.D.: SW-2

arameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
NTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
RSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
HROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
OBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
OPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
EAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H
ICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
HALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
INC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 631_969
Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC
Client Proj. I.D.: 170.010 Swepsonville Landfill
Sample Number: PBW 04119701P

Parameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ANTIMONY	SW846 6010	30.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ARSENIC	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BARIUM	SW846 6010	500	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
BERYLLIUM	SW846 6010	2.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CADMIUM	SW846 6010	1.00	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
CHROMIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COBALT	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
COPPER	SW846 6010	200	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
LEAD	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
NICKEL	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SELENIUM	SW846 6010	20.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
SILVER	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
THALLIUM	SW846 6010	10.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
VANADIUM	SW846 6010	40.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P
ZINC	SW846 6010	50.0	BQL	04/11/97	04/15/97	FXW	R10863	04119701P

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
PREPARATION BLANKS

IEA Project #: 631_969
Matrix: WATER
Client Name: BPA ENVIRONMENTAL & ENG., INC
lient Proj. I.D.: 170.010 Swepsonville Landfill
Sample Number: PBW 04159701H

arameter	Method	Quant Limit	Result (ug/l)	Date Prepared	Date Analyzed	Analyst	IEA Run	Prep Batch
ERCURY	SW846 7470	0.500	BQL	04/15/97	04/16/97	PW	R10817	04159701H

:orresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606,
970420607, 970420608, 970420609, 970420610, 970420611, 970420612,
970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F,
970422806F, 970422807F

:omments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
LABORATORY CONTROL SAMPLE

IEA Project #: 631_969
IEA Sample #: LCSW 04119701P
Matrix: WATER

Parameter	Method	Results (ug/l) True	Found	Limits Lower	Upper	% RCY	Date Analyzed	IEA Run	Prep Batch
ANTIMONY	SW846 6010	5000	4920	4000	6000	98.4	04/15/97	R10863	04119701P
ARSENIC	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
BARIUM	SW846 6010	5000	5090	4000	6000	102.	04/15/97	R10863	04119701P
BERYLLIUM	SW846 6010	5000	5190	4000	6000	104.	04/15/97	R10863	04119701P
CADMIUM	SW846 6010	5000	5110	4000	6000	102.	04/15/97	R10863	04119701P
CHROMIUM	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
COBALT	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
COPPER	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
LEAD	SW846 6010	5000	5050	4000	6000	101.	04/15/97	R10863	04119701P
NICKEL	SW846 6010	5000	5030	4000	6000	101.	04/15/97	R10863	04119701P
SELENIUM	SW846 6010	5000	5080	4000	6000	102.	04/15/97	R10863	04119701P
SILVER	SW846 6010	500	491	400	600	98.2	04/15/97	R10863	04119701P
THALLIUM	SW846 6010	5000	5170	4000	6000	103.	04/15/97	R10863	04119701P
VANADIUM	SW846 6010	5000	5060	4000	6000	101.	04/15/97	R10863	04119701P
ZINC	SW846 6010	5000	5460	4000	6000	109.	04/15/97	R10863	04119701P

Comments:

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

EA Project #: 631_969
IEA Sample #: 970406604
Matrix: WATER

arameter	Method	Duplicate Analysis Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
NTIMONY	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
RSENIC	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ARIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ERYLLIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ADMIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
HROMIUM	SW846 6010	25.1	BQL		04/15/97	R10863	R10863	04119701P
OBALT	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
OPPER	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
EAD	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ICKEL	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ELENIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ILVER	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
HALLIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
ANADIUM	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P
INC	SW846 6010	BQL	BQL		04/15/97	R10863	R10863	04119701P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

orresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

omments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
DUPLICATE ANALYSIS

IEA Project #: 631_969
IEA Sample #: 970420613
Matrix: WATER

Parameter	Method	Duplicate Analysis Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
MERCURY	SW846 7470	BQL	BQL		04/16/97	R10817	R10817	04159701H

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 631_969
IEA Sample #: 970406604
Matrix: WATER

Spike Results (ug/l)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
ANTIMONY	SW846 6010	500	BQL	417	83.5	04/15/97	R10863	R10863	04119701P
ARSENIC	SW846 6010	2000	BQL	1880	94.3	04/15/97	R10863	R10863	04119701P
BARIUM	SW846 6010	2000	BQL	1880	94.1	04/15/97	R10863	R10863	04119701P
BERYLLIUM	SW846 6010	50.0	BQL	47.8	95.6	04/15/97	R10863	R10863	04119701P
CADMIUM	SW846 6010	50.0	BQL	47.0	94.1	04/15/97	R10863	R10863	04119701P
CHROMIUM	SW846 6010	200	25.1	194	84.6	04/15/97	R10863	R10863	04119701P
COBALT	SW846 6010	500	BQL	460	92.1	04/15/97	R10863	R10863	04119701P
COPPER	SW846 6010	250	BQL	238	95.3	04/15/97	R10863	R10863	04119701P
LEAD	SW846 6010	500	BQL	473	94.6	04/15/97	R10863	R10863	04119701P
NICKEL	SW846 6010	500	BQL	474	94.8	04/15/97	R10863	R10863	04119701P
SELENIUM	SW846 6010	2000	BQL	1900	94.9	04/15/97	R10863	R10863	04119701P
SILVER	SW846 6010	50.0	BQL	47.8	95.5	04/15/97	R10863	R10863	04119701P
THALLIUM	SW846 6010	2000	BQL	1900	95.0	04/15/97	R10863	R10863	04119701P
VANADIUM	SW846 6010	500	BQL	474	94.8	04/15/97	R10863	R10863	04119701P
ZINC	SW846 6010	500	BQL	500	100.	04/15/97	R10863	R10863	04119701P

%R = ((SSR - SR) / SA) * 100 Control Limits: 75-125%

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE RESULTS

IEA Project #: 631_969
IEA Sample #: 970420613
Matrix: WATER

Spike Results (ug/l)

Parameter	Method	SA	SR	SSR	%RCY	Date Analyzed	Samp Run	Spike Run	Prep Batch
MERCURY	SW846 7470	1.00	BQL	1.00	100.	04/16/97	R10817	R10817	04159701H

%R = ((SSR - SR) / SA) * 100 Control Limits: 75-125%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

:EA Project #: 631_969
IEA Sample #: 970406604S
Matrix: WATER

Spike Duplicate Results

Parameter	Method	Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
ANTIMONY	SW846 6010	417	445	6.42	04/15/97	R10863	R10863	04119701P
ARSENIC	SW846 6010	1880	1920	1.76	04/15/97	R10863	R10863	04119701P
BARIUM	SW846 6010	1880	1900	0.98	04/15/97	R10863	R10863	04119701P
BERYLLIUM	SW846 6010	47.8	48.6	1.67	04/15/97	R10863	R10863	04119701P
CADMIUM	SW846 6010	47.0	48.9	3.80	04/15/97	R10863	R10863	04119701P
CHROMIUM	SW846 6010	194	196	0.96	04/15/97	R10863	R10863	04119701P
COBALT	SW846 6010	460	470	1.98	04/15/97	R10863	R10863	04119701P
COPPER	SW846 6010	238	240	0.98	04/15/97	R10863	R10863	04119701P
LEAD	SW846 6010	473	483	2.02	04/15/97	R10863	R10863	04119701P
NICKEL	SW846 6010	474	483	1.84	04/15/97	R10863	R10863	04119701P
SELENIUM	SW846 6010	1900	1920	1.09	04/15/97	R10863	R10863	04119701P
SILVER	SW846 6010	47.8	48.3	1.04	04/15/97	R10863	R10863	04119701P
THALLIUM	SW846 6010	1900	1940	1.87	04/15/97	R10863	R10863	04119701P
VANADIUM	SW846 6010	474	482	1.66	04/15/97	R10863	R10863	04119701P
ZINC	SW846 6010	500	506	1.16	04/15/97	R10863	R10863	04119701P

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970406604, 970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613

Comments:

Client-specific quantitative limits used.

Industrial & Environmental Analysts, Inc. (IEA)
Level 2 Metals Results Report
SPIKE DUPLICATE RESULTS

IEA Project #: 631_969
IEA Sample #: 970420613S
Matrix: WATER

Spike Duplicate Results

Parameter	Method	Sample (ug/l)	Duplicate (ug/l)	RPD %	Date Analyzed	Samp Run	Dup Run	Prep Batch
MERCURY	SW846 7470	1.00	0.977	2.53	04/16/97	R10817	R10817	04159701H

$$RPD = \frac{S-D}{(S+D)/2} \times 100$$

Control Limits: +/- 20%

Corresponding Samples:
970420601, 970420602, 970420603, 970420604, 970420605, 970420606, 970420607, 970420608, 970420609, 970420610, 970420611, 970420612, 970420613, 970422801F, 970422802F, 970422803F, 970422804F, 970422805F, 970422806F, 970422807F

Comments:

Client-specific quantitative limits used.

IEA
An Aquarion Company
3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 81618

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☐ OTHER Landfill No

☐ STATE CERT. SPECIFY

Page 1 of 2

COMPANY/LOCATION: BFA Environmental Eng Inc.

PROJECT #	PROJECT NAME
170 010	Simpson NC Landfill

SAMPLERS: *(PLEASE PRINT)* Ken Vinsky, Julia I Geniac

SIGNATURE: Ken Vinsky, Julia I. Geniac

SAMPLE I.D. (28 CHARACTER MAXIMUM)	DATE	TIME	G/C	PRES.	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	MATRIX OTHER	REQUESTED PARAMETERS: 40 CFR 258 Appendix I	REQUESTED PARAMETERS: 40 CFR 258 Appendix II
mw-1	4/5/97	4:24p	G	✓	3		✓		✓	✓
mw-2	4/5	4:45p	G	✓	3		✓		✓	✓
mw-3	4/5	1:30p	G	✓	3		✓		✓	✓
mw-4	4/5	12:30p	G	✓	3		✓		✓	✓
mw-3	4/5	8:30A		✓	2		✓			✓
mw-5	4/5	11:40A		✓	1		✓		✓	
mw-6	4/5	11:50A		✓	3		✓		✓	✓
mw-7A	4/5	11:30A		✓	3		✓		✓	✓
mw-7B	4/5	11:00A		✓	3		✓		✓	✓

RELINQUISHED BY *(SIGNATURE)*	DATE	TIME	RECEIVED BY	DATE	TIME
[signature]	4/4/97		Julia I. Geniac	4/7/97	
Julia I. Geniac	4/7/97	5:00pm	[signature]	4/10/97	0930

IEA QUOTE NO.	IEA PROJECT NO.
W970409D	631-969
PROJECT MANAGER (PLEASE PRINT)	**P.O. NO.**
Wes Scalott	170.010

RECEIVED FOR LAB BY: [signature]

REMARKS ON SAMPLE RECEIPT

☒ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT
☒ CHILLED ☐ SEE REMARKS

IEA REMARKS

RECEIPT TEMPERATURE= 2°C

FIELD REMARKS / COMMENTS

Please report using NC Rules

IEA
An Aquarion Company

3000 WESTON PKWY.
CARY, N.C. 27513
PH # 919-677-0090
FAX # 919-677-0427

CHAIN OF CUSTODY RECORD

NO. 62941

REGULATORY CLASSIFICATION - PLEASE SPECIFY

☐ NPDES ☐ DRINKING WATER ☐ RCRA ☑ OTHER N.C. Landfill

COMPANY: BPA Env. Eng. Inc

Page 2 of 2

PROJECT #: 170.010

PROJECT NAME: Simpsonville Landfill

SAMPLERS: (SIGNATURE) Kenneth V. Kay (Kenneth V. Kay) Julia I. Geniac

SAMPLE I.D.	DATE	TIME	GRAB	COMP	STATION LOCATION	# OF CONTAINERS	SOIL	WATER	App I metals	App I vol NC 524.2
mw-9A	4/9/97	6:45p		✓	Simpsonville L.F.	3		✓	✓	✓
mw-9B	4/9/97	5:15p		✓	Simpsonville L.F.	3		✓	✓	✓
mw-9	4/9/97	5:20p		✓	Simpsonville L.F.	3		✓	✓	✓
SW-1	4/9/97	9:15A		✓	Simpsonville L.F.	3		✓	✓	✓
SW-2	4/9/97	1:45p		✓	Simpsonville L.F.	3		✓	✓	✓

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
Julia I. Geniac	4/9/97	5:00 pm			
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED FOR LAB BY	DATE	TIME
			[illegible]	4/10/97	0930

IEA QUOTE NO.	IEA RUSH NO.
—	—
PROJECT MANAGER (PLEASE PRINT)	**P.O. NO.**
Wes Scott	170.010

REMARKS ON SAMPLE RECEIPT

☒ BOTTLE INTACT ☐ CUSTODY SEALS
☐ PRESERVED ☐ SEALS INTACT

LAB REMARKS: 2°C 631-969

FIELD REMARKS: Please report using N.C. PQLs

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(910) 272-9713

May 15, 1997

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1997." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

MAY 1997
Received
Solid Waste
Section

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1997

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 17, 1997

BPA Environmental & Engineering, Inc.

(910) 272-9713 2641-G Randleman Road, Greensboro, NC 27406

I hereby certify this 17th day of November 1997, that this report was prepared by me or under my direct supervision.

Julia I. Geniac
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 1

2.0 INTRODUCTION 2

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- 4.1 Monitoring Well Sampling 2
- 4.2 Stream Sampling 3

5.0 RESULTS 3
- 5.1 Groundwater 3
- 5.2 Surface Water 5

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TABLES

Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, October 7, 1997

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, October 7, 1997

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, October 7, 1997

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1997

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on October 7, 1997. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of one inorganic constituent (chromium in MW-3 and MW-6) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Five inorganic constituents (arsenic, barium, chromium, nickel, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of five volatile organic constituents (1,1-dichloroethene in MW-2; cis-1,2-dichloroethene in MW-4; tetrachloroethene in MW-2 and MW-4; trichloroethene in MW-2 and MW-4; and vinyl chloride in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

One Appendix I inorganic constituent for which no 15A NCAC 2B Standard for Class B,C surface waters has been established (zinc in SW-1) was detected in one surface water sample. No volatile organic constituents were detected in either of the two surface water samples.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

This sampling task included sampling eleven monitoring wells and two locations on a nearby stream for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on October 7, 1997. The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on October 7, 1997. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed six constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Chromium was detected in MW-3 at 0.076 ppm and MW-6 at 0.064 ppm. The 2L Standard is 0.05 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 8.0 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 220.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 9.9 ppb and MW-4 at 58.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 14.0 ppb and MW-4 at 39.0 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 12.0 ppb. The 2L Standard is 0.015 ppb

The following seven constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.016 ppm and MW-9 at 0.011 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 0.59 ppm and MW-3 at 0.76 ppm. The 2L Standard is 2.0 ppm.

- Chromium was detected in MW-1 at 0.011 ppm, MW-2 at 0.039 ppm, MW-5 at 0.019 ppm, MW-7A at 0.018 ppm, MW-7B at 0.016 ppm, and MW-8B at 0.026 ppm. The 2L Standard is 0.05 ppm.

- Nickel was detected in MW-3 at 0.063 ppm and MW-9 at 0.059 ppm. The 2L Standard is 0.1 ppm.

- Zinc was detected in MW-1 at 0.13 ppm, MW-2 at 0.18 ppm, MW-3 at 0.25 ppm, MW-5 at 0.27 ppm, MW-6 at 0.082 ppm, MW-7A at 0.052 ppm, MW-7B at 0.078 ppm, MW-8A at 0.076 ppm, MW-8B at 0.26 ppm, and MW-9 at 0.34 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 42.0 ppb and MW-4 at 24.0 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 13.0 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following three potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as standards for naturally occurring constituents.

- Beryllium was detected in MW-2 at 0.002 ppm, MW-3 at 0.002 ppm, MW-8B at 0.002 ppm, and MW-9 at 0.003 ppm.

- Cobalt was detected in MW-2 at 0.039 ppm, MW-3 at 0.066 ppm, MW-4 at 0.023 ppm, MW-5 at 0.011 ppm, MW-8B at 0.037 ppm, and MW-9 at 0.099 ppm.

- Vanadium was detected in MW-2 at 0.15 ppm, MW-5 at 0.042 ppm, and MW-9 at 0.13 ppm.

5.2 Surface Water

The results of the laboratory analyses for Appendix I constituents in the surface water samples are summarized in Tables 2 and 3 and the complete laboratory reports are included in Appendix B.

The following constituent was detected in one of the samples on the date the samples were collected. No 15A NCAC 2B Standards for Class B,C Surface Water has been set for this constituent.

- Zinc was detected in SW-1 at 0.64 ppm.

No other inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 4, 1994).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
OCTOBER 7, 1997

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	65.5°F	66.2°F	64.2°F	64.8°F	59.7°F	62.8°F	61.2°F	61.7°F
Specific Conductance	94.7 μMHOs	163.6 μMHOs	74.6 μMHOs	399 μMHOs	116.6 μMHOs	111.3 μMHOs	101.3 μMHOs	100.5 μMHOs
pH	5.1	5.4	5.9	5.6	5.6	6.4	6.2	6.2

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.6°F	58.8°F	67.5°F	65.4°F	68.2°F
Specific Conductance	48 μMHOs	35.7 μMHOs	44.7 μMHOs	128.4 μMHOs	158 μMHOs
pH	5.6	5.5	6.6	7.1	6.8

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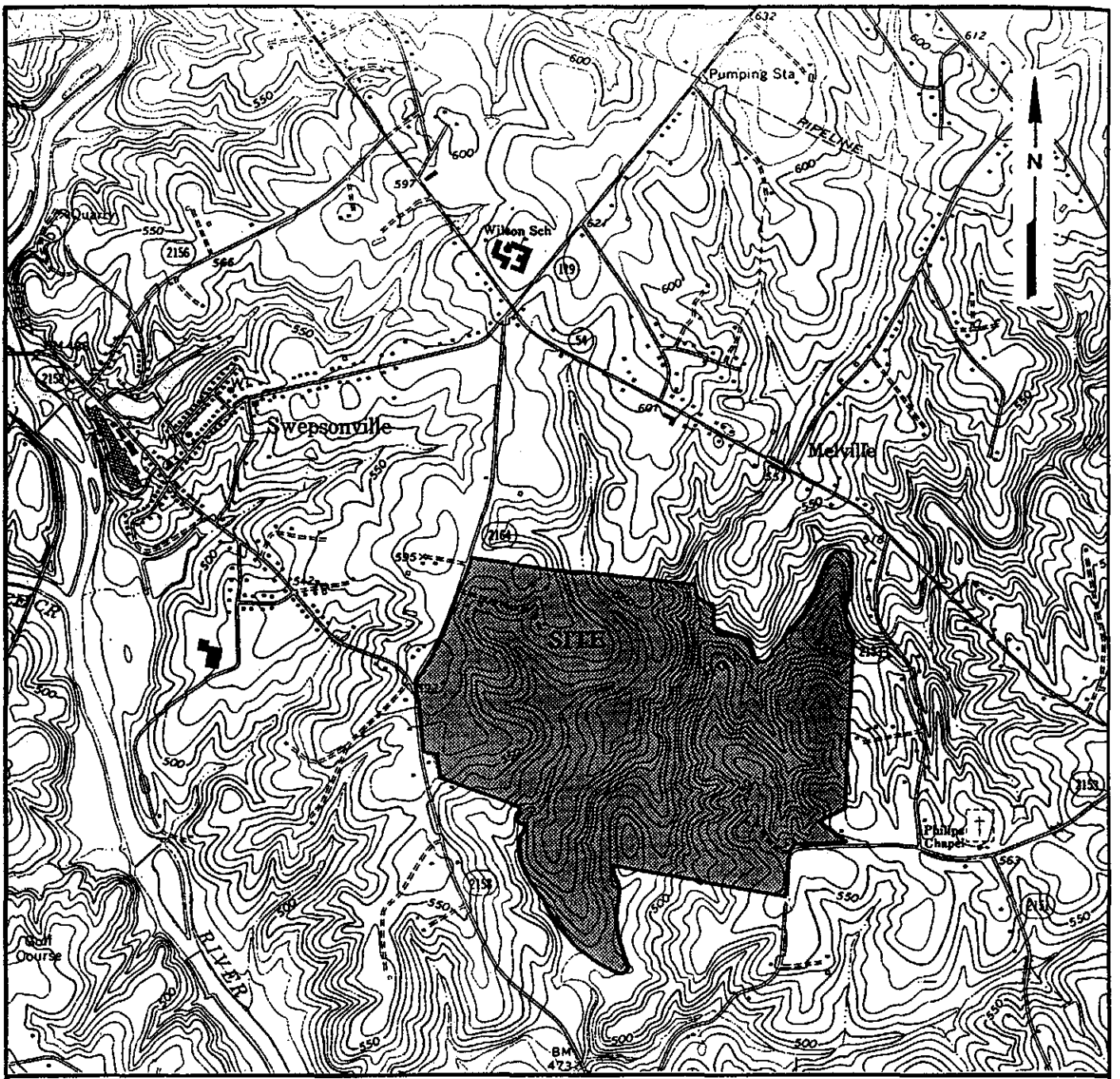
TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
OCTOBER 7, 1997

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	0.016	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.011	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	0.59	0.76	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	BQL	0.002	0.002	BQL	BQL	BQL	BQL	BQL	BQL	0.002	0.003	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	0.011	0.039	0.076	BQL	0.019	0.064	0.018	0.016	BQL	0.026	BQL	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	BQL	0.039	0.066	0.023	0.011	BQL	BQL	BQL	BQL	0.037	0.099	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	0.063	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.059	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	BQL	0.15	BQL	BQL	0.042	BQL	BQL	BQL	BQL	BQL	0.13	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.13	0.18	0.25	BQL	0.27	0.082	0.052	0.078	0.076	0.26	0.34	0.64	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

C:\123R23\SWP10972.WK1



MEBANE QUADRANGLE
NORTH CAROLINA
USGS 7.5 MINUTE TOPOGRAPHIC SERIES
1969

1000 0 2000 3000
SCALE IN FEET

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

BPA Environmental & Engineering, Inc.

SITE LOCATION MAP

FIGURE 1

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 3:55 pm to 4:10 pm

Sample Date October 7, 1997

Sample Time 4:15 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	24.57 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	9.18 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	1.50 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	65.5°F
2)	Specific Conductance	94.7 μmhos
3)	pH	5.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 3:00 pm to 3:05 pm

Sample Date October 7, 1997

Sample Time 3:15 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.93 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	2.37 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method		Teflon Bailer
2)	Sample Method		Teflon Bailer
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h)		–
	b) 4" well . . . . (v = 0.651 x h)		0.39 gal.
	c) 6" well . . . . (v = 1.5 x h)		
4)	Volume of water removed prior to sampling		0.5 gal.
5)	Was well purged DRY? (circle one)	(YES)	NO

Field Analysis

1)	Temperature	66.2°F
2)	Specific Conductance	163.6 μmhos
3)	pH	5.4
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 2:10 pm to 2:25 pm

Sample Date October 7, 1997

Sample Time 2:35 pm

Weather Clear, 85-90°F

Water Level and Well Data

1)	Depth to water from measuring point	11.14 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	12.70 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	
	b) 4" well . . . . (v = 0.651 x h)	2.07 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.2°F
2)	Specific Conductance	74.6 μmhos
3)	pH	5.9
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 1:30 pm to 1:50 pm

Sample Date October 7, 1997

Sample Time 1:50 pm

Weather Clear, 80-90°F

Water Level and Well Data

1)	Depth to water from measuring point	35.76 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	14.14 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	2.3 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.8°F
2)	Specific Conductance	399 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date October 7, 1997

Purge Time 10:15 am to 10:20 am

Sample Date October 7, 1997

Sample Time 10:30 am/4:30 pm

Weather Clear, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	16.79 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	2.62 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.43 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	.40 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59.7°F
2)	Specific Conductance	116.6 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 10:55 am to 11:30 am

Sample Date October 7, 1997

Sample Time 11:30 am

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	21.37 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	31.30 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	5.10 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	15.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	62.8°F
2)	Specific Conductance	111.3 μmhos
3)	pH	6.4
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 12:00 pm to 12:55 pm

Sample Date October 7, 1997

Sample Time 1:15 pm

Weather Clear, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.04 ft.
2)	Depth to well bottom from measuring point	63.30 ft.
3)	Height of water column (h)	37.26 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	6.07 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	18.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	61.2°F
2)	Specific Conductance	101.3 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 12:05 pm to 12:10 pm

Sample Date October 7, 1997

Sample Time 12:30 pm

Weather Clear, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	26.81 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	5.65 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.92 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	61.7°F
2)	Specific Conductance	100.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 9:05 am to 9:55 am

Sample Date October 7, 1997

Sample Time 10:00 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	24.55 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	38.80 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	6.32 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	19.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.6°F
2)	Specific Conductance	48 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 7, 1997

Purge Time 9:10 am to 9:12 am

Sample Date October 7, 1997

Sample Time 9:30 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	23.88 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	1.82 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h)	—
	b) 4" well . . . . (v = 0.651 x h)	0.30 gal.
	c) 6" well . . . . (v = 1.5 x h)	
4)	Volume of water removed prior to sampling	0.3 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58.8°F
2)	Specific Conductance	35.7 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: Yes (No)

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date October 7, 1997

Purge Time 3:35 pm to 3:45 pm

Sample Date October 7, 1997

Sample Time 3:50 pm

Weather Sunny, 80-90°F

Water Level and Well Data

1)	Depth to water from measuring point	18.33 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	8.92 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.45 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	67.5°F
2)	Specific Conductance	44.7 μmhos
3)	pH	6.6
4)	Physical Appearance and Odor	Tan and orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-1

Sampled by Ken Vanhoy

Sample Date October 7, 1997

Sample Time 11:00 am

Weather Sunny, 70-80°F

Field Analysis

1)	Temperature		65.4°F
2)	Specific Conductance		128.4 μmhos
3)	pH		7.1
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Sample Date October 7, 1997

Sample Time 2:20 pm

Weather Sunny, 85-90°F

Field Analysis

1)	Temperature		68.2°F
2)	Specific Conductance		158 μmhos
3)	pH		6.8
4)	Physical Appearance and Odor	Clear, no odor	

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

NOV 1997 RECEIVED

ENCO Laboratories
DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR9107
DATE SUBMITTED: October 9, 1997
DATE REPORTED : October 24, 1997
DATE AMENDED : November 3, 1997

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance CTY. Swepsonville

10/07/97

#1	- MW-1	@ 16:15
#2	- MW-2	@ 15:15
#3	- MW-3	@ 14:35
#4	- MW-4	@ 13:50
#5	- MW-5	@ 10:30
#6	- MW-6	@ 11:30
#7	- MW-7A	@ 13:15
#8	- MW-7B	@ 12:30
#9	- MW-8A	@ 10:00
#10	- MW-8B	@ 09:30
#11	- MW-9	@ 15:30
#12	- SW-1	@ 11:00
#13	- SW-2	@ 14:20
#14	- TRIP BLANK	

SENIOR CHEMIST Kath B. Brooks
Kathleen Brooks

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	8.0	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	42	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	13	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	14	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	9.9	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	101	94	79-136
D8-Toluene	114	115	88-115
Bromofluorobenzene	102	97	72-132
Date Analyzed	10/14/97	10/14/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	**0.59**	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	**0.002**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.011**	**0.039**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	**0.039**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/15/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	**0.15**	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.13**	**0.18**	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	12		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	24		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	220	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	39		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

D1 = Analyte value determined from a 1:2.5 dilution.
U = Compound was analyzed for but not detected to the level shown.

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
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PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	58	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	100	98	79-136
D8-Toluene	113	107	88-115
Bromofluorobenzene	106	100	72-132
Date Analyzed	10/14/97	10/14/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	**0.016**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	**0.76**	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	**0.002**	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.076**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	**0.066**	**0.023**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	**0.063**	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
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DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.400 U	0.400 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.25	0.050 U	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	98	101	79-136
D8-Toluene	113	110	88-115
Bromofluorobenzene	95	101	72-132
Date Analyzed	10/16/97	10/16/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	**0.019**	**0.064**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	**0.011**	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	**0.042**	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.27**	**0.082**	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	101	99	79-136
D8-Toluene	115	110	88-115
Bromofluorobenzene	99	100	72-132
Date Analyzed	10/16/97	10/16/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.018	0.016	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.052	0.078	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	90	92	79-136
D8-Toluene	112	111	88-115
Bromofluorobenzene	95	98	72-132
Date Analyzed	10/20/97	10/20/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	**0.002**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.010 U	**0.026**	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	**0.037**	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/15/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/15/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.076	0.26	mg/L
Date Analyzed		10/15/97	10/15/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
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REFERENCE : 0170.010
PROJECT NAME : Alamance CTY.
Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	80	97	79-136
D8-Toluene	97	93	88-115
Bromofluorobenzene	85	100	72-132
Date Analyzed	10/20/97	10/20/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.011	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.003	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.099	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.059	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
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PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/15/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	**0.13**	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	**0.34**	**0.064**	mg/L
Date Analyzed		10/13/97	10/13/97	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

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

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
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REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	SW-2	LAB BLANK #1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	93	105	79-136
D8-Toluene	87	115	88-115
Bromofluorobenzene	92	104	72-132
Date Analyzed	10/20/97	10/14/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Barium	6010	0.500 U	0.500 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Copper	6010	0.200 U	0.200 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		10/14/97	10/14/97	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
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PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/13/97	10/13/97	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/13/97	10/13/97	

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

ENCO LABORATORIES
REPORT # : OR9107
DATE REPORTED: October 24, 1997
DATE AMENDED : November 3, 1997
REFERENCE : 0170.010
PROJECT NAME : Alamance CTY. Swepsonville

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

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

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

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RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	LAB BLANK #2	Units
Bromodichloromethane	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	94	79-136
D8-Toluene	110	88-115
Bromofluorobenzene	102	72-132
Date Analyzed	10/20/97	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260 (MW-1,MW-2,MW-3,MW-4)				
1,1-Dichloroethene	95/ 95/101	56-136	<1	19
Benzene	96/ 93/ 96	66-115	3	8
Trichloroethene	110/106/108	68-110	4	8
Toluene	98/ 94/ 98	68-110	4	9
Chlorobenzene	99/ 98/ 99	50-131	1	9
EPA Method APPENDIX I, 8260 (MW-4,MW-8A,MW-8B,MW-9,SW-1,SW-2)				
1,1-Dichloroethene	95/ 95/115	56-136	<1	19
Benzene	96/ 93/ 88	66-115	3	8
Trichloroethene	110/106/109	68-110	4	8
Toluene	98/ 94/ 95	68-110	4	9
Chlorobenzene	99/ 98/ 94	50-131	1	9
EPA Method APPENDIX I, 8260 (MW-5,MW-6,MW-7A,MW-7B)				
1,1-Dichloroethene	95/ 95/114	56-136	<1	19
Benzene	96/ 93/ 92	66-115	3	8
Trichloroethene	110/106/112	68-110	4	8
Toluene	98/ 94/ 96	68-110	4	9
Chlorobenzene	99/ 98/ 91	50-131	1	9

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals				
Antimony, 6010	106/ 96/103	38-138	10	30
Arsenic, 6010	106/100/101	64-126	6	12
Barium, 6010	104/ 99/103	74-119	5	11
Beryllium, 6010	107/ 96/105	76-126	11	12
Cadmium, 6010	106/101/105	68-121	5	12
Chromium, 6010	102/ 97/101	73-120	5	10
Cobalt, 6010	113/101/110	76-120	11	17
Copper, 6010	106/ 94/ 99	75-123	12	11
Lead, 6010	107/101/105	68-126	6	19
Nickel, 6010	116/103/112	64-126	12	12
Selenium, 6010	106/100/102	65-129	6	10
Silver, 6010	85/ 80/ 82	69-121	6	12
Thallium, 6010	106/ 96/103	67-135	10	13
Vanadium, 6010	108/ 96/105	82-115	12	16
Zinc, 6010	110/ 95/112	63-131	15	24
Zinc, 6010	101/ 99/101	63-131	2	24

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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.

QSARF # 0624

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
Ph. (407) 826-5314 • Fax (407) 850-6945

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Alamance County Sweepsville
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Julia Genac & Ken Vanhoy
PHONE: 910 272 9713
FAX: 910 273 4057
CLIENT NAME: BA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, NC 27406-5159

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

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

REQUIRED ANALYSIS: As supplied DI water; Appendix I Volatiles; Appendix I metals + Hg

PRESERVATIVE: AC | HNO3

STATION	DATE	TIME	GRAB	COMP	SAMPLE IDENTIFICATION	SURFACE WATER	GROUND WATER	WASTEWATER	DRINKING WATER	SOIL/SOLID/SEDIMENT	NONAQUEOUS LIQUID	AIR	SLUDGE	OTHER	As supplied DI water (AC)	Appendix I Volatiles (HNO3)	Appendix I metals + Hg	REMARKS
1 MW-1	10.7.97	4:15pm	✓				✓								3	1		
2 MW-2	10.7.97	3:15pm	✓				✓								3	1		
3 MW-3	10.7.97	2:35pm	✓				✓								3	1		
4 MW-4	10.7.97	1:50pm	✓				✓								3	1		
5 MW-5	10.7.97	10:30am/ 4:30pm	✓				✓								3	1		
6 MW-6	10.7.97	11:30am	✓				✓								3	1		
7 MW-7A	10.7.97	1:19pm	✓				✓								3	1		
8 MW-7B	10.7.97	12:34pm	✓				✓								3	1		
9 MW-8A	10.7.97	10:00am	✓				✓								3	1		
10 MW-8B	10.7.97	9:30am	✓				✓								3	1		
11 MW-9	10.7.97	3.50pm	✓				✓								3	1		
12 SW-1	10.7.97	11:00am	✓			✓									3	1		
13 SW-2	10.7.97	2:20pm	✓			✓									3	1		

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☑ ORLANDO			K. Armstrong	9/26/97	5:30	Julia S. Genac	9/26/97	9:00am
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Julia S. Genac	10/8/97	4:00pm						
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
D. Weaver ☐ Jacksonville ☑ Orlando	10/9/97	10:35am	☐ YES ☐ NO	OR9107	

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(910) 272-9713

November 18, 1997

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

NOV 1997
Received
Solid Waste
Section

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, October 1997." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Wes Scarlett

Purge Date October 13, 1998

Purge Time 3:19 pm to 3:28 pm

Sample Date October 13, 1998

Sample Time 3:30 pm

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	24.47 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	9.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.51 gal.
4)	Volume of water removed prior to sampling	4.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	63.0°F
2)	Specific Conductance	88.6 μmhos
3)	pH	5.4
4)	Physical Appearance and Odor	Cloudy, tan, silty, no odor, rocks and grout bailed out of well

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Wes Scarlett

Purge Date October 13, 1998

Purge Time 1:59 pm to 2:00 pm

Sample Date October 13, 1998

Sample Time 2:20 pm

Weather Partly cloudy, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	26.95 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	2.35 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.38 gal.
4)	Volume of water removed prior to sampling	0.40 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	60.6°F
2)	Specific Conductance	159.6 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 1:25 pm to 1:35 pm

Sample Date October 13, 1998

Sample Time 1:40 pm

Weather Partly cloudy, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	11.34	ft.
2)	Depth to well bottom from measuring point	23.84	ft.
3)	Height of water column (h)	12.50	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.04	gal.
4)	Volume of water removed prior to sampling	6.1	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	61.9°F
2)	Specific Conductance	71.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett/Ken Vanhoy

Purge Date October 13, 1998

Purge Time 9:58 am to 10:10 am

Sample Date October 13, 1998

Sample Time 10:15 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	35.62 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	14.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.33 gal.
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.7°F
2)	Specific Conductance	360 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett/Ken Vanhoy

Purge Date October 13, 1998

Purge Time 9:30 am to 9:32 am

Sample Date October 13, 1998

Sample Time 9:40 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	15.82 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	3.59 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.59 gal.
4)	Volume of water removed prior to sampling	0.6 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	64.0°F
2)	Specific Conductance	113.6 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 10:30 am to 10:55 am

Sample Date October 13, 1998

Sample Time 11:00 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	21.39 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	31.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.1 gal.
4)	Volume of water removed prior to sampling	15.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.4°F
2)	Specific Conductance	99.9 μmhos
3)	pH	6.6
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 11:15 am to 11:59 am

Sample Date October 13, 1998

Sample Time 12:00 pm

Weather Cloudy, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	25.94	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	37.36	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.09	gal.
4)	Volume of water removed prior to sampling	18.3	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.6°F	
2)	Specific Conductance	99.3	μmhos
3)	pH	6.4	
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 11:18 am to 11:20 am

Sample Date October 13, 1998

Sample Time 11:30 am

Weather Sunny, 65-70°F

Water Level and Well Data

1)	Depth to water from measuring point	26.45 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	6.01 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.98 gal.
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59.4°F
2)	Specific Conductance	104.5 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 8:25 am to 9:00 am

Sample Date October 13, 1998

Sample Time 9:05 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	24.68 ft.
2)	Depth to well bottom from measuring point	63.35 ft.
3)	Height of water column (h)	38.67 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.30 gal.
4)	Volume of water removed prior to sampling	19.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	57.9°F
2)	Specific Conductance	45.3 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date October 13, 1998

Purge Time 8:30 am to 8:32 am

Sample Date October 13, 1998

Sample Time 8:40 am

Weather Sunny, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	24.05 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	1.65 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.27 gal.
4)	Volume of water removed prior to sampling	0.30 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	58°F
2)	Specific Conductance	36.0 μmhos
3)	pH	5.3
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Wes Scarlett

Purge Date October 13, 1998

Purge Time 2:55 pm to 3:04 pm

Sample Date October 13, 1998

Sample Time 3:05 pm

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	18.55 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	8.70 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.42 gal.
4)	Volume of water removed prior to sampling	4.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	62.6°F
2)	Specific Conductance	40.8 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date October 13, 1998

Source/Well SW-1

Time 10:45 am

Sampled by Ken Vanhoy

Weather Sunny, 65-70°F

Field Analysis

1)	Temperature		59.7°F
2)	Specific Conductance		79.9 μmhos
3)	pH		7.7
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well SW-2

Sampled by Ken Vanhoy

Purge Date October 13, 1998

Time 1:15 pm

Weather Partly cloudy, 70-75°F

Field Analysis

1)	Temperature		59°F
2)	Specific Conductance		86.8 μmhos
3)	pH		7.1
4)	Physical Appearance and Odor	Clear, no odor	

Environmental Conservation Laboratories
10207 General Drive
Orlando, Florida 32824
407 / 826-5314
Fax 407 / 850-6945
www.encolabs.com

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR3918
DATE SUBMITTED: October 15, 1998
DATE REPORTED : November 12, 1998

ATTENTION: Wes Scarlet

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance County/Swepsonville

10/13/98

#1	- MW-1	@ 15:30
#2	- MW-2	@ 14:20
#3	- MW-3	@ 13:40
#4	- MW-4	@ 10:15
#5	- MW-5	@ 09:40
#6	- MW-6	@ 11:00
#7	- MW-7A	@ 12:00
#8	- MW-7B	@ 11:30
#9	- MW-8A	@ 09:05
#10	- MW-8B	@ 08:40
#11	- MW-9	@ 15:05
#12	- SW-1	@ 10:45
#13	- SW-2	@ 13:15
#14	- TRIP BLANK	

PROJECT MANAGER Marcia C Terlep
Marcia C. Terlep

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	**15**	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	**140**	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**74**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**28**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**25**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**19**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	102	102	79-136
D8-Toluene	105	106	88-115
Bromofluorobenzene	96	98	72-132
Date Analyzed	10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	**0.55**	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0030**	**0.0060**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	**0.033**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.012**	**0.029**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	**0.012**	mg/L
Date Analyzed		10/23/98	10/29/98	
Vanadium	6010	**0.044**	**0.15**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.11**	**0.16**	mg/L
Date Analyzed		10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	**11**		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	**37**		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	**430**	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	**56**		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**74**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	96	107	79-136
D8-Toluene	100	106	88-115
Bromofluorobenzene	96	98	72-132
Date Analyzed	10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Arsenic	7060	**0.013**	0.010 U	mg/L
Date Analyzed		11/11/98	11/11/98	
Barium	6010	**0.84**	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.016**	**0.011**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.11**	**0.013**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.053**	**0.087**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	**0.22**	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	**0.0057**	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/27/98	10/27/98	
Thallium	7840	0.010 U	0.010 U	mg/L
Date Analyzed		11/12/98	11/12/98	
Vanadium	6010	**0.34**	**0.49**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.27**	**0.14**	mg/L
Date Analyzed		10/20/98	10/20/98	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	102	91	79-136
D8-Toluene	101	93	88-115
Bromofluorobenzene	101	92	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/20/98	10/23/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0060**	**0.0010**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.042**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.022**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U *	0.010 U	mg/L
Date Analyzed		11/12/98	10/23/98	
Vanadium	6010	**0.13**	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.23**	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	105	101	79-136
D8-Toluene	107	102	88-115
Bromofluorobenzene	106	101	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		11/04/98	11/04/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	0.0010 U	**0.0050**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	**0.014**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	**0.021**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	0.010 U *	mg/L
Date Analyzed		10/23/98	11/12/98	
Vanadium	6010	0.040 U	**0.10**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	**0.14**	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	100	97	79-136
D8-Toluene	98	98	88-115
Bromofluorobenzene	95	96	72-132
Date Analyzed	10/21/98	10/21/98	

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

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RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		11/04/98	10/29/98	
Arsenic	6010	0.010 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/29/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	**0.0020**	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.0010**	**0.0050**	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	**0.022**	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	**0.28**	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	**0.020**	mg/L
Date Analyzed		10/23/98	10/29/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/29/98	
Thallium	6010	0.010 U	0.010 U *	mg/L
Date Analyzed		10/23/98	11/12/98	
Vanadium	6010	0.040 U	**0.044**	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	**0.44**	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	97	104	79-136
D8-Toluene	92	103	88-115
Bromofluorobenzene	92	104	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/30/98	11/04/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	**0.74**	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	**0.0060**	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	**0.012**	0.0010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	**0.11**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	**0.14**	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	**0.011**	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

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RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/29/98	10/20/98	
Thallium	6010	0.010 U *	0.010 U	mg/L
Date Analyzed		11/12/98	10/23/98	
Vanadium	6010	**0.25**	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	**0.30**	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

* = Value determined by EPA Method 7840, GFAA.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	SW-2	TRIP BLANK	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	SW-2	TRIP BLANK	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	97	103	79-136
D8-Toluene	98	97	88-115
Bromofluorobenzene	95	96	72-132
Date Analyzed	10/21/98	10/21/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	TRIP BLANK	Units
Antimony	6010	0.030 U	NR	mg/L
Date Analyzed		10/20/98		
Arsenic	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Barium	6010	0.50 U	NR	mg/L
Date Analyzed		10/20/98		
Beryllium	6010	0.0020 U	NR	mg/L
Date Analyzed		10/20/98		
Cadmium	6010	0.0010 U	NR	mg/L
Date Analyzed		10/20/98		
Chromium	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Cobalt	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Copper	6010	0.20 U	NR	mg/L
Date Analyzed		10/20/98		
Lead	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Mercury	7470	0.00050 U	NR	mg/L
Date Analyzed		10/20/98		
Nickel	6010	0.050 U	NR	mg/L
Date Analyzed		10/20/98		

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

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TOTAL METALS	METHOD	SW-2	TRIP BLANK	Units
Selenium	6010	0.020 U	NR	mg/L
Date Analyzed		10/20/98		
Silver	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Thallium	6010	0.010 U	NR	mg/L
Date Analyzed		10/20/98		
Vanadium	6010	0.040 U	NR	mg/L
Date Analyzed		10/20/98		
Zinc	6010	**0.10**	NR	mg/L
Date Analyzed		10/20/98		

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	LAB BLANK	Units
Chloromethane	10 U	µg/L
Vinyl Chloride	10 U	µg/L
Bromomethane	10 U	µg/L
Chloroethane	10 U	µg/L
Trichlorofluoromethane	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	µg/L
Acetone	100 U	µg/L
Iodomethane	10 U	µg/L
Carbon Disulfide	100 U	µg/L
Methylene Chloride	10 U	µg/L
Acrylonitrile	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	µg/L
Vinyl Acetate	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	µg/L
2-Butanone	100 U	µg/L
Bromochloromethane	5.0 U	µg/L
Chloroform	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	µg/L
Carbon tetrachloride	10 U	µg/L
Benzene	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	µg/L
Trichloroethene	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	µg/L
Dibromomethane	10 U	µg/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	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	101	79-136
D8-Toluene	102	88-115
Bromofluorobenzene	100	72-132
Date Analyzed	10/20/98	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	LAB BLANK	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		10/23/98	10/23/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		10/20/98	10/20/98	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		10/20/98	10/20/98	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260 (MW-5,MW-6,MW-7A,MW-7B,MW-8A,MW-8B,MW-9,SW-1, SW-2,TRIP BLANK)				
1,1-Dichloroethene	149/135/144	58-140	10	18
Benzene	113/103/109	66-114	9	8
Trichloroethene	106/106/106	65-114	<1	10
Toluene	98/ 98/103	65-113	<1	8
Chlorobenzene	103/ 92/100	52-127	11	10
EPA Method 8260 (MW-1,MW-2,MW-3,MW-4)				
1,1-Dichloroethene	94/118/137	58-140	23	18
Benzene	104/122/ 96	66-114	16	8
Trichloroethene	71/ 91/ 95	65-114	25	10
Toluene	115/109/ 94	65-113	5	8
Chlorobenzene	95/111/ 93	52-127	16	10
Total Metals				
Antimony, 6010	93/ 92/ 95	38-138	1	30
Antimony, 6010	87/ 90/ 89	38-138	3	30
Arsenic, 6010	101/101/102	64-126	<1	12
Arsenic, 6010	97/101/100	64-126	4	12
Barium, 6010	98/ 97/ 97	74-119	1	11
Barium, 6010	95/ 95/ 95	74-119	<1	11

NC DHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals (Cont.)				
Beryllium, 6010	102/101/102	76-126	<1	12
Beryllium, 6010	100/102/100	76-126	2	12
Cadmium, 6010	97/ 96/ 99	68-121	1	12
Cadmium, 6010	97/ 97/ 96	68-121	<1	12
Chromium, 6010	98/ 97/100	73-120	1	10
Chromium, 6010	98/ 98/ 98	73-120	<1	10
Cobalt, 6010	97/ 95/ 98	76-120	2	17
Cobalt, 6010	96/ 97/ 96	76-120	1	17
Copper, 6010	100/ 98/102	75-123	2	11
Copper, 6010	99/100/101	75-123	1	11
Lead, 6010	98/ 97/ 99	68-126	1	19
Lead, 6010	94/ 95/ 96	68-126	1	19
Mercury, 7470	111/112/111	70-136	<1	12
Mercury, 7470	118/121/115	70-136	2	12
Nickel, 6010	101/ 99/102	64-126	2	12
Nickel, 6010	100/101/100	64-126	<1	12
Selenium, 6010	100/100/101	65-129	<1	10
Selenium, 6010	97/101/100	65-129	4	10
Silver, 6010	101/100/102	69-121	<1	12
Silver, 6010	100/100/100	69-121	<1	12
Thallium, 6010	99/ 98/106	67-135	1	13
Thallium, 6010	90/ 95/ 96	67-135	5	13
Vanadium, 6010	105/104/106	82-115	<1	16
Vanadium, 6010	105/106/104	82-115	<1	16
Zinc, 6010	97/ 96/100	63-131	1	24
Zinc, 6010	96/ 98/ 96	63-131	2	24

NC DHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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.

QSARF #08361

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
Ph. (407) 826-5314 • Fax (407) 850-6945

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Swepsonville
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Ken Vanhoy
PHONE: 336 272 9713
FAX: 336 273 4057

CLIENT NAME: PPA Environmental & Engineering Inc
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, NC 27406-5143

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

REQUIRED ANALYSIS: App. I Volatiles; App. I Metals (Mercury)

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	HCl	HNO_3 ← PRESERVATIVE	NUMBER OF CONTAINERS SUBMITTED						REMARKS
1 MW-1	10/13/98	3:30 p.m.	✓				✓								2	1							
2 MW-2	10/13/98	2:20 p.m.	✓				✓								2	1							
3 MW-3	10/13/98	1:40 p.m.	✓				✓								2	1							
4 MW-4	10/13/98	10:15 A.m.	✓				✓								2	1							
5 MW-5	10/13/98	9:40 A.m.	✓				✓								2	1							
6 MW-6	10/13/98	11:00 A.m.	✓				✓								2	1							
7 MW-7A	10/13/98	12:00 p.m.	✓				✓								2	1							
8 MW-7B	10/13/98	11:30 A.m.	✓				✓								2	1							
9 MW-8A	10/13/98	9:05 A.m.	✓				✓								2	1							
10 MW-8B	10/13/98	8:40 A.m.	✓				✓								2	1							
11 MW-9	10/13/98	3:05 p.m.	✓				✓								2	1							
12 SW-1	10/13/98	10:45 A.m.	✓			✓									2	1							
13 SW-2	10/13/98	1:15 p.m.	✓			✓									2	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☒ ORLANDO			K Armstrong	10/13/98	2:40	Julia S. Jemiac (opened)	9/10/98	10:25 am
RELINQUISHED BY: (SIGNATURE) Ken Vanhoy	DATE 10/14/98	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		

c

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

November 19, 1998

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, October 1998." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

NOV 1998
Received
Solid Waste
Section

01-01
4-3-98

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1998

PREPARED FOR
ALAMANCE COUNTY

MAY 27, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1998

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on April 3, 1998. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of two inorganic constituents (chromium and lead in MW-3, MW-5, and MW-9) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Four inorganic constituents (barium, chromium, copper, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Two Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (cobalt and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of four volatile organic constituents (cis-1,2-dichloroethene in MW-4; tetrachloroethene and trichloroethene in MW-2 and MW-4; and vinyl chloride in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

No Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Land for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 3, 1998 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 3, 1998. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed six constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Chromium was detected in MW-3 at 0.070 ppm, MW-5 at 0.15 ppm, and MW-9 at 0.12 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-3 at 0.020 ppm, MW-5 at 0.042 ppm, and MW-9 at 0.036 ppm. The 2L Standard is 0.015 ppm.

- cis-1,2-Dichloroethene was detected in MW-4 at 250.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 5.1 ppb and MW-4 at 62.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 6.0 ppb and MW-4 at 35.0 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 15.0 ppb. The 2L Standard is 0.015 ppb.

The following six constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Barium was detected in MW-3 at 0.64 ppm, MW-5 at 0.84 ppm, and MW-9 at 0.67 ppm. The 2L Standard is 2.0 ppm.

- Chromium was detected in MW-2 at 0.019 ppm, MW-6 at 0.020 ppm, and MW-8B at 0.010 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-5 at 0.20 ppm. The 2L Standard is 1.0 ppm.

- Zinc was detected in MW-1 at 0.098 ppm, MW-2 at 0.092 ppm, MW-3 at 0.24 ppm, MW-4 at 0.11 ppm, MW-5 at 0.38 ppm, MW-6 at 0.069 ppm, MW-7A at 0.051 ppm, MW-8B at 0.21 ppm, and MW-9 at 0.32 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 19.0 ppb and MW-4 at 24.0 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 5.6 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following two potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Cobalt was detected in MW-2 at 0.018 ppm, MW-3 at 0.046 ppm, MW-4 at 0.031 ppm, MW-5 at 0.071 ppm, MW-6 at 0.013 ppm, MW-7B at 0.010 ppm, MW-8B at 0.031 ppm, and MW-9 at 0.14 ppm.

- Vanadium was detected in MW-2 at 0.053 ppm, MW-3 at 0.21 ppm, MW-5 at 0.48 ppm, MW-8B at 0.049 ppm, and MW-9 at 0.26 ppm.

5.2 Surface Water

The results of the laboratory analyses for Appendix I constituents in the surface water samples are summarized in Tables 2 and 3 and the complete laboratory reports are included in Appendix B. No inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
APRIL 3, 1998

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	59.0°F	57.0°F	53.0°F	60.0°F	53.0°F	57.5°F	59.9°F	60.1°F
Specific Conductance	88.4 μMHOs	151.6 μMHOs	102.0 μMHOs	483.0 μMHOs	108.0 μMHOs	107.0 μMHOs	87.7 μMHOs	78.6 μMHOs
pH	5.77	6.22	6.50	6.31	6.71	6.90	6.73	6.85

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.7°F	58.9°F	58.0°F	59.0°F	60.0°F
Specific Conductance	52.0 μMHOs	215.0 μMHOs	55.2 μMHOs	69.4 μMHOs	61.0 μMHOs
pH	6.52	7.14	7.17	6.88	7.19

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TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
APRIL 3, 1998

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	BQL	0.64	BQL	0.84	BQL	BQL	BQL	BQL	BQL	0.67	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	BQL	0.019	0.070	BQL	0.15	0.020	BQL	BQL	BQL	0.010	0.12	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	BQL	0.018	0.046	0.031	0.071	0.013	BQL	0.010	BQL	0.031	0.14	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	0.20	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	0.020	BQL	0.042	BQL	BQL	BQL	BQL	BQL	0.036	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	BQL	0.053	0.21	BQL	0.48	BQL	BQL	BQL	BQL	0.049	0.26	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.098	0.092	0.24	0.11	0.38	0.069	0.051	BQL	BQL	0.21	0.32	BQL	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 3, 1998

Purge Time 2:50 pm to 3:00 pm

Sample Date April 3, 1998

Sample Time 3:05 pm

Weather Light rain, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	20.30 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	13.45 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.19 gal.
4)	Volume of water removed prior to sampling	5.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	59°F
2)	Specific Conductance	88.4 μmhos
3)	pH	5.77
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 3, 1998

Purge Time 2:10 pm to 2:15 pm

Sample Date April 3, 1998

Sample Time 2:20 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	23.11 ft.
2)	Depth to well bottom from measuring point	29.30 ft.
3)	Height of water column (h)	6.19 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.01 gal.
4)	Volume of water removed prior to sampling	1.5 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	57.0°F
2)	Specific Conductance	151.6 μmhos
3)	pH	6.22
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 1:20 pm to 1:35 pm

Sample Date April 3, 1998

Sample Time 1:40 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	8.44 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	15.40 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.51 gal.
4)	Volume of water removed prior to sampling	7.6 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	53°F
2)	Specific Conductance	102 μmhos
3)	pH	6.50
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 3, 1998

Purge Time 12:40 pm to 12:48 pm

Sample Date April 3, 1998

Sample Time 12:50 pm

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	32.72 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	17.18 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.80 gal.
4)	Volume of water removed prior to sampling	8.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60°F
2)	Specific Conductance	483 μmhos
3)	pH	6.31
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 3, 1998

Purge Time 9:05 am to 9:10 am

Sample Date April 3, 1998

Sample Time 9:20 am

Weather Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	13.13 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	6.28 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.02 gal.
4)	Volume of water removed prior to sampling	1.1 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	53°F
2)	Specific Conductance	108 μmhos
3)	pH	6.71
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 9:45 am to 10:25 am

Sample Date April 3, 1998

Sample Time 10:30 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	19.29 ft.
2)	Depth to well bottom from measuring point	52.67 ft.
3)	Height of water column (h)	33.38 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.44 gal.
4)	Volume of water removed prior to sampling	16.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	57.5°F
2)	Specific Conductance	107 μmhos
3)	pH	6.90
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 10:50 am to 11:39 am

Sample Date April 3, 1998

Sample Time 11:40 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	19.46 ft.
2)	Depth to well bottom from measuring point	63.30 ft.
3)	Height of water column (h)	43.84 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.15 gal.
4)	Volume of water removed prior to sampling	21.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.9°F
2)	Specific Conductance	87.7 μmhos
3)	pH	6.73
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 3, 1998

Purge Time 10:45 am to 11:00 am

Sample Date April 3, 1998

Sample Time 11:15 am

Weather Cloudy, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	17.38 ft.
2)	Depth to well bottom from measuring point	32.46 ft.
3)	Height of water column (h)	15.08 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.46 gal.
4)	Volume of water removed prior to sampling	7.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	60.1°F
2)	Specific Conductance	78.6 μmhos
3)	pH	6.85
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 7:55 am to 8:40 am

Sample Date April 3, 1998

Sample Time 8:45 am

Weather Partly Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	19.55	ft.
2)	Depth to well bottom from measuring point	63.35	ft.
3)	Height of water column (h)	43.80	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	7.14	gal.
4)	Volume of water removed prior to sampling	21.5	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	58.7°F
2)	Specific Conductance	52 μmhos
3)	pH	6.52
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 3, 1998

Purge Time 8:10 am to 8:20 am

Sample Date April 3, 1998

Sample Time 8:30 am

Weather Partly Cloudy, 55-60° F

Water Level and Well Data

1)	Depth to water from measuring point	18.79 ft.
2)	Depth to well bottom from measuring point	25.70 ft.
3)	Height of water column (h)	6.91 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.12 gal.
4)	Volume of water removed prior to sampling	3.4 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58.9°F
2)	Specific Conductance	215 μmhos
3)	pH	7.14
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 3, 1998

Purge Time 2:35 pm to 2:45 pm

Sample Date April 3, 1998

Sample Time 2:50 am

Weather Light Rain, 60-65° F

Water Level and Well Data

1)	Depth to water from measuring point	12.43 ft.
2)	Depth to well bottom from measuring point	27.25 ft.
3)	Height of water column (h)	14.82 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer
2)	Sample Method	Teflon bailer
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.42 gal.
4)	Volume of water removed prior to sampling	7.3 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	58°F
2)	Specific Conductance	55.2 μmhos
3)	pH	7.17
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date April 3, 1998

Source/Well SW-1

Time 10:00 am

Sampled by Ken Vanhoy

Weather Cloudy, 60-65°F

Field Analysis

1)	Temperature		59°F
2)	Specific Conductance		69.4 μmhos
3)	pH		6.88
4)	Physical Appearance and Odor	Clear, no odor	

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Purge Date April 3, 1998

Source/Well SW-2

Time 1:25 pm

Sampled by Ken Vanhoy

Weather Cloudy, 60-65°F

Field Analysis

1)	Temperature		60°F
2)	Specific Conductance		61.0 μmhos
3)	pH		7.19
4)	Physical Appearance and Odor	Clear, no odor	

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

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR1929
DATE SUBMITTED: April 7, 1998
DATE REPORTED : April 29, 1998

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Swepsonville Alamance County

04/03/98

#1 - MW-1 @ 15:05
#2 - MW-2 @ 14:20
#3 - MW-3 @ 13:40
#4 - MW-4 @ 12:50
#5 - MW-5 @ 09:20
#6 - MW-6 @ 10:30
#7 - MW-7A @ 11:40
#8 - MW-7B @ 11:15
#9 - MW-8A @ 08:45
#10 - MW-8B @ 08:30
#11 - MW-9 @ 14:50
#12 - SW-1 @ 10:00
#13 - SW-2 @ 13:25

LABORATORY MANAGER David J. Vesey

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**19**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**5.6**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**6.0**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**5.1**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	98	94	79-136
D8-Toluene	104	99	88-115
Bromofluorobenzene	94	91	72-132
Date Analyzed	04/08/98	04/08/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Chromium	6010	0.010 U	**0.019**	mg/L
Date Analyzed		04/15/98	04/15/98	
Cobalt	6010	0.010 U	**0.018**	mg/L
Date Analyzed		04/15/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Vanadium	6010	0.040 U	**0.053**	mg/L
Date Analyzed		04/15/98	04/15/98	
Zinc	6010	**0.098**	**0.092**	mg/L
Date Analyzed		04/15/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4		Units
Chloromethane	10 U	10 U		µg/L
Vinyl Chloride	10 U	**15**		µg/L
Bromomethane	10 U	10 U		µg/L
Chloroethane	10 U	10 U		µg/L
Trichlorofluoromethane	5.0 U	5.0 U		µg/L
1,1-Dichloroethene	5.0 U	5.0 U		µg/L
Acetone	100 U	100 U		µg/L
Iodomethane	10 U	10 U		µg/L
Carbon Disulfide	100 U	100 U		µg/L
Methylene Chloride	10 U	10 U		µg/L
Acrylonitrile	200 U	200 U		µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U		µg/L
1,1-Dichloroethane	5.0 U	**24**		µg/L
Vinyl Acetate	50 U	50 U		µg/L
c-1,2-Dichloroethene	5.0 U	**250**	D1	µg/L
2-Butanone	100 U	100 U		µg/L
Bromochloromethane	5.0 U	5.0 U		µg/L
Chloroform	5.0 U	5.0 U		µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U		µg/L
Carbon tetrachloride	10 U	10 U		µg/L
Benzene	5.0 U	5.0 U		µg/L
1,2-Dichloroethane	5.0 U	5.0 U		µg/L
Trichloroethene	5.0 U	**35**		µg/L
1,2-Dichloropropane	5.0 U	5.0 U		µg/L
Dibromomethane	10 U	10 U		µg/L

D1 = Analyte value determined from a 1:2.5 dilution.
U = Compound was analyzed for but not detected to the level shown.

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-3	MW-4	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	62	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	94	96	79-136
D8-Toluene	99	102	88-115
Bromofluorobenzene	89	89	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Barium	6010	**0.64**	0.50 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Beryllium	6010	0.020 U	0.002 U	mg/L
Date Analyzed		04/23/98	04/15/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Chromium	6010	**0.070**	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Cobalt	6010	**0.046**	**0.031**	mg/L
Date Analyzed		04/15/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Lead	6010	**0.020**	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.040 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Thallium	6010	0.10 U	0.020 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Vanadium	6010	**0.21**	0.040 U	mg/L
Date Analyzed		04/15/98	04/15/98	
Zinc	6010	**0.24**	**0.11**	mg/L
Date Analyzed		04/15/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	99	103	79-136
D8-Toluene	104	107	88-115
Bromofluorobenzene	92	99	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	**0.84**	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.020 U	0.002 U	mg/L
Date Analyzed		04/23/98	04/16/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	**0.15**	**0.020**	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	**0.071**	**0.013**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	**0.20**	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	**0.042**	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.20 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.020 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	**0.48**	0.040 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	**0.38**	**0.069**	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	101	96	79-136
D8-Toluene	105	105	88-115
Bromofluorobenzene	97	96	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	0.010 U	**0.010**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	**0.051**	0.050 U	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	97	103	79-136
D8-Toluene	85	107	88-115
Bromofluorobenzene	91	97	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Beryllium	6010	0.002 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/23/98	
Cadmium	6010	0.001 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Chromium	6010	0.010 U	**0.010**	mg/L
Date Analyzed		04/16/98	04/16/98	
Cobalt	6010	0.010 U	**0.031**	mg/L
Date Analyzed		04/16/98	04/16/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/22/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Silver	6010	0.010 U	0.10 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Thallium	6010	0.010 U	0.020 U	mg/L
Date Analyzed		04/16/98	04/16/98	
Vanadium	6010	0.040 U	**0.049**	mg/L
Date Analyzed		04/16/98	04/16/98	
Zinc	6010	0.050 U	**0.21**	mg/L
Date Analyzed		04/16/98	04/16/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	MW-9	SW-1	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

BY EPA METHOD 8260 - GC/MS	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	102	98	79-136
D8-Toluene	104	102	88-115
Bromofluorobenzene	93	91	72-132
Date Analyzed	04/09/98	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/20/98	04/24/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Barium	6010	**0.67**	0.50 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Cadmium	6010	0.010 U	0.001 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Chromium	6010	**0.12**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Cobalt	6010	**0.14**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Lead	6010	**0.036**	0.010 U	mg/L
Date Analyzed		04/16/98	04/24/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.10 U	0.050 U	mg/L
Date Analyzed		04/27/98	04/27/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.20 U	0.040 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Silver	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/24/98	
Thallium	6010	0.10 U	0.010 U	mg/L
Date Analyzed		04/23/98	04/24/98	
Vanadium	6010	**0.26**	0.040 U	mg/L
Date Analyzed		04/24/98	04/24/98	
Zinc	6010	**0.32**	0.050 U	mg/L
Date Analyzed		04/16/98	04/24/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

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

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS

EPA METHOD 8260 - GC/MS	SW-2	LAB BLANK #1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	92	95	79-136
D8-Toluene	98	100	88-115
Bromofluorobenzene	86	94	72-132
Date Analyzed	04/09/98	04/08/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK #1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/24/98	04/20/98	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Beryllium	6010	0.002 U	0.002 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Cadmium	6010	0.001 U	0.001 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Mercury	7470	0.0005 U	0.0005 U	mg/L
Date Analyzed		04/14/98	04/14/98	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/27/98	04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	SW-2	LAB BLANK #1	Units
Selenium	6010	0.040 U	0.020 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/24/98	04/15/98	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/24/98	04/15/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

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

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I VOLATILE COMPOUNDS
BY EPA METHOD 8260 - GC/MS

	LAB BLANK #2	Units
Bromodichloromethane	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	µg/L
4-Methyl-2-Pentanone	100 U	µg/L
Toluene	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	µg/L
Tetrachloroethene	5.0 U	µg/L
2-Hexanone	50 U	µg/L
Dibromochloromethane	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	µg/L
Chlorobenzene	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	µg/L
Ethylbenzene	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	µg/L
o-Xylene	5.0 U	µg/L
Styrene	10 U	µg/L
Bromoform	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	µg/L

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	97	79-136
D8-Toluene	101	88-115
Bromofluorobenzene	94	72-132
Date Analyzed	04/09/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	LAB BLANK #2	Units
Antimony	6010	0.030 U	mg/L
Date Analyzed		04/20/98	
Arsenic	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Barium	6010	0.50 U	mg/L
Date Analyzed		04/15/98	
Beryllium	6010	0.002 U	mg/L
Date Analyzed		04/15/98	
Cadmium	6010	0.001 U	mg/L
Date Analyzed		04/15/98	
Chromium	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Cobalt	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Copper	6010	0.20 U	mg/L
Date Analyzed		04/15/98	
Lead	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Mercury	7470	0.0005 U	mg/L
Date Analyzed		04/14/98	
Nickel	6010	0.050 U	mg/L
Date Analyzed		04/22/98	

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

RESULTS OF ANALYSIS

40 CFR Pt. 258
APPENDIX I

TOTAL METALS	METHOD	LAB BLANK #2	Units
Selenium	6010	0.020 U	mg/L
Date Analyzed		04/15/98	
Silver	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Thallium	6010	0.010 U	mg/L
Date Analyzed		04/15/98	
Vanadium	6010	0.040 U	mg/L
Date Analyzed		04/15/98	
Zinc	6010	0.050 U	mg/L
Date Analyzed		04/15/98	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260	(MW-4,MW-6,MW-7A,MW-7B,MW-8A,MW-8B,MW-9,SW-1,SW-2)			
1,1-Dichloroethene	104/104/ 94	56-136	<1	19
Benzene	94/ 93/ 95	66-115	1	8
Trichloroethene	93/ 91/ 93	68-110	2	8
Toluene	90/ 90/ 95	68-110	<1	9
Chlorobenzene	88/ 90/ 94	50-131	2	9
EPA Method APPENDIX I, 8260	(MW-1,MW-2,MW-3,MW-4,MW-5)			
1,1-Dichloroethene	104/104/ 87	56-136	<1	19
Benzene	94/ 93/ 90	66-115	1	8
Trichloroethene	93/ 91/ 88	68-110	2	8
Toluene	90/ 90/ 89	68-110	<1	9
Chlorobenzene	88/ 90/ 90	50-131	2	9
Total Metals				
Antimony, 6010	99/ 98/107	38-138	1	30
Antimony, 6010	116/117/115	38-138	<1	30
Arsenic, 6010	105/105/110	64-126	<1	12
Arsenic, 6010	107/105/104	64-126	2	12
Barium, 6010	104/103/103	74-119	<1	11
Barium, 6010	98/ 99/100	74-119	1	11
Beryllium, 6010	106/105/104	76-126	<1	12
Beryllium, 6010	102/102/102	76-126	<1	12
Cadmium, 6010	102/103/105	68-121	<1	12
Cadmium, 6010	98/ 98/100	68-121	<1	12

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
Total Metals (Cont.)				
Chromium, 6010	96/ 95/ 95	73-120	1	10
Chromium, 6010	92/ 92/ 93	73-120	<1	10
Cobalt, 6010	106/105/106	76-120	<1	17
Cobalt, 6010	98/ 99/102	76-120	1	17
Copper, 6010	103/109/102	75-123	6	11
Copper, 6010	108/107/100	75-123	<1	11
Lead, 6010	105/107/104	68-126	2	19
Lead, 6010	98/ 98/ 99	68-126	<1	19
Mercury, 7470	104/109/104	70-136	5	12
Mercury, 7470	104/104/104	70-136	<1	12
Nickel, 6010	94/ 96/ 94	64-126	2	12
Nickel, 6010	88/ 88/ 90	64-126	<1	12
Selenium, 6010	99/ 98/101	65-129	1	10
Selenium, 6010	91/ 91/ 93	65-129	<1	10
Silver, 6010	113/110/112	69-121	3	12
Silver, 6010	109/108/110	69-121	<1	12
Thallium, 6010	100/ 99/ 99	67-135	1	13
Thallium, 6010	89/ 88/ 94	67-135	1	13
Vanadium, 6010	106/104/104	82-115	2	16
Vanadium, 6010	102/101/101	82-115	<1	16
Zinc, 6010	103/101/101	63-131	2	24
Zinc, 6010	90/ 90/ 96	63-131	<1	24

Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QSARF # 07431

ENVIRONMENTAL CONSERVATION LABORATORIES

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Ph. (904) 296-3007 • Fax (904) 296-6210

10207 General Drive
Orlando, Florida 32824
Ph. (407) 826-5314 • Fax (407) 850-6945

ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE	PROJECT NO.	P.O. NUMBER
SWEPSONVILLE ALAMANCE COUNTY	0170.010	0170.010

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Julia Geniac / Ken Vanhoy
PHONE: 336 272 9713
FAX: 336 273 4057
CLIENT NAME: BPA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett
CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, North Carolina 27406-5159

REQUIRED ANALYSIS: Appendix I Volatiles; Appendix I metals plus Mercury

PAGE 1 OF 1

☑ 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	HCl	HNO_3							REMARKS
															PRESERVATIVE								
															NUMBER OF CONTAINERS SUBMITTED								
1 MW-1	4-3-98	3:05 p.m.	✓				✓								3	1							
2 MW-2	4-3-98	2:20 p.m.	✓				✓								3	1							
3 MW-3	4-3-98	1:40 p.m.	✓				✓								3	1							
4 MW-4	4-3-98	12:50 p.m.	✓				✓								3	1							
5 MW-5	4-3-98	9:20 a.m.	✓				✓								3	1							
6 MW-6	4-3-98	10:30 a.m.	✓				✓								3	1							
7 MW-7A	4-3-98	11:40 a.m.	✓				✓								3	1							
8 MW-7B	4-3-98	11:15 a.m.	✓				✓								3	1							
9 MW-8A	4-3-98	8:45 a.m.	✓				✓								3	1							
10 MW-8B	4-3-98	8:30 a.m.	✓				✓								3	1							
11 MW-9	4-3-98	2:50 p.m.	✓				✓								3	1							
12 SW-1	4-3-98	10:00 Am	✓			✓									3	1							
13 SW-2	4-3-98	1:25 p.m.	✓			✓									3	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☑ ORLANDO — Dueawa	3/27/98	11:00 Am	Dueawa / Enco	3/27/98	11:00 Am	Julia Geniac (opened)	3/27/98	1:40 pm
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Ken Vanhoy	4/6/98	9:15 AM						
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
Kevin Casey ☐ Jacksonville ☑ Orlando	4/7/98	11:00 AM	☑ YES ☐ NO	OR1929	

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

May 27, 1998

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1998." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

MAY 1998
Received
Solid Waste
Section

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1.0 EXECUTIVE SUMMARY 1

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3.0 SCOPE OF WORK 2

4.0 METHODS EMPLOYED 2
- 4.1 Monitoring Well Sampling 2
- 4.2 Stream Sampling 3

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- 5.1 Groundwater 3
- 5.2 Surface Water 5

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TABLES

Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, April 8, 1997

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, April 8, 1997

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, April 8, 1997

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1997

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on [redacted]. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of five inorganic constituents (barium in MW-7B, cadmium in MW-7B, chromium in MW-3, MW-7B and MW-9, lead in MW-3 and MW-7B, and Nickel in MW-7B) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Eight inorganic constituents (arsenic, barium, cadmium, chromium, copper, lead, nickel, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of three volatile organic constituents ([redacted] and t[redacted] exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. [redacted]

No inorganic or volatile organic constituents were detected in the surface water samples collected from two locations on the creek that flows along the east/southeast boundary of the landfill disposal area.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water at eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

This sampling task included sampling eleven monitoring wells and two locations on a nearby stream for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 8, 1997. The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by IEA, Inc., a North Carolina certified laboratory located in Cary, North Carolina. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 8, 1997. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed eight constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Barium was detected in MW-7B at 2.320 ppm. The 2L Standard is 2.0 ppm.
- Cadmium was detected in MW-7B at 0.00661 ppm. The 2L Standard is 0.005 ppm.
- Chromium was detected in MW-3 at 0.137 ppm, MW-7B at 0.141 ppm, and MW-9 at 0.0766 ppm. The 2L Standard is 0.05 ppm.
- Lead was detected in MW-3 at 0.0179 ppm and MW-7B at 0.0221 ppm. The 2L Standard is 0.015 ppm.
- Nickel was detected in MW-7B at 0.109 ppm. The 2L Standard is 0.1 ppm.

- cis-1,2-Dichloroethene was detected in MW-4 at 400.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-4 at 70.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-4 at 43.0 ppb. The 2L Standard is 2.8 ppb.

The following nine constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.0101 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-3 at 1.280 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-3 at 0.00238 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-1 at 0.0105 ppm, MW-2 at 0.021 ppm, MW-5 at 0.0464 ppm, MW-6 at 0.0483 ppm, and MW-8B at 0.013 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-3 at 0.250 ppm and MW-7B at 0.265 ppm. The 2L Standard is 1.0 ppm.

- Lead was detected in MW-9 at 0.0148 ppm. The 2L Standard is 0.015 ppm.

- Nickel was detected in MW-3 at 0.0721 ppm and MW-9 at 0.0571 ppm. The 2L Standard is 0.1 ppm.

- Zinc was detected in MW-1 at 0.0864 ppm, MW-2 at 0.0814 ppm, MW-3 at 0.353 ppm, MW-5 at 0.0657 ppm, MW-6 at 0.104 ppm, MW-7B at 0.858 ppm, MW-8A at 0.0508 ppm, MW-8B at 0.174 ppm, and MW-9 at 0.199 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 14.0 ppb and in MW-4 at 35.0 ppb. The 2L Standard is 700 ppb.

No 2L Standards have been set for the following three potentially naturally occurring constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.0021 ppm, MW-3 at 0.00425 ppm, MW-7B at 0.00936 ppm, and MW-9 at 0.00416 ppm.

- Cobalt was detected in MW-2 at 0.0121 ppm, MW-3 at 0.0577 ppm, MW-4 at 0.0192 ppm, MW-6 at 0.0132 ppm, MW-7B at 0.165 ppm, MW-8B at 0.014 ppm, and MW-9 at 0.117 ppm.

- Vanadium was detected in MW-2 at 0.0732 ppm, MW-3 at 0.395 ppm, MW-5 at 0.0420 ppm, MW-6 at 0.0531 ppm, MW-7B at 0.766 ppm, MW-8B at 0.0413 ppm, and MW-9 at 0.161 ppm.

5.2 Surface Water

There were no inorganic or volatile organic constituents detected in either of the surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

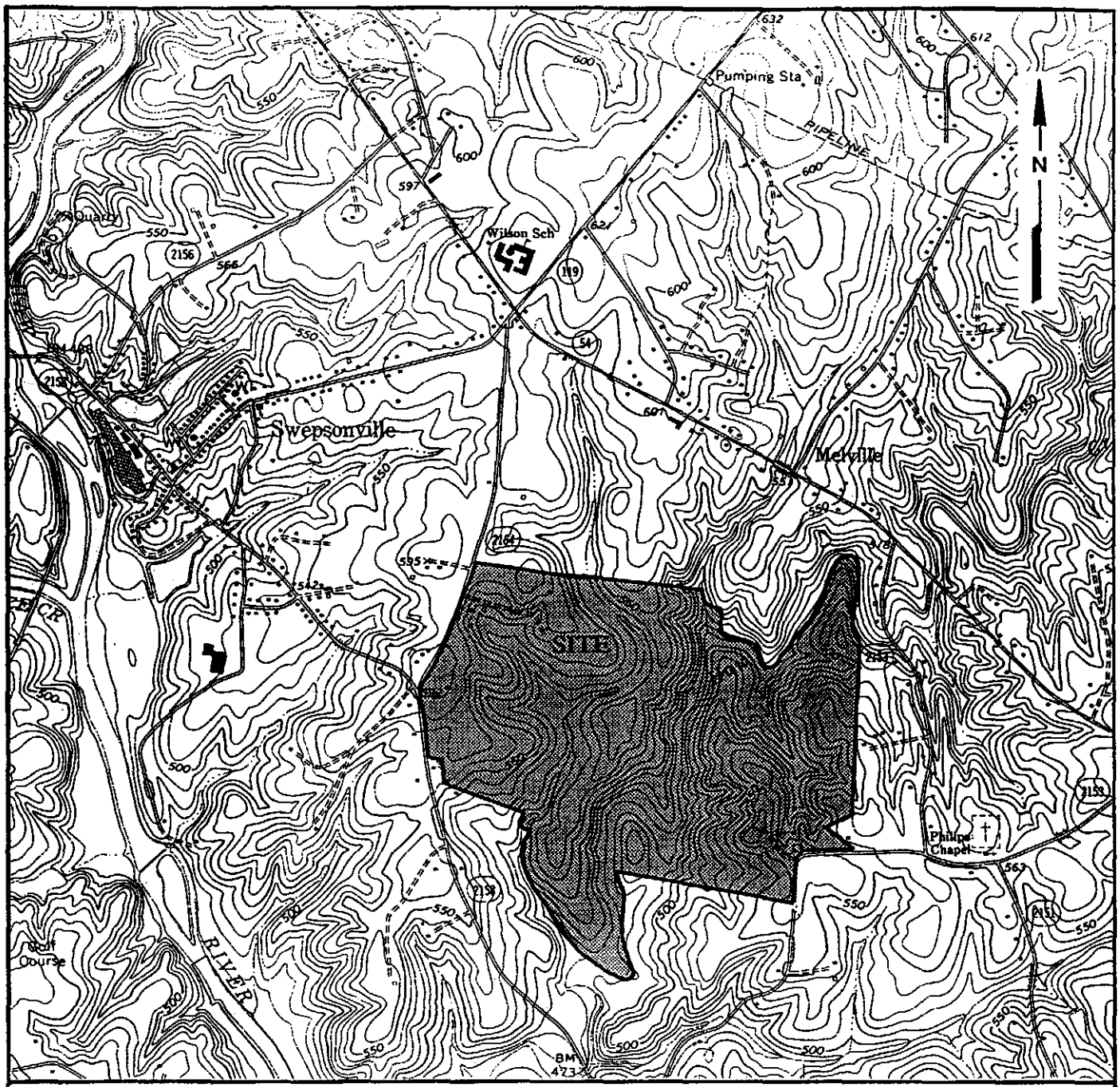
North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 4, 1994).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA
APRIL 8, 1997

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	64.2 °F	61.2 °F	59.2 °F	61.3 °F	52.9 °F	58.0 °F	57.6 °F	58.6 °F
Specific Conductance	93.3 μMHOs	132 μMHOs	63.5 μMHOs	522 μMHOs	66.3 μMHOs	6.6 μMHOs	109 μMHOs	64.3 μMHOs
pH	6.0	6.5	5.0	6.5	6.0	7.0	6.0	5.5

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	58.9 °F	60.3 °F	66.1 °F	56.2 °F	59.0 °F
Specific Conductance	35 μMHOs	18 μMHOs	39.3 μMHOs	60.1 μMHOs	87.0 μMHOs
pH	6.0	6.0	6.0	6.0	6.0

C:\123R23\SWEP4971.WK1



MEBANE QUADRANGLE
NORTH CAROLINA
USGS 7.5 MINUTE TOPOGRAPHIC SERIES
1969

1000 0 2000 3000
SCALE IN FEET

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

BPA Environmental & Engineering, Inc.

SITE LOCATION MAP

FIGURE 1

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 3:55 pm to 4:15 pm

Sample Date April 8, 1997

Sample Time 4:20 pm

Weather Sunny, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	21.04 ft.
2)	Depth to well bottom from measuring point	33.75 ft.
3)	Height of water column (h)	12.71 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.07 gal.
4)	Volume of water removed prior to sampling	6.5 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	64.2°F
2)	Specific Conductance	93.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 4:38 pm to 4:42 pm

Sample Date April 8, 1997

Sample Time 4:45 pm

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	23.84	ft.
2)	Depth to well bottom from measuring point	29.30	ft.
3)	Height of water column (h)	5.46	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer	
2)	Sample Method	Teflon Bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.89	gal.
4)	Volume of water removed prior to sampling	1.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	61.2°F
2)	Specific Conductance	132 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1997

Purge Time 1:05 pm to 1:20 pm

Sample Date April 8, 1997

Sample Time 1:30 pm

Weather Clear, 60-70°F

Water Level and Well Data

1)	Depth to water from measuring point	9.64 ft.
2)	Depth to well bottom from measuring point	23.84 ft.
3)	Height of water column (h)	14.20 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.31 gal.
4)	Volume of water removed prior to sampling	7.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	59.2°F
2)	Specific Conductance	63.5 μmhos
3)	pH	5.0
4)	Physical Appearance and Odor	Orange, cloudy, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1997

Purge Time 12:10 pm to 12:20 pm

Sample Date April 8, 1997

Sample Time 12:30 pm

Weather Clear, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	33.70 ft.
2)	Depth to well bottom from measuring point	49.90 ft.
3)	Height of water column (h)	16.20 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.64 gal.
4)	Volume of water removed prior to sampling	8.0 gal.
5)	Was well purged DRY? (circle one)	YES (NO)

Field Analysis

1)	Temperature	61.3°F
2)	Specific Conductance	522 μmhos
3)	pH	6.5
4)	Physical Appearance and Odor	Clear, no odor

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GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1997

Purge Time 8:15 am to 8:20 am

Sample Date April 8, 1997

Sample Time 8:30 am/11:40 am

Weather Clear, 40-50°F

Water Level and Well Data

1)	Depth to water from measuring point	14.67 ft.
2)	Depth to well bottom from measuring point	19.41 ft.
3)	Height of water column (h)	4.74 ft.
4)	Measuring point description	Top of 2-inch PVC Casing

Well Purging and Sample Collection

1)	Purge Method	Teflon Bailer
2)	Sample Method	Teflon Bailer
3)	Volume of water in well	
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.77 gal.
4)	Volume of water removed prior to sampling	1.0 gal.
5)	Was well purged DRY? (circle one)	(YES) NO

Field Analysis

1)	Temperature	52.9°F
2)	Specific Conductance	66.3 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Orange, silty, no odor

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:45	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:45	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:45	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:45	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:45	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:45	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:45	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:45	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:45	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:45	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 22:15	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 22:15	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 22:15	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 22:15	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 22:15	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:15	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 22:15	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB45585**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:15	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 22:15	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:51	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:51	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:51	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:51	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
COBALT, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 18:51	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:51	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:51	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:51	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:51	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:51	MSP
ZINC, TOTAL APPENDIX1	0.071	mg/L	0.05	6010	10/21/99 18:51	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 22:56	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 22:56	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 22:56	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 22:56	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 22:56	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 22:56	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 22:56	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB45586**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99 15:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 22:56	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 22:56	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:25	MSP
ARSENIC, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 20:25	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:25	MSP
BERYLLIUM, TOTAL APPENDIX1	0.002	mg/L	0.002	6010	10/21/99 20:25	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 20:25	MSP
CHROMIUM, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	10/21/99 20:25	MSP
COBALT, TOTAL APPENDIX1	0.11	mg/L	0.01	6010	10/21/99 20:25	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:25	MSP
LEAD, TOTAL APPENDIX1	0.011	mg/L	0.01	6010	10/21/99 20:25	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:25	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:25	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:25	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:25	MSP
VANADIUM, TOTAL APPENDIX1	0.051	mg/L	0.04	6010	10/21/99 20:25	MSP
ZINC, TOTAL APPENDIX1	0.093	mg/L	0.05	6010	10/21/99 20:25	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 16:00	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 16:00	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 16:00	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 16:00	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 16:00	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:00	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 16:00	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB45587**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 10:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:00	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 16:00	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:42	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:42	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 20:42	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 20:42	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:42	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:42	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:42	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:42	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 20:42	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:42	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 21:35	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 21:35	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 21:35	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 21:35	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP

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Lab Report

PRISM LABORATORIES, INC.

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 21:35	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 21:35	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 21:35	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB45588**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 21:35	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 21:35	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 20:47	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 20:47	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 20:47	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 20:47	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 20:47	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:47	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 20:47	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 20:47	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 20:47	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 20:47	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 16:45	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 16:45	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 16:45	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 16:45	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 16:45	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 16:45	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 16:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB45589**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 16:45	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 16:45	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB45590**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ACETONE	Not detected	ug/L	20	8260	10/26/99 23:37	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 23:37	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 23:37	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 23:37	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP

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Lab Report

PRISM LABORATORIES, INC.

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB45590**
Login Group: 2916F14
Sample Collection Date/Time: 10/18/99
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 23:37	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 23:37	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 23:37	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 23:37	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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	YES	NO	N/A
Samples INTACT upon arrival?			
Received ON WET ICE? Temp ____			
PROPER PRESERVATIVES indicated?			
Received WITHIN HOLDING TIMES?			
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?			
PROPER CONTAINERS used?			

Client ____
Physical Address ____
Phone ____ **Fax** ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	SAMPLE CONTAINER NO.	SAMPLE CONTAINER SIZE	PRESERVATIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible]	[illegible]	13 30							✓		✓					
[illegible]	10/15/99	13 30							✓		✓					
[illegible]	10/15/99	14 10							✓		✓					
[illegible]	10/15/99	12 30							✓		✓					
[illegible]	10/15/99	11 45							✓		✓					
[illegible]	10/15/99	14 00							✓		✓					
[illegible]	10/15/99	11 15							✓		✓					
[illegible]	10/15/99	15 30							✓		✓					
[illegible]	10/15/99	15 15							✓		✓					
[illegible]	10/15/99	15 00							✓		✓					

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

***CONTAINER TYPE CODES:** A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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Full Service Analytical & Environmental Solutions

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	YES	NO	
Samples INTACT upon arrival?	____	____	____
Received ON WET ICE? Temp ____	____	____	____
PROPER PRESERVATIVES indicated?	____	____	____
Received WITHIN HOLDING TIMES?	____	____	____
CUSTODY SEALS INTACT?	____	____	____
VOLATILES rec'd W/OUT HEADSPACE?	____	____	____
PROPER CONTAINERS used?	____	____	____

Client ____
Physical Address ____
Phone ____ **Fax** ____
P.O.#/Billing Reference ____
Project Name ____

REPORT TO: Name ____
Address ____
BILL TO: Name ____
Address ____
Requested Due Date ____

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVA-TIVES	ANALYSES REQUESTED						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
[illegible]	[illegible]	10:30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
[illegible]	[illegible]	11:00														
[illegible]	[illegible]	11:30														
[illegible]																

Sampler's Signature ____ Sampled By (Print Name) ____ Affiliation ____

Relinquished By: (Signature)	Received By: (Signature)	Date	Military/Hours
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature)	Received For Prism Laboratories By:	Date	
Method of Shipment		Log-In Group No.	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

***CONTAINER TYPE CODES:** A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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4-8-99

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

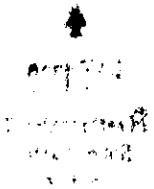
PREPARED FOR
ALAMANCE COUNTY

MAY 13, 1999

MAY 1999
Received
Solid Waste
Section

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159



SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

PREPARED FOR
ALAMANCE COUNTY

MAY 13, 1999

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

I hereby certify this 13th day of May 1999, that this report was prepared by me or under my direct supervision.

Julia I. Geniac
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

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1.0 EXECUTIVE SUMMARY 1

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TABLES

Table 1 — Ground and Surface Water Sampling Field Data, Swepsonville Landfill, April 8, 1999

Table 2 — Water Quality Sampling Results, Appendix I Inorganic Constituents Plus Mercury, Swepsonville Landfill, April 8, 1999

Table 3 — Water Quality Sampling Results, Appendix I Volatile Organic Constituents by SW-846 Method 8260, Swepsonville Landfill, April 8, 1999

FIGURES

Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
APRIL 1999

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on April 8, 1999. All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of three inorganic constituents (cadmium in MW-2, MW-5, and MW-9; chromium in MW-2, MW-5, and MW-9; and lead in MW-9) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Six inorganic constituents (arsenic, barium, cadmium, chromium, lead, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Three Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, and vanadium) were detected in one or more of the monitoring well samples.

Concentrations of four volatile organic constituents (1,1-dichloroethene in MW-2; cis-1,2-dichloroethene in MW-4; and tetrachloroethene and trichloroethene in MW-2 and MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Two volatile organic constituents (1,1-dichloroethane and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

No Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Landfill and have them analyzed for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on April 8, 1999 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on April 8, 1999. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed seven constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Cadmium was detected in MW-2 at 0.011 ppm, MW-5 at 0.007 ppm, and MW-9 at 0.024 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-2 at 0.086 ppm, MW-5 at 0.074 ppm, and MW-9 at 0.26 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-9 at 0.032 ppm. The 2L Standard is 0.015 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 14.0 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 360.0 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 15.0 ppb and MW-4 at 56.0 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 20.0 ppb and MW-4 at 43.0 ppb. The 2L Standard is 2.8 ppb.

The following eight constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-9 at 0.011 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 1.1 ppm and MW-9 at 1.4 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-1 at 0.003 ppm, MW-3 at 0.003 ppm, MW-4 at 0.001 ppm, MW-7B at 0.001 ppm, and MW-8B at 0.002 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-1 at 0.012 ppm and MW-3 at 0.028 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-5 at 0.012 ppm. The 2L Standard is 0.015 ppm.

- Zinc was detected in MW-1 at 0.14 ppm, MW-2 at 0.30 ppm, MW-3 at 0.15 ppm, MW-4 at 0.096 ppm, MW-5 at 0.18 ppm, MW-7B at 0.063 ppm, MW-8B at 0.084 ppm, and MW-9 at 0.61 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 110.0 ppb and MW-4 at 53.0 ppb. The 2L Standard is 700.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 27.0 ppb. The 2L Standard is 70.0 ppb.

No 2L Standards have been set for the following three potentially naturally occurring inorganic constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.002 ppm, MW-2 at 0.003 ppm, MW-5 at 0.002 ppm, and MW-9 at 0.014 ppm.

- Cobalt was detected in MW-1 at 0.017 ppm, MW-2 at 0.047 ppm, MW-3 at 0.011 ppm, MW-4 at 0.050 ppm, MW-5 at 0.031 ppm, and MW-9 at 0.33 ppm.

- Vanadium was detected in MW-1 at 0.046 ppm, MW-2 at 0.32 ppm, MW-3 at 0.071 ppm, MW-4 at 0.053 ppm, MW-5 at 0.22 ppm, and MW-9 at 0.49 ppm.

5.2 Surface Water

No inorganic or volatile organic constituents were found in detectable concentrations in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
APRIL 8, 1999

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	19.4 °C	18.0 °C	18.8 °C	21.0 °C	14.5 °C	16.9 °C	15.8 °C	17.0 °C
Specific Conductance	83.4 μMHOs	158.1 μMHOs	64.6 μMHOs	362 μMHOs	132.6 μMHOs	112.7 μMHOs	113.3 μMHOs	69.7 μMHOs
pH	5.5	6.0	6.2	6.1	6.3	6.3	6.4	5.9

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	14.9 °C	15.1 °C	18.0 °C	62 °F	63 °F
Specific Conductance	47.2 μMHOs	31.9 μMHOs	44.2 μMHOs	74.1 μMHOs	75.1 μMHOs
pH	6.7	5.6	6.2	7.5	7.2

C:\123R23\SWP4991.WK1

TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
APRIL 8, 1999

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.011	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	1.1	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.4	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	0.002	0.003	BQL	BQL	0.002	BQL	BQL	BQL	BQL	BQL	0.014	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	0.003	0.011	0.003	0.001	0.007	BQL	BQL	0.001	BQL	0.002	0.024	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	0.012	0.086	0.028	BQL	0.074	BQL	BQL	BQL	BQL	BQL	0.26	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	0.017	0.047	0.011	0.050	0.031	BQL	BQL	BQL	BQL	BQL	0.33	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	0.012	BQL	BQL	BQL	BQL	BQL	0.032	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	BQL[1]	BQL[1]	BQL	BQL[1]	BQL[1]	BQL	BQL	BQL[1]	BQL	BQL	BQL	BQL[1]	*	x	0.01
Vanadium, Total	SW-846 6010	0.046	0.32	0.071	0.053	0.22	BQL	BQL	BQL	BQL	BQL	0.49	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.14	0.30	0.15	0.096	0.18	BQL	BQL	0.063	BQL	0.084	0.61	BQL	BQL	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents
- [1] Sample also analyzed by EPA Method 7841

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BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-1

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 3:08 pm to 3:23 pm

Sample Date April 8, 1999

Sample Time 3:25 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	21.71	ft.
2)	Depth to well bottom from measuring point	33.75	ft.
3)	Height of water column (h)	12.04	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.96	gal.
4)	Volume of water removed prior to sampling	5.9	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	19.4°C
2)	Specific Conductance	83.4 μmhos
3)	pH	5.5
4)	Physical Appearance and Odor	Cloudy, tan, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-2

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 1:40 pm to 1:41 pm

Sample Date April 8, 1999

Sample Time 1:45 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	25.51	ft.
2)	Depth to well bottom from measuring point	29.30	ft.
3)	Height of water column (h)	3.79	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.62	gal.
4)	Volume of water removed prior to sampling	0.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	18.0°C
2)	Specific Conductance	158.1 μmhos
3)	pH	6.0
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-3

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 1:08 pm to 1:20 pm

Sample Date April 8, 1999

Sample Time 1:25 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	8.32	ft.
2)	Depth to well bottom from measuring point	23.84	ft.
3)	Height of water column (h)	15.52	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.53	gal.
4)	Volume of water removed prior to sampling	7.6	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	18.8°C
2)	Specific Conductance	64.6 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Orange, cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-4

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 8, 1999

Purge Time 2:08 pm to 2:30 pm

Sample Date April 8, 1999

Sample Time 2:30 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	33.81	ft.
2)	Depth to well bottom from measuring point	49.90	ft.
3)	Height of water column (h)	16.09	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	2.62	gal.
4)	Volume of water removed prior to sampling	8.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	21.0°C
2)	Specific Conductance	362 μmhos
3)	pH	6.1
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-5

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac/Ken Vanhoy

Purge Date April 8, 1999

Purge Time 9:58 am to 10:02 am

Sample Date April 8, 1999

Sample Time 10:05 am

Weather Sunny, 60-65°F

Water Level and Well Data

1)	Depth to water from measuring point	9.38	ft.
2)	Depth to well bottom from measuring point	19.41	ft.
3)	Height of water column (h)	10.03	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.63	gal.
4)	Volume of water removed prior to sampling	1.5	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	14.5°C
2)	Specific Conductance	132.6 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-6

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 10:30 am to 11:00 am

Sample Date April 8, 1999

Sample Time 11:05 am

Weather Sunny, 70-75°F

Water Level and Well Data

1)	Depth to water from measuring point	20.40	ft.
2)	Depth to well bottom from measuring point	52.67	ft.
3)	Height of water column (h)	32.27	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	5.26	gal.
4)	Volume of water removed prior to sampling	16.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	16.9°C
2)	Specific Conductance	112.7 μmhos
3)	pH	6.3
4)	Physical Appearance and Odor	Clear to slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 11:20 am to 12:00 pm

Sample Date April 8, 1999

Sample Time 12:05 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	22.58	ft.
2)	Depth to well bottom from measuring point	63.30	ft.
3)	Height of water column (h)	40.72	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.64	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	15.8°C
2)	Specific Conductance	113.3 μmhos
3)	pH	6.4
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-7B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 11:23 am to 11:33 am

Sample Date April 8, 1999

Sample Time 11:40 pm

Weather Sunny, 75-80°F

Water Level and Well Data

1)	Depth to water from measuring point	20.28	ft.
2)	Depth to well bottom from measuring point	32.46	ft.
3)	Height of water column (h)	12.18	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.99	gal.
4)	Volume of water removed prior to sampling	3.75	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	17.0°C
2)	Specific Conductance	69.7 μmhos
3)	pH	5.9
4)	Physical Appearance and Odor	Orange, silty, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8A

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Julia Geniac

Purge Date April 8, 1999

Purge Time 8:40 am to 9:30 am

Sample Date April 8, 1999

Sample Time 9:35 am

Weather Cloudy, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	22.74	ft.
2)	Depth to well bottom from measuring point	63.35	ft.
3)	Height of water column (h)	40.61	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	6.62	gal.
4)	Volume of water removed prior to sampling	20.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	14.9°C
2)	Specific Conductance	47.2 μmhos
3)	pH	6.7
4)	Physical Appearance and Odor	Clear, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-8B

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy

Purge Date April 8, 1999

Purge Time 8:42 am to 8:46 am

Sample Date April 8, 1999

Sample Time 9:00 am

Weather Cloudy, 55-60°F

Water Level and Well Data

1)	Depth to water from measuring point	22.09	ft.
2)	Depth to well bottom from measuring point	25.70	ft.
3)	Height of water column (h)	3.61	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well		
	(a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	0.59	gal.
4)	Volume of water removed prior to sampling	1.0	gal.
5)	Was well purged DRY? (circle one)	(YES) NO	

Field Analysis

1)	Temperature	15.1°C
2)	Specific Conductance	31.9 μmhos
3)	pH	5.6
4)	Physical Appearance and Odor	Cloudy, tan, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

GROUNDWATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Source/Well MW-9

Locked: (Yes) No

(PVC) Steel Stainless Steel

Sampled by Ken Vanhoy/Julia Geniac

Purge Date April 8, 1999

Purge Time 2:45 pm to 2:55 pm

Sample Date April 8, 1999

Sample Time 3:00 pm

Weather Sunny, 80-85°F

Water Level and Well Data

1)	Depth to water from measuring point	15.35	ft.
2)	Depth to well bottom from measuring point	27.25	ft.
3)	Height of water column (h)	11.90	ft.
4)	Measuring point description	Top of 2-inch PVC Casing	

Well Purging and Sample Collection

1)	Purge Method	Teflon bailer	
2)	Sample Method	Teflon bailer	
3)	Volume of water in well (a) 2" well . . . . (v = 0.163 x h) b) 4" well . . . . (v = 0.651 x h) c) 6" well . . . . (v = 1.5 x h)	1.94	gal.
4)	Volume of water removed prior to sampling	6.0	gal.
5)	Was well purged DRY? (circle one)	YES (NO)	

Field Analysis

1)	Temperature	18.0°C
2)	Specific Conductance	44.2 μmhos
3)	pH	6.2
4)	Physical Appearance and Odor	Cloudy, tan, orange, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Date April 8, 1999

Source/Well SW-1

Time 10:35 am

Sampled by Ken Vanhoy

Weather Sunny, 70-75°F

FIELD ANALYSIS

1)	Temperature	62°F
2)	Specific Conductance	74.1 μmhos[b]
3)	pH	7.5
4)	Physical Appearance and Odor	Slightly cloudy, no odor

BPA ENVIRONMENTAL & ENGINEERING, INC.

SURFACE WATER SAMPLING FIELD DATA

Location Swepsonville Landfill

Date April 8, 1999

Source/Well SW-2

Time 12:55 pm

Sampled by Ken Vanhoy

Weather Partly cloudy, 75-80°F

FIELD ANALYSIS

1)	Temperature		63°F
2)	Specific Conductance		75.1 μmhos[b]
3)	pH		7.2
4)	Physical Appearance and Odor	Cloudy, no odor	

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

MAY 1999

ENCO Laboratories

DHRS Certification No. E83182

CLIENT : BPA Environmental
ADDRESS: Engineering, Inc.
2641-G Randleman Road
Greensboro, NC 27408

REPORT # : OR6170
DATE SUBMITTED: April 9, 1999
DATE REPORTED : April 19, 1999
DATE AMENDED : May 12, 1999

ATTENTION: Wes Scarlett

SAMPLE IDENTIFICATION

Samples submitted and
identified by client as:

PROJECT #: 0170.010

Alamance County/Swepsonville

04/08/99

#1	- MW-1	@ 15:25
#2	- MW-2	@ 13:45
#3	- MW-3	@ 13:25
#4	- MW-4	@ 14:30
#5	- MW-5	@ 10:05
#6	- MW-6	@ 11:05
#7	- MW-7A	@ 12:05
#8	- MW-7B	@ 11:40
#9	- MW-8A	@ 09:35
#10	- MW-8B	@ 09:00
#11	- MW-9	@ 15:00
#12	- SW-1	@ 10:35
#13	- SW-2	@ 12:55

PROJECT MANAGER _____
David Vesey

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	**14**	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	**110**	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	**27**	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	**20**	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/L

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-1	MW-2	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	**15**	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	94	90	52-149
D8-Toluene	86	84	70-132
Bromofluorobenzene	83	82	60-135
Date Analyzed	04/09/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	**1.1**	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.0020**	**0.0030**	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0030**	**0.011**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.012**	**0.086**	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.017**	**0.047**	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/16/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-1	MW-2	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	NR	mg/L
Date Analyzed		04/15/99		
Thallium	7841	NR	0.010 U	mg/L
Date Analyzed			04/22/99	
Vanadium	6010	**0.046**	**0.32**	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.14**	**0.30**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Chloromethane	10 U	50 U	D1	µg/L
Vinyl Chloride	10 U	50 U	D1	µg/L
Bromomethane	10 U	50 U	D1	µg/L
Chloroethane	10 U	50 U	D1	µg/L
Trichlorofluoromethane	5.0 U	25 U	D1	µg/L
1,1-Dichloroethene	5.0 U	25 U	D1	µg/L
Acetone	100 U	500 U	D1	µg/L
Iodomethane	10 U	50 U	D1	µg/L
Carbon Disulfide	100 U	500 U	D1	µg/L
Methylene Chloride	10 U	50 U	D1	µg/L
Acrylonitrile	200 U	1000 U	D1	µg/L
t-1,2-Dichloroethene	5.0 U	25 U	D1	µg/L
1,1-Dichloroethane	5.0 U	**53**	D1	µg/L
Vinyl Acetate	50 U	250 U	D1	µg/L
c-1,2-Dichloroethene	5.0 U	**360**	D1	µg/L
2-Butanone	100 U	500 U	D1	µg/L
Bromochloromethane	5.0 U	25 U	D1	µg/L
Chloroform	5.0 U	25 U	D1	µg/L
1,1,1-Trichloroethane	5.0 U	25 U	D1	µg/L
Carbon tetrachloride	10 U	50 U	D1	µg/L
Benzene	5.0 U	25 U	D1	µg/L
1,2-Dichloroethane	5.0 U	25 U	D1	µg/L
Trichloroethene	5.0 U	**43**	D1	µg/L
1,2-Dichloropropane	5.0 U	25 U	D1	µg/L
Dibromomethane	10 U	50 U	D1	µg/L

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-3	MW-4		Units
Bromodichloromethane	5.0 U	25 U	D1	µg/L
c-1,3-Dichloropropene	10 U	50 U	D1	µg/L
4-Methyl-2-Pentanone	100 U	500 U	D1	µg/L
Toluene	5.0 U	25 U	D1	µg/L
t-1,3-Dichloropropene	10 U	50 U	D1	µg/L
1,1,2-Trichloroethane	5.0 U	25 U	D1	µg/L
Tetrachloroethene	5.0 U	56	D1	µg/L
2-Hexanone	50 U	250 U	D1	µg/L
Dibromochloromethane	5.0 U	25 U	D1	µg/L
1,2-Dibromoethane	5.0 U	25 U	D1	µg/L
Chlorobenzene	5.0 U	25 U	D1	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	25 U	D1	µg/L
Ethylbenzene	5.0 U	25 U	D1	µg/L
m-Xylene & p-Xylene	5.0 U	25 U	D1	µg/L
o-Xylene	5.0 U	25 U	D1	µg/L
Styrene	10 U	50 U	D1	µg/L
Bromoform	5.0 U	25 U	D1	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	25 U	D1	µg/L
1,2,3-Trichloropropane	15 U	75 U	D1	µg/L
t-1,4-Dichloro-2-Butene	100 U	500 U	D1	µg/L
1,4-Dichlorobenzene	5.0 U	25 U	D1	µg/L
1,2-Dichlorobenzene	5.0 U	25 U	D1	µg/L
1,2-Dibromo-3-Chloropropane	25 U	120 U	D1	µg/L

Surrogate:	% RECOV	% RECOV	LIMITS
Dibromofluoromethane	89	84	79-136
D8-Toluene	84	82	88-115
Bromofluorobenzene	85	81	72-132
Date Analyzed	04/09/99	04/09/99	

U = Compound was analyzed for but not detected to the level shown.
D1 = Analyte value determined from a 1:5 dilution.

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0030**	**0.0010**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.028**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.011**	**0.050**	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/16/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-3	MW-4	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	NR	0.010 U	mg/L
Date Analyzed			04/16/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	**0.071**	**0.053**	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.15**	**0.096**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-5	MW-6	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-5	MW-6	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	86	90	79-136
D8-Toluene	86	81	88-115
Bromofluorobenzene	82	83	72-132
Date Analyzed	04/09/99	04/09/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.0020**	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.0070**	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.074**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.031**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	**0.012**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/16/99	04/14/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-5	MW-6	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	7841	0.010 U	0.010 U	mg/L
Date Analyzed		04/22/99	04/22/99	
Vanadium	6010	**0.22**	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.18**	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-7A	MW-7B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-7A	MW-7B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	99	98	79-136
D8-Toluene	90	85	88-115
Bromofluorobenzene	88	84	72-132
Date Analyzed	04/10/99	04/10/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	**0.0010**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-7A	MW-7B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/99	04/16/99	
Vanadium	7841	0.010 U	0.010 U	mg/L
Date Analyzed		04/22/99	04/22/99	
Zinc	6010	0.050 U	**0.063**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	MW-8A	MW-8B	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	MW-8A	MW-8B	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	91	91	79-136
D8-Toluene	82	85	88-115
Bromofluorobenzene	82	85	72-132
Date Analyzed	04/10/99	04/10/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	**0.0020**	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-8A	MW-8B	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	NR	0.010 U	mg/L
Date Analyzed			04/16/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	0.050 U	**0.084**	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

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

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

APPENDIX I VOLATILE COMPOUNDS	MW-9	SW-1	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	84	88	79-136
D8-Toluene	79	79	88-115
Bromofluorobenzene	76	76	72-132
Date Analyzed	04/10/99	04/10/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/16/99	04/14/99	
Arsenic	6010	**0.011**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	**1.4**	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	**0.014**	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	**0.024**	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	**0.26**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	**0.33**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	**0.032**	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	MW-9	SW-1	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/16/99	04/15/99	
Vanadium	6010	**0.49**	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	**0.61**	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 - APPENDIX I VOLATILE COMPOUNDS	SW-2	LAB BLANK	Units
Chloromethane	10 U	10 U	µg/L
Vinyl Chloride	10 U	10 U	µg/L
Bromomethane	10 U	10 U	µg/L
Chloroethane	10 U	10 U	µg/L
Trichlorofluoromethane	5.0 U	5.0 U	µg/L
1,1-Dichloroethene	5.0 U	5.0 U	µg/L
Acetone	100 U	100 U	µg/L
Iodomethane	10 U	10 U	µg/L
Carbon Disulfide	100 U	100 U	µg/L
Methylene Chloride	10 U	10 U	µg/L
Acrylonitrile	200 U	200 U	µg/L
t-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
1,1-Dichloroethane	5.0 U	5.0 U	µg/L
Vinyl Acetate	50 U	50 U	µg/L
c-1,2-Dichloroethene	5.0 U	5.0 U	µg/L
2-Butanone	100 U	100 U	µg/L
Bromochloromethane	5.0 U	5.0 U	µg/L
Chloroform	5.0 U	5.0 U	µg/L
1,1,1-Trichloroethane	5.0 U	5.0 U	µg/L
Carbon tetrachloride	10 U	10 U	µg/L
Benzene	5.0 U	5.0 U	µg/L
1,2-Dichloroethane	5.0 U	5.0 U	µg/L
Trichloroethene	5.0 U	5.0 U	µg/L
1,2-Dichloropropane	5.0 U	5.0 U	µg/L
Dibromomethane	10 U	10 U	µg/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	SW-2	LAB BLANK	Units
Bromodichloromethane	5.0 U	5.0 U	µg/L
c-1,3-Dichloropropene	10 U	10 U	µg/L
4-Methyl-2-Pentanone	100 U	100 U	µg/L
Toluene	5.0 U	5.0 U	µg/L
t-1,3-Dichloropropene	10 U	10 U	µg/L
1,1,2-Trichloroethane	5.0 U	5.0 U	µg/L
Tetrachloroethene	5.0 U	5.0 U	µg/L
2-Hexanone	50 U	50 U	µg/L
Dibromochloromethane	5.0 U	5.0 U	µg/L
1,2-Dibromoethane	5.0 U	5.0 U	µg/L
Chlorobenzene	5.0 U	5.0 U	µg/L
1,1,1,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
Ethylbenzene	5.0 U	5.0 U	µg/L
m-Xylene & p-Xylene	5.0 U	5.0 U	µg/L
o-Xylene	5.0 U	5.0 U	µg/L
Styrene	10 U	10 U	µg/L
Bromoform	5.0 U	5.0 U	µg/L
1,1,2,2-Tetrachloroethane	5.0 U	5.0 U	µg/L
1,2,3-Trichloropropane	15 U	15 U	µg/L
t-1,4-Dichloro-2-Butene	100 U	100 U	µg/L
1,4-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dichlorobenzene	5.0 U	5.0 U	µg/L
1,2-Dibromo-3-Chloropropane	25 U	25 U	µg/L
Surrogate:	**% RECOV**	**% RECOV**	**LIMITS**
Dibromofluoromethane	92	86	79-136
D8-Toluene	81	81	88-115
Bromofluorobenzene	80	81	72-132
Date Analyzed	04/10/99	04/09/99	

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

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Antimony	6010	0.030 U	0.030 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Arsenic	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Barium	6010	0.50 U	0.50 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Beryllium	6010	0.0020 U	0.0020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cadmium	6010	0.0010 U	0.0010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Chromium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Cobalt	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Copper	6010	0.20 U	0.20 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Lead	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Mercury	7470	0.00050 U	0.00050 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Nickel	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

TOTAL METALS	METHOD	SW-2	LAB BLANK	Units
Selenium	6010	0.020 U	0.020 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Silver	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Thallium	6010	0.010 U	0.010 U	mg/L
Date Analyzed		04/15/99	04/14/99	
Thallium	7841	0.010 U	NR	mg/L
Date Analyzed		04/22/99		
Vanadium	6010	0.040 U	0.040 U	mg/L
Date Analyzed		04/14/99	04/14/99	
Zinc	6010	0.050 U	0.050 U	mg/L
Date Analyzed		04/14/99	04/14/99	

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

RESULTS OF ANALYSIS

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

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

ENCO LABORATORIES
REPORT # : OR6170
DATE REPORTED: April 19, 1999
DATE AMENDED : May 12, 1999
REFERENCE : 0170.010
PROJECT NAME : Alamance County/ Swepsonville

RESULTS OF ANALYSIS

EPA METHOD APPENDIX I, 8260 (cont.) -

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

Surrogate:	% RECOV	LIMITS
Dibromofluoromethane	94	79-136
D8-Toluene	82	88-115
Bromofluorobenzene	81	72-132
Date Analyzed	04/10/99	

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

QUALITY CONTROL DATA

Parameter	% RECOVERY MS/MSD/LCS	ACCEPT LIMITS	% RPD MS/MSD	ACCEPT LIMITS
EPA Method APPENDIX I, 8260				
1,1-Dichloroethene	119/124/125	58-140	4	18
Benzene	147/136/136	66-114	8	8
Trichloroethene	88/ 95/ 84	65-114	8	10
Toluene	132/124/135	65-113	6	8
Chlorobenzene	99/106/ 95	52-127	7	10
Total Metals				
Antimony, 6010	94/ 95/ 96	38-138	1	30
Arsenic, 6010	102/101/101	64-126	<1	12
Barium, 6010	94/ 95/ 98	74-119	1	11
Beryllium, 6010	98/ 98/100	76-126	<1	12
Cadmium, 6010	94/ 94/ 98	68-121	<1	12
Chromium, 6010	95/ 96/ 99	73-120	1	10
Cobalt, 6010	92/ 93/ 96	76-120	1	17
Copper, 6010	100/103/ 97	75-123	3	11
Lead, 6010	96/ 95/ 99	68-126	1	19
Mercury, 7470	94/ 96/120	70-136	2	12
Mercury, 7470	113/114/120	70-136	<1	12
Mercury, 7470	117/117/122	70-136	<1	12
Mercury, 7470	107/109/105	70-136	2	12
Nickel, 6010	96/ 98/ 98	64-126	2	12
Selenium, 6010	99/100/102	65-129	1	10
Silver, 6010	90/ 92/ 94	69-121	2	12
Thallium, 6010	96/100/101	67-135	4	13
Thallium, 7841	94/ 89/ 91	69-153	5	15
Vanadium, 6010	94/ 95/ 96	82-115	1	16
Zinc, 6010	93/ 92/ 96	63-131	1	24

NC DEHNR #424
Environmental Conservation Laboratories Comprehensive QA Plan #960038

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

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QSAKT #

ENVIRONMENTAL CONSERVATION LABORATORIES

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ENCO CompQAP No.: 960038G/0

CHAIN OF CUSTODY RECORD

PROJECT REFERENCE: Alamance G, SWEPSONVILLE
PROJECT NO.: 0170.010
P.O. NUMBER: 0170.010
PAGE 1 OF 1

PROJECT LOC. (State): NC
SAMPLER(s) NAME: Ken Van hoy, Julia Genac
PHONE: 336 272 9713
FAX: 336 273 4057

CLIENT NAME: BPA Environmental & Engineering, Inc.
CLIENT PROJECT MANAGER: Wes Scarlett

CLIENT ADDRESS (CITY, STATE, ZIP): 2641-G Randleman Road, Greensboro, N.C. 27406-5159

☐ 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: HCl APP. I Vols; HNO3 APP. I Metals plus Mercury

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	HCl	HNO3							REMARKS
1 MW-1	4/8/99	3:25 p.m.	✓				✓								3	1							
2 MW-2	4/8/99	1:45 p.m.	✓				✓								3	1							
3 MW-3	4/8/99	1:25 p.m.	✓				✓								3	1							
4 MW-4	4/8/99	2:30 p.m.	✓				✓								3	1							
5 MW-5	4/8/99	10:05 a.m.	✓				✓								3	1							
6 MW-6	4/8/99	11:05 a.m.	✓				✓								3	1							
7 MW-7A	4/8/99	12:05 p.m.	✓				✓								3	1							
8 MW-7B	4/8/99	11:40 a.m.	✓				✓								3	1							
9 MW-8A	4/8/99	9:35 a.m.	✓				✓								3	1							
10 MW-8B	4/8/99	9:00 a.m.	✓				✓								3	1							
11 MW-9	4/8/99	3:00 p.m.	✓				✓								3	1							
12 SW-1	4/8/99	10:35 a.m.	✓			✓									3	1							
13 SW-2	4/8/99	12:55 p.m.	✓			✓									3	1							
14																							

SAMPLE KIT PREPARED BY:	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
☐ JACKSONVILLE ☒ ORLANDO			K. Armstrong	4/16/99	5:25	Julia S. Genac / Ken Van hoy	4/9/99	2:00 pm
RELINQUISHED BY: (SIGNATURE) Julia S. Genac	DATE 4/8/99	TIME 5:00 pm	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
K. Armstrong ☐ Jacksonville ☐ Orlando	4-9-99	12:20	☒ YES ☐ NO	0R6176	

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

APR 1999
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ENCO Laboratories

DHRS Certification No. E83182

April 20, 1999

Mr. Wes Scarlett
BPA Environmental
2641-G Randleman Road
Greensboro, NC 27408

Login Number(SDG): OR6170
Project Number: 0170.010
Description: Alamance County / Swepsonville

Case Narrative:

Thirteen water samples were collected on April 8, 1999. All samples were received at ENCO Laboratories, Inc., on April 9, 1999 on wet ice and in good condition. All samples were analyzed as requested on the associated sample chain-of-custody forms.

The requests included analyses for the determination of 40 CFR, Pt. 258, Appendix I metals. The analyses were done by an "inductively coupled plasma" (ICP) technique following SW-846 EPA Method 6010 protocols. "Thallium", (Tl), is included in the list of metals determined by this method. Due to the nature of the samples analyzed, the laboratory noted spectral interferences which inhibited the accurate determination of the thallium result. The laboratory performed dilutions on the samples in order to provide method compliant data for the analyte in question. This removal of the interferences by dilution caused the resulting non-detect values to be elevated above the target MCL of 0.010 mg/L for Tl. The laboratory is in the process of re-analyzing the samples in question utilizing graphite furnace atomic absorption in an effort to provide data for the thallium results to the required level of detection.

All samples were extracted and analyzed within EPA specified holding times.

Should you have questions or require further information regarding this issue, please do not hesitate to contact the laboratory.

Environmental Conservation Laboratories, Inc.

David J. Vesey
Project Manager

BPA Environmental & Engineering, Inc.

John E. Palmer, P.G.
E.W. Scarlett, Jr., P.G.
R. Edward Hedgecock, P.E., P.G.

2641-G Randleman Road
Greensboro, NC 27406-5159
(336) 272-9713

May 13, 1999

Mr. Larry Rose
Division of Solid Waste Management
P.O. Box 27687
Raleigh, NC 27611-7687

MAY 1999
Received
Solid Waste
Section

RE: Water Quality Sampling
Swepsonville Landfill
BPA Project No. 0170.010

Dear Mr. Rose:

Enclosed is one (1) copy of the report titled "Swepsonville Landfill, Alamance County, NC, Results of Water Quality Sampling, April 1999." If you have any comments or questions, please call.

Sincerely yours,

BPA ENVIRONMENTAL & ENGINEERING, INC.

E. W. Scarlett, Jr., P.G.
Principal

EWS/cwm

01-01

10-13-98

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 19, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC

RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

PREPARED FOR
ALAMANCE COUNTY

NOVEMBER 19, 1998

BPA Environmental & Engineering, Inc.

(336) 272-9713 2641-G Randleman Road, Greensboro, NC 27406-5159

I hereby certify this 19th day of November 1998, that this report was prepared by me or under my direct supervision.

Kenneth B. Vanhoy, P.G.
Geologist

Technical review performed by:

E. W. Scarlett, Jr., P.G.
Principal

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Figure 1 — Site Location Map

Figure 2 — Sample Location Map

APPENDICES

Appendix A — Ground and Surface Water Sampling Field Data Sheets

Appendix B — Laboratory Analytical Reports

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NC
RESULTS OF WATER QUALITY SAMPLING
OCTOBER 1998

1.0 EXECUTIVE SUMMARY

Eleven monitoring wells and two stream locations at the Alamance County Swepsonville Landfill were sampled on [redacted] All sampling was conducted according to North Carolina Solid Waste Management Guidelines. The samples were submitted to a North Carolina certified laboratory for testing using the Federal Appendix I list of constituents for detection monitoring plus mercury.

Results from the eleven monitoring well samples show that the concentrations of for inorganic constituents (cadmium in MW-2, MW-3, MW-4, MW-5, MW-7B, MW-8B, and MW-9; chromium in MW-3 and MW-9; lead in MW-8B; and mercury in MW-4) exceeded the 15A NCAC 2L Standards for Class GA groundwater on the date the samples were collected. Seven inorganic constituents (arsenic, barium, cadmium, chromium, copper, lead, and zinc) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards. Four Appendix I inorganic constituents for which no 15A NCAC 2L Standards have been established (beryllium, cobalt, thallium, and vanadium) were detected in one or more of the monitoring well samples.

[redacted] Three volatile organic constituents (carbon disulfide; 1,1-dichloroethane, and cis-1,2-dichloroethene) were detected in one or more of the monitoring well samples at concentrations that did not exceed the 2L Standards.

One Appendix I inorganic constituent (zinc), for which no 15 NCAC 2B Standard has been established, was detected in surface water sample SW-2. No other Appendix I inorganic or volatile organic constituents were detected in either of the two surface water samples on the date the samples were collected.

2.0 INTRODUCTION

BPA Environmental & Engineering, Inc. was contracted by Alamance County, North Carolina to sample the ground and surface water from eleven monitoring wells and two surface water locations at the Swepsonville Landfill. The site location is shown on Figure 1.

3.0 SCOPE OF WORK

The scope of work was to sample eleven monitoring wells and two stream locations at the Swepsonville Landfill and have them analyzed for Federal Appendix I organic and inorganic constituents plus mercury as listed in 40 CFR, Part 258.

4.0 METHODS EMPLOYED

4.1 Monitoring Well Sampling

Groundwater sampling took place on October 13, 1998 The wells were purged by either removing a minimum of three (3) well volumes or bailing until the wells were dry prior to obtaining water samples. The water samples were collected using properly decontaminated teflon bailers. Immediately upon collection, water samples from the monitoring wells were field tested for temperature, specific conductance, and pH. These data are summarized in Table 1. Field data sheets are included as Appendix A. Samples were placed in laboratory cleaned and supplied containers, packed on ice, and placed under chain-of-custody. Samples were shipped to the laboratory by a next day delivery service. All analyses were conducted by

Environmental Conservation Laboratories, a North Carolina certified laboratory. The monitoring well locations are shown on Figure 2.

4.2 Stream Sampling

Surface water sampling took place on October 13, 1998. Samples SW-1 and SW-2 were collected from a stream that flows along the east/southeast side of the Swepsonville Landfill. The stream samples were analyzed for the same parameters as the groundwater samples. The stream sample locations are shown on Figure 2.

5.0 RESULTS

The results of the laboratory analyses for Appendix I constituents plus mercury in the groundwater and surface water are summarized in Tables 2 and 3, and the complete laboratory reports are included as Appendix B.

5.1 Groundwater

The groundwater sample analyses revealed nine constituents that had concentrations at or above 2L Standards in one or more of the wells. A summary of these analytical results is provided below.

- Cadmium was detected in MW-2 at 0.006 ppm, MW-3 at 0.016 ppm, MW-4 at 0.011 ppm, MW-5 at 0.006 ppm, MW-7 at 0.005 ppm, MW-8B at 0.005 ppm, and MW-9 at 0.012 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-3 at 0.11 ppm and MW-9 at 0.11 ppm. The 2L Standard is 0.05 ppm.

- Lead was detected in MW-8B at 0.020 ppm. The 2L Standard is 0.015 ppm.

- Mercury was detected in MW-4 at 0.0057 ppm. The 2L Standard is 0.0011 ppm.

- 1,1-Dichloroethene was detected in MW-2 at 15 ppb. The 2L Standard is 7.0 ppb.

- cis-1,2-Dichloroethene was detected in MW-4 at 430 ppb. The 2L Standard is 70.0 ppb.

- Tetrachloroethene was detected in MW-2 at 19 ppb and MW-4 at 74 ppb. The 2L Standard is 0.7 ppb.

- Trichloroethene was detected in MW-2 at 25 ppb and MW-4 at 56 ppb. The 2L Standard is 2.8 ppb.

- Vinyl chloride was detected in MW-4 at 11.0 ppb. The 2L Standard is 0.015 ppb.

The following ten constituents were detected in one or more of the wells in concentrations below the 2L Standards.

- Arsenic was detected in MW-3 at 0.013 ppm. The 2L Standard is 0.05 ppm.

- Barium was detected in MW-2 at 0.55 ppm, MW-3 at 0.84 ppm, and MW-9 at 0.74 ppm. The 2L Standard is 2.0 ppm.

- Cadmium was detected in MW-1 at 0.003 ppm, MW-6 at 0.001 ppm, and MW-8A at 0.001 ppm. The 2L Standard is 0.005 ppm.

- Chromium was detected in MW-2 at 0.033 ppm, MW-4 at 0.013 ppm, MW-5 at 0.042 ppm, and MW-7B at 0.014 ppm. The 2L Standard is 0.05 ppm.

- Copper was detected in MW-4 at 0.22 ppm and MW-8B at 0.028 ppm. The 2L Standard is 1.0 ppm.

- Lead was detected in MW-9 at 0.011 ppm. The 2L Standard is 0.015 ppm.

- Zinc was detected in MW-1 at 0.11 ppm, MW-2 at 0.16 ppm, MW-3 at 0.27 ppm, MW-4 at 0.14 ppm, MW-5 at 0.23 ppm, MW-7B at 0.14 ppm, MW-8B at 0.44 ppm, and MW-9 at 0.30 ppm. The 2L Standard is 2.1 ppm.

- 1,1-Dichloroethane was detected in MW-2 at 74 ppb and MW-4 at 37 ppb. The 2L Standard is 700 ppb.

- cis-1,2-Dichloroethene was detected in MW-2 at 28 ppb. The 2L Standard is 70.0 ppb.

- Carbon Disulfide was detected in MW-2 at 140 ppb. The interim 2L Standard is 700 ppb.

No 2L Standards have been set for the following four potentially naturally occurring inorganic constituents that were found in detectable concentrations. The practical quantitation limits of the analyses do not serve as the standards for naturally occurring constituents.

- Beryllium was detected in MW-1 at 0.002 ppm, MW-3 at 0.002 ppm, MW-8B at 0.002 ppm, and MW-9 at 0.006 ppm.

- Cobalt was detected in MW-1 at 0.012 ppm, MW-2 at 0.029 ppm, MW-3 at 0.053 ppm, MW-4 at 0.087 ppm, MW-5 at 0.022 ppm, MW-7B at 0.021 ppm, MW-8B at 0.022 ppm, and MW-9 at 0.14 ppm.

- Thallium was detected in MW-2 at 0.012 ppm.

- Vanadium was detected in MW-1 at 0.044 ppm, MW-2 at 0.15 ppm, MW-3 at 0.34 ppm, MW-4 at 0.49 ppm, MW-5 at 0.13 ppm, MW-7B at 0.10 ppm, MW-8B at 0.044 ppm, and MW-9 at 0.25 ppm.

5.2 Surface Water

The surface water sample analyses revealed one naturally occurring constituent (zinc in SW-2 at 0.10 ppm) for which no 15A NCAC 2B surface water standard exist. No other inorganic or volatile organic constituents were detected in either of the two surface water samples.

6.0 REFERENCES

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Sections .0100, .0200, and .0300 (November 8, 1993); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Environmental Management, Subchapter 2B, Classifications and Water Quality Standards Applicable to the Surface Waters of North Carolina, Section .0200 (April 1, 1991); from the Environmental Management Commission, Raleigh, North Carolina.

North Carolina Administrative Code, Title 15A, Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Subchapter 13B, Solid Waste Management, Section .1600 (January 1, 1997).

TABLE 1
GROUND AND SURFACE WATER SAMPLING FIELD DATA
SWEPSONVILLE LANDFILL
OCTOBER 13, 1998

Field Parameter	Sample No.							
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B
Temperature	63.0°F	60.6°F	61.9°F	59.7°F	64.0°F	60.4°F	58.6°F	59.4°F
Specific Conductance	88.6 μMHOs	159.6 μMHOs	71.5 μMHOs	360.0 μMHOs	113.6 μMHOs	99.9 μMHOs	99.3 μMHOs	104.5 μMHOs
pH	5.4	6.1	6.2	6.0	6.3	6.6	6.4	6.2

Field Parameter	Sample No.				
	MW-8A	MW-8B	MW-9	SW-1	SW-2
Temperature	57.9°F	58.0°F	62.6°F	59.7°F	59.0°F
Specific Conductance	45.3 μMHOs	36.0 μMHOs	40.8 μMHOs	79.9 μMHOs	86.8 μMHOs
pH	6.5	5.3	6.1	7.7	7.1

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TABLE 2
WATER QUALITY SAMPLING RESULTS
APPENDIX I INORGANIC CONSTITUENTS PLUS MERCURY
SWEPSONVILLE LANDFILL
OCTOBER 13, 1998

Compound	Laboratory Method	Sample No.													15A NCAC 2L Standards for Class GA Ground Water	15A NCAC 2B Standards for Class B, C Surface Waters	Practical Quantitation Limit (PQL)
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2			
Antimony, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.03
Arsenic, Total	SW-846 6010	BQL	BQL	0.013	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.05	0.01
Barium, Total	SW-846 6010	BQL	0.55	0.84	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.74	BQL	BQL	2.0	x	0.5
Beryllium, Total	SW-846 6010	0.002	BQL	0.002	BQL	BQL	BQL	BQL	BQL	BQL	0.002	0.006	BQL	BQL	*	0.0065	0.002
Cadmium, Total	SW-846 6010	0.003	0.006	0.016	0.011	0.006	0.001	BQL	0.005	0.001	0.005	0.012	BQL	BQL	0.005	0.002	0.001
Chromium, Total	SW-846 6010	BQL	0.033	0.11	0.013	0.042	BQL	BQL	0.014	BQL	BQL	0.11	BQL	BQL	0.05	0.05	0.01
Cobalt, Total	SW-846 6010	0.012	0.029	0.053	0.087	0.022	BQL	BQL	0.021	BQL	0.022	0.14	BQL	BQL	*	x	0.01
Copper, Total	SW-846 6010	BQL	BQL	BQL	0.22	BQL	BQL	BQL	BQL	BQL	0.28	BQL	BQL	BQL	1.0	x	0.2
Lead, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.02	0.011	BQL	BQL	0.015	0.025	0.01
Mercury, Total	SW-846 7470	BQL	BQL	BQL	0.0057	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.0011	0.000012	0.0005
Nickel, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.1	0.088	0.05
Selenium, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.05	0.005	0.02
Silver, Total	SW-846 6010	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.018	x	0.01
Thallium, Total	SW-846 6010	BQL	0.012	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	*	x	0.01
Vanadium, Total	SW-846 6010	0.044	0.15	0.34	0.49	0.13	BQL	BQL	0.10	BQL	0.044	0.25	BQL	BQL	*	x	0.04
Zinc, Total	SW-846 6010	0.11	0.16	0.27	0.14	0.23	BQL	BQL	0.14	BQL	0.44	0.30	BQL	0.10	2.1	x	0.05

Notes:
- All results in parts per million (ppm)
- BQL – Below practical quantitation limit
- Shaded blocks denote concentrations that do not meet 15A NCAC 2L Standards for Class GA Groundwater (MW data) or 15A NCAC 2B Standards for Class B surface waters (SW data)
- * – No 15A NCAC 2L Standard has been established for these constituents
- x – No 15A NCAC 2B Standard has been established for these constituents

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LAWGIBB GROUP

May 15, 2000

Mr. Larry Rose
North Carolina Department of Natural Resources
Solid Waste Section
P.O. Box 2687
Raleigh, North Carolina 27611

Subject: **Report of Semi-Annual Water Quality Monitoring**
Series 2 – April 2000
Swepsonville Landfill
Graham, Alamance County, North Carolina
LAW Project 30440-9-0124

Dear Mr. Rose:

On behalf of Alamance County, Law Engineering and Environmental Services, Inc. (LAW) is pleased to present this Report of Semi-Annual Water Quality Monitoring for the above referenced site. This report summarizes the field activities, analytical results, and statistical analysis from the semi-annual sampling event performed in April 2000.

The surface water and groundwater samples were collected in general accordance with the North Carolina Department of Natural Resources (NCDENR) North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Carin Lee Kromm, G.I.T
Project Geologist

Mark I. Miller, L.G.
Principal Geologist
Licensed NC 1715

NORTH CAROLINA LICENSED SEAL 1715 GEOLOGIST MARK IVES MILLER

Attachments

LAW Engineering and Environmental Services, Inc.
7347-E West Friendly Avenue • Greensboro, NC 27410
336-294-4221 • Fax: 336-294-4227

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FIGURES

Figure 1 – Site Location Map
Figure 2 – Monitoring Well and Surface Water Location Map

TABLES

Table 1 – Groundwater and Surface Water Field Parameters
Table 2 – Summary of Groundwater and Surface Water Analytical Results

APPENDIX

Laboratory Data and Chain-of-Custody Documentation

1.0 PROJECT BACKGROUND

Law Engineering and Environmental Services, Inc. (LAW) was contracted by Alamance County to conduct water quality monitoring at the Swepsonville Landfill. The Swepsonville Landfill is located in Graham, North Carolina (Figure 1).

Prior to LAW's April 2000 and October 1999 sampling event, BPA Environmental & Engineering, Inc. (BPA) conducted semi-annual water quality monitoring events for the existing eleven monitoring wells and collected two surface water samples (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7A, MW-7B, MW-8A, MW-8B, MW-9, SW-1 and SW-2) from October 1995 until March 1999. Groundwater samples from the previous monitoring events were analyzed for Appendix I constituents, which included volatile organic compounds (VOCs) and metals including mercury.

2.0 FIELD ACTIVITIES

Between April 12 and April 17, 2000, LAW conducted the first semi-annual sampling event for 2000 at the Swepsonville Landfill. The field activities were performed in general accordance with the requirements of the North Carolina Department of Natural Resources (NCDENR), North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637. A total of eleven monitoring wells, and two surface water locations were sampled as part of this monitoring event (Figure 2).

Prior to sampling, the depth-to-groundwater was measured in the eleven monitoring wells using an electric water level indicator. The water level indicator was decontaminated between uses according to the following procedure:

- washed with potable water and phosphate-free detergent solution;
- rinsed with potable water; and
- rinsed with distilled water.

The depth-to-groundwater measurements were not converted to groundwater elevations because survey data indicated that only the top of the steel outer protective casing was surveyed and depth-to-water measurements were previously referenced to the top of the PVC riser casing.

The dissolved oxygen (DO), temperature, pH, and specific conductivity of the groundwater and surface water samples were measured in the field using a YSI combination meter. The pH of the groundwater was also measured in the field using a Cole Parmer pH meter. These measurements are presented in Table 1.

The monitoring wells were purged by bailing an equivalent of five casing volumes of water from the wells or to dryness using a one-liter capacity disposable Teflon™ bailer. The water samples were collected in laboratory-decontaminated bottles. The sample containers were labeled with identifying numbers and information, preserved on ice, and shipped to Prism Laboratories, Inc., a North Carolina licensed laboratory, located in Charlotte, North Carolina for analysis.

The groundwater samples from the monitoring wells and surface water samples were analyzed for Appendix I constituents which included volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (USEPA) Method 8260B and metals using USEPA Method

6010. Mercury was analyzed using USEPA Method 245.1. Laboratory reports and chain-of-custody documentation are included in the Appendix.

3.0 ANALYTICAL RESULTS

3.1. Groundwater Analytical Results

The groundwater analytical results were compared to the North Carolina groundwater quality standards established in NCDENR Title15A NCAC Subchapter 2L Section .0202, Groundwater Quality Standards (2L Groundwater Quality Standards). The detected groundwater analytical results are summarized in Table 2.

Seven chlorinated VOCs were detected in the groundwater samples. Of these VOCs, five were detected above their respective 2L Groundwater Quality Standards. As shown on Table 1, cis-1,2-dichloroethene (cis- 1,2-DCE) was detected in groundwater samples from monitoring well MW-4 at a concentration of 390 µg/l, which exceeds the 2L Groundwater Quality Standard of 70 µg/l. 1,1-DCE was detected in the MW-2 groundwater sample at a concentration of 9 µg/l, exceeding the 2L Groundwater Quality Standard of 7 µg/l. Tetrachloroethene (a.k.a. perchloroethylene or PCE) was detected in groundwater samples collected from monitoring wells MW-2 (15 µg/l), and MW-4 (61µg/l) at concentrations which exceed the 2L Groundwater Quality Standard of 0.7 µg/l. Trichloroethene (TCE) was also detected in groundwater samples collected from monitoring wells MW-2 (17 µg/l) and MW-4 (51 µg/l) at concentrations exceeding the 2L Groundwater Quality Standard of 2.8 µg/l. Vinyl chloride was detected in the groundwater sample from MW-4 (35 µg/l) at a concentration which exceeds the 2L Groundwater Quality Standard of 0.015 µg/l. Other VOCs were detected in wells MW-2 and MW-4 at concentrations below their respective 2L Groundwater Quality Standards. No VOCs were detected in wells MW-1, MW-3, MW-5, MW-6, MW-7A and B, MW-8A and B, or MW-9.

Seven metals were detected in groundwater samples collected at the site. Of those metals, only cadmium was detected in all of the eleven monitoring wells sampled; the cadmium concentration of 0.006 mg/l measured in the groundwater sample from well MW-2 slightly exceeded the 2L Groundwater Quality Standard for cadmium of 0.005 mg/l. Lead was detected in one of the eleven monitoring wells sampled; the lead concentration of 0.016 mg/l measured in the groundwater sample from well MW-5 slightly exceeded the 2L Groundwater Quality Standard for lead of 0.015 mg/l.

3.2. Surface Water Analytical Results

The surface water analytical results were compared to the North Carolina surface water quality standards established in NCDENR Title15A NCAC Subchapter 2B Section .0202, Surface Water Quality Standards (2B Surface Water Quality Standards). The detected surface water analytical results are also summarized in Table 2. No VOCs were detected in the surface water samples; however, zinc was detected in SW-2 (0.061 mg/l). Although there is no established concentration for zinc under 2B Surface Water Quality Standards for Human Health, the detected concentration of zinc in surface water slightly exceeds the 2B Surface Water Quality Standard for Freshwater Aquatic Life of 0.05 mg/l.

4.0 CONCLUSIONS

Based on the analytical data described above, the following conclusions are presented:

- Five VOCs (cis-1,2-DCE, 1,1-DCE, PCE, TCE, and VC) were detected at concentrations which exceed their respective 2L Groundwater Quality Standards. 1,1-Dicholorethane and Cholorethane were also detected in one groundwater sample; however, concentrations were below their respective 2L Groundwater Quality Standards of 700 µg/l and 2800 µg/l. Chloroethane has not been detected previously. Other detected VOC concentrations appear to have decreased since the October 1999 sampling event, with the exception of VC, which has increased.

- Cadmium was detected in several monitoring wells, and one concentration was detected in excess of the 2L Groundwater Quality Standard. The concentrations of cadmium in the April 2000 sampling event have increased in the majority of the wells in which cadmium was detected in the October 1999 sampling event; and

- With the exception of zinc detected in one surface water sample, Appendix I VOCs and Appendix I total metals were not detected in the surface water samples.

The next semi-annual water quality monitoring event is scheduled for October 2000.

TABLES

Table 1
Groundwater and Surface Water Field Parameters
Swepsonville Landfill
Series 2 - March 2000

Well Number	Total Well Depth (feet TOC)	Date	Depth to Groundwater (feet TOC)	pH (SU)	Temperature (°C)	Specific Conductivity (mS)
MW-1	33.00	10/15/99	22.78	5.46	17.3	106.800
		4/12/00	20.04	4.52	17.2	103.000
MW-2	29.90	10/15/99	26.31	6.22	17.6	245.50
		4/17/00	24.04	5.01	22.0	0.60
MW-3	24.10	10/15/99	7.30	6.13	N/A	106.6
		4/12/00	7.24	6.74	14.6	67.3
MW-4	50.00	10/16/99	30.34	6.27	16.8	451.6
		4/12/00	32.20	5.61	18.1	643.0
MW-5	19.00	10/16/99	N/A	6.24	17.3	153.4
		4/12/00	8.16	7.20	16.3	198.5
MW-6	50.00	10/16/99	20.78	6.30	16.6	129.6
		4/12/00	19.75	6.20	17.6	132.0
MW-7A	64.02	10/18/99	23.98	6.47	14.4	121.2
		4/12/00	20.49	5.57	15.1	132.0
MW-7B	31.05	10/18/99	22.33	6.26	16.2	83.5
		4/12/00	18.25	5.31	15.5	97.1
MW-8A	65.00	10/18/99	23.42	6.20	17.8	5.19
		4/17/00	20.68	5.27	15.4	45.80
MW-8B	26.00	10/18/99	23.90	5.95	16.8	38.2
		4/17/00	21.83	5.05	15.8	30.2
MW-9	27.50	10/15/99	15.30	6.12	15.6	41.01
		4/17/00	12.60	4.66	19.5	27.00
SW-1	N/A	10/18/99	N/A	7.43	16.4	72.14
		4/12/00	N/A	7.01	17.2	70.14
SW-2	N/A	10/15/99	N/A	7.26	17.2	74.06
		4/12/00	N/A	7.16	16.7	72.37

Prepared By: JAM Date: 5/15/00
Checked By: [illegible] Date: 5/15/00

Notes:

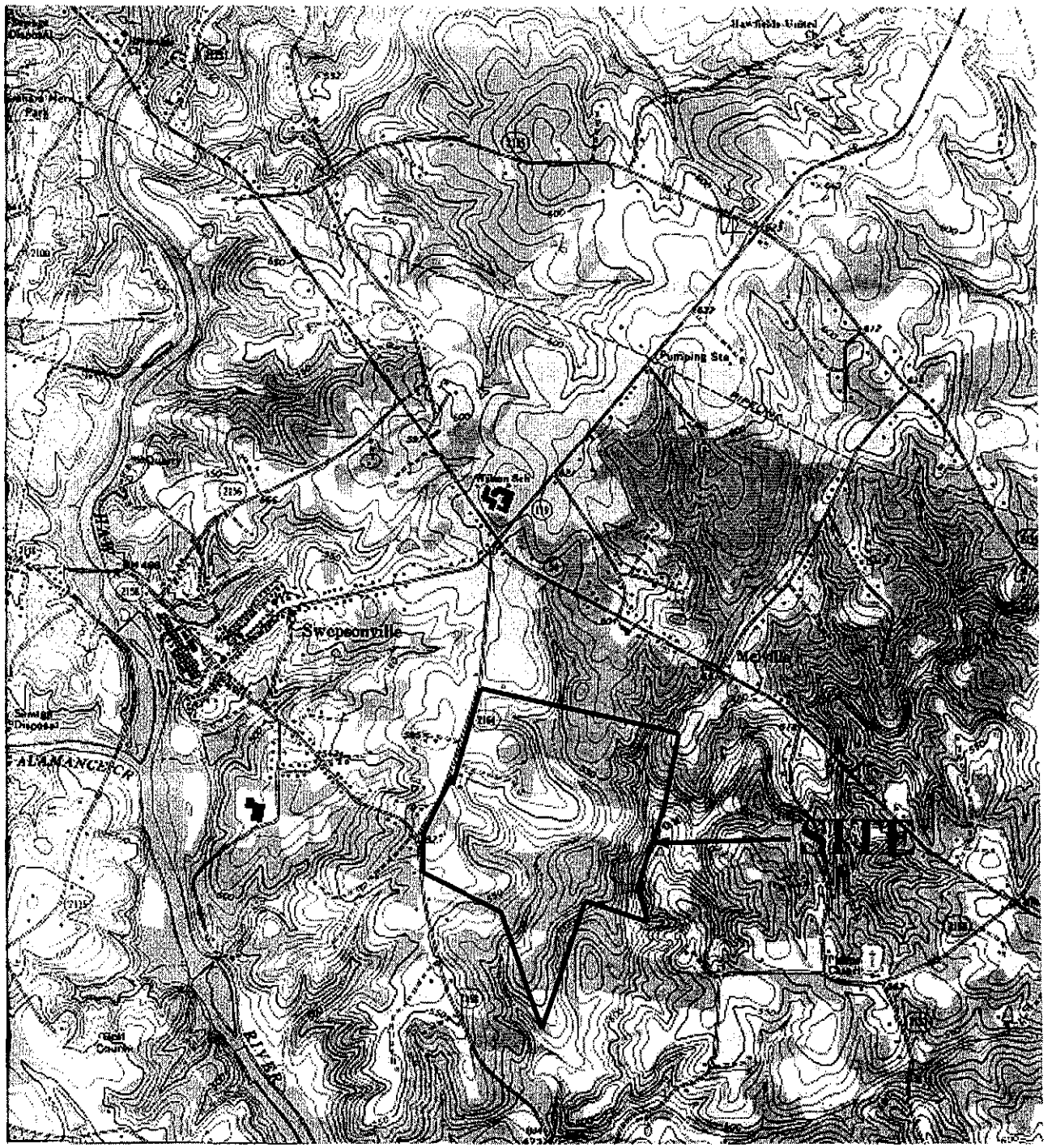
1) All data reported in feet above National Geodetic Vertical Datum (NGVD).

2) Top of casing elevations surveyed by Landmark Surveying, Inc.

N/A - Not Applicable

SU - Standard Units
mS - milli Siemens
TOC - Top of PVC riser casing

FIGURES



APPROXIMATE SITE LOCATION

APPROXIMATE SCALE

1000 500 0 1000

(IN FEET)

REF.: U.S.G.S. TOPOGRAPHIC MAP, MEBANE, N.C. QUADRANGLE, DATED 1969.

LAW

ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA

SITE LOCATION MAP

SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

PROJECT NO.	30440-9-0124	FIGURE	1

APPENDIX

LABORATORY DATA AND CHAIN-OF-CUSTODY DOCUMENTATION

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:28	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:28	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:28	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:28	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:28	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:28	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:28	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:28	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:28	MSP
ZINC, TOTAL APPENDIX1	0.086	mg/L	0.05	6010	4/25/00 18:28	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 13:25	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 13:25	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 13:25	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 13:25	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB65735**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 12:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 13:25	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 13:25	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:34	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
BARIUM, TOTAL APPENDIX1	1.0	mg/L	0.5	6010	4/25/00 18:34	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:34	MSP
CADMIUM, TOTAL APPENDIX1	0.006	mg/L	0.001	6010	4/25/00 18:34	MSP
CHROMIUM, TOTAL APPENDIX1	0.042	mg/L	0.01	6010	4/25/00 18:34	MSP
COBALT, TOTAL APPENDIX1	0.039	mg/L	0.01	6010	4/25/00 18:34	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:34	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:34	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:34	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:34	MSP
VANADIUM, TOTAL APPENDIX1	0.18	mg/L	0.04	6010	4/25/00 18:34	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 18:34	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 14:05	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 14:05	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 14:05	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
1,1-DICHLOROETHANE	57	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1-DICHLOROETHENE	9	ug/L	5	SW846-8260	4/25/00 14:05	MP
CIS-1,2-DICHLOROETHENE	18	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:05	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TETRACHLOROETHENE	15	ug/L	5	SW846-8260	4/25/00 14:05	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
TRICHLOROETHENE	17	ug/L	5	SW846-8260	4/25/00 14:05	MP

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Lab Report

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5/3/00

Carin Kromm
Law Eng & Env Services, Inc
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Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB65736**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:05	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 14:05	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

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Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:39	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:39	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:39	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:39	MSP
ZINC, TOTAL APPENDIX1	0.053	mg/L	0.05	6010	4/25/00 18:39	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 14:51	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 14:51	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 14:51	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

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7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 14:51	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB65737**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 14:51	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 14:51	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:44	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:44	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:44	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 18:44	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
COBALT, TOTAL APPENDIX1	0.071	mg/L	0.01	6010	4/25/00 18:44	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:44	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:44	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:44	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:44	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:44	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:44	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 15:45	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 15:45	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 15:45	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CHLOROETHANE	15	ug/L	10	SW846-8260	4/25/00 15:45	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
1,1-DICHLOROETHANE	43	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CIS-1,2-DICHLOROETHENE	390	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 15:45	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TETRACHLOROETHENE	61	ug/L	5	SW846-8260	4/25/00 15:45	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
TRICHLOROETHENE	51	ug/L	5	SW846-8260	4/25/00 15:45	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB65738**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 14:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 15:45	MP
VINYL CHLORIDE	35	ug/L	10	SW846-8260	4/25/00 15:45	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 15:45	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:50	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:50	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:50	MSP
CADMIUM, TOTAL APPENDIX1	0.004	mg/L	0.001	6010	4/25/00 18:50	MSP
CHROMIUM, TOTAL APPENDIX1	0.042	mg/L	0.01	6010	4/25/00 18:50	MSP
COBALT, TOTAL APPENDIX1	0.026	mg/L	0.01	6010	4/25/00 18:50	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:50	MSP
LEAD, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	4/25/00 18:50	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:50	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:50	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:50	MSP
VANADIUM, TOTAL APPENDIX1	0.13	mg/L	0.04	6010	4/25/00 18:50	MSP
ZINC, TOTAL APPENDIX1	0.097	mg/L	0.05	6010	4/25/00 18:50	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 16:38	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 16:38	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 16:38	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 16:38	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB65739**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 15:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 16:38	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 16:38	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 18:55	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 18:55	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 18:55	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 18:55	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 18:55	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:55	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 18:55	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 18:55	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 18:55	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 18:55	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 17:36	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 17:36	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 17:36	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 17:36	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB65740**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 17:36	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 17:36	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:24	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:24	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:24	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 19:24	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:24	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:24	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:24	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:24	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:24	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:24	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 18:16	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 18:16	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 18:16	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:16	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB65741**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:50
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:16	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 18:16	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:39	MSP
CADMIUM, TOTAL APPENDIX1	0.005	mg/L	0.001	6010	4/25/00 19:39	MSP
CHROMIUM, TOTAL APPENDIX1	0.019	mg/L	0.01	6010	4/25/00 19:39	MSP
COBALT, TOTAL APPENDIX1	0.029	mg/L	0.01	6010	4/25/00 19:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:39	MSP
VANADIUM, TOTAL APPENDIX1	0.12	mg/L	0.04	6010	4/25/00 19:39	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 19:39	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 18:57	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 18:57	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 18:57	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 18:57	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB65742**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 11:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 18:57	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 18:57	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:45	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:45	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:45	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	4/25/00 19:45	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:45	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:45	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:45	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:45	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:45	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:45	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 15:44	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 15:44	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 15:44	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 15:44	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8A**
Prism Sample ID: **AB65743**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 10:00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 15:44	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 15:44	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:50	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:50	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:50	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	4/25/00 19:50	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:50	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:50	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:50	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:50	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 19:50	MSP
ZINC, TOTAL APPENDIX1	0.068	mg/L	0.05	6010	4/25/00 19:50	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 16:31	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 16:31	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 16:31	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 16:31	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-8B**
Prism Sample ID: **AB65744**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 09:45
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 16:31	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 16:31	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 19:55	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 19:55	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 19:55	MSP
CADMIUM, TOTAL APPENDIX1	0.003	mg/L	0.001	6010	4/25/00 19:55	MSP
CHROMIUM, TOTAL APPENDIX1	0.022	mg/L	0.01	6010	4/25/00 19:55	MSP
COBALT, TOTAL APPENDIX1	0.058	mg/L	0.01	6010	4/25/00 19:55	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 19:55	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 19:55	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 19:55	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 19:55	MSP
VANADIUM, TOTAL APPENDIX1	0.058	mg/L	0.04	6010	4/25/00 19:55	MSP
ZINC, TOTAL APPENDIX1	0.17	mg/L	0.05	6010	4/25/00 19:55	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 17:28	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 17:28	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 17:28	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 17:28	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **MW-9**
Prism Sample ID: **AB65745**
Login Group: 8626F14
Sample Collection Date/Time: 4/17/00 11:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 17:28	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 17:28	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 20:00	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 20:00	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 20:00	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	4/25/00 20:00	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 20:00	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:00	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 20:00	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:00	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 20:00	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:00	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 19:38	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 19:38	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 19:38	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 19:38	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-1**
Prism Sample ID: **AB65746**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 10:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 19:38	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 19:38	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METALS DIGESTION	Completed			3010	4/24/00 12:30	PRF
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	4/25/00 20:04	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	4/25/00 20:04	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	4/25/00 20:04	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	4/25/00 20:04	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	4/25/00 20:04	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	4/25/00 20:04	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	4/25/00 20:04	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	4/25/00 20:04	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	4/25/00 20:04	MSP
ZINC, TOTAL APPENDIX1	0.061	mg/L	0.05	6010	4/25/00 20:04	MSP
MERCURY, TOTAL	Less than	mg/L	0.0002	EPA 245.1	4/25/00 14:00	PRF
MERCURY DIGESTION	Completed			EPA 245.1	4/25/00 08:00	PRF
ACETONE	Not detected	ug/L	20	SW846-8260	4/25/00 20:18	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/25/00 20:18	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/25/00 20:18	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/25/00 20:18	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **SW-2**
Prism Sample ID: **AB65747**
Login Group: 8626F14
Sample Collection Date/Time: 4/12/00 16:30
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/25/00 20:18	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/25/00 20:18	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB65969**
Login Group: 8626F14
Sample Collection Date/Time: 4/19/00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ACETONE	Not detected	ug/L	20	SW846-8260	4/26/00 18:08	MP
ACRYLONITRILE	Not detected	ug/L	100	SW846-8260	4/26/00 18:08	MP
BENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
BROMOFORM	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CARBON DISULFIDE	Not detected	ug/L	20	SW846-8260	4/26/00 18:08	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CHLOROETHANE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
CHLOROFORM	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
ETHYLBENZENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
2-HEXANONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
METHYL BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
METHYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
METHYLENE BROMIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

5/3/00

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill**
Customer Sample ID: **TRIP BLANK**
Prism Sample ID: **AB65969**
Login Group: 8626F14
Sample Collection Date/Time: 4/19/00
Lab Submittal Date/Time: 4/19/00 15:45

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	REPORTING LIMIT	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
METHYLENE CHLORIDE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
METHYL IODIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	SW846-8260	4/26/00 18:08	MP
STYRENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TETRACHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TOLUENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRICHLOROETHENE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP
VINYL ACETATE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
VINYL CHLORIDE	Not detected	ug/L	10	SW846-8260	4/26/00 18:08	MP
XYLENES	Not detected	ug/L	5	SW846-8260	4/26/00 18:08	MP

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			✓
CUSTODY SEALS INTACT?			
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: LAW ENGINEERING
Physical Address: 1347-C W. FRIENDLY AVE, GREENSBORO, NC 27410
Phone: 336-294-4271 Fax: 336-294-4277
P.O.#/Billing Reference: 30400069
Project Name: Swepsonville Landfill

REPORT TO: Name: CARIN KROUMA
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA, GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification
Requested NC ____ SC ____ Other ____ NA ____
Water Chlorinated Yes ____ No ____ NA ____
Sample Iced Upon Collection Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: App IX VOC	SOTO App IX Metals					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-1	4/12/00	1230	Water	VOA	3		HCl	✓								65735
MW-1	4/12/00	1230	Water	P	1		HNO_3		✓							↓
MW-2	4/17/00	1100	Water	VOA	3		HCl	✓								65736
MW-2	4/17/00	1100	Water	P	1		HNO_3		✓							↓
MW-3	4/12/00	1630	Water	VOA	3		HCl	✓								65737
MW-3	4/12/00	1630	Water	P	1		HNO_3		✓							↓
MW-4	4/12/00	1400	Water	VOA	3		HCl	✓								65738
MW-4	4/12/00	1400	Water	P	1		HNO_3		✓							↓
MW-5	4/12/00	1530	Water	VOA	3		HCl	✓								65739
MW-5	4/12/00	1530	Water	P	1		HNO_3		✓							↓

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: LAW Technician

Relinquished By: (Signature)	Received By: (Signature) [signature]	Date 04/19/00	Military/Hours 0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 8L960F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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LAB USE ONLY

	YES	NO	N/A
Samples INTACT upon arrival?	✓		
Received ON WET ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?			✓
CUSTODY SEALS INTACT?			✓
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

Client: LAW ENGINEERING
Physical Address: 7347-C W. FRIENDLY AVE GREENSBORO NC 27410
Phone: 336-294-4221 Fax: 336-294-4227
P.O.#/Billing Reference: 304000169
Project Name: Swepsonville Landfill

REPORT TO: Name: Ms. CARIN KROMM
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ____ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ____
Sample Iced Upon Collection: Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	ANALYSES REQUESTED: 8260 App 7 VOC	Metals						REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-6	4/12/00	1100	Water	VOA	3		HCl	✓									65740
MW-6	4/12/00	1100	Water	P	1		HNO_3		✓								⊥
MW-7A	4/12/00	1150	Water	VOA	3		HCl	✓									65741
MW-7A	4/12/00	1150	Water	P	1		HNO_3		✓								⊥
MW-7B	4/12/00	1145	Water	VOA	3		HCl	✓									65742
MW-7B	4/12/00	1145	Water	P	1		HNO_3		✓								⊥
MW-8A	4/17/00	1000	Water	VOA	3		HCl	✓									65743
MW-8A	4/17/00	1000	Water	P	1		HNO_3		✓								⊥
MW-8B	4/17/00	0945	Water	VOA	3		HCl	✓									65744
MW-8B	4/17/00	0945	Water	P	1		HNO_3		✓								⊥

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: Law Technician

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
	[signature]	041900	0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) [signature]	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 060216F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Fax: 704/525-0409

LAB USE ONLY

	YES	NO	NA
Samples INTACT upon arrival?	✓		
Received ON ICE? Temp ____	✓		
PROPER PRESERVATIVES indicated?	✓		
Received WITHIN HOLDING TIMES?	✓		✓
CUSTODY SEALS INTACT?	✓		
VOLATILES rec'd W/OUT HEADSPACE?	✓		
PROPER CONTAINERS used?	✓		

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Client: LAW ENGINEERING
Physical Address: 7347-E W. FRIENDLY AVE GREENSBORO, NC 27410
Phone: 336-294-4221 Fax: 336-294-4227
P.O.#/Billing Reference: 30400169
Project Name: Swepsonville Landfill

REPORT TO: Name: CARIN KROMM
Address:
BILL TO: Name: ACCOUNTS PAYABLE
Address: ALPHARETTA GA
Requested Due Date:

(SEE REVERSE SIDE FOR RUSH TURNAROUND FEES)

State Certification Requested: NC ____ SC ____ Other ____ NA ____
Water Chlorinated: Yes ____ No ____ NA ____
Sample Iced Upon Collection: Yes ____ No ____

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER *TYPE SEE BELOW	NO.	SIZE	PRESERVATIVES	8260	App IV VOC Metals					REMARKS	SUB LAB CERT. ID NO.	PRISM LAB ID NO.
MW-9	4/17/00	1130	Water	VOA	3		HCl	✓								65745
MW-9	4/17/00	1130	Water	P	1		HNO_3		✓							1
SW-1	4/12/00	1030	Water	VOA	3		HCl	✓								65746
SW-1	4/12/00	1030	Water	P	1		HNO_3		✓							1
SW-2	4/12/00	1630	Water	VOA	3		HCl	✓								65747
SW-2	4/12/00	1630	Water	P	1		HNO_3		✓							1
TRIPBLANK	—	—	Water	VOA	3			✓								65969

Sampler's Signature: [signature] Sampled By (Print Name): Jennifer McCoach Affiliation: Lab Technician

Relinquished By: (Signature)	Received By: (Signature)	Date	Military Hours
	C.V.J. Matthews	04/19/00	0830
Relinquished By: (Signature)	Received By: (Signature)	Date	
Relinquished By: (Signature) C.V.J. Matthews	Received For Prism Laboratories By: [signature]	Date 4-19-00	1545
Method of Shipment		Log-In Group No. 8606F13	

Additional Comments

NPDES NC ____ SC ____ OTHER ____ UST: NC ____ SC ____ OTHER ____ GROUNDWATER: NC ____ SC ____ OTHER ____ DRINKING WATER: NC ____ SC ____ OTHER ____ SOLID WASTE: NC ____ SC ____ OTHER ____ OTHER: NC ____ SC ____ OTHER ____

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

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LAWGIBB GROUP

February 28, 2000

Mr. Larry Rose
North Carolina Department of Natural Resources
Solid Waste Section
P.O. Box 2687
Raleigh, North Carolina 27611

Subject: **Report of Semi-Annual Water Quality Monitoring**
Series 1 – October 1999
Swepsonville Landfill
Graham, Alamance County, North Carolina
LAW Project 30440-9-0124

Dear Mr. Rose:

On behalf of Alamance County, Law Engineering and Environmental Services, Inc. (LAW) is pleased to present this Report of Semi-Annual Water Quality Monitoring for the above referenced site. This report summarizes the field activities, analytical results, and statistical analysis from the semi-annual sampling event performed in October 1999.

The surface water and groundwater samples were collected in general accordance with the North Carolina Department of Natural Resources (NCDENR) North Carolina Administrative Code (NCAC), Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637.

Sincerely,

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

Carin Lee Kromm, G.I.T
Project Geologist

Mark I. Miller, L.G.
Principal Geologist
Licensed NC 1715

Attachments

MAR 2000
Section

LAW Engineering and Environmental Services, Inc.
7347 - E West Friendly Avenue
Greensboro, NC 27410
336-294-4221 • Fax: 336-294-4227

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3.0 ANALYTICAL RESULTS 4
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FIGURES

Figure 1 – Site Location Map
Figure 2 – Monitoring Well and Surface Water Location Map

TABLES

Table 1 – Groundwater and Surface Water Field Parameters
Table 2 – Summary of Groundwater and Surface Water Analytical Results

APPENDIX

Laboratory Data and Chain-of-Custody Documentation

1.0 PROJECT BACKGROUND

Law Engineering and Environmental Services, Inc. (LAW) was contracted by Alamance County to conduct water quality monitoring at the Swepsonville Landfill. The Swepsonville Landfill is located in Graham, North Carolina (Figure 1).

Prior to LAW's October 1999 sampling event, BPA Environmental & Engineering, Inc. (BPA) conducted semi-annual water quality monitoring events for the existing eleven monitoring wells and collected two surface water samples (MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7A, MW-7B, MW-8A, MW-8B, MW-9, SW-1 and SW-2) from October 1995 until March 1999. Groundwater samples from the previous monitoring events were analyzed for Appendix I constituents, which included volatile organic compounds (VOCs) and metals including mercury.

2.0 FIELD ACTIVITIES

Between October 13 and October 18, 1999, LAW conducted the second semi-annual sampling event for 1999 at the Swepsonville Landfill. The field activities were performed in general accordance with the requirements of the North Carolina Department of Natural Recourses (NCDENR) Title 15A, Subchapter 13B (15A NCAC 13B), Sections .0601, and .1630 through .1637. A total of eleven monitoring wells, and two surface water locations were sampled as part of this monitoring event (Figure 2).

Prior to sampling, the depth-to-groundwater was measured in the eleven monitoring using an electric water level indicator. The water level indicator was decontaminated between uses according to the following procedure:

- washed with potable water and phosphate-free detergent solution;
- rinsed with potable water; and
- rinsed with distilled water.

The depth-to-groundwater measurements were not converted to groundwater elevations because survey data indicated that only the top of the steel outer protective casing was surveyed and depth-to-water measurements were referenced to the top of the PVC riser casing.

The dissolved oxygen (DO), temperature, pH, and specific conductivity of the groundwater and surface water samples were measured in the field using a YSI combination meter. The pH of the groundwater was also measured in the field using a Cole Parmer pH meter. These measurements are presented in Table 1.

The monitoring wells were purged by bailing an equivalent of five casing volumes of water from the wells or to dryness using a one-liter capacity disposable Teflon™ bailer. The water samples were collected in laboratory-decontaminated bottles. The sample containers were labeled with identifying numbers and information, preserved on ice, and shipped to Prism Laboratories, Inc., a North Carolina licensed laboratory, located in Charlotte, North Carolina for analysis.

The groundwater samples from the monitoring wells and surface water samples were analyzed for Appendix I constituents which included volatile organic compounds (VOCs) using U.S. Environmental Protection Agency (USEPA) Method 8260B and metals using USEPA Method

6010. Mercury was analyzed using USEPA Method 245.1 for analysis. Laboratory reports and chain-of-custody documentation are included in the Appendix.

3.0 ANALYTICAL RESULTS

3.1. Groundwater Analytical Results

The groundwater analytical results were compared to the North Carolina groundwater quality standards established in NCDENR Title15A NCAC Subchapter 2L Section .0202, Groundwater Quality Standards (2L Groundwater Quality Standards). The detected groundwater analytical results are summarized in Table 2.

Nine chlorinated VOCs were detected in the groundwater samples. Of these VOCs, six were detected above their respective 2L Groundwater Quality Standards. As shown on Table 1, cis-1,2-DCE was detected in groundwater samples from monitoring well MW-4 at a concentration of 410 µg/l, which exceeds the 2L Groundwater Quality Standard of 70 µg/l. 1,1-Dichlorethene (1,1-DCE) was detected in the MW-2 groundwater samples at a concentration of 23 µg/l, exceeding the 2L Groundwater Quality Standard of 7 µg/l. 1,2-Dichloropropane (1,2-DCP) was detected in the groundwater sample from monitoring well MW- 2 at a concentration of 8 µg/l, which exceeds the 2L Groundwater Quality Standard of 0.56 µg/l. Tetrachloroethene (a.k.a perchloroethylene or PCE) was detected in groundwater samples collected from monitoring wells MW-1 (9 µg/l), MW-2 (38 µg/l), and MW-4 (68 µg/l) at concentrations which exceed the 2L Groundwater Quality Standard of 0.7 ug/l. Trichloroethene (TCE) was also detected in groundwater samples collected from monitoring wells MW-2 (49 µg/l) and MW-4 (57 µg/l) at concentrations exceeding the 2L Groundwater Quality Standard of 2.8 µg/l. Vinyl chloride was detected in the groundwater sample from MW-4 (16 µg/l) at a concentration which exceeds the 2L Groundwater Quality Standard of 0.015 µg/l. 1,4-Dichlorobenzene (1,4-DCB) was also detected in the groundwater sample from MW-4 at a concentration of 7 µg/l; however, a 2L Groundwater Quality Standard has not been established for this compound. Other VOCs were detected in wells MW-2 and MW-4 at concentrations below their respective 2L Groundwater Quality Standards. No VOCs were detected in wells MW-3, MW-5, MW-6, MW-7A and B, MW-8A and B, or MW-9.

Ten metals were detected in groundwater samples collected at the site. Of those metals, only cadmium was detected in seven of the eleven monitoring wells sampled; the cadmium concentration of 0.006 mg/l measured in the groundwater sample from well MW-2 slightly exceeded the 2L Groundwater Quality Standard for cadmium of 0.005 mg/l.

3.2. Surface Water Analytical Results

The surface water analytical results were compared to the North Carolina surface water quality standards established in NCDENR Title15A NCAC Subchapter 2B Section .0202, Surface Water Quality Standards (2B Surface Water Quality Standards). The detected surface water analytical results are also summarized in Table 2. No VOCs or metals were detected in the surface water samples.

4.0 CONCLUSIONS

Based on the analytical data described above, the following conclusions are presented:

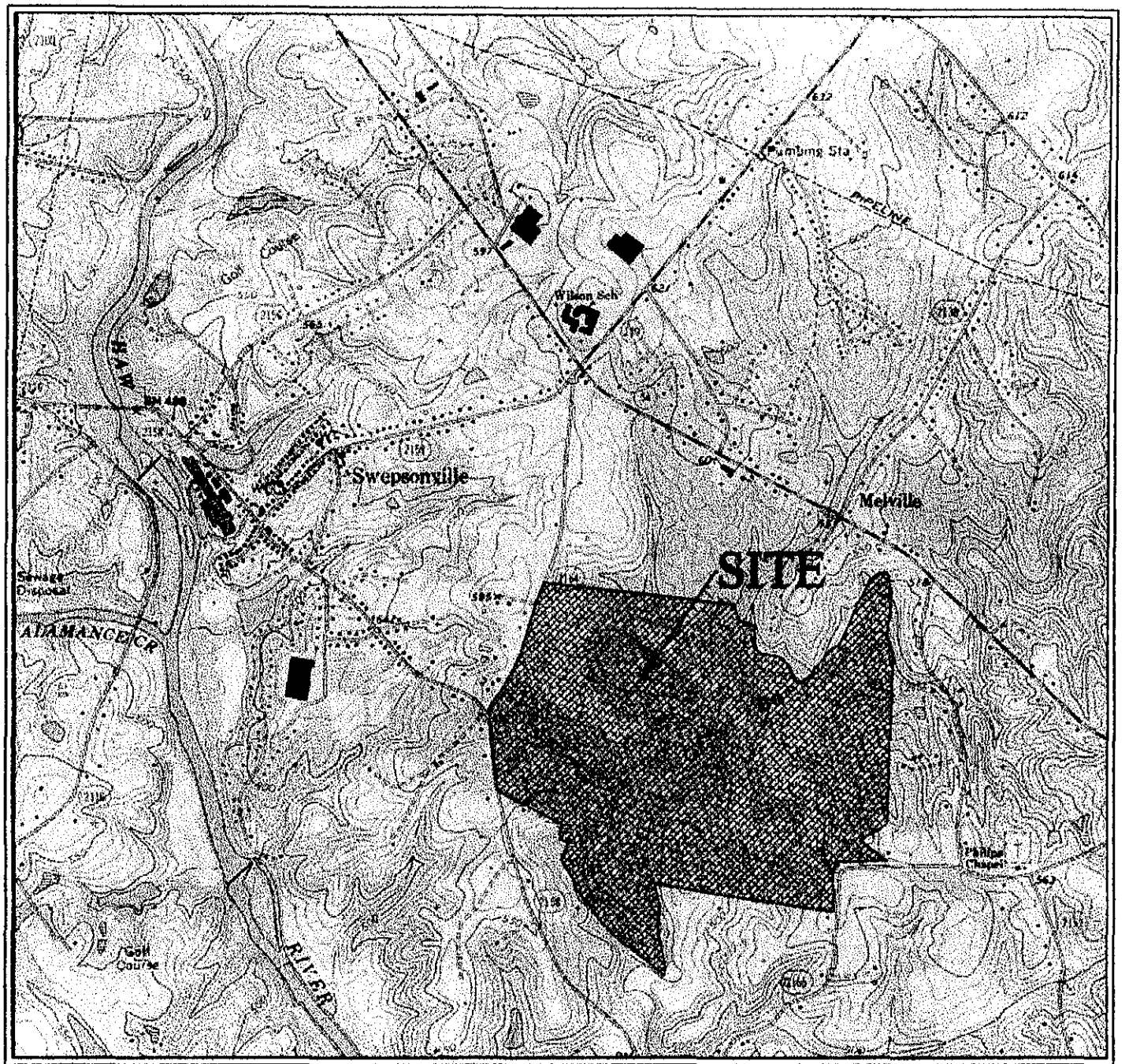
- Six VOCs (cis-1,2-DCE, 1,4 DCB, 1.1 DCE, 1,2-DCP, PCE, TCE, and VC) were detected at concentrations which exceed their respective 2L Groundwater Quality Standards. 1,4-DCB was also detected in one groundwater sample; however, a 2L Groundwater Quality Standard has not been established for this compound. 1,4-DCB, 1,2-DCP, and VC have not been detected previously. Other detected concentrations appear to have increased since the March 1999 sampling event.

- Cadmium was detected in several monitoring wells, and one concentration was detected in excess of the 2L Groundwater Quality Standard. The concentrations of cadmium in the October 1999 sampling event have decreased in the majority of the wells in which cadmium was detected in the March 1999 sampling event; and

- Appendix I VOCs or Appendix I total metals were not detected in the surface water samples.

The next semi-annual water quality monitoring event is scheduled for April 2000.

FIGURES



NORTH

MEBANE, N.C.
36079-A3-TF-024
1969
REVISED 1994
DMA 5156 III SE-SERIES V842

QUADRANGLE LOCATION

NOTE: SITE LOCATION IS APPROXIMATE.

CONTOUR INTERVALS 10 FEET

GRAPHIC SCALE FEET

2000 1000 0 2000 4000

LAW
ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
GREENSBORO, NORTH CAROLINA

SITE LOCATION MAP
SWEPSONVILLE LANDFILL
ALAMANCE COUNTY, NORTH CAROLINA

DRAWN:	DATE: FEBRUARY 2000
DFT CHECK:	SCALE: 1: 24000
ENG CHECK:	JOB: 30440-9-0124
APPROVAL:	FIGURE: 1

TABLES

Table 1
Groundwater and Surface Water Field Parameters
Swepsonville Landfill
Series 1 - October 1999

Well Number	Total Well Depth (feet TOC)	Depth to Groundwater (feet TOC)	pH (SU)	Temperature (°C)	Specific Conductivity (mS)
MW-1	33.00	22.78	5.46	17.3	106.800
MW-2	29.90	26.31	6.22	17.6	245.50
MW-3	24.10	7.30	6.13	N/A	106.6
MW-4	50.00	30.34	6.27	16.8	451.6
MW-5	19.00	N/A	6.24	17.3	153.4
MW-6	50.00	20.78	6.30	16.6	129.6
MW-7A	64.02	23.98	6.47	14.4	121.2
MW-7B	31.05	22.33	6.26	16.2	83.5
MW-8A	65.00	23.42	6.20	17.8	5.19
MW-8B	26.00	23.90	5.95	16.8	38.2
MW-9	27.50	15.30	6.12	15.6	41.01
SW-1	N/A	N/A	7.43	16.4	72.14
SW-2	N/A	N/A	7.26	17.2	74.06

Prepared By: JM Date: 2/17/00
Checked By: CLK Date: 2/24/00

Notes:

1) All data reported in feet above National Geodetic Vertical Datum (NGVD).

2) Top of casing elevations surveyed by Landmark Surveying, Inc.

SU - Standard Units
N/A - Not Applicable
mS - milli Siemens
TOC - Top of PVC riser casing

Table 2
Summary of Groundwater and Surface Water Analytical Results
Swepsonville Landfill
Series 1 - October 1999

Parameter	MDL	Analytical Results														
Sample ID		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7A	MW-7B	MW-8A	MW-8B	MW-9	SW-1	SW-2	2L Ground-	2B Water
Depth (feet)		33.00	29.90	24.10	50.00	19.00	50.00	64.02	31.05	65.00	26.00	27.50	N/A	N/A	Water Quality	Quality
Collection Date		10/15/99	10/13/99	10/14/99	10/15/99	10/15/99	10/15/99	10/16/99	10/15/99	10/18/99	10/18/99	10/14/99	10/16/99	10/14/99	Standards	Standards
Appendix I Volatile Organic Compounds (µg/l):																
Cis-1,2-Dichloroethene	5	<5	45	<5	**410**	<5	<5	<5	<5	<5	<5	<5	<5	<5	70	NE
1,4-Dichlorobenzene	5	<5	<5	<5	**7**	<5	<5	<5	<5	<5	<5	<5	<5	<5	NE	NE
1,1-Dichloroethane	5	<5	170	<5	45	<5	<5	<5	<5	<5	<5	<5	<5	<5	700	NE
1,1-Dichloroethene	5	<5	**23**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	NE
1,2-Dichloropropane	5	<5	**8**	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.56	NE
Tetrachloroethene	5	**9**	**38**	<5	**68**	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.7	NE
1,1,1-Trichloroethane	5	<5	9	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	200	NE
Trichloroethene	5	<5	**49**	<5	**57**	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.8	NE
Vinyl Chloride	10	<10	<10	<10	**16**	<10	<10	<10	<10	<10	<10	<10	<10	<10	0.015	NE
Appendix I Total Metals (mg/l):																
Arsenic	0.01	<0.010	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	<0.01	<0.01	0.05	NE
Barium	0.5	<0.5	0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2	NE
Beryllium	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	NE	NE
Cadmium	0.001	<0.001	**0.006**	0.002	0.002	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.002	<0.001	<0.001	0.005	NE
Chromium	0.01	<0.01	0.066	0.024	<0.01	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	0.016	<0.01	<0.01	NE	NE
Cobalt	0.01	<0.01	0.049	0.016	0.072	0.012	<0.01	<0.01	<0.01	<0.01	0.012	0.11	<0.01	<0.01	NE	NE
Lead	0.01	<0.01	0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011	<0.01	<0.01	0.015	NE
Nickel	0.05	<0.05	0.062	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	NE
Vanadium	0.04	<0.04	0.22	0.061	0.14	0.059	<0.04	<0.04	<0.04	<0.04	<0.04	0.051	<0.04	<0.04	NE	NE
Zinc	0.05	<0.05	0.26	0.064	0.061	<0.05	<0.05	<0.05	<0.05	<0.05	0.071	0.093	<0.05	<0.05	2.10	NE

Notes:
BOLD - Concentration exceeds the 2L Groundwater Quality Standards or 2B Water Quality Criteria
MDL - Method Detection Limit
2B Surface Water Quality Standards, North Carolina Administrative Code Title 15A, NCDENR, Subchapter 2B, Classifications and Surface Water Quality Standards
2L Groundwater Quality Standard - North Carolina Administrative Code Title 15A, NCDENR, Subchapter 2L, Section .0200, Classifications and Water Quality Standards dated November 9, 1993 as ammended on April 14, 1998
NE - Not Established

Prepared By: JM Date: 2/14/00
Checked By: CLK Date: 2/24/00

APPENDIX

LABORATORY DATA AND CHAIN-OF-CUSTODY DOCUMENTATION

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 17:46	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 17:46	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 17:46	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 17:46	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 17:46	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 17:46	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 17:46	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 17:46	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 17:46	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 17:46	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 17:32	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 17:32	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 17:32	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 17:32	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 17:32	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TETRACHLOROETHENE	9	ug/L	5	8260	10/26/99 17:32	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 17:32	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-1**
Prism Sample ID: **AB45577**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 13:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 17:32	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 17:32	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

449 Springbrook Road ▲ P.O. Box 240543 ▲ Charlotte, NC 28224-0543
Phone: 704/529-6364 ▲ Toll Free Number: 1-800/529-6364 ▲ Fax: 704/525-0409

Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:03	MSP
ARSENIC, TOTAL APPENDIX1	0.011	mg/L	0.01	6010	10/21/99 18:03	MSP
BARIUM, TOTAL APPENDIX1	0.89	mg/L	0.5	6010	10/21/99 18:03	MSP
BERYLLIUM, TOTAL APPENDIX1	0.002	mg/L	0.002	6010	10/21/99 18:03	MSP
CADMIUM, TOTAL APPENDIX1	0.006	mg/L	0.001	6010	10/21/99 18:03	MSP
CHROMIUM, TOTAL APPENDIX1	0.066	mg/L	0.01	6010	10/21/99 18:03	MSP
COBALT, TOTAL APPENDIX1	0.049	mg/L	0.01	6010	10/21/99 18:03	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:03	MSP
LEAD, TOTAL APPENDIX1	0.013	mg/L	0.01	6010	10/21/99 18:03	MSP
NICKEL, TOTAL APPENDIX1	0.062	mg/L	0.05	6010	10/21/99 18:03	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:03	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:03	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:03	MSP
VANADIUM, TOTAL APPENDIX1	0.22	mg/L	0.04	6010	10/21/99 18:03	MSP
ZINC, TOTAL APPENDIX1	0.26	mg/L	0.05	6010	10/21/99 18:03	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 14:29	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 14:29	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 14:29	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 14:29	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
1,1-DICHLOROETHANE	170	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1-DICHLOROETHENE	23	ug/L	5	8260	10/26/99 14:29	MP
CIS-1,2-DICHLOROETHENE	45	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2-DICHLOROPROPANE	8	ug/L	5	8260	10/26/99 14:29	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 14:29	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TETRACHLOROETHENE	38	ug/L	5	8260	10/26/99 14:29	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,1,1-TRICHLOROETHANE	9	ug/L	5	8260	10/26/99 14:29	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
TRICHLOROETHENE	49	ug/L	5	8260	10/26/99 14:29	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 14:29	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 14:29	MP

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Lab Report

PRISM LABORATORIES, INC.
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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-2**
Prism Sample ID: **AB45578**
Login Group: 2916F14
Sample Collection Date/Time: 10/13/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 14:29	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 14:29	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

Lab Report

PRISM LABORATORIES, INC.

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:09	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:09	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:09	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 18:09	MSP
CHROMIUM, TOTAL APPENDIX1	0.024	mg/L	0.01	6010	10/21/99 18:09	MSP
COBALT, TOTAL APPENDIX1	0.016	mg/L	0.01	6010	10/21/99 18:09	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:09	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:09	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:09	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:09	MSP
VANADIUM, TOTAL APPENDIX1	0.061	mg/L	0.04	6010	10/21/99 18:09	MSP
ZINC, TOTAL APPENDIX1	0.064	mg/L	0.05	6010	10/21/99 18:09	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 15:15	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 15:15	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 15:15	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 15:15	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 15:15	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 15:15	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 15:15	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-3**
Prism Sample ID: **AB45579**
Login Group: 2916F14
Sample Collection Date/Time: 10/14/99 14:10
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 15:15	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 15:15	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:15	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:15	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:15	MSP
CADMIUM, TOTAL APPENDIX1	0.002	mg/L	0.001	6010	10/21/99 18:15	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
COBALT, TOTAL APPENDIX1	0.072	mg/L	0.01	6010	10/21/99 18:15	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:15	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:15	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:15	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:15	MSP
VANADIUM, TOTAL APPENDIX1	0.14	mg/L	0.04	6010	10/21/99 18:15	MSP
ZINC, TOTAL APPENDIX1	0.061	mg/L	0.05	6010	10/21/99 18:15	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 18:12	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 18:12	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 18:12	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 18:12	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	7	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
1,1-DICHLOROETHANE	45	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CIS-1,2-DICHLOROETHENE	410	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 18:12	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 18:12	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TETRACHLOROETHENE	68	ug/L	5	8260	10/26/99 18:12	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
TRICHLOROETHENE	57	ug/L	5	8260	10/26/99 18:12	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:12	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 18:12	MP

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/4/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-4**
Prism Sample ID: **AB45580**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 12:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	16	ug/L	10	8260	10/26/99 18:12	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 18:12	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	11/2/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.
Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:21	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:21	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:21	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:21	MSP
CHROMIUM, TOTAL APPENDIX1	0.018	mg/L	0.01	6010	10/21/99 18:21	MSP
COBALT, TOTAL APPENDIX1	0.012	mg/L	0.01	6010	10/21/99 18:21	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:21	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:21	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:21	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:21	MSP
VANADIUM, TOTAL APPENDIX1	0.059	mg/L	0.04	6010	10/21/99 18:21	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:21	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 18:53	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 18:53	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 18:53	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 18:53	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP

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Lab Report

PRISM LABORATORIES, INC.
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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 18:53	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 18:53	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 18:53	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-5**
Prism Sample ID: **AB45581**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 11:45
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 18:53	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 18:53	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:27	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:27	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:27	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:27	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:27	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:27	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:27	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:27	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:27	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:27	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 19:33	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 19:33	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 19:33	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 19:33	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 19:33	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 19:33	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 19:33	MP

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Lab Report

PRISM LABORATORIES, INC.
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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-6**
Prism Sample ID: **AB45582**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 14:00
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 19:33	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 19:33	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

PRISM LABORATORIES, INC.

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Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:33	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:33	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:33	MSP
CADMIUM, TOTAL APPENDIX1	Less than	mg/L	0.001	6010	10/21/99 18:33	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:33	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:33	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:33	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:33	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:33	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:33	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 20:54	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 20:54	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 20:54	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 20:54	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 20:54	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:54	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 20:54	MP

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Lab Report

PRISM LABORATORIES, INC.

Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7A**
Prism Sample ID: **AB45583**
Login Group: 2916F14
Sample Collection Date/Time: 10/16/99 11:15
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:54	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 20:54	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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Lab Report

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Full Service Analytical & Environmental Solutions

11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB45584**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 15:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
ANTIMONY, TOTAL APPENDIX1	Less than	mg/L	0.03	6010	10/21/99 18:39	MSP
ARSENIC, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
BARIUM, TOTAL APPENDIX1	Less than	mg/L	0.5	6010	10/21/99 18:39	MSP
BERYLLIUM, TOTAL APPENDIX1	Less than	mg/L	0.002	6010	10/21/99 18:39	MSP
CADMIUM, TOTAL APPENDIX1	0.001	mg/L	0.001	6010	10/21/99 18:39	MSP
CHROMIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
COBALT, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
COPPER, TOTAL APPENDIX1	Less than	mg/L	0.2	6010	10/21/99 18:39	MSP
LEAD, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
NICKEL, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:39	MSP
SELENIUM, TOTAL APPENDIX1	Less than	mg/L	0.02	6010	10/21/99 18:39	MSP
SILVER, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
THALLIUM, TOTAL APPENDIX1	Less than	mg/L	0.01	6010	10/21/99 18:39	MSP
VANADIUM, TOTAL APPENDIX1	Less than	mg/L	0.04	6010	10/21/99 18:39	MSP
ZINC, TOTAL APPENDIX1	Less than	mg/L	0.05	6010	10/21/99 18:39	MSP
ACETONE	Not detected	ug/L	20	8260	10/26/99 20:14	MP
ACRYLONITRILE	Not detected	ug/L	100	8260	10/26/99 20:14	MP
BENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMODICHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
BROMOFORM	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CARBON DISULFIDE	Not detected	ug/L	20	8260	10/26/99 20:14	MP
CARBON TETRACHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CHLOROETHANE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
CHLOROFORM	Not detected	ug/L	5	8260	10/26/99 20:14	MP
DIBROMOCHLOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DIBROMOETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP

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11/3/99

Carin Kromm
Law Eng & Env Services, Inc
7347 West Friendly Ave. Suite F
Greensboro, NC 27410

Customer Project ID: **Swepsonville Landfill/PM: Krom**
Customer Sample ID: **MW-7B**
Prism Sample ID: **AB45584**
Login Group: 2916F14
Sample Collection Date/Time: 10/15/99 15:30
Lab Submittal Date/Time: 10/19/99 11:00

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
1,4-DICHLOROBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,4-DICHLORO-2-BUTENE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
1,1-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CIS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,2-DICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2-DICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
CIS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRANS-1,3-DICHLOROPROPENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
ETHYLBENZENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
2-HEXANONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
METHYL BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYLENE BROMIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
METHYLENE CHLORIDE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
METHYL ETHYL KETONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
METHYL IODIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
4-METHYL-2-PENTANONE	Not detected	ug/L	50	8260	10/26/99 20:14	MP
STYRENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,1,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,2,2-TETRACHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TETRACHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TOLUENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,1-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,1,2-TRICHLOROETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRICHLOROETHENE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
TRICHLOROFLUOROMETHANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
1,2,3-TRICHLOROPROPANE	Not detected	ug/L	5	8260	10/26/99 20:14	MP
VINYL ACETATE	Not detected	ug/L	10	8260	10/26/99 20:14	MP

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The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

TEST PARAMETER	TEST RESULT	UNITS	MDL	METHOD REFERENCE	DATE/TIME STARTED	ANALYST
VINYL CHLORIDE	Not detected	ug/L	10	8260	10/26/99 20:14	MP
XYLENES	Not detected	ug/L	5	8260	10/26/99 20:14	MP

METALS DIGESTION	Completed			EPA 200.7	10/20/99 14:30	GRR
MERCURY, TOTAL IN GROUNDWATER	Less than	mg/L	0.0002	EPA 245.1	10/26/99 14:00	GRR
MERCURY DIGESTION	Completed			EPA 245.1	10/26/99 08:00	GRR

Sample Comments:

Angela D. Overcash, V.P. Laboratory Services

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