BLE INC.

BUNNELL-LAMMONS ENGINEERING, INC.

GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

REPORT OF GROUNDWATER QUALITY RESULTS & STATISTICAL ANALYSIS

FIRST SEMI-ANNUAL SAMPLING EVENT OF 2007

WHITE OAK MSW LANDFILL
PERMIT NUMBER: 44-07
HAYWOOD COUNTY, NORTH CAROLINA

Prepared for:

HAYWOOD COUNTY SOLID WASTE MANAGEMENT
278 Recycle Road
Clyde, North Carolina 28721

Prepared By:

BUNNELL-LAMMONS ENGINEERING, INC.
6004 Ponder Court
Greenville, South Carolina 29615

February 1, 2008

BLE Project Number J07-1957-03

BLE INC.
BUNNELL-LAMMONS ENGINEERING, INC.
GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

February 1, 2008

Haywood County Solid Waste Management
278 Recycle Road
Clyde, NC 28721

Attention: Mr. Stephen King
Solid Waste Director

Subject: **Report of Groundwater Quality Results & Statistical Analysis**
First Semi-Annual Sampling Event of 2007 (N20)
White Oak MSW Landfill
Permit Number: 44-07
Haywood County, North Carolina
BLE Project Number J07-1957-03

Dear Mr. King:

As authorized, Bunnell-Lammons Engineering, Inc. (BLE) has performed the statistical analysis of groundwater quality data obtained from the subject site. The enclosed report describes the work performed and presents the results obtained with our conclusions. The purpose of this work was to statistically compare the laboratory analytical results of groundwater samples from the background monitoring wells to the downgradient monitoring wells at the subject municipal solid waste (MSW) landfill in accordance with Title 15A NCAC 13B .1632 (g), (h), and (i). This report of the sampling and statistical analysis has been prepared for submittal to the North Carolina Division of Waste Management (NCDWM) in accordance with Rule 15A NCAC 13B .1632 (j).

We appreciate the opportunity to serve as your hydrogeological consultant on this project and look forward to working with you on future projects. If you have any questions, please contact us at (864) 288-1265.

Sincerely,
BUNNELL-LAMMONS ENGINEERING, INC.

Trevor J. Benton, P.G.
Project Hydrogeologist
Registered, North Carolina No. 2025

NORTH CAROLINA LICENSED SEAL 2025 GEOLOGIST TREVOR J. BENTON

Mark S. Preddy, P.G.
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c.c: Mr. Ervin Lane – NC DENR Solid Waste Section, 401 Oberlin Road, Ste. 150, Raleigh, NC 27605

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PROJECT INFORMATION

The subject municipal solid waste landfill site is located in Haywood County, North Carolina, approximately twelve miles north of the city of Waynesville on White Oak Road at exit 15 of Interstate 40 (Figure 1). The Subtitle D lined landfill has fifteen groundwater monitoring wells consisting of two upgradient (MW-11S and MW-11D) and thirteen downgradient wells (MW-1A, MW-2, MW-2D, MW-3, MW-3D, MW-4A, MW-5A, MW-5D, MW-8, MW-9, MW-12, MW-13S, MW-13D). Additionally, there are four surface water sampling points (SW-1, SW-2, SW-3, and SW-5), a leachate lagoon sampling point, and a settling pond sampling point. The C&D landfill, which is located on the same property, is monitored by one upgradient (MW-14), one down gradient well (MW-15), and two locations for surface water monitoring (SW-6 and SW-7).

BLE was retained by Haywood County to prepare the semi-annual sampling reports for 2007. Historical data from multiple sources and in multiple formats had to be gathered from multiple sources and formats, and synthesized into this report.

This report presents data from the first semi-annual sampling event in 2007 for the site. The water samples were collected and analyzed as required in North Carolina's regulations for operation of municipal solid waste landfills. Twenty sampling events (N1 through N20) have been performed between April 2000 and April 2007.

FIELD ACTIVITIES, SAMPLING, AND ANALYSIS

Groundwater, surface water, and leachate samples were collected for the first semi-annual sampling event (N20) of 2007 by personnel from Pace Analytical Services, Inc. (Pace) of Asheville, North Carolina on April 23-24. Sampling was performed in general accordance with the *Operations Plan* for the White Oak Landfill. Summary tables of historic and current analytical results are attached in Appendix A (groundwater) and Appendix B (surface water). The samples were analyzed in the laboratory for North Carolina's *Appendix I* list of constituents that include total metals and volatile organic compounds (VOCs) and in the field for pH, specific conductance, and temperature.

Additionally, the leachate sample was also analyzed for BOD, COD, sulfate, nitrate, and nitrite. A copy of the Pace laboratory and field data is included in Appendix C.

The water level data collected during the groundwater sampling is presented in Table 1. A water table surface elevation contour map is presented as Figure 2 along with generalized groundwater flow directions. Flow velocity calculations are provided on Table 2. Please note, hydraulic conductivity and effective porosity values for the existing wells were obtained from prior reports prepared by other consultants.

SUMMARY OF LABORATORY RESULTS

Concentrations of total antimony (one well), total arsenic (two wells), total barium (13 wells), total beryllium (two wells), total cadmium (one well), total chromium (five wells), total cobalt (three wells), total copper (three wells), total lead (two wells), total nickel (one well), total selenium (three wells), total thallium (one well), total vanadium (four wells), and total zinc (18 wells) were detected in the groundwater monitoring wells during sampling event N20. Concentrations of total arsenic, cadmium, chromium, lead, nickel, and selenium were detected above North Carolina maximum contaminant levels[1] (MCLs) in MW-2D. Additionally, concentrations of total lead were detected above MCLs in MW-15. No VOCs were detected. A summary of the detected concentrations is included in Appendix A.

Total zinc was detected in each of the surface water samples during sampling event N20; but North Carolina has not established a surface water[2] MCL for this constituent. Additionally, total barium was detected in SW-1 through SW-3, and total copper was detected in SW-5 during sampling event N20; but North Carolina has not established surface water MCLs for these constituents. No VOCs were detected. A summary of the detected surface water concentrations is included in Appendix B.

[1] North Carolina Department of Environment and Natural Resources, Classifications of Water Quality Standards, Section 15A NCAC 2L.202, December 1, 2005.

[2] North Carolina Department of Environment and Natural Resources, "Redbook", Surface Waters and Wetlands Standards, Section 15A NCAC 02B.0100, .0200, and .0300, May 1, 2007.

STATISTICAL METHODS PERFORMED

The purpose of performing statistical analysis of groundwater quality data is to determine if a release of leachate has occurred from the landfill cells to the groundwater at the site. The US EPA has prepared guidance documents for evaluating groundwater quality data, which include the *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Interim Final Guidance* (April 1989) and the *Addendum to the Interim Final Guidance* (July 1992). The procedures and methodology used for data analysis of this project are consistent with these US EPA guidance documents, and meet or exceed the performance criteria specified in the North Carolina solid waste management rules Title 15A NCAC 13B .1632(g-i). Four methods of statistical analysis were performed depending on the number of detected concentrations and the distribution of the data for a specific compound, as follows:

1. If greater than 90% of the data were not detected, Poisson Tolerance Limits were performed. Additionally, Wilcoxon rank-sum tests were performed for those compounds that failed the initial Poisson Tolerance Limits test;

2. If 15% to 90% of the data were not detected, the one-way non-parametric analysis of variance (ANOVA) Kruskal-Wallis rank-sum test was performed;

3. If less than 15% of the data were not detected, and if the data was normally distributed and homogeneous, then one-way parametric ANOVA was performed. If the data were not normally distributed and homogeneous, then a non-parametric type test was used (Kruskal-Wallis);

4. Alternatively, if greater than 50% of the data were not detected, Poisson Prediction Limits may be performed, or if less than 50% of the data were not detected, Normal Prediction Limits may be performed.

SUMMARY OF STATISTICAL RESULTS

The statistical results of the twenty sampling events summarized on Table 3 and included in Appendix D indicate that:

1. The Poisson Prediction Limit and Wilcoxon tests performed for total antimony, total selenium, total silver, total thallium, and carbon disulfide did not calculate SSIs; and

2. The Kruskal-Wallis tests did not calculate SSIs for total cadmium. However, the Kruskal-Wallis tests calculates SSIs for total arsenic (2 wells), total beryllium (2 wells), total chromium (2 wells), total cobalt (3 wells), total copper (1 well), total lead (2 wells), total nickel (2 wells), total vanadium (3 wells), and total zinc (1 well); and

3. The ANOVA and Bonferroni tests performed for total barium did calculate SSIs (3 wells).

CONCLUSION

Concentrations of various total metals were detected in the groundwater monitoring wells during sampling event N20. No VOCs were detected. Concentrations of total arsenic, total cadmium, total chromium, total lead, total nickel, and total selenium were detected above North Carolina MCLs in MW-2D. Additionally, concentrations of total lead in MW-15 were detected above North Carolina MCLs. The remaining detected concentrations were either below North Carolina's promulgated MCLs, or MCLs have not been established for a particular constituent. Only the concentration of total lead in MW-15 was detected as a statistically significant metal above North Carolina MCLs during sampling event N20 (Table 3).

In summary, the detected concentrations of total metals are most likely naturally occurring and related to sample turbidity. Metal cations typically adsorb to the surface of platy particles (clay and silt). Therefore, turbidity of the groundwater and surface water samples will relate to detected concentrations of the metal cations. Consequently, the metal concentrations detected should be considered natural background concentrations.

We recommend that the field sampling contractor test the groundwater for turbidity prior to sample collection during future sampling events. We also recommend that sampling continue on a semi-annual basis for the *Appendix I* list of VOCs and total metals constituents.

TABLES

TABLE 1

POTENTIOMETRIC SURFACE DATA
White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Monitoring Well	TOC Elevation	Groundwater Elevation Data							
		10/30/03	4/20/04	10/21/04	4/18/05	10/13/05	4/25/06	10/20/06	4/26/07
MW-1A	2520.46	2502.66	2503.12	2502.74	2503.41	2502.02	2502.91	2501.25	2501.09
MW-2	2497.00	2466.57	2468.00	2466.94	2468.07	2466.29	2467.76	2466.13	2466.97
MW-2D	2497.94	2467.54	2469.02	2467.94	2469.11	2467.31	2468.76	2467.08	2467.94
MW-3	2437.66	2428.66	2430.25	2429.37	2430.96	2428.76	2430.98	2428.45	2429.31
MW-3D	2436.90	2420.13	2421.07	2420.58	2421.33	2420.09	2421.13	2420.19	2420.20
MW-4A	2499.45	2451.08	2451.13	2452.87	2452.32	2451.68	2449.88	2448.68	2448.37
MW-5A	2504.06	2498.18	2498.23	2497.91	2498.96	2497.97	2499.76	NS	2498.56
MW-5D	2503.28	2496.77	2496.90	2496.63	2497.30	2496.68	2497.96	NS	2497.10
MW-8	2477.70	2446.61	2447.54	2447.17	2448.00	2446.67	2447.74	2446.33	2446.96
MW-9	2430.15	2420.98	2421.06	2420.90	2421.02	2420.83	2420.99	2421.09	2420.87
MW-11S	2674.58	2587.72	2589.31	2590.86	2592.08	2593.90	2594.94	2595.11	2593.96
MW-11D	2675.21	2587.93	2589.95	2590.84	2592.06	2593.84	2594.62	2594.89	2593.67
MW-12	2529.77	2519.19	2518.13	2517.47	2518.23	2517.57	2518.77	2517.65	2517.87
MW-13S	2532.35	2521.63	2520.78	2519.68	2520.50	2520.03	2520.65	2519.56	2519.97
MW-13D	2531.05	2520.31	2519.29	2518.41	2519.22	2518.74	2519.29	2518.42	2518.69
MW-14	2711.69	2610.79	2611.66	2612.36	2613.19	2613.51	2612.41	2611.74	2610.50
MW-15	2547.41	2538.15	2538.46	2538.49	2538.70	2538.39	2538.71	2538.33	2538.33

NOTES:

1. Elevations are in FEET above mean sea level (MSL)
2. *TOC* = top of casing
3. Current water level measurements are from ASI field sampling notes
4. *NP* = Not Present during sampling event
5. *NS* = Not sampled during event

Prepared By: TJB
Checked By: MSP

TABLE 2

GROUNDWATER FLOW DATA
White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Monitoring Well	Hydraulic Conductivity			Local Hydraulic Gradient (ft/ft)	Effective Porosity	Flow Velocity (ft/day)	Flow Velocity (ft/yr)
	cm/sec	ft/min	ft/day				
MW-1A	1.50E-04	2.95E-04	4.25E-01	0.0740	0.114	0.28	100.74
MW-2	1.50E-04	2.95E-04	4.31E+00	0.0740	0.114	2.79	1,020.01
MW-3	1.50E-04	2.95E-04	4.31E+00	0.0740	0.114	2.79	1,020.01
MW-4A	1.49E-04	2.93E-04	4.28E+00	0.1905	0.05	16.29	5,946.24
MW-5A	1.50E-04	2.95E-04	4.31E+00	0.0937	0.114	3.54	1,291.59
MW-8	1.50E-04	2.95E-04	4.31E+00	0.0740	0.114	2.79	1,020.01
MW-11S	2.40E-06	4.72E-06	6.89E-02	0.0809	0.114	0.05	17.83
MW-12	1.36E-04	2.68E-04	3.90E+00	0.0937	0.17	2.15	785.29
MW-13S	3.76E-04	7.40E-04	1.08E+01	0.0937	0.17	5.95	2,171.09
MW-14	1.38E-05	2.72E-05	3.96E-01	0.0537	0.17	0.13	45.63
MW-15	2.10E-05	4.13E-05	6.03E-01	0.0537	0.17	0.19	69.44

Notes:

1. Hydraulic conductivity and effective porosity values are from prior site hydrogeologic studies performed by others.
2. Hydraulic gradients and flow velocities calculated from measurements taken during the April 2007 sampling event.
3. Groundwater flow velocities calculated using the equation $V = Ki/n_e$ where
4. V = velocity
5. K = hydraulic conductivity
6. i = hydraulic gradient
7. n_e = effective porosity

TABLE 3

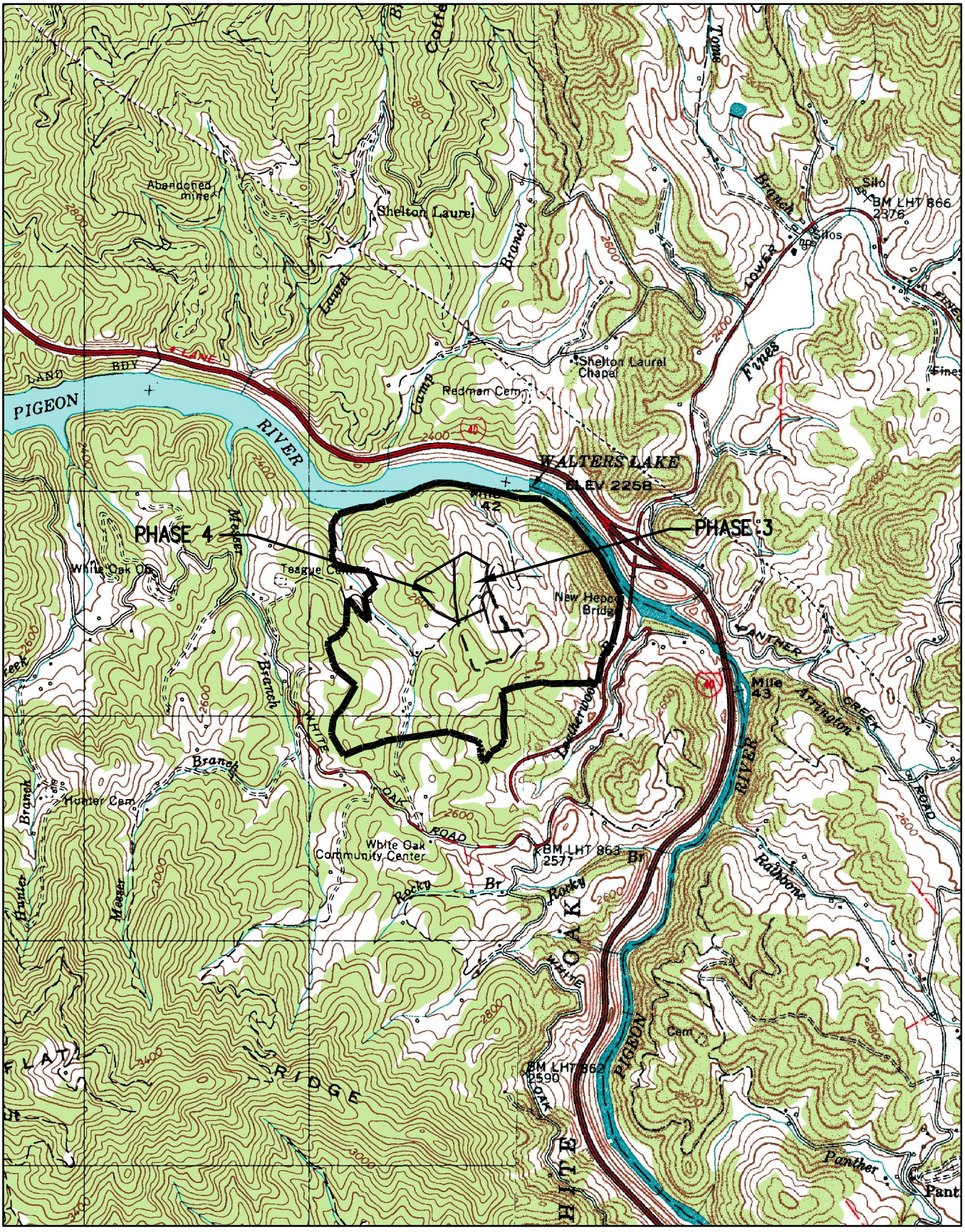
SUMMARY OF STATISTICAL ANALYSIS RESULTS
White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Chemical/ Compound	Percent ND	Primary Statistical Test	Primary Pass/Fail	Secondary Statistical Test	Secondary Pass/Fail	SSI Calculated	SSI Validated as Leachate	SSI Concentration Above MCL During Current Event
Total Antimony	97%	Poisson Prediction Limits	Pass	-	-	-	-	-
Total Arsenic	86%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-12, MW-15	No (background)	No
Total Barium	11%	ANOVA	Fail	Bonferroni	Fail	MW-12, MW-13S, MW-15	No (background)	No
Total Beryllium	76%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-12, MW-15	No (background)	MCL Not Established
Total Cadmium	76%	Kruskal-Wallis	Fail	Kruskal-Wallis	Pass	-	-	-
Total Chromium	47%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-8, MW-15	No (background)	No
Total Cobalt	59%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-8, MW-12, MW-15	No (background)	MCL Not Established
Total Copper	52%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-15	No (background)	No
Total Lead	64%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-12, MW-15	No (background)	Yes (MW-15)
Total Nickel	54%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-12, MW-15	No (background)	No (not detected)
Total Selenium	98%	Poisson Prediction Limits	Fail	Wilcoxon	Pass	-	-	-
Total Silver	99%	Poisson Prediction Limits	Fail	Wilcoxon	Pass	-	-	-
Total Thallium	92%	Poisson Prediction Limits	Pass	-	-	-	-	-
Total Vanadium	47%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-8, MW-12, MW-15	No (background)	MCL Not Established
Total Zinc	22%	Kruskal-Wallis	Fail	Kruskal-Wallis	Fail	MW-15	No (background)	No
Carbon Disulfide	93%	Poisson Prediction Limits	Pass	-	-	-	-	-

Notes:

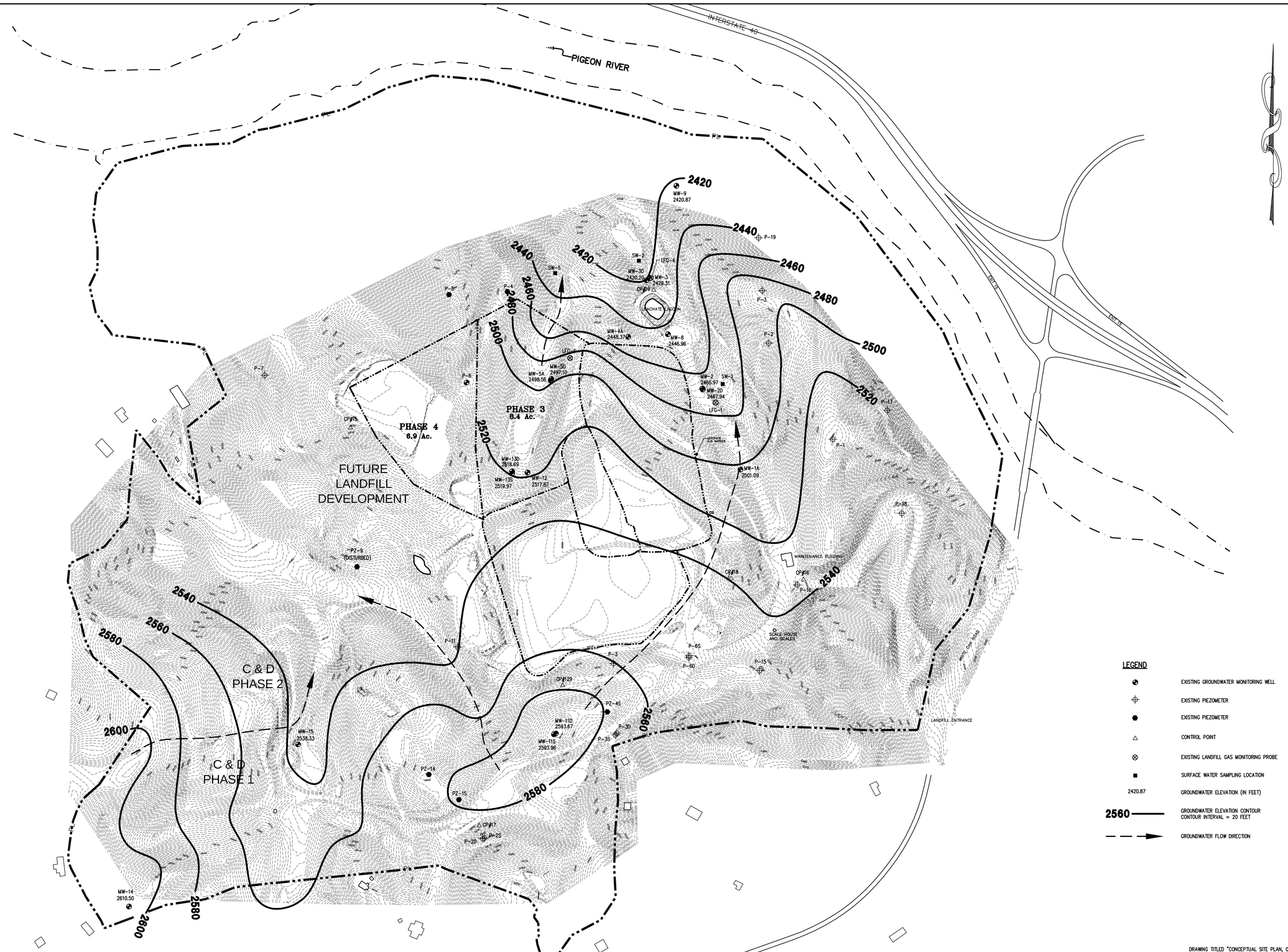
1. MCL = *Maximum Contaminant Level*
2. SSI = *Statistically Significant Increase*
3. ** = The dataset for total barium was not homogeneous and normally distributed. Therefore, a non-parametric ANOVA testing procedure was used (Kruskal-Wallis) rather than parametric ANOVA.

FIGURES



REFERENCE:
USGS TOPOGRAPHIC MAP, 7.5 MINUTE SERIES,
COVE CREEK GAP AND FINES CREEK, N.C. QUADRANGLES, 1967.

DRAWN: AEH	DATE: 11-09-07	BLE inc. BUNNELL-LAMMONS ENGINEERING, INC. 6004 PONDERS COURT GREENVILLE, SOUTH CAROLINA 29615 PHONE: (864)288-1265 FAX: (864)288-4430	SITE LOCATION MAP WHITE OAK LANDFILL HAYWOOD COUNTY, NORTH CAROLINA
CHECKED: TDL	CAD: WHITEOAK-03SLM		FIGURE 1
APPROVED:	JOB NO: J07-1957-03		



LEGEND

- EXISTING GROUNDWATER MONITORING WELL
- EXISTING PIEZOMETER
- EXISTING PIEZOMETER
- CONTROL POINT
- EXISTING LANDFILL GAS MONITORING PROBE
- SURFACE WATER SAMPLING LOCATION
- 2420.87 — GROUNDWATER ELEVATION (IN FEET)
- 2560 — GROUNDWATER ELEVATION CONTOUR, CONTOUR INTERVAL = 20 FEET
- GROUNDWATER FLOW DIRECTION

DRAWING TITLED "CONCEPTUAL SITE PLAN, OPTION 1 & 2" BY McGILL ASSOCIATES DATED JUNE 2007.

REVISIONS		
No.	DESCRIPTION	BY

DRAWN:	AEH
CHECKED:	TJB
APPROVED:	

DATE:	02-01-08
CAD FILE:	HCWOLF-pot42607
JOB NO:	J07-1957-03

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GROUNDWATER ELEVATION CONTOUR MAP – 4/23/07
WHITE OAK MSW LANDFILL
HAYWOOD COUNTY, NORTH CAROLINA

FIGURE NO. **2**

APPENDICES

APPENDIX A

Summary Tables of Groundwater Analytical Results
Sampling Events N1 through N20

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-24-1993)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	10	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	2	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-28-1993)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-1-1993)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	1200	1300	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak GW Stats First 2007.xls
(10-1-1993)

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-4-1993)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	ND	ND	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-25-1994)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	1400	920	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak GW Stats First 2007.xls
(4-25-1994)

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-26-1994)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	1670	298	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	11	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
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NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak GW Stats First 2007.xls
(10-26-1994)

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-12-1995)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	**747**	**201**	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	**6**	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak GW Stats First 2007.xls
(4-12-1995)

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-13-1995)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NA	NS	NS	**804**	**335**	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NA	NS	NS	NT	NT	NS	NS	NS	**8**	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NA	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NA	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NT	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-29-1996)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	**586**	**162**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-23-1996)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	280	278	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	7	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak GW Stats First 2007.xls
(9-23-1996)

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-29-1997)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	1800	200	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	160	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
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Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-4-1997)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	400	500	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	ND	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	NT	NT	NS	NS	NS	13	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-9-1998)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	2900	400	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	80	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-14-1998)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	6.5	6.4	6.6	6.2	6.2	7.5	5.2	6.1	5.8	6.6	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	69	50	55	110	78	120	32	60	79	160	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	14	15	16	17	15	14	16	14	16	17	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	3	NE	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NT
Total Arsenic (As)	µg/l	5	50	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	100	1000	NS	NS	NS	1200	100	100	ND	100	100	ND	300	1200	100	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	1	NE	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	1	50	NS	NS	NS	6	2	3	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	1	NE	NS	NS	NS	15	ND	ND	6	ND	1	ND	ND	ND	2	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	10	1000	NS	NS	NS	ND	ND	20	10	10	ND	ND	ND	10	ND	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	5	15	NS	NS	NS	ND	5	ND	ND	ND	ND	ND	ND	14	ND	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	5	50	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	1	18	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	1	NE	NS	NS	NS	ND	4	ND	ND	ND	ND	3	ND	ND	ND	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	23	7	9	ND	ND	8	ND	ND	16	6	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	30	ND	20	ND	ND	20	ND	ND	10	10	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-26-1999)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	5.9	5.5	5.7	6.4	6.4	7.2	4.5	5.2	6.4	6.7	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	71	59	55	110	80	130	38	59	99	150	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	13	15	14	13	13	14	11	13	15	11	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	5	NE	NS	NS	NS	ND	ND	ND	5	ND	ND	ND	7	ND	5	NS	NS	NS	NS	8
Total Arsenic (As)	µg/l	5	50	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	100	1000	NS	NS	NS	200	300	ND	ND	200	200	ND	200	200	200	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	1	NE	NS	NS	NS	2	2	2	2	1	2	2	2	ND	2	NS	NS	NS	NS	2
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	2	50	NS	NS	NS	15	18	3	2	17	20	3	3	27	2	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	2	NE	NS	NS	NS	ND	7	ND	7	10	8	ND	ND	16	3	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	10	1000	NS	NS	NS	ND	ND	20	ND	10	20	10	ND	ND	ND	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	5	15	NS	NS	NS	7	7	ND	5	ND	6	7	ND	ND	6	NS	NS	NS	NS	8
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	5	50	NS	NS	NS	ND	ND	7	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	ND	ND	2	ND	ND	ND	ND	ND	2	2	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	13	30	ND	3000	16	24	ND	ND	42	6	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	20	40	10	10	20	40	10	ND	30	200	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-21-1999)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	5.1	5.2	5.3	6.5	6.2	6.8	6.2	6	5.8	5.9	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	75	55	58	88	79	110	36	59	100	160	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	14	13	13	15	14	17	15	14	14	15	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	10	NE	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	5	1000	NS	NS	NS	1000	170	160	79	190	350	74	170	230	160	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	2.2	ND	ND	ND	ND	2.1	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	6.3	ND	1.4	ND	1.9	3.7	1.1	ND	5.6	ND	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	5	50	NS	NS	NS	130	54	320	380	270	46	ND	5.5	62	8.8	NS	NS	NS	NS	29
Total Cobalt (Co)	µg/l	5	NE	NS	NS	NS	26	ND	ND	ND	8.9	18	ND	ND	27	ND	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	5	1000	NS	NS	NS	39	ND	15	ND	18	41	ND	ND	21	ND	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	ND	ND	ND	ND	ND	15	ND	ND	ND	10	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	5	100	NS	NS	NS	110	7.1	13	9	22	43	ND	7.8	31	7.7	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	66	ND	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	130	130	22	7.1	20	56	ND	8.1	71	6.4	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	210	56	49	40	51	67	ND	12	51	41	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT

Notes:

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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-17-2000)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	5	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-24-2000)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2A	MW-2D	MW-3A	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.9	NS	NS	6.1	5.1	5.1	6.2	5.9	5.4	5.7	5.5	5.2	6.3	NS	NS	NS	NS	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	72	NS	NS	69	55	51	89	85	89	31	49	100	130	NS	NS	NS	NS	NS
Temperature	°C (on-site)	-	NE	12	NS	NS	13	14	14	12	12	13	10	12	13	10	NS	NS	NS	NS	NS
Turbidity	NTU (on-site)	0.1	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Total Antimony (Sb)	µg/l	10	NE	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
Total Arsenic (As)	µg/l	10	50	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
Total Barium (Ba)	µg/l	5	1000	250	NS	NS	240	420	200	63	300	93	81	170	230	ND	NS	NS	NS	NS	NS
Total Beryllium (Be)	µg/l	2	NE	4.4	NS	NS	ND	2	ND	2.2	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
Total Cadmium (Cd)	µg/l	1	5	2	NS	NS	ND	1.3	1.2	1.3	2.1	ND	ND	ND	5.4	ND	NS	NS	NS	NS	NS
Total Chromium (Cr)	µg/l	5	50	15	NS	NS	18	17	11	ND	26	5.4	ND	ND	50	ND	NS	NS	NS	NS	NS
Total Cobalt (Co)	µg/l	5	NE	ND	NS	NS	ND	8.2	5.4	ND	14	ND	ND	ND	16	ND	NS	NS	NS	NS	NS
Total Copper (Cu)	µg/l	5	1000	12	NS	NS	ND	ND	13	ND	27	ND	ND	ND	22	ND	NS	NS	NS	NS	NS
Total Lead (Pb)	µg/l	10	15	35	NS	NS	ND	ND	ND	ND	11	ND	10	ND	ND	ND	NS	NS	NS	NS	NS
Total Nickel (Ni)	µg/l	5	100	15	NS	NS	17	12	8.3	ND	24	6.7	ND	5.6	22	ND	NS	NS	NS	NS	NS
Total Selenium (Se)	µg/l	20	50	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
Total Silver (Ag)	µg/l	2	18	3.7	NS	NS	ND	ND	ND	6.9	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
Total Thallium (Tl)	µg/l	2	NE	2	NS	NS	ND	3	2	4	ND	2	ND	3	5	ND	NS	NS	NS	NS	NS
Total Vanadium (V)	µg/l	5	NE	17	NS	NS	19	32	21	ND	29	8.9	ND	ND	78	ND	NS	NS	NS	NS	NS
Total Zinc (Zn)	µg/l	10	2100	150	NS	NS	35	48	36	12	43	28	12	14	68	ND	NS	NS	NS	NS	NS
Acetone	µg/l	100	700	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Acrylonitrile	µg/l	200	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Benzene	µg/l	5	1	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Bromochloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Bromodichloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Bromoform	µg/l	5	0.19	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Carbon Disulfide	µg/l	100	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Chloroethane	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Chloroform	µg/l	5	0.19	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Dibromochloromethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Dibromomethane	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1-Dichloroethane	µg/l	5	700	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Ethylbenzene	µg/l	5	29	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
2-Hexanone	µg/l	50	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Iodomethane	µg/l	10	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Styrene	µg/l	10	100	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Toluene	µg/l	5	1000	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Vinyl acetate	µg/l	50	NE	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Vinyl chloride	µg/l	10	0.015	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS
Xylene	µg/l	5	530	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NS

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (6-26-2000)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	5.9	6.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	29	60	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	14	14	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	10	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Arsenic (As)	µg/l	10	50	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	5	1000	300	67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	1.6	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	5	50	22	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	5	NE	10	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	5	1000	17	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	ND	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	5	100	15	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	40	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	37	12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (7-26-2000)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	10	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	5	1000	**330**	**30**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	**1.1**	**3.2**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	5	50	**29**	**20**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	5	NE	**9.9**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	5	1000	**12**	**6.1**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	5	100	**16**	**9.7**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	**45**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	**65**	**66**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-18-2000)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	**330**	**92**	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NT	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	**8.8**	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	ND
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-9-2001)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	5.9	7.3	NS	6.4	6	6.3	6	6.1	8.2	5.1	5.9	5.8	7	NS	NS	NS	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	20	60	NS	75	75	68	130	90	110	45	61	125	140	NS	NS	NS	NS	NT
Temperature	°C (on-site)	-	NE	15	15	NS	13	15	15	14	15	15	10	13	15	11	NS	NS	NS	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Barium (Ba)	µg/l	5	1000	1300	380	NS	180	330	120	80	290	360	80	140	970	130	NS	NS	NS	NS	ND
Total Beryllium (Be)	µg/l	2	NE	2.3	7	NS	ND	ND	ND	ND	ND	2.4	ND	ND	4.8	ND	NS	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	5	130	2	NS	ND	ND	ND	1.7	1.8	2.7	ND	ND	19	ND	NS	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	5	50	130	ND	NS	11	8.4	ND	ND	20	27	ND	ND	160	ND	NS	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	5	NE	54	ND	NS	ND	ND	ND	13	12	13	ND	ND	59	8.1	NS	NS	NS	NS	ND
Total Copper (Cu)	µg/l	5	1000	77	8.4	NS	ND	ND	5.4	ND	26	38	ND	ND	110	ND	NS	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	15	ND	59	NS	ND	ND	ND	ND	ND	18	ND	ND	2.5	ND	NS	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	5	100	76	7.2	NS	9.6	5.3	ND	ND	18	28	ND	ND	6.1	7.3	NS	NS	NS	NS	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	2	NE	40	ND	NS	ND	ND	ND	ND	ND	ND	30	ND	ND	ND	NS	NS	NS	NS	ND
Total Vanadium (V)	µg/l	5	NE	250	1.4	NS	13	19	9.3	ND	24	41	ND	ND	230	8	NS	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	10	2100	230	130	NS	12	24	18	17	33	75	ND	ND	200	2.9	NS	NS	NS	NS	24
Acetone	µg/l	100	700	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Benzene	µg/l	5	1	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromoform	µg/l	5	0.19	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Styrene	µg/l	10	100	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Toluene	µg/l	5	1000	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT
Xylene	µg/l	5	530	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-18-2001)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.83	5.15	8.36	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	45	43	70	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.9	13.5	14.9	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Total Antimony (Sb)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11	ND	ND	NS	ND
Total Barium (Ba)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1800	4700	90	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4	5.3	ND	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10	8.9	ND	NS	ND
Total Chromium (Cr)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	51	66	5.4	NS	ND
Total Cobalt (Co)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	54	53	ND	NS	ND
Total Copper (Cu)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	35	44	ND	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	27	ND	ND	NS	ND
Total Nickel (Ni)	µg/l	5	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	97	59	ND	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	160	170	6.4	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130	220	ND	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-29-2001)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.98	5.12	7.72	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	39	46	50	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12	12.5	12.6	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Total Antimony (Sb)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17	ND	ND	NS	ND
Total Barium (Ba)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3000	450	27	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.2	ND	ND	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16	ND	ND	NS	ND
Total Chromium (Cr)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	82	ND	ND	NS	ND
Total Cobalt (Co)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	87	ND	ND	NS	ND
Total Copper (Cu)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	47	ND	ND	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	43	ND	ND	NS	ND
Total Nickel (Ni)	µg/l	5	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	120	ND	ND	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	3.1
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250	9.2	ND	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	17	ND	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (1-30-2002)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	6.57	5.73	6.85	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	40	51	41	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.8	12.6	13	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Total Antimony (Sb)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Barium (Ba)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	980	360	41	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.5	ND	ND	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.9	ND	ND	NS	ND
Total Chromium (Cr)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	21	ND	ND	NS	ND
Total Cobalt (Co)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28	5.7	ND	NS	ND
Total Copper (Cu)	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16	ND	ND	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	26	ND	ND	NS	ND
Total Nickel (Ni)	µg/l	5	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	49	5.5	ND	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Silver (Ag)	µg/l	2	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Thallium (Tl)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	ND
Total Vanadium (V)	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	83	12	ND	NS	ND
Total Zinc (Zn)	µg/l	10	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	62	16	11	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (2-28-2002)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Temperature	°C (on-site)	-	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Barium (Ba)	µg/l	500	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	ND	NS	ND
Total Beryllium (Be)	µg/l	2	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.6	NS	1300	NS	ND
Total Cadmium (Cd)	µg/l	1	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4300	NS	2.5	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Copper (Cu)	µg/l	200	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.1	NS	15	NS	ND
Total Lead (Pb)	µg/l	10	15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Nickel (Ni)	µg/l	50	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	11	NS	17	NS	ND
Total Selenium (Se)	µg/l	20	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Silver (Ag)	µg/l	10	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Thallium (Tl)	µg/l	20	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	ND
Total Zinc (Zn)	µg/l	50	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	NS	58	NS	ND
Acetone	µg/l	100	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	180	NS	58	NS	ND
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Benzene	µg/l	5	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Bromoform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	NT

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-15-2002)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.01	6.42	NS	6.46	5.89	5.25	5.75	5.68	6.88	4.77	5.38	6.01	5.87	5.37	5.2	6.16	NS	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	21	42	NS	75	82	84	101	93	94	41	51	125	109	38	59	41	NS	NT
Temperature	°C (on-site)	-	NE	15.9	17.4	NS	15.3	15.7	16.8	16.2	13.2	16.3	14.6	16	17.3	11	14.1	14.2	14.9	NS	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Total Antimony (Sb)	µg/l	10	NE	15.0	ND	NS	ND	ND	ND	NT	ND	ND	ND	ND	11	ND	ND	ND	ND	NS	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	NS	ND	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND
Total Barium (Ba)	µg/l	5	1000	1300	41	NS	ND	ND	160	23	190	460	180	250	1400	110	540	820	38	NS	ND
Total Beryllium (Be)	µg/l	2	NE	2.1	ND	NS	ND	ND	ND	ND	ND	2.5	ND	ND	4.5	ND	2.1	2.2	ND	NS	ND
Total Cadmium (Cd)	µg/l	10	5	13	ND	NS	ND	ND	ND	4	ND	5.5	1.2	ND	19	ND	2.3	2.2	ND	NS	ND
Total Chromium (Cr)	µg/l	5	50	170	ND	NS	ND	ND	5.7	7	10	56	13	7.1	180	ND	9.2	12	ND	NS	ND
Total Cobalt (Co)	µg/l	5	NE	58	ND	NS	ND	ND	ND	18	8.2	21	ND	ND	82	6.8	13	12	ND	NS	ND
Total Copper (Cu)	µg/l	2	1000	69	ND	NS	ND	ND	ND	ND	13	68	4.4	5.1	120	4.7	5.6	8.4	ND	NS	150
Total Lead (Pb)	µg/l	10	15	13	ND	NS	ND	ND	ND	ND	ND	13	ND	ND	29	ND	14	10	ND	NS	ND
Total Nickel (Ni)	µg/l	5	100	74	ND	NS	ND	ND	ND	6.2	9.2	44	7.1	8.7	68	6.9	20	13	ND	NS	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND
Total Thallium (Tl)	µg/l	2	NE	40	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	ND
Total Vanadium (V)	µg/l	5	NE	240	ND	NS	ND	ND	11	21	14	69	17	12	260	ND	37	37	ND	NS	ND
Total Zinc (Zn)	µg/l	10	2100	230	16	NS	ND	ND	13	33	38	120	37	31	230	52	51	79	ND	NS	15
Acetone	µg/l	100	700	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Benzene	µg/l	5	1	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Bromoform	µg/l	5	0.19	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Chloroethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Chloroform	µg/l	5	0.19	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Dibromomethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Ethylbenzene	µg/l	5	29	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
2-Hexanone	µg/l	50	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Iodomethane	µg/l	10	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Styrene	µg/l	10	100	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Toluene	µg/l	5	1000	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT
Xylene	µg/l	5	530	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (9-26-2002)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.5	7.3	7.09	6.14	6.17	6.18	5.96	5.96	7.22	6.1	6.5	6.37	5.91	6.7	6.39	6.86	6.65	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	22	59	52	71	85	82	117	101	92	40	72	130	134	44	72	60	97	NT
Temperature	°C (on-site)	-	NE	15.1	13.5	13.7	13.5	13.9	14	15.8	14.6	15.1	18.6	15.8	17.7	16	14.9	15.7	15.3	16.6	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	10	NE	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	98	ND
Total Arsenic (As)	µg/l	5	50	ND	5.7	ND	ND	ND	ND	ND	ND	27	ND	ND	ND	ND	30	6.5	ND	68	ND
Total Barium (Ba)	µg/l	5	1000	330	500	750	4200	120	230	93	410	910	130	320	1400	140	8600	1600	46	11000	ND
Total Beryllium (Be)	µg/l	2	NE	ND	7	2.1	5.1	ND	ND	ND	ND	8.5	ND	ND	4.7	ND	13	3.6	ND	95	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	4.2	21	ND	10	ND	2.3	4.2	ND	ND	19	ND	27	5.4	ND	180	ND
Total Chromium (Cr)	µg/l	5	50	33	5.4	33	510	ND	5.2	ND	37	36	5.5	9.1	230	ND	180	52	ND	770	ND
Total Cobalt (Co)	µg/l	5	NE	13	5.4	16	100	ND	16	7.4	21	19	ND	ND	85	7.7	200	30	ND	560	ND
Total Copper (Cu)	µg/l	2	1000	20	10	31	220	ND	ND	2.6	42	88	3.3	7.4	150	6.8	100	31	ND	450	ND
Total Lead (Pb)	µg/l	10	15	ND	76	29	ND	ND	ND	ND	ND	150	ND	ND	20	ND	81	ND	ND	740	ND
Total Nickel (Ni)	µg/l	5	100	16	6.8	31	400	ND	ND	ND	27	40	ND	6.5	78	5.6	180	27	ND	430	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	2	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	65	ND
Total Vanadium (V)	µg/l	5	NE	58	16	44	640	ND	ND	ND	42	50	8.7	17	310	8.8	530	130	ND	1000	ND
Total Zinc (Zn)	µg/l	10	2100	57	120	110	580	ND	20	ND	56	250	17	20	280	43	510	110	15	4800	2000
Acetone	µg/l	100	700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzene	µg/l	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromoform	µg/l	5	0.19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Styrene	µg/l	10	100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Toluene	µg/l	5	1000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Xylene	µg/l	5	530	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-28-2003)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	8.3	7.15	6.89	6.37	6.21	6.17	6.4	6.16	8.15	4.94	5.7	5.85	5.73	NT	NT	NT	6.75	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	29	43	55	91	110	99	150	114	100	51	78	138	129	NT	NT	NT	125	NT
Temperature	°C (on-site)	-	NE	16.7	15.9	15.6	15.6	16.3	15.3	13.5	14.2	17.7	14	15	14.9	13	NT	NT	NT	18.4	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	24	ND
Total Barium (Ba)	µg/l	5	1000	600	66	220	1800	160	140	110	92	360	95	140	800	140	NT	NT	NT	2800	ND
Total Beryllium (Be)	µg/l	2	NE	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	2.2	ND	NT	NT	NT	20	ND
Total Cadmium (Cd)	µg/l	1	5	3.6	ND	ND	6	ND	ND	ND	ND	2.9	ND	ND	16	ND	NT	NT	NT	20	ND
Total Chromium (Cr)	µg/l	5	50	ND	ND	ND	89	ND	ND	ND	ND	ND	ND	ND	110	ND	NT	NT	NT	27	ND
Total Cobalt (Co)	µg/l	5	NE	21	ND	ND	37	ND	ND	6.9	ND	17	ND	ND	50	ND	NT	NT	NT	81	ND
Total Copper (Cu)	µg/l	2	1000	24	ND	2.6	40	ND	ND	ND	ND	28	ND	ND	94	ND	NT	NT	NT	71	ND
Total Lead (Pb)	µg/l	10	15	ND	ND	ND	ND	ND	ND	ND	ND	25	ND	ND	ND	ND	NT	NT	NT	300	ND
Total Nickel (Ni)	µg/l	5	100	ND	ND	ND	90	ND	ND	ND	ND	ND	ND	ND	26	ND	NT	NT	NT	70	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND
Total Thallium (Tl)	µg/l	1	NE	ND	ND	ND	1.6	ND	ND	ND	ND	1.4	ND	ND	ND	1	NT	NT	NT	15	ND
Total Vanadium (V)	µg/l	5	NE	89	ND	9.6	170	6.8	6.8	ND	ND	37	ND	ND	230	ND	NT	NT	NT	130	ND
Total Zinc (Zn)	µg/l	10	2100	86	14	31	160	16	ND	ND	ND	81	ND	ND	190	240	NT	NT	NT	800	ND
Acetone	µg/l	100	700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Benzene	µg/l	5	1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromoform	µg/l	5	0.19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,4-Dichloro-2-butene	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Styrene	µg/l	10	100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Toluene	µg/l	5	1000	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Xylene	µg/l	5	530	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-30-2003)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.58	6.9	6.73	6.57	6.26	6.44	6.33	6.27	7.7	4.82	5.81	6.18	6.54	5.59	5.71	6.5	6.46	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	29	39	58	82	119	110	140	115	105	40	80	149	112	50	88	51	120	NT
Temperature	°C (on-site)	-	NE	15	15.1	14.9	15.8	15.9	16.7	15	14	17.5	15	14	16.3	14	15	16.2	17.3	16	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	NT	ND	ND	ND	ND	ND	ND	6.2	ND	5.3	ND	6.3	ND	ND	81	ND
Total Barium (Ba)	µg/l	5	1000	320	100	NT	210	310	130	95	110	1200	580	190	270	130	920	320	29	4900	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	NT	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	ND	ND	ND	33	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	2	50	30	ND	NT	ND	6.2	ND	ND	ND	31	83	ND	4.6	ND	22	3.9	ND	140	ND
Total Cobalt (Co)	µg/l	5	NE	9	ND	NT	ND	ND	ND	5.7	ND	52	11	ND	8.8	ND	28	ND	ND	110	ND
Total Copper (Cu)	µg/l	2	1000	18	ND	NT	ND	2.3	2.6	ND	3	85	26	ND	4.4	2.9	16	2.7	ND	150	ND
Total Lead (Pb)	µg/l	5	15	8.7	12	NT	ND	ND	ND	ND	ND	39	25	ND	7.4	ND	29	ND	ND	640	ND
Total Nickel (Ni)	µg/l	5	100	19	ND	NT	6.9	6.9	ND	ND	ND	48	22	ND	ND	7.7	34	ND	ND	190	ND
Total Selenium (Se)	µg/l	5	50	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	54	ND	NT	6.6	16	ND	ND	ND	92	82	5.9	14	ND	82	13	ND	200	ND
Total Zinc (Zn)	µg/l	10	2100	55	22	NT	17	26	10	ND	ND	140	100	12	26	64	61	24	13	1800	ND
Acetone	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	28	15	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-20-2004)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.71	6.81	6.78	5.57	5.4	5.47	5.47	5.41	7.36	5.39	6.01	5.17	6.2	6.39	5.64	6.67	6.83	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	25	31	40	67	135	120	115	100	100	42	60	115	103	39	49	35	70	NT
Temperature	°C (on-site)	-	NE	15.8	15.6	15.5	13.5	14.6	14.4	13.5	14.1	15.3	14.1	15	14.9	11.5	14	13.1	14.9	13.8	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND	9.2	ND	ND	30	ND
Total Barium (Ba)	µg/l	5	1000	320	56	120	410	460	170	140	210	62	85	170	940	150	1600	860	36	2000	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8	ND	3.7	1.2	ND	8.9	ND
Total Chromium (Cr)	µg/l	2	50	33	ND	2.1	45	13	ND	ND	11	3.5	ND	2.9	190	ND	50	12	ND	68	ND
Total Cobalt (Co)	µg/l	5	NE	9.5	ND	ND	7.7	5.2	ND	13	6.4	ND	ND	ND	43	ND	47	7.4	ND	50	ND
Total Copper (Cu)	µg/l	2	1000	18	ND	2.8	12	5.3	2.3	4.3	13	7.4	ND	2.2	100	2.3	27	8	ND	89	ND
Total Lead (Pb)	µg/l	5	15	7.2	7	5.2	6.4	5.4	ND	ND	ND	12	ND	ND	39	ND	43	12	ND	250	ND
Total Nickel (Ni)	µg/l	5	100	20	ND	ND	30	7.3	ND	ND	12	5.3	ND	ND	49	12	36	8.4	ND	110	ND
Total Selenium (Se)	µg/l	5	50	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	55	ND	ND	45	25	ND	ND	13	5.1	ND	5.6	240	ND	140	33	ND	88	ND
Total Zinc (Zn)	µg/l	10	2100	55	10	ND	44	30	11	14	19	23	ND	ND	220	160	120	36	15	770	11
Acetone	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Carbon Disulfide	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Carbon tetrachloride	µg/l	5	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Chloromethane (Methylchloride)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Dichloromethane (Methylene chloride)	µg/l	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
2-Butanone (Methyl ethyl ketone)	µg/l	10	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
1,2,3-Trichloropropane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-21-2004)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.83	6.55	6.76	6.9	5.92	6.39	5.75	6.03	7.84	5.38	5.55	5.57	6.05	6.65	5.46	6.58	7.12	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	29	49	62	96	290	302	196	148	111	59	93	198	90	69	69	50	134	NT
Temperature	°C (on-site)	-	NE	14.3	16.7	14	13	14.7	14.3	15	14.5	14.2	16.5	15.5	14.6	15	15.1	15.5	16.7	17	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	59	ND
Total Barium (Ba)	µg/l	5	1000	320	40	200	300	310	140	140	130	12	100	320	900	110	2700	1700	29	4900	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	1.4	1.2	ND	28	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	ND
Total Chromium (Cr)	µg/l	2	50	21	ND	2.8	16	2	ND	ND	ND	ND	ND	5.5	120	ND	14	21	ND	140	ND
Total Cobalt (Co)	µg/l	5	NE	6.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31	ND	42	12	ND	120	ND
Total Copper (Cu)	µg/l	2	1000	11	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	63	ND	11	14	ND	140	ND
Total Lead (Pb)	µg/l	5	15	7.2	5.6	5.7	ND	ND	ND	ND	ND	ND	ND	5.6	24	ND	18	16	ND	430	ND
Total Nickel (Ni)	µg/l	5	100	12	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	35	ND	23	14	ND	160	ND
Total Selenium (Se)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	41	ND	ND	18	ND	ND	ND	ND	ND	ND	10	160	ND	46	59	ND	210	ND
Total Zinc (Zn)	µg/l	10	2100	29	ND	ND	17	ND	14	ND	12	15	11	11	70	55	27	31	15	1200	ND
Acetone	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	NE	ND	24	ND	ND	ND	ND	ND	ND	15	14	19	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
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NS = Not Sampled
NT = Not Tested
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NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-18-2005)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.95	7.44	6.15	6.2	5.58	6.04	6.02	6.18	7.46	5.01	5.2	5.6	5.6	5.72	5.73	6.64	6.85	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	25	40	42	78	330	161	171	139	95	49	90	149	149	125	51	41	138	NT
Temperature	°C (on-site)	-	NE	14.2	15.6	15	13.5	15	17.7	13	13.5	16.2	13	15	14.1	14.1	12	13	14.5	16.4	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	10	ND	ND	ND	ND	ND	ND	ND	5.2	ND	21	ND	ND	65	ND
Total Barium (Ba)	µg/l	5	1000	480	55	160	7200	610	180	160	140	12	78	150	1000	140	2000	1000	31	3700	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	3.8	ND	3	1.5	ND	26	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	2	50	49	12	8.3	680	2.9	ND	ND	3.2	ND	ND	2.4	210	ND	36	18	ND	100	ND
Total Cobalt (Co)	µg/l	5	NE	12	ND	ND	110	ND	ND	ND	ND	ND	ND	ND	36	ND	82	9.3	ND	70	ND
Total Copper (Cu)	µg/l	2	1000	29	ND	ND	240	ND	ND	ND	3.8	ND	ND	ND	120	ND	25	12	ND	130	ND
Total Lead (Pb)	µg/l	5	15	13	8	5.2	73	ND	ND	ND	ND	ND	ND	ND	39	ND	40	13	ND	380	ND
Total Nickel (Ni)	µg/l	5	100	29	9.6	17	460	ND	ND	5.5	5.4	ND	ND	ND	59	ND	61	12	ND	170	ND
Total Selenium (Se)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	85	ND	ND	680	5.4	ND	ND	ND	ND	ND	ND	240	ND	100	44	ND	110	ND
Total Zinc (Zn)	µg/l	10	2100	83	ND	ND	780	ND	30	13	10	ND	ND	13	240	200	96	38	14	1200	ND
Acetone	µg/l	25	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	53	17	ND	ND	ND	ND	16	ND	ND
Carbon tetrachloride	µg/l	5	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-13-2005)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	7.21	7.38	7.79	6.36	6.07	6.25	6.08	6.6	7.73	5.61	6.49	6.08	6.35	5.75	6.24	6.35	6.72	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	21	35	40	85	580	201	185	160	102	50	82	180	145	75	50	40	52	NT
Temperature	°C (on-site)	-	NE	13.2	14	13.3	13.3	14.9	14.3	16.5	15.5	15.3	14.1	16.5	16.5	16.3	15.1	16.2	16.1	16.8	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	53	9.9	ND	44	ND
Total Barium (Ba)	µg/l	5	1000	770	37	160	1700	870	250	160	140	27	110	290	810	150	5500	4400	27	2700	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	3.4	ND	11	9.5	ND	21	ND
Total Cadmium (Cd)	µg/l	1	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	2	50	52	ND	3.7	230	4.7	ND	ND	ND	ND	5.3	6.8	150	ND	130	130	ND	88	ND
Total Cobalt (Co)	µg/l	5	NE	21	ND	ND	32	ND	ND	5.1	ND	ND	ND	ND	29	ND	150	48	ND	56	ND
Total Copper (Cu)	µg/l	2	1000	31	2.6	3.5	70	ND	ND	ND	ND	3	4.6	3.8	82	ND	75	72	ND	96	ND
Total Lead (Pb)	µg/l	5	15	14	6.9	ND	20	ND	ND	ND	ND	ND	ND	ND	29	ND	110	62	ND	290	ND
Total Nickel (Ni)	µg/l	5	100	29	ND	ND	160	6.8	ND	ND	6.1	ND	ND	ND	46	ND	160	72	ND	100	ND
Total Selenium (Se)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	2	18	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	82	ND	ND	210	8.9	ND	ND	ND	ND	ND	5.7	170	ND	330	310	ND	82	ND
Total Zinc (Zn)	µg/l	10	2100	92	13	12	230	19	25	ND	ND	14	23	36	170	81	330	280	11	800	ND
Acetone	µg/l	25	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	170	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-25-2006)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.33	7.06	6.61	6.07	5.45	6.16	5.63	5.62	7.7	5.16	5.78	5.56	6.02	5.97	5.77	6.55	5.83	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	53	48	52	106	105	383	301	236	136	90	101	251	157	170	70	53	70	NT
Temperature	°C (on-site)	-	NE	18.1	19.2	16.1	13.7	19.5	20.6	12.4	13.8	14.6	12.1	13.5	14.8	12.2	12.5	12.9	14.1	12.9	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND	ND	42	ND
Total Barium (Ba)	µg/l	500	2000	650	ND	ND	ND	1100	ND	ND	ND	ND	820	ND	750	ND	ND	1700	ND	2700	ND
Total Beryllium (Be)	µg/l	2	NE	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	ND	17	ND
Total Cadmium (Cd)	µg/l	1	1.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	10	50	65	ND	16	ND	ND	ND	ND	ND	16	200	ND	100	ND	ND	20	ND	93	ND
Total Cobalt (Co)	µg/l	10	NE	16	ND	ND	ND	ND	ND	ND	ND	ND	22	ND	25	ND	170	12	ND	57	ND
Total Copper (Cu)	µg/l	200	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Lead (Pb)	µg/l	10	15	15	ND	ND	ND	ND	ND	ND	ND	53	34	ND	19	ND	ND	18	ND	300	ND
Total Nickel (Ni)	µg/l	50	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	88	ND
Total Selenium (Se)	µg/l	20	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	10	17.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	40	NE	110	ND	ND	ND	ND	ND	ND	ND	ND	160	ND	120	ND	ND	54	ND	85	ND
Total Zinc (Zn)	µg/l	50	1050	130	ND	88	ND	ND	ND	ND	ND	110	180	ND	120	120	ND	56	ND	780	ND
Acetone	µg/l	25	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.269	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	2800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.00047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	550	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	4200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
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MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (10-20-2006)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.47	6.81	6.51	6.74	5.56	6.14	5.87	5.74	8.2	NS	NS	5.61	5.96	6.07	5.73	6.83	5.97	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	229	48	53	108	876	564	149	200	12.8	NS	NS	330	229	142	71	52	33	NT
Temperature	°C (on-site)	-	NE	12.2	11.9	12.8	12.5	12.7	12.9	14.9	13.7	13.5	NS	NS	13.3	12.7	13.6	13.5	13.5	14.9	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	11	25	ND	13	ND
Total Barium (Ba)	µg/l	5	2000	410	22	180	470	1100	ND	ND	ND	160	NS	NS	ND	ND	1800	1400	ND	650	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	2.9	2.4	ND	5.7	ND
Total Cadmium (Cd)	µg/l	1	1.75	3.8	ND	ND	ND	ND	ND	ND	ND	1.5	NS	NS	ND	ND	4.6	4.7	ND	5.2	ND
Total Chromium (Cr)	µg/l	5	50	50	ND	11	24	ND	ND	ND	ND	17	NS	NS	ND	ND	43	31	ND	27	ND
Total Cobalt (Co)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	13	ND	ND	ND
Total Copper (Cu)	µg/l	5	1000	26	ND	ND	9.6	ND	ND	ND	ND	20	NS	NS	ND	ND	ND	ND	ND	25	ND
Total Lead (Pb)	µg/l	5	15	20	ND	ND	ND	ND	ND	ND	ND	32	NS	NS	ND	ND	30	37	ND	89	ND
Total Nickel (Ni)	µg/l	5	100	22	ND	8.3	25	ND	ND	ND	ND	13	NS	NS	ND	ND	ND	ND	ND	24	ND
Total Selenium (Se)	µg/l	10	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	5	17.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	5	NE	79	ND	ND	28	ND	ND	ND	ND	23	NS	NS	ND	ND	120	100	ND	30	ND
Total Zinc (Zn)	µg/l	10	1050	74	ND	20	37	ND	ND	ND	ND	55	NS	NS	ND	82	110	75	ND	200	ND
Acetone	µg/l	25	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.269	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	2800	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.00047	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	550	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	4200	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	10	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND

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Closed Francis Farm Landfill - Haywood Co., NC
Groundwater Sampling Event (4-25-2007)

TEST	UNITS	MDL	MCL	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	EQUIP. BLANK
pH	pH units (on-site)	-	NE	6.04	7.08	6.27	6.25	5.36	5.83	5.7	5.73	8.02	5.22	5.84	5.54	6.26	5.6	5.69	6.68	9.08	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	31	50	54	105	1540	757	391	312	134	139	95	336	238	274	76	50	46	NT
Temperature	°C (on-site)	-	NE	13.4	14.2	14	13	14	14.6	14	13	15.7	12	13.5	15.4	12	12	12	12.4	12.5	NT
Turbidity	NTU (on-site)	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	6	NE	ND	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	5	50	ND	ND	ND	ND	ND	280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	ND
Total Barium (Ba)	µg/l	100	2000	290	ND	200	240	1300	1500	130	180	ND	240	250	ND	160	160	120	ND	600	ND
Total Beryllium (Be)	µg/l	1	NE	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND
Total Cadmium (Cd)	µg/l	1	1.75	ND	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	10	50	20	ND	ND	16	ND	410	ND	ND	ND	31	ND	ND	ND	ND	ND	ND	17	ND
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	ND	ND	260	ND	ND	ND	ND	10	ND	ND	92	ND	ND	ND	ND
Total Copper (Cu)	µg/l	10	1000	15	ND	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND
Total Lead (Pb)	µg/l	10	15	ND	ND	ND	ND	ND	96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	69	ND
Total Nickel (Ni)	µg/l	50	100	ND	ND	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Selenium (Se)	µg/l	10	50	12	ND	ND	ND	ND	460	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND
Total Silver (Ag)	µg/l	10	17.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	5.5	NE	ND	ND	ND	ND	ND	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	25	NE	43	ND	ND	ND	ND	300	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	26	ND
Total Zinc (Zn)	µg/l	10	1050	55	21	30	30	22	830	22	15	10	39	21	12	74	37	20	12	200	12
Acetone	µg/l	25	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	25	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	10	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	5	0.269	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	2800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	5	2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	5	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.00047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	550	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	5	4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	10	4200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	5	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	10	2100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	5	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	5	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, Classifications of Water Quality Standards Applicable to Groundwaters of North Carolina, Section 15A NCAC 2L.202.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

APPENDIX B

Summary Table of Surface Water Analytical Results
Sampling Events N1 through N20

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (9-14-1998)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7	7.6	7.6	6.4	NS	NS	NS	7.2	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	80	75	78	120	NS	NS	NS	2700	NS
Temperature	°C (on-site)	-	29	16	16	21	15	NS	NS	NS	18	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NS	NS	NS	0.31	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NS	NS	NS	79	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	79	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NS	NS	NS	120	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NS	NS	NS	360	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NS	NS	NS	1600	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NS	NS	NS	ND	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Barium (Ba)	µg/l	500	NE	100	ND	ND	ND	NS	NS	NS	400	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Cobalt (Co)	µg/l	10	NE	2	ND	ND	2	NS	NS	NS	NT	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Magnesium (Mg)	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Total Nickel (Ni)	µg/l	50	88	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Selenium (Se)	µg/l	20	5	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Silver (Ag)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Vanadium (V)	µg/l	40	NE	5	ND	ND	ND	NS	NS	NS	NT	NS
Total Zinc (Zn)	µg/l	50	NE	10	20	ND	ND	NS	NS	NS	50	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NS	NS	NS	ND	NS
Acetone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromofrom	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NT	NS	NS	NS	NT	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-26-1999)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6	6.8	6.9	6	NS	NS	NS	NT	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	80	72	75	50	NS	NS	NS	NT	NS
Temperature	°C (on-site)	-	29	12	13	17	14	NS	NS	NS	NT	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NS	NS	NS	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NS	NS	NS	90	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	90	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NS	NS	NS	100	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NS	NS	NS	310	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NS	NS	NS	1200	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NS	NS	NS	ND	NS
Total Antimony (Sb)	µg/l	30	NE	11	ND	5	6	NS	NS	NS	ND	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Barium (Ba)	µg/l	500	NE	100	ND	100	ND	NS	NS	NS	300	NS
Total Beryllium (Be)	µg/l	2	6.5	20	2	2	2	NS	NS	NS	ND	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Chromium (Cr)	µg/l	10	50	3	ND	ND	3	NS	NS	NS	6	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	2	NS	NS	NS	ND	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Lead (Pb)	µg/l	10	25	6	5	6	ND	NS	NS	NS	ND	NS
Total Magnesium (Mg)	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	63000	NS
Total Nickel (Ni)	µg/l	50	88	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Selenium (Se)	µg/l	20	5	ND	ND	5	ND	NS	NS	NS	8	NS
Total Silver (Ag)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Zinc (Zn)	µg/l	50	NE	10	20	ND	ND	NS	NS	NS	ND	NS
Mercury	µg/l	0.2	0.012	ND	ND	NT	NT	NS	NS	NS	ND	NS
Acetone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromofrom	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NT	NT	NT	NT	NT	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
MDL = Laboratory Method Detection Limit
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (9-21-1999)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.6	6.7	6.4	5.3	NS	NS	NS	NT	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	88	82	89	55	NS	NS	NS	NT	NS
Temperature	°C (on-site)	-	29	14	16	16	12	NS	NS	NS	NT	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NS	NS	NS	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NS	NS	NS	41	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	41	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NS	NS	NS	3500	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NS	NS	NS	600	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NS	NS	NS	1900	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
Total Aluminum (Al)	µg/l	250	NE	NT	NT	NT	NT	NS	NS	NS	1700	NS
Total Antimony (Sb)	µg/l	30	50	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Arsenic (As)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Barium (Ba)	µg/l	500	6.5	88	67	98	76	NS	NS	NS	180	NS
Total Beryllium (Be)	µg/l	2	2	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Cadmium (Cd)	µg/l	1	50	ND	1.4	1.3	ND	NS	NS	NS	1.8	NS
Total Calcium (Ca)	µg/l	100	NE	NT	NT	NT	ND	NS	NS	NS	27000	NS
Total Chromium (Cr)	µg/l	10	NE	16	51	48	ND	NS	NS	NS	43	NS
Total Cobalt (Co)	µg/l	10	25	ND	ND	ND	ND	NS	NS	NS	9.7	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Iron (Fe)	µg/l	20	88	NT	NT	NT	NT	NS	NS	NS	9900	NS
Total Lead (Pb)	µg/l	10	5	ND	ND	ND	11	NS	NS	NS	ND	NS
Total Magnesium (Mg)	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	75000	NS
Total Manganese (Mn)	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	1800	NS
Total Molybdenum (Mo)	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	10	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	6.2	ND	NS	NS	NS	41	NS
Total Potassium (K)	µg/l	500	0.012	ND	ND	ND	NT	NS	NS	NS	18000	NS
Total Selenium (Se)	µg/l	20	NE	ND	ND	ND	NT	NS	NS	NS	ND	NS
Total Silicon (Si)	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	610	NS
Total Silver (Ag)	µg/l	10	51	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Sodium (Na)	µg/l	250	NE	NT	NT	NT	NT	NS	NS	NS	15000	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Tin (Sn)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	10	NS
Total Titanium (Ti)	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	130	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	9.2	ND	NS	NS	NS	11	NS
Total Zinc (Zn)	µg/l	50	0.3	24	46	38	ND	NS	NS	NS	86	NS
Mercury	µg/l	0.2	0.012	ND	ND	ND	NT	NS	NS	NS	NT	NS
Acetone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromoform	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NT	NS	NS	NS	NT	NS

Notes:
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NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-24-2000)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.4	6.3	6.7	6.4	NS	NS	NS	7.8	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	65	65	59	65	NS	NS	NS	2600	NS
Temperature	°C (on-site)	-	29	11	11	14	11	NS	NS	NS	11	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NS	NS	NS	300	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NS	NS	NS	95	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	95	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NS	NS	NS	190	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NS	NS	NS	670	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NS	NS	NS	2700	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NS	NS	NS	13	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	25	NS	NS	NS	NT	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Barium (Ba)	µg/l	500	NE	91	70	29	62	NS	NS	NS	NT	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	2	ND	ND	NS	NS	NS	NT	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NS	13	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	16	NS	NS	NS	NT	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	NS	NS	NS	ND	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	3.8	NS	NS	NS	NT	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	NS	2	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	NS	NS	NS	NT	NS
Total Zinc (Zn)	µg/l	50	NE	13	26	14	ND	NS	NS	NS	NT	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NS	NS	NS	0.3	NS
Acetone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromoform	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NT	NS	NS	NS	NT	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-9-2001)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7	7.1	7.1	NS	NS	NS	8.1	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	73	80	75	NS	NS	NS	3600	NS
Temperature	°C (on-site)	-	29	11	13	18	NS	NS	NS	15	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NS	NS	NS	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NS	NS	NS	120	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NS	NS	NS	120	NS
Sulfate	mg/l	500	250	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NS	NS	NS	240	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NS	NS	NS	430	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NS	NS	NS	5000	NS
Cyanide	µg/l	2	70	NT	NT	NT	NS	NS	NS	ND	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	NS	NS	NS	NT	NS
Total Barium (Ba)	µg/l	500	NE	99	81	55	NS	NS	NS	NT	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	NS	NS	NS	NT	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	NS	NS	NS	NT	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	NS	NS	NS	10	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	NS	NS	NS	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	NS	NS	NS	210	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	NS	NS	NS	NT	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	NS	NS	NS	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Zinc (Zn)	µg/l	50	NE	15	31	20	NS	NS	NS	NT	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NS	NS	NS	ND	NS
Acetone	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromoform	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NS	NS	NS	NT	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (9-18-2001)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	NS	NS	NS	**7.48**	NS	NS	NS	**6.02**
Specific Conductance	µmhos/cm (on-site)	1	NE	NS	NS	NS	**160**	NS	NS	NS	**120**
Temperature	°C (on-site)	-	29	NS	NS	NS	**20**	NS	NS	NS	**19**
Turbidity	NTU (on-site)	0.1	50	NS	NS	NS	NT	NS	NS	NS	NT
Nitrate as N	mg/l	0.1	10	NS	NS	NS	NT	NS	NS	NS	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NS	NS	NS	NT	NS	NS	NS	NT
Nitrite as N	mg/l	0.1	1	NS	NS	NS	NT	NS	NS	NS	NT
Nitrogen	mg/l	0.2	NE	NS	NS	NS	NT	NS	NS	NS	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NS	NS	NS	NT	NS	NS	NS	NT
Sulfate	mg/l	500	250	NS	NS	NS	NT	NS	NS	NS	NT
Biochemical Oxygen Demand	mg/l	2	NE	NS	NS	NS	NT	NS	NS	NS	NT
Chemical Oxygen Demand	mg/l	25	NE	NS	NS	NS	NT	NS	NS	NS	NT
Total Dissolved Solids	mg/l	20	1000	NS	NS	NS	NT	NS	NS	NS	NT
Cyanide	µg/l	2	70	NS	NS	NS	NT	NS	NS	NS	NT
Total Antimony (Sb)	µg/l	30	NE	NS	NS	NS	ND	NS	NS	NS	ND
Total Arsenic (As)	µg/l	10	50	NS	NS	NS	ND	NS	NS	NS	ND
Total Barium (Ba)	µg/l	500	NE	NS	NS	NS	**71**	NS	NS	NS	**110**
Total Beryllium (Be)	µg/l	2	6.5	NS	NS	NS	ND	NS	NS	NS	ND
Total Cadmium (Cd)	µg/l	1	2	NS	NS	NS	ND	NS	NS	NS	ND
Total Chromium (Cr)	µg/l	10	50	NS	NS	NS	ND	NS	NS	NS	ND
Total Cobalt (Co)	µg/l	10	NE	NS	NS	NS	**7.2**	NS	NS	NS	**13**
Total Copper (Cu)	µg/l	200	NE	NS	NS	NS	ND	NS	NS	NS	ND
Total Lead (Pb)	µg/l	10	25	NS	NS	NS	ND	NS	NS	NS	ND
Total Nickel (Ni)	µg/l	50	NE	NS	NS	NS	**9.4**	NS	NS	NS	**8.1**
Total Selenium (Se)	µg/l	20	88	NS	NS	NS	ND	NS	NS	NS	ND
Total Silver (Ag)	µg/l	10	5	NS	NS	NS	ND	NS	NS	NS	ND
Total Thallium (Tl)	µg/l	10	NE	NS	NS	NS	ND	NS	NS	NS	ND
Total Vanadium (V)	µg/l	40	NE	NS	NS	NS	ND	NS	NS	NS	ND
Total Zinc (Zn)	µg/l	50	NE	NS	NS	NS	**11**	NS	NS	NS	**35**
Mercury	µg/l	0.2	0.012	NS	NS	NS	NT	NS	NS	NS	NT
Acetone	µg/l	100	NE	NS	NS	NS	NT	NS	NS	NS	NT
Acrylonitrile	µg/l	200	NE	NS	NS	NS	NT	NS	NS	NS	NT
Benzene	µg/l	5	51	NS	NS	NS	NT	NS	NS	NS	NT
Bromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
Bromodichloromethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
Bromoform	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
Carbon Disulfide	µg/l	100	NE	NS	NS	NS	NT	NS	NS	NS	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
Carbon tetrachloride	µg/l	10	0.3	NS	NS	NS	NT	NS	NS	NS	NT
Chlorobenzene (mono)	µg/l	5	50	NS	NS	NS	NT	NS	NS	NS	NT
Chloroethane	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
Chloroform	µg/l	5	0.19	NS	NS	NS	NT	NS	NS	NS	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
Dibromochloromethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NS	NS	NS	NT	NS	NS	NS	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NS	NS	NS	NT	NS	NS	NS	NT
Dibromomethane	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
1,2-Dichlorobenzene	µg/l	5	620	NS	NS	NS	NT	NS	NS	NS	NT
1,4-Dichlorobenzene	µg/l	5	75	NS	NS	NS	NT	NS	NS	NS	NT
trans-1,4-Dichloro-2butene	µg/l	100	NE	NS	NS	NS	NT	NS	NS	NS	NT
1,1-Dichloroethane	µg/l	5	700	NS	NS	NS	NT	NS	NS	NS	NT
1,2-Dichloroethane	µg/l	5	0.38	NS	NS	NS	NT	NS	NS	NS	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NS	NS	NS	NT	NS	NS	NS	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NS	NS	NS	NT	NS	NS	NS	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NS	NS	NS	NT	NS	NS	NS	NT
1,2-Dichloropropane	µg/l	5	0.56	NS	NS	NS	NT	NS	NS	NS	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
Ethylbenzene	µg/l	5	29	NS	NS	NS	NT	NS	NS	NS	NT
2-Hexanone	µg/l	50	NE	NS	NS	NS	NT	NS	NS	NS	NT
Iodomethane	µg/l	10	NE	NS	NS	NS	NT	NS	NS	NS	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NS	NS	NS	NT	NS	NS	NS	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NS	NS	NS	NT	NS	NS	NS	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NS	NS	NS	NT	NS	NS	NS	NT
Styrene	µg/l	10	100	NS	NS	NS	NT	NS	NS	NS	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NS	NS	NS	NT	NS	NS	NS	NT
Toluene	µg/l	5	1000	NS	NS	NS	NT	NS	NS	NS	NT
1,1,1-Trichloroethane	µg/l	5	200	NS	NS	NS	NT	NS	NS	NS	NT
1,1,2-Trichloroethane	µg/l	5	NE	NS	NS	NS	NT	NS	NS	NS	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NS	NS	NS	NT	NS	NS	NS	NT
Trichlorofluoromethane	µg/l	5	2100	NS	NS	NS	NT	NS	NS	NS	NT
1,2,3-Trichloropropane	µg/l	15	NE	NS	NS	NS	NT	NS	NS	NS	NT
Vinyl acetate	µg/l	50	NE	NS	NS	NS	NT	NS	NS	NS	NT
Vinyl chloride	µg/l	10	0.015	NS	NS	NS	NT	NS	NS	NS	NT
Xylene	µg/l	5	530	NS	NS	NS	NT	NS	NS	NS	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-15-2002)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.67	6.08	6.46	7	NS	NS	6.71	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	78	78	80	170	NS	NS	265	NT
Temperature	°C (on-site)	-	29	17.8	13.3	19.4	20	NS	NS	20.1	NT
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NS	NS	NT	NT
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NS	NS	NT	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NS	NS	0.3	NT
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NS	NS	NT	NT
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NS	NS	96	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NS	NS	96	NT
Sulfate	mg/l	500	250	NT	NT	NT	NT	NS	NS	NT	NT
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NS	NS	740	NT
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NS	NS	1400	NT
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NS	NS	2300	NT
Cyanide	µg/l	2	70	NT	NT	NT	NT	NS	NS	0.006	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	NS	NS	NT	NT
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	NS	NS	NT	NT
Total Barium (Ba)	µg/l	500	NE	92	91	40	140	NS	NS	NT	NT
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	NS	NS	NT	NT
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	NS	NS	NT	NT
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	NS	NS	34	NT
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	7.7	NS	NS	NT	NT
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	NS	NS	NT	NT
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	NS	NS	ND	NT
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	9	NS	NS	NT	NT
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	NS	NS	ND	NT
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	NS	NS	NT	NT
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	NS	NS	ND	NT
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	6.5	NS	NS	NT	NT
Total Zinc (Zn)	µg/l	50	NE	ND	37	32	60	NS	NS	NT	NT
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NS	NS	ND	NT
Acetone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NT	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NT	NS	NS	NT	NT
Benzene	µg/l	5	51	NT	NT	NT	NT	NS	NS	NT	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
Bromoform	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NT	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NT	NS	NS	NT	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NT	NS	NS	NT	NT
Chloroethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
Chloroform	µg/l	5	0.19	NT	NT	NT	NT	NS	NS	NT	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NT	NS	NS	NT	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NT	NS	NS	NT	NT
Dibromomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NT	NS	NS	NT	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NT	NS	NS	NT	NT
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NT	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NT	NS	NS	NT	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NT	NS	NS	NT	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NT	NS	NS	NT	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NT	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NT	NS	NS	NT	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NT	NS	NS	NT	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
Ethylbenzene	µg/l	5	29	NT	NT	NT	NT	NS	NS	NT	NT
2-Hexanone	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NT	NT
Iodomethane	µg/l	10	NE	NT	NT	NT	NT	NS	NS	NT	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NT	NS	NS	NT	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NT	NS	NS	NT	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NT	NS	NS	NT	NT
Styrene	µg/l	10	100	NT	NT	NT	NT	NS	NS	NT	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NT	NS	NS	NT	NT
Toluene	µg/l	5	1000	NT	NT	NT	NT	NS	NS	NT	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NT	NS	NS	NT	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NT	NS	NS	NT	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NT	NS	NS	NT	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NT	NS	NS	NT	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NT	NS	NS	NT	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NT	NS	NS	NT	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NT	NS	NS	NT	NT
Xylene	µg/l	5	530	NT	NT	NT	NT	NS	NS	NT	NT

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
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NS = Not Sampled
NT = Not Tested
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NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (9-26-2002)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.9	6.88	7.01	NS	NS	NS	7.48	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	102	151	115	NS	NS	NS	3700	NS
Temperature	°C (on-site)	-	29	16.5	17.2	17.5	NS	NS	NS	18.4	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NS	NS	NS	NT	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NS	NS	NS	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NS	NS	NS	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NS	NS	NS	ND	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NS	NS	NS	130	NS
Sulfate	mg/l	500	250	NT	NT	NT	NS	NS	NS	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NS	NS	NS	210	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NS	NS	NS	1300	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NS	NS	NS	3000	NS
Cyanide	µg/l	2	70	NT	NT	NT	NS	NS	NS	2.5	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	NS	NS	NS	NT	NS
Total Barium (Ba)	µg/l	500	NE	150	160	80	NS	NS	NS	NT	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	NS	NS	NS	NT	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	NS	NS	NS	NT	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	NS	NS	NS	34	NS
Total Cobalt (Co)	µg/l	10	NE	7.2	ND	ND	NS	NS	NS	NT	NS
Total Copper (Cu)	µg/l	200	NE	ND	4.5	2.7	NS	NS	NS	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	NS	NS	NS	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	NS	NS	NS	NT	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	NS	NS	NS	ND	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	NS	NS	NS	NT	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	NS	NS	NS	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	6.4	ND	NS	NS	NS	NT	NS
Total Zinc (Zn)	µg/l	50	NE	19	100	41	NS	NS	NS	NT	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NS	NS	NS	ND	NS
Acetone	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NS	NS	NS	NT	NS
Benzene	µg/l	5	51	NT	NT	NT	NS	NS	NS	NT	NS
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromoform	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NS	NS	NS	NT	NS
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NS	NS	NS	NT	NS
Chloroethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Chloroform	µg/l	5	0.19	NT	NT	NT	NS	NS	NS	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NS	NS	NS	NT	NS
Dibromomethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NS	NS	NS	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NS	NS	NS	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NS	NS	NS	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NS	NS	NS	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Ethylbenzene	µg/l	5	29	NT	NT	NT	NS	NS	NS	NT	NS
2-Hexanone	µg/l	50	NE	NT	NT	NT	NS	NS	NS	NT	NS
Iodomethane	µg/l	10	NE	NT	NT	NT	NS	NS	NS	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NS	NS	NS	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NS	NS	NS	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NS	NS	NS	NT	NS
Styrene	µg/l	10	100	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NS	NS	NS	NT	NS
Toluene	µg/l	5	1000	NT	NT	NT	NS	NS	NS	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NS	NS	NS	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NS	NS	NS	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NS	NS	NS	NT	NS
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NS	NS	NS	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NS	NS	NS	NT	NS
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NS	NS	NS	NT	NS
Xylene	µg/l	5	530	NT	NT	NT	NS	NS	NS	NT	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-29-2003)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.91	6.42	7.17	NS	6.41	6.71	NT	7.05
Specific Conductance	µmhos/cm (on-site)	1	NE	77	75	101	NS	19	29	NT	130
Temperature	°C (on-site)	-	29	11.8	13	16	NS	15.6	14.9	NT	23
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NS	NT	NT	NT	NT
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NS	NT	NT	NT	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NS	NT	NT	ND	NT
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NS	NT	NT	NT	NT
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NS	NT	NT	220	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NS	NT	NT	220	NT
Sulfate	mg/l	500	250	NT	NT	NT	NS	NT	NT	NT	NT
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NS	NT	NT	2500	NT
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NS	NT	NT	1100	NT
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NS	NT	NT	120	NT
Cyanide	µg/l	2	70	NT	NT	NT	NS	NT	NT	110	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	NS	ND	ND	ND	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	NS	ND	ND	15	ND
Total Barium (Ba)	µg/l	500	NE	90	82	64	NS	27	27	270	92
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	NS	ND	ND	ND	ND
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	NS	ND	ND	2.5	ND
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	NS	ND	ND	ND	ND
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	16	ND
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	NS	ND	ND	ND	ND
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	NS	ND	ND	ND	ND
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	NS	ND	ND	ND	ND
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	NS	ND	ND	ND	ND
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	NS	ND	ND	2.4	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	ND	ND
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	NS	ND	ND	19	ND
Total Zinc (Zn)	µg/l	50	NE	ND	45	20	NS	ND	ND	1000	ND
Mercury	µg/l	0.2	0.012	NT	NT	NT	NS	NT	NT	NT	NT
Acetone	µg/l	100	NE	NT	NT	NT	NS	NT	NT	NT	NT
Acrylonitrile	µg/l	200	NE	NT	NT	NT	NS	NT	NT	NT	NT
Benzene	µg/l	5	51	NT	NT	NT	NS	NT	NT	NT	NT
Bromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
Bromodichloromethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
Bromoform	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
Carbon Disulfide	µg/l	100	NE	NT	NT	NT	NS	NT	NT	NT	NT
Bromomethane (Methylbromide)	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
Carbon tetrachloride	µg/l	10	0.3	NT	NT	NT	NS	NT	NT	NT	NT
Chlorobenzene (mono)	µg/l	5	50	NT	NT	NT	NS	NT	NT	NT	NT
Chloroethane	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
Chloroform	µg/l	5	0.19	NT	NT	NT	NS	NT	NT	NT	NT
Chloromethane (Methylchloride)	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
Dibromochloromethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	NT	NT	NT	NS	NT	NT	NT	NT
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	NT	NT	NT	NS	NT	NT	NT	NT
Dibromomethane	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
1,2-Dichlorobenzene	µg/l	5	620	NT	NT	NT	NS	NT	NT	NT	NT
1,4-Dichlorobenzene	µg/l	5	75	NT	NT	NT	NS	NT	NT	NT	NT
trans-1,4-Dichloro-2butene	µg/l	100	NE	NT	NT	NT	NS	NT	NT	NT	NT
1,1-Dichloroethane	µg/l	5	700	NT	NT	NT	NS	NT	NT	NT	NT
1,2-Dichloroethane	µg/l	5	0.38	NT	NT	NT	NS	NT	NT	NT	NT
1,1-Dichloroethene (-ethylene)	µg/l	5	7	NT	NT	NT	NS	NT	NT	NT	NT
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	NT	NT	NT	NS	NT	NT	NT	NT
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	NT	NT	NT	NS	NT	NT	NT	NT
1,2-Dichloropropane	µg/l	5	0.56	NT	NT	NT	NS	NT	NT	NT	NT
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
Ethylbenzene	µg/l	5	29	NT	NT	NT	NS	NT	NT	NT	NT
2-Hexanone	µg/l	50	NE	NT	NT	NT	NS	NT	NT	NT	NT
Iodomethane	µg/l	10	NE	NT	NT	NT	NS	NT	NT	NT	NT
Dichloromethane (Methylene chloride)	µg/l	10	5	NT	NT	NT	NS	NT	NT	NT	NT
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	NT	NT	NT	NS	NT	NT	NT	NT
4-Methyl-2-Pentanone	µg/l	100	NE	NT	NT	NT	NS	NT	NT	NT	NT
Styrene	µg/l	10	100	NT	NT	NT	NS	NT	NT	NT	NT
1,1,1,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
1,1,2,2-Tetrachloroethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
Tetrachloroethene (-ethylene)	µg/l	5	0.7	NT	NT	NT	NS	NT	NT	NT	NT
Toluene	µg/l	5	1000	NT	NT	NT	NS	NT	NT	NT	NT
1,1,1-Trichloroethane	µg/l	5	200	NT	NT	NT	NS	NT	NT	NT	NT
1,1,2-Trichloroethane	µg/l	5	NE	NT	NT	NT	NS	NT	NT	NT	NT
Trichloroethene (-ethylene)	µg/l	5	2.8	NT	NT	NT	NS	NT	NT	NT	NT
Trichlorofluoromethane	µg/l	5	2100	NT	NT	NT	NS	NT	NT	NT	NT
1,2,3-Trichloropropane	µg/l	15	NE	NT	NT	NT	NS	NT	NT	NT	NT
Vinyl acetate	µg/l	50	NE	NT	NT	NT	NS	NT	NT	NT	NT
Vinyl chloride	µg/l	10	0.015	NT	NT	NT	NS	NT	NT	NT	NT
Xylene	µg/l	5	530	NT	NT	NT	NS	NT	NT	NT	NT

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NS = Not Sampled
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NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (10-30-2003)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7.41	7.38	7.42	NS	5.87	7.14	8.37	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	80	80	80	NS	19	29	3500	NS
Temperature	°C (on-site)	-	29	12	12	12	NS	14.2	15.1	19.3	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NS	NT	NT	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NS	NT	NT	3.4	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NS	NT	NT	3.4	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NS	NT	NT	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NS	NT	NT	72	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NS	NT	NT	69	NS
Sulfate	mg/l	500	250	NT	NT	NT	NS	NT	NT	NT	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NS	NT	NT	ND	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NS	NT	NT	250	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NS	NT	NT	2500	NS
Cyanide	µg/l	2	70	NT	NT	NT	NS	NT	NT	NT	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	NS	ND	ND	NT	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	NS	5.5	ND	NT	NS
Total Barium (Ba)	µg/l	500	NE	110	130	84	NS	24	27	NT	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	NS	ND	ND	NT	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	NS	ND	ND	NT	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	NS	ND	ND	10	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Total Copper (Cu)	µg/l	200	NE	ND	2.7	2.2	NS	2.2	ND	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	NS	ND	ND	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	NS	ND	ND	NT	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	NS	ND	ND	ND	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	NS	ND	ND	NT	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	5.3	ND	NS	ND	ND	NT	NS
Total Zinc (Zn)	µg/l	50	NE	ND	80	40	NS	14	ND	NT	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NS	NT	NT	ND	NS
Acetone	µg/l	100	NE	ND	ND	ND	NS	ND	ND	NT	NS
Acrylonitrile	µg/l	200	NE	ND	ND	ND	NS	ND	ND	NT	NS
Benzene	µg/l	5	51	ND	ND	ND	NS	ND	ND	NT	NS
Bromochloromethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
Bromoform	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	NS	ND	11	NT	NS
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	NS	ND	ND	NT	NS
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	NS	ND	ND	NT	NS
Chloroethane	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Chloroform	µg/l	5	0.19	ND	ND	ND	NS	ND	ND	NT	NS
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	NS	ND	ND	NT	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	NS	ND	ND	NT	NS
Dibromomethane	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	NS	ND	ND	NT	NS
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	NS	ND	ND	NT	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	NS	ND	ND	NT	NS
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	NS	ND	ND	NT	NS
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	NS	ND	ND	NT	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	NS	ND	ND	NT	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	NS	ND	ND	NT	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	NS	ND	ND	NT	NS
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	NS	ND	ND	NT	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Ethylbenzene	µg/l	5	29	ND	ND	ND	NS	ND	ND	NT	NS
2-Hexanone	µg/l	50	NE	ND	ND	ND	NS	ND	ND	NT	NS
Iodomethane	µg/l	10	NE	ND	ND	ND	NS	ND	ND	NT	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	NS	ND	ND	NT	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	NS	ND	ND	NT	NS
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	NS	ND	ND	NT	NS
Styrene	µg/l	10	100	ND	ND	ND	NS	ND	ND	NT	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	NS	ND	ND	NT	NS
Toluene	µg/l	5	1000	ND	ND	ND	NS	ND	ND	NT	NS
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	NS	ND	ND	NT	NS
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	NS	ND	ND	NT	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	NS	ND	ND	NT	NS
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	NS	ND	ND	NT	NS
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	NS	ND	ND	NT	NS
Vinyl acetate	µg/l	50	NE	ND	ND	ND	NS	ND	ND	NT	NS
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	NS	ND	ND	NT	NS
Xylene	µg/l	5	530	ND	ND	ND	NS	ND	ND	NT	NS

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MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
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NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-20-2004)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.8	7.05	7.19	8.05	6.19	6.35	8.37	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	74	73	142	1790	19	29	4050	NS
Temperature	°C (on-site)	-	29	13	13	15	17	17	16	28.4	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	0.11	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	0.11	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	640	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	470	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	1100	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	16	NS
Total Barium (Ba)	µg/l	500	NE	120	95	83	260	18	26	140	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	ND	ND	ND	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	ND	ND	ND	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	ND	ND	28	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	26	ND	ND	17	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	3.1	ND	ND	ND	ND	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	ND	ND	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	12	ND	ND	45	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	6	ND	ND	8	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	ND	ND	12	NS
Total Zinc (Zn)	µg/l	50	NE	ND	48	31	310	15	ND	62	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	ND	NT	NT	ND	NS
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	490	NS
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	NS
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	NS
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	14	NS
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	NS
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	NS
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	NS
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	NS
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	NS
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	NS
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	300	NS
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	NS
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	NS
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	NS
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	NS
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (10-21-2004)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7.06	6.62	NS	7.16	7.42	6.41	7.89	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	103	103	NS	129	26	38	3270	NS
Temperature	°C (on-site)	-	29	14	14.5	NS	15	15	16	23.4	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NS	NT	NT	NT	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NS	NT	NT	NT	ND	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NS	NT	NT	NT	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NS	NT	NT	NT	NT	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NS	NT	NT	NT	NT	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NS	NT	NT	NT	NT	NS
Sulfate	mg/l	500	250	NT	NT	NS	NT	NT	NT	34	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NS	NT	NT	NT	640	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NS	NT	NT	NT	1300	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NS	NT	NT	NT	NT	NS
Cyanide	µg/l	2	70	NT	NT	NS	NT	NT	NT	NT	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	NS	ND	ND	ND	ND	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	NS	ND	ND	ND	10	NS
Total Barium (Ba)	µg/l	500	NE	100	100	NS	87	24	31	160	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	NS	ND	2.6	ND	ND	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	NS	ND	2.1	ND	ND	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	NS	ND	3.7	2.3	26	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	NS	6.5	ND	ND	ND	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	NS	ND	ND	ND	ND	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	NS	ND	ND	ND	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	NS	ND	ND	ND	24	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	NS	ND	ND	ND	6.2	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	NS	ND	ND	ND	ND	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	NS	ND	ND	ND	8.2	NS
Total Zinc (Zn)	µg/l	50	NE	ND	44	NS	17	12	13	43	NS
Mercury	µg/l	0.2	0.012	NT	NT	NS	NT	NT	NT	NT	NS
Acetone	µg/l	100	NE	ND	ND	NS	ND	ND	ND	290	NS
Acrylonitrile	µg/l	200	NE	ND	ND	NS	ND	ND	ND	ND	NS
Benzene	µg/l	5	51	ND	ND	NS	ND	ND	ND	ND	NS
Bromochloromethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
Bromodichloromethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
Bromoform	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
Carbon Disulfide	µg/l	100	NE	ND	ND	NS	ND	39	32	ND	NS
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Carbon tetrachloride	µg/l	10	0.3	ND	ND	NS	ND	ND	ND	ND	NS
Chlorobenzene (mono)	µg/l	5	50	ND	ND	NS	ND	ND	ND	ND	NS
Chloroethane	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Chloroform	µg/l	5	0.19	ND	ND	NS	ND	ND	ND	ND	NS
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Dibromochloromethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	NS	ND	ND	ND	ND	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	NS	ND	ND	ND	ND	NS
Dibromomethane	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	NS	ND	ND	ND	ND	NS
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	NS	ND	ND	ND	ND	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	NS	ND	ND	ND	ND	NS
1,1-Dichloroethane	µg/l	5	700	ND	ND	NS	ND	ND	ND	ND	NS
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	NS	ND	ND	ND	ND	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	NS	ND	ND	ND	ND	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	NS	ND	ND	ND	ND	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	NS	ND	ND	ND	ND	NS
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	NS	ND	ND	ND	ND	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Ethylbenzene	µg/l	5	29	ND	ND	NS	ND	ND	ND	ND	NS
2-Hexanone	µg/l	50	NE	ND	ND	NS	ND	ND	ND	ND	NS
Iodomethane	µg/l	10	NE	ND	ND	NS	ND	ND	ND	ND	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	NS	ND	ND	ND	ND	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	NS	ND	ND	ND	260	NS
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	NS	ND	ND	ND	ND	NS
Styrene	µg/l	10	100	ND	ND	NS	ND	ND	ND	ND	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	NS	ND	ND	ND	ND	NS
Toluene	µg/l	5	1000	ND	ND	NS	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	NS	ND	ND	ND	ND	NS
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	NS	ND	ND	ND	ND	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	NS	ND	ND	ND	ND	NS
Trichlorofluoromethane	µg/l	5	2100	ND	ND	NS	ND	ND	ND	ND	NS
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	NS	ND	ND	ND	ND	NS
Vinyl acetate	µg/l	50	NE	ND	ND	NS	ND	ND	ND	ND	NS
Vinyl chloride	µg/l	10	0.015	ND	ND	NS	ND	ND	ND	ND	NS
Xylene	µg/l	5	530	ND	ND	NS	ND	ND	ND	ND	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-18-2005)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	6.49	5.99	6.21	7.05	7.08	7.27	7.28	6.26
Specific Conductance	µmhos/cm (on-site)	1	NE	79	88	151	120	21	28	6500	172
Temperature	°C (on-site)	-	29	13	123	13.5	16	14.1	13	19	21
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NT
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	ND	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	ND	NT
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	NT	NT
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	1300	NT
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	300	NT
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	760	NT
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NT
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	22	ND
Total Barium (Ba)	µg/l	500	NE	100	120	98	79	24	28	390	83
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	ND	ND	ND	ND
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	ND	ND	31	ND
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	14	ND
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	ND	ND	ND	ND
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	ND	ND	ND	50	ND
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	ND	ND	7.4	ND
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	ND	ND	17	ND
Total Zinc (Zn)	µg/l	50	NE	ND	50	22	34	ND	ND	150	ND
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NT	NT	NT	NT
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	240	ND
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	11	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	11	ND
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	410	ND
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	40	ND
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	63	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	43	ND

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (10-13-2005)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7.11	6.72	7.18	6.28	6.76	8.13	8.01	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	89	90	240	340	91	31	6500	NS
Temperature	°C (on-site)	-	29	15.7	16.9	16.9	18.9	18.7	15.2	21.1	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	ND	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	ND	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	1300	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	720	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	920	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NS
Total Antimony (Sb)	µg/l	30	NE	NT	NT	NT	ND	NT	NT	NT	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	16	NS
Total Barium (Ba)	µg/l	500	NE	120	96	140	90	86	36	430	NS
Total Beryllium (Be)	µg/l	2	6.5	NT	NT	NT	ND	NT	NT	NT	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	ND	ND	ND	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	4.2	ND	ND	50	NS
Total Cobalt (Co)	µg/l	10	NE	NT	NT	NT	6.8	NT	NT	NT	NS
Total Copper (Cu)	µg/l	200	NE	NT	NT	NT	2.4	NT	NT	NT	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	ND	ND	ND	NS
Total Nickel (Ni)	µg/l	50	NE	NT	NT	NT	ND	NT	NT	NT	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	ND	ND	9.2	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
Total Thallium (Tl)	µg/l	10	NE	NT	NT	NT	ND	NT	NT	NT	NS
Total Vanadium (V)	µg/l	40	NE	NT	NT	NT	ND	NT	NT	NT	NS
Total Zinc (Zn)	µg/l	50	NE	NT	NT	NT	33	NT	NT	NT	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NT	NT	ND	NS
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	NS
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	NS
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	NS
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	NS
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	NS
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	NS
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	NS
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	NS
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	ND	NS
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	NS
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	NS
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	NS
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	NS
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-25-2006)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7.07	7.11	7.18	6.73	6.45	6.28	7.55	6.81
Specific Conductance	µmhos/cm (on-site)	1	NE	107	138	340	201	45	53	8660	216
Temperature	°C (on-site)	-	29	14.1	13.8	15.6	18.6	14.8	14.3	17.1	20.4
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NT
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	2.4	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	2.4	NT
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	NT	NT
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	2400	NT
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	51	NT
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	700	NT
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NT
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	18	ND
Total Barium (Ba)	µg/l	500	NE	ND	ND	ND	ND	ND	ND	580	ND
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	ND	ND	ND	ND
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	ND	ND	40	ND
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	15	ND
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	11	ND	ND	ND	ND
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	ND	ND	ND	56	ND
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Zinc (Zn)	µg/l	50	NE	ND	ND	ND	ND	ND	ND	130	ND
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NT	NT	NT	NT
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	6.2	ND
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	24	ND
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	15	ND
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	12	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	16.1	ND

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (10-16-2006)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	7.53	7.1	NT	7.14	6.64	7.13	8.11	NS
Specific Conductance	µmhos/cm (on-site)	1	NE	123	139	NT	200	46	40	9800	NS
Temperature	°C (on-site)	-	29	11.9	10.9	NT	11.9	13.4	11.3	19.6	NS
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NS
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	0.58	NS
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	ND	NS
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	ND	NS
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NS
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NS
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	2100	NS
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	61	NS
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	780	NS
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NS
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NS
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	NS
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	18	NS
Total Barium (Ba)	µg/l	500	NE	120	140	120	240	54	33	430	NS
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	ND	ND	ND	NS
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	5.8	ND	ND	ND	NS
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	21	ND	ND	54	NS
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	ND	7.4	ND	14	NS
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	23	ND	ND	ND	NS
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	18	ND	ND	ND	NS
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	8.4	ND	ND	68	NS
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	ND	ND	ND	NS
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	62	ND	ND	18	NS
Total Zinc (Zn)	µg/l	50	NE	ND	39	22	130	ND	ND	63	NS
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NT	NT	NT	NS
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	NS
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	NS
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	NS
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	NS
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	NS
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	NS
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	NS
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	NS
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	NS
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	NS
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	ND	NS
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	NS
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	NS
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	ND	NS
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	NS
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	NS
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	ND	NS
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	NS
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	NS
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	NS
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	NS
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	NS
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	NS
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	ND	NS

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
NT = Not Tested
NE = Not Established; North Carolina has not established a MCL
NP = Not Present during sampling event
Shaded cells indicated exceedances of MCLs.

White Oak Landfill - Haywood Co., NC
Surface Water Sampling Event (4-23-2007)

TEST	UNITS	MDL	MCL	SW-1	SW-2	SW-3	SW-5	SW-6	SW-7	Leachate	Settling
pH	pH units (on-site)	-	<6.0; >8.5	NT	NT	NT	NT	NT	NT	NT	NT
Specific Conductance	µmhos/cm (on-site)	1	NE	NT	NT	NT	NT	NT	NT	NT	NT
Temperature	°C (on-site)	-	29	NT	NT	NT	NT	NT	NT	NT	NT
Turbidity	NTU (on-site)	0.1	50	NT	NT	NT	NT	NT	NT	NT	NT
Nitrate as N	mg/l	0.1	10	NT	NT	NT	NT	NT	NT	**0.38**	NT
Nitrate/Nitrite as N	mg/l	0.1	NE	NT	NT	NT	NT	NT	NT	NT	NT
Nitrite as N	mg/l	0.1	1	NT	NT	NT	NT	NT	NT	ND	NT
Nitrogen	mg/l	0.2	NE	NT	NT	NT	NT	NT	NT	NT	NT
Total Nitrogen, Kjeldahl	mg/l	100	NE	NT	NT	NT	NT	NT	NT	NT	NT
Sulfate	mg/l	500	250	NT	NT	NT	NT	NT	NT	**2400**	NT
Biochemical Oxygen Demand	mg/l	2	NE	NT	NT	NT	NT	NT	NT	**89**	NT
Chemical Oxygen Demand	mg/l	25	NE	NT	NT	NT	NT	NT	NT	**1000**	NT
Total Dissolved Solids	mg/l	20	1000	NT	NT	NT	NT	NT	NT	NT	NT
Cyanide	µg/l	2	70	NT	NT	NT	NT	NT	NT	NT	NT
Total Antimony (Sb)	µg/l	30	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Arsenic (As)	µg/l	10	50	ND	ND	ND	ND	ND	ND	**16**	ND
Total Barium (Ba)	µg/l	500	NE	**100**	**120**	**250**	ND	ND	ND	**380**	ND
Total Beryllium (Be)	µg/l	2	6.5	ND	ND	ND	ND	ND	ND	ND	ND
Total Cadmium (Cd)	µg/l	1	2	ND	ND	ND	ND	ND	ND	ND	ND
Total Chromium (Cr)	µg/l	10	50	ND	ND	ND	ND	ND	ND	**46**	ND
Total Cobalt (Co)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Copper (Cu)	µg/l	200	NE	ND	ND	ND	**38**	ND	ND	ND	ND
Total Lead (Pb)	µg/l	10	25	ND	ND	ND	ND	ND	ND	ND	ND
Total Nickel (Ni)	µg/l	50	NE	ND	ND	ND	ND	ND	ND	**50**	ND
Total Selenium (Se)	µg/l	20	88	ND	ND	ND	ND	ND	ND	ND	ND
Total Silver (Ag)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
Total Thallium (Tl)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Vanadium (V)	µg/l	40	NE	ND	ND	ND	ND	ND	ND	ND	ND
Total Zinc (Zn)	µg/l	50	NE	**13**	**37**	**130**	**91**	**15**	**11**	**80**	**15**
Mercury	µg/l	0.2	0.012	NT	NT	NT	NT	NT	NT	NT	NT
Acetone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	µg/l	200	NE	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	µg/l	5	51	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane (Methylbromide)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	µg/l	10	0.3	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene (mono)	µg/l	5	50	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	µg/l	5	0.19	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane (Methylchloride)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane; DBCP	µg/l	25	0.025	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane; Ethylene dibromide	µg/l	5	0.0004	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	µg/l	5	620	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	µg/l	5	75	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2butene	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	µg/l	5	700	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	µg/l	5	0.38	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene (-ethylene)	µg/l	5	7	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene (-ethylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene (-ylene)	µg/l	5	70	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	µg/l	5	0.56	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene (-propylene)	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	µg/l	5	29	ND	ND	ND	ND	ND	ND	**10**	ND
2-Hexanone	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Iodomethane	µg/l	10	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dichloromethane (Methylene chloride)	µg/l	10	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (Methyl ethyl ketone)	µg/l	100	170	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	µg/l	100	NE	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	µg/l	10	100	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene (-ethylene)	µg/l	5	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	µg/l	5	1000	ND	ND	ND	ND	ND	ND	**46**	ND
1,1,1-Trichloroethane	µg/l	5	200	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	µg/l	5	NE	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (-ethylene)	µg/l	5	2.8	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	µg/l	5	2100	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/l	15	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	µg/l	50	NE	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	µg/l	10	0.015	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	µg/l	5	530	ND	ND	ND	ND	ND	ND	**31.3**	ND

Notes:
MCL = Maximum Contaminant Level, as established in the NCDENR, "Redbook" Surface Waters and Wetlands Standards Section 15A NCAC 02B.0100, .0200, and .0300.
ND = Not Detected at the method detection limit
NS = Not Sampled
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Shaded cells indicated exceedances of MCLs.

APPENDIX C

Laboratory Analytical Results

Sampling Event
April 25, 2007

Pace Analytical™
www.pacelabs.com

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

F

May 23, 2007

Mr. Stephen King
Haywood County Solid Waste Mgt
278 Recycle Road
Clyde, NC 28721

RE: Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Dear Mr. King:

Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2007. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

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

Sincerely,

Tom R. Williams

Tom Williams
tom.williams@pacelabs.com
(828) 254-7176
Project Manager

Enclosures

Pace Analytical™
www.pacelabs.com

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

F

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291103 Project Sample Number: 92142922-001 Date Collected: 04/23/07 12:00
Client Sample ID: SW-1 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	04/26/07 20:20	EWS	7440-36-0		
Arsenic	ND	ug/l	10.	04/26/07 20:20	EWS	7440-38-2		
Barium	100	ug/l	100	04/26/07 20:20	EWS	7440-39-3		
Beryllium	ND	ug/l	1.0	04/26/07 20:20	EWS	7440-41-7		
Cadmium	ND	ug/l	1.0	04/26/07 20:20	EWS	7440-43-9		
Chromium	ND	ug/l	10.	04/26/07 20:20	EWS	7440-47-3		
Cobalt	ND	ug/l	10.	04/26/07 20:20	EWS	7440-48-4		
Copper	ND	ug/l	10.	04/26/07 20:20	EWS	7440-50-8		
Lead	ND	ug/l	10.	04/26/07 20:20	EWS	7439-92-1		
Nickel	ND	ug/l	50.	04/26/07 20:20	EWS	7440-02-0		
Selenium	ND	ug/l	10.	04/26/07 20:20	EWS	7782-49-2		
Silver	ND	ug/l	10.	04/26/07 20:20	EWS	7440-22-4		
Thallium	ND	ug/l	5.5	04/26/07 20:20	EWS	7440-28-0		
Vanadium	ND	ug/l	25.	04/26/07 20:20	EWS	7440-62-2		
Zinc	13.	ug/l	10.	04/26/07 20:20	EWS	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 15:47	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 15:47	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 15:47	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 15:47	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 15:47	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 15:47	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 15:47	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 15:47	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 15:47	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 15:47	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 15:47	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 15:47	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 15:47	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 15:47	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 15:47	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 15:47	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 15:47	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 15:47	MCK	74-95-3		

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

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Phone: 704.875.9092
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F

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291103 Project Sample Number: 92142922-001 Date Collected: 04/23/07 12:00
Client Sample ID: SW-1 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 15:47	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 15:47	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 15:47	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 15:47	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 15:47	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 15:47	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 15:47	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 15:47	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 15:47	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 15:47	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 15:47	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 15:47	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 15:47	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 15:47	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 15:47	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 15:47	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 15:47	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 15:47	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 15:47	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 15:47	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 15:47	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 15:47	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 15:47	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 15:47	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 15:47	MCK	95-47-6		
Toluene-d8 (S)	98	%		04/26/07 15:47	MCK	2037-26-5		
4-Bromofluorobenzene (S)	103	%		04/26/07 15:47	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 15:47	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	94	%		04/26/07 15:47	MCK	17060-07-0		

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NC Drinking Water 37712
SC Environmental 99030
FL NELAP E87648

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F

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291137 Project Sample Number: 92142922-002 Date Collected: 04/23/07 13:20
Client Sample ID: SW-2 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	04/26/07 20:24	EWS	7440-36-0		
Arsenic	ND	ug/l	10.	04/26/07 20:24	EWS	7440-38-2		
Barium	120	ug/l	100	04/26/07 20:24	EWS	7440-39-3		
Beryllium	ND	ug/l	1.0	04/26/07 20:24	EWS	7440-41-7		
Cadmium	ND	ug/l	1.0	04/26/07 20:24	EWS	7440-43-9		
Chromium	ND	ug/l	10.	04/26/07 20:24	EWS	7440-47-3		
Cobalt	ND	ug/l	10.	04/26/07 20:24	EWS	7440-48-4		
Copper	ND	ug/l	10.	04/26/07 20:24	EWS	7440-50-8		
Lead	ND	ug/l	10.	04/26/07 20:24	EWS	7439-92-1		
Nickel	ND	ug/l	50.	04/26/07 20:24	EWS	7440-02-0		
Selenium	ND	ug/l	10.	04/26/07 20:24	EWS	7782-49-2		
Silver	ND	ug/l	10.	04/26/07 20:24	EWS	7440-22-4		
Thallium	ND	ug/l	5.5	04/26/07 20:24	EWS	7440-28-0		
Vanadium	ND	ug/l	25.	04/26/07 20:24	EWS	7440-62-2		
Zinc	37.	ug/l	10.	04/26/07 20:24	EWS	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 16:03	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 16:03	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 16:03	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 16:03	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 16:03	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 16:03	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 16:03	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 16:03	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 16:03	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 16:03	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 16:03	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 16:03	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 16:03	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 16:03	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 16:03	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 16:03	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 16:03	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 16:03	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291137 Project Sample Number: 92142922-002 Date Collected: 04/23/07 13:20
Client Sample ID: SW-2 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:03	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:03	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 16:03	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 16:03	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:03	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:03	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 16:03	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:03	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:03	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 16:03	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 16:03	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 16:03	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 16:03	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 16:03	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 16:03	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 16:03	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 16:03	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 16:03	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 16:03	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 16:03	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 16:03	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 16:03	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 16:03	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 16:03	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 16:03	MCK	95-47-6		
Toluene-d8 (S)	100	%		04/26/07 16:03	MCK	2037-26-5		
4-Bromofluorobenzene (S)	99	%		04/26/07 16:03	MCK	460-00-4		
Dibromofluoromethane (S)	92	%		04/26/07 16:03	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		04/26/07 16:03	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291145 Project Sample Number: 92142922-003 Date Collected: 04/23/07 13:45
Client Sample ID: SW-3 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 15:55	EWS	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 15:55	EWS	7440-38-2		
Barium	250	ug/l	100	05/04/07 15:55	EWS	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 15:55	EWS	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 15:55	EWS	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 15:55	EWS	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 15:55	EWS	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 15:55	EWS	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 15:55	EWS	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 15:55	EWS	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 15:55	EWS	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 15:55	EWS	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 15:55	EWS	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 15:55	EWS	7440-62-2		
Zinc	130	ug/l	10.	05/04/07 15:55	EWS	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 16:19	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 16:19	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 16:19	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 16:19	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 16:19	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 16:19	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 16:19	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 16:19	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 16:19	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 16:19	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 16:19	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 16:19	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 16:19	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 16:19	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 16:19	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 16:19	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 16:19	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 16:19	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291145 Project Sample Number: 92142922-003 Date Collected: 04/23/07 13:45
Client Sample ID: SW-3 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:19	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:19	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 16:19	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 16:19	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:19	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:19	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 16:19	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:19	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:19	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 16:19	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 16:19	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 16:19	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 16:19	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 16:19	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 16:19	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 16:19	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 16:19	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 16:19	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 16:19	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 16:19	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 16:19	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 16:19	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 16:19	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 16:19	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 16:19	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 16:19	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 16:19	MCK	460-00-4		
Dibromofluoromethane (S)	90	%		04/26/07 16:19	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	94	%		04/26/07 16:19	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291160 Project Sample Number: 92142922-004 Date Collected: 04/23/07 17:30
Client Sample ID: SW-5 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:23	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 18:23	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 18:23	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:23	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:23	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 18:23	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:23	JDA1	7440-48-4		
Copper	38.	ug/l	10.	05/04/07 18:23	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:23	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 18:23	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:23	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:23	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:23	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:23	JDA1	7440-62-2		
Zinc	91.	ug/l	10.	05/04/07 18:23	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 16:35	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 16:35	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 16:35	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 16:35	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 16:35	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 16:35	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 16:35	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 16:35	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 16:35	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 16:35	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 16:35	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 16:35	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 16:35	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 16:35	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 16:35	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 16:35	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 16:35	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 16:35	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291160 Project Sample Number: 92142922-004 Date Collected: 04/23/07 17:30
Client Sample ID: SW-5 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:35	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:35	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 16:35	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 16:35	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:35	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:35	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 16:35	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:35	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:35	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 16:35	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 16:35	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 16:35	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 16:35	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 16:35	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 16:35	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 16:35	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 16:35	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 16:35	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 16:35	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 16:35	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 16:35	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 16:35	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 16:35	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 16:35	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 16:35	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 16:35	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 16:35	MCK	460-00-4		
Dibromofluoromethane (S)	96	%		04/26/07 16:35	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 16:35	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291178 Project Sample Number: 92142922-005 Date Collected: 04/23/07 16:45
Client Sample ID: SW-6 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:29	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 18:29	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 18:29	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:29	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:29	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 18:29	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:29	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 18:29	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:29	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 18:29	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:29	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:29	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:29	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:29	JDA1	7440-62-2		
Zinc	15.	ug/l	10.	05/04/07 18:29	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 16:51	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 16:51	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 16:51	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 16:51	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 16:51	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 16:51	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 16:51	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 16:51	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 16:51	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 16:51	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 16:51	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 16:51	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 16:51	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 16:51	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 16:51	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 16:51	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 16:51	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 16:51	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291178 Project Sample Number: 92142922-005 Date Collected: 04/23/07 16:45
Client Sample ID: SW-6 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:51	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 16:51	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 16:51	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 16:51	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:51	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 16:51	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 16:51	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:51	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 16:51	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 16:51	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 16:51	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 16:51	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 16:51	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 16:51	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 16:51	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 16:51	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 16:51	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 16:51	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 16:51	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 16:51	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 16:51	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 16:51	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 16:51	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 16:51	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 16:51	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 16:51	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 16:51	MCK	460-00-4		
Dibromofluoromethane (S)	98	%		04/26/07 16:51	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	100	%		04/26/07 16:51	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291194 Project Sample Number: 92142922-006 Date Collected: 04/23/07 16:30
Client Sample ID: SW-7 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:33	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 18:33	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 18:33	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:33	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:33	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 18:33	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:33	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 18:33	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:33	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 18:33	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:33	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:33	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:33	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:33	JDA1	7440-62-2		
Zinc	11.	ug/l	10.	05/04/07 18:33	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 17:07	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 17:07	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 17:07	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 17:07	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 17:07	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 17:07	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 17:07	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 17:07	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 17:07	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 17:07	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 17:07	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 17:07	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 17:07	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 17:07	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 17:07	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 17:07	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 17:07	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 17:07	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291194 Project Sample Number: 92142922-006 Date Collected: 04/23/07 16:30
Client Sample ID: SW-7 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:07	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:07	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 17:07	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 17:07	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:07	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:07	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 17:07	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:07	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:07	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 17:07	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 17:07	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 17:07	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 17:07	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 17:07	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 17:07	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 17:07	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 17:07	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 17:07	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 17:07	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 17:07	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 17:07	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 17:07	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 17:07	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 17:07	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 17:07	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 17:07	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 17:07	MCK	460-00-4		
Dibromofluoromethane (S)	92	%		04/26/07 17:07	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 17:07	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291202 Project Sample Number: 92142922-007 Date Collected: 04/23/07 14:05
Client Sample ID: SETT POND Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:37	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 18:37	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 18:37	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:37	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:37	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 18:37	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:37	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 18:37	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:37	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 18:37	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:37	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:37	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:37	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:37	JDA1	7440-62-2		
Zinc	15.	ug/l	10.	05/04/07 18:37	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 17:23	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 17:23	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 17:23	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 17:23	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 17:23	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 17:23	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 17:23	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 17:23	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 17:23	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 17:23	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 17:23	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 17:23	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 17:23	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 17:23	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 17:23	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 17:23	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 17:23	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 17:23	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291202 Project Sample Number: 92142922-007 Date Collected: 04/23/07 14:05
Client Sample ID: SETT POND Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:23	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:23	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 17:23	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 17:23	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:23	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:23	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 17:23	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:23	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:23	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 17:23	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 17:23	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 17:23	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 17:23	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 17:23	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 17:23	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 17:23	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 17:23	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 17:23	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 17:23	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 17:23	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 17:23	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 17:23	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 17:23	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 17:23	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 17:23	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 17:23	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/26/07 17:23	MCK	460-00-4		
Dibromofluoromethane (S)	93	%		04/26/07 17:23	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	97	%		04/26/07 17:23	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291285 Project Sample Number: 92142922-008 Date Collected: 04/23/07 12:30
Client Sample ID: LEACHATE Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:42	JDA1	7440-36-0		
Arsenic	16.	ug/l	10.	05/04/07 18:42	JDA1	7440-38-2		
Barium	380	ug/l	100	05/04/07 18:42	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:42	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:42	JDA1	7440-43-9		
Chromium	46.	ug/l	10.	05/04/07 18:42	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:42	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 18:42	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:42	JDA1	7439-92-1		
Nickel	50.	ug/l	50.	05/04/07 18:42	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:42	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:42	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:42	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:42	JDA1	7440-62-2		
Zinc	80.	ug/l	10.	05/04/07 18:42	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
Wet Chemistry								
48 Hour NO3 / NO2 / NOX	Method: EPA 353.2							
Nitrate as N	0.38	mg/l	0.10	04/25/07 12:06	JMW			
Nitrite as N	ND	mg/l	0.10	04/25/07 12:06	JMW			
Sulfate,Turbidimetric	Method: EPA 375.4							
Sulfate	2400	mg/l	500	04/30/07 14:30	JDA1			
Biochemical Oxygen Demand, 5 d	Method: EPA 405.1							
BOD, 5 day	89.	mg/l	2.0	04/25/07 07:55	MJR1			
Chemical Oxygen Demand	Method: EPA 410.4							
Chemical Oxygen Demand	1000	mg/l	25.	05/02/07 14:30	SHB			
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 17:39	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 17:39	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 17:39	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 17:39	MCK	74-97-5		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291285 Project Sample Number: 92142922-008 Date Collected: 04/23/07 12:30
Client Sample ID: LEACHATE Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Bromodichloromethane	ND	ug/l	5.0	04/26/07 17:39	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 17:39	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 17:39	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 17:39	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 17:39	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 17:39	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 17:39	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 17:39	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 17:39	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 17:39	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 17:39	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 17:39	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 17:39	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 17:39	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:39	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:39	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 17:39	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 17:39	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:39	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:39	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 17:39	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:39	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:39	MCK	10061-02-6		
Ethylbenzene	10.	ug/l	5.0	04/26/07 17:39	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 17:39	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 17:39	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 17:39	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 17:39	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 17:39	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 17:39	MCK	127-18-4		
Toluene	46.	ug/l	5.0	04/26/07 17:39	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 17:39	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 17:39	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 17:39	MCK	75-69-4		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291285 Project Sample Number: 92142922-008 Date Collected: 04/23/07 12:30
Client Sample ID: LEACHATE Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 17:39	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 17:39	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 17:39	MCK	75-01-4		
m&p-Xylene	22.	ug/l	10.	04/26/07 17:39	MCK			
o-Xylene	9.3	ug/l	5.0	04/26/07 17:39	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/26/07 17:39	MCK	2037-26-5		
4-Bromofluorobenzene (S)	102	%		04/26/07 17:39	MCK	460-00-4		
Dibromofluoromethane (S)	99	%		04/26/07 17:39	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	104	%		04/26/07 17:39	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291335 Project Sample Number: 92142922-009 Date Collected: 04/23/07 14:50
Client Sample ID: MW-2 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/23/07			05/09/07	MPS			
Collected Time	14:50			05/09/07	MPS			
Field pH	5.36			05/09/07	MPS			
Field Specific Conductance	1540			05/09/07	MPS			
Field Temperature	14.0			05/09/07	MPS			
Static Water Level	30.03			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 18:50	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 18:50	JDA1	7440-38-2		
Barium	1300	ug/l	100	05/04/07 18:50	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 18:50	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 18:50	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 18:50	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 18:50	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 18:50	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 18:50	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 18:50	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 18:50	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 18:50	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 18:50	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 18:50	JDA1	7440-62-2		
Zinc	22.	ug/l	10.	05/04/07 18:50	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 17:55	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 17:55	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 17:55	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 17:55	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 17:55	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 17:55	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 17:55	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 17:55	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291335 Project Sample Number: 92142922-009 Date Collected: 04/23/07 14:50
Client Sample ID: MW-2 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 17:55	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 17:55	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 17:55	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 17:55	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 17:55	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 17:55	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 17:55	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 17:55	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 17:55	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 17:55	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:55	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 17:55	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 17:55	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 17:55	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:55	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 17:55	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 17:55	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:55	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 17:55	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 17:55	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 17:55	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 17:55	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 17:55	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 17:55	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 17:55	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 17:55	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 17:55	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 17:55	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 17:55	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 17:55	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 17:55	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 17:55	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 17:55	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 17:55	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291335 Project Sample Number: 92142922-009 Date Collected: 04/23/07 14:50
Client Sample ID: MW-2 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 17:55	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 17:55	MCK	2037-26-5		
4-Bromofluorobenzene (S)	104	%		04/26/07 17:55	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 17:55	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	95	%		04/26/07 17:55	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291343 Project Sample Number: 92142922-010 Date Collected: 04/23/07 14:55
Client Sample ID: MW-2D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/23/07			05/09/07	MPS			
Collected Time	14:55			05/09/07	MPS			
Field pH	5.83			05/09/07	MPS			
Field Specific Conductance	757			05/09/07	MPS			
Field Temperature	14.6			05/09/07	MPS			
Static Water Level	30.00			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	20.	ug/l	6.0	05/05/07 14:00	JDA1	7440-36-0		
Arsenic	280	ug/l	10.	05/05/07 14:00	JDA1	7440-38-2		
Barium	1500	ug/l	100	05/05/07 14:00	JDA1	7440-39-3		
Beryllium	14.	ug/l	1.0	05/05/07 14:00	JDA1	7440-41-7		
Cadmium	2.2	ug/l	1.0	05/05/07 14:00	JDA1	7440-43-9		
Chromium	410	ug/l	10.	05/05/07 14:00	JDA1	7440-47-3		
Cobalt	260	ug/l	10.	05/05/07 14:00	JDA1	7440-48-4		
Copper	330	ug/l	10.	05/05/07 14:00	JDA1	7440-50-8		
Lead	96.	ug/l	10.	05/05/07 14:00	JDA1	7439-92-1		
Nickel	330	ug/l	50.	05/05/07 14:00	JDA1	7440-02-0		
Selenium	460	ug/l	10.	05/05/07 14:00	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/05/07 14:00	JDA1	7440-22-4		
Thallium	35.	ug/l	5.5	05/05/07 14:00	JDA1	7440-28-0		
Vanadium	300	ug/l	25.	05/05/07 14:00	JDA1	7440-62-2		
Zinc	830	ug/l	10.	05/05/07 14:00	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 18:11	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 18:11	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 18:11	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 18:11	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 18:11	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 18:11	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 18:11	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 18:11	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291343 Project Sample Number: 92142922-010 Date Collected: 04/23/07 14:55
Client Sample ID: MW-2D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 18:11	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 18:11	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 18:11	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 18:11	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 18:11	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 18:11	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 18:11	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 18:11	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 18:11	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 18:11	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:11	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:11	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 18:11	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 18:11	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:11	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:11	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 18:11	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:11	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:11	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 18:11	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 18:11	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 18:11	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 18:11	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 18:11	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 18:11	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 18:11	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 18:11	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 18:11	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 18:11	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 18:11	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 18:11	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 18:11	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 18:11	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 18:11	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291343 Project Sample Number: 92142922-010 Date Collected: 04/23/07 14:55
Client Sample ID: MW-2D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 18:11	MCK	95-47-6		
Toluene-d8 (S)	102	%		04/26/07 18:11	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/26/07 18:11	MCK	460-00-4		
Dibromofluoromethane (S)	99	%		04/26/07 18:11	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	102	%		04/26/07 18:11	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291350 Project Sample Number: 92142922-011 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/23/07			05/09/07	MPS			
Collected Time	14:35			05/09/07	MPS			
Field pH	5.70			05/09/07	MPS			
Field Specific Conductance	391			05/09/07	MPS			
Field Temperature	14.0			05/09/07	MPS			
Static Water Level	8.35			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:08	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:08	JDA1	7440-38-2		
Barium	130	ug/l	100	05/04/07 19:08	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:08	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:08	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:08	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:08	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:08	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:08	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:08	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:08	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:08	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:08	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:08	JDA1	7440-62-2		
Zinc	22.	ug/l	10.	05/04/07 19:08	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 18:27	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 18:27	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 18:27	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 18:27	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 18:27	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 18:27	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 18:27	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 18:27	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291350 Project Sample Number: 92142922-011 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 18:27	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 18:27	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 18:27	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 18:27	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 18:27	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 18:27	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 18:27	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 18:27	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 18:27	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 18:27	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:27	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:27	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 18:27	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 18:27	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:27	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:27	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 18:27	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:27	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:27	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 18:27	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 18:27	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 18:27	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 18:27	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 18:27	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 18:27	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 18:27	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 18:27	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 18:27	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 18:27	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 18:27	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 18:27	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 18:27	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 18:27	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 18:27	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291350 Project Sample Number: 92142922-011 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 18:27	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/26/07 18:27	MCK	2037-26-5		
4-Bromofluorobenzene (S)	103	%		04/26/07 18:27	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 18:27	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 18:27	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291368 Project Sample Number: 92142922-012 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/23/07			05/09/07	MPS			
Collected Time	14:45			05/09/07	MPS			
Field pH	5.73			05/09/07	MPS			
Field Specific Conductance	312			05/09/07	MPS			
Field Temperature	13.0			05/09/07	MPS			
Static Water Level	16.70			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:14	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:14	JDA1	7440-38-2		
Barium	180	ug/l	100	05/04/07 19:14	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:14	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:14	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:14	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:14	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:14	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:14	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:14	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:14	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:14	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:14	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:14	JDA1	7440-62-2		
Zinc	15.	ug/l	10.	05/04/07 19:14	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 18:43	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 18:43	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 18:43	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 18:43	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 18:43	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 18:43	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 18:43	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 18:43	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291368 Project Sample Number: 92142922-012 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 18:43	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 18:43	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 18:43	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 18:43	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 18:43	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 18:43	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 18:43	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 18:43	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 18:43	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 18:43	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:43	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:43	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 18:43	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 18:43	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:43	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:43	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 18:43	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:43	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:43	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 18:43	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 18:43	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 18:43	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 18:43	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 18:43	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 18:43	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 18:43	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 18:43	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 18:43	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 18:43	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 18:43	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 18:43	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 18:43	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 18:43	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 18:43	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291368 Project Sample Number: 92142922-012 Date Collected: 04/23/07 14:35
Client Sample ID: MW-3D Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 18:43	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/26/07 18:43	MCK	2037-26-5		
4-Bromofluorobenzene (S)	102	%		04/26/07 18:43	MCK	460-00-4		
Dibromofluoromethane (S)	96	%		04/26/07 18:43	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 18:43	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291376 Project Sample Number: 92142922-013 Date Collected: 04/23/07 13:30
Client Sample ID: MW-9 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/23/07			05/09/07	MPS			
Collected Time	13:30			05/09/07	MPS			
Field pH	6.26			05/09/07	MPS			
Field Specific Conductance	238			05/09/07	MPS			
Field Temperature	12.0			05/09/07	MPS			
Static Water Level	9.28			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:19	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:19	JDA1	7440-38-2		
Barium	160	ug/l	100	05/04/07 19:19	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:19	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:19	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:19	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:19	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:19	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:19	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:19	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:19	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:19	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:19	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:19	JDA1	7440-62-2		
Zinc	74.	ug/l	10.	05/04/07 19:19	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 19:31	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 19:31	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 19:31	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 19:31	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 19:31	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 19:31	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 19:31	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 19:31	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291376 Project Sample Number: 92142922-013 Date Collected: 04/23/07 13:30
Client Sample ID: MW-9 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 19:31	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 19:31	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 19:31	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 19:31	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 19:31	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 19:31	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 19:31	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 19:31	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 19:31	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 19:31	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:31	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:31	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 19:31	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 19:31	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:31	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:31	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 19:31	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:31	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:31	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 19:31	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 19:31	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 19:31	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 19:31	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 19:31	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 19:31	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 19:31	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 19:31	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 19:31	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 19:31	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 19:31	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 19:31	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 19:31	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 19:31	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 19:31	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291376 Project Sample Number: 92142922-013 Date Collected: 04/23/07 13:30
Client Sample ID: MW-9 Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 19:31	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 19:31	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/26/07 19:31	MCK	460-00-4		
Dibromofluoromethane (S)	95	%		04/26/07 19:31	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	100	%		04/26/07 19:31	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291384 Project Sample Number: 92142922-014 Date Collected: 04/23/07 00:00
Client Sample ID: TRAVEL BLANK Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 18:59	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 18:59	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 18:59	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 18:59	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 18:59	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 18:59	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 18:59	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 18:59	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 18:59	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 18:59	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 18:59	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 18:59	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 18:59	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 18:59	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 18:59	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 18:59	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 18:59	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 18:59	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:59	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 18:59	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 18:59	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 18:59	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:59	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 18:59	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 18:59	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:59	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 18:59	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 18:59	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 18:59	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 18:59	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 18:59	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 18:59	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 18:59	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	79-34-5		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291384 Project Sample Number: 92142922-014 Date Collected: 04/23/07 00:00
Client Sample ID: TRAVEL BLANK Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
Tetrachloroethene	ND	ug/l	5.0	04/26/07 18:59	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 18:59	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 18:59	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 18:59	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 18:59	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 18:59	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 18:59	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 18:59	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 18:59	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 18:59	MCK	95-47-6		
Toluene-d8 (S)	102	%		04/26/07 18:59	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 18:59	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 18:59	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	99	%		04/26/07 18:59	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291392 Project Sample Number: 92142922-015 Date Collected: 04/23/07 00:00
Client Sample ID: EQUIPMENT BLANK Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:23	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:23	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 19:23	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:23	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:23	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:23	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:23	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:23	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:23	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:23	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:23	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:23	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:23	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:23	JDA1	7440-62-2		
Zinc	12.	ug/l	10.	05/04/07 19:23	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 19:15	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 19:15	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 19:15	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 19:15	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 19:15	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 19:15	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 19:15	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 19:15	MCK	78-93-3		
Carbon disulfide	ND	ug/l	10.	04/26/07 19:15	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 19:15	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 19:15	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 19:15	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 19:15	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 19:15	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 19:15	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 19:15	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 19:15	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 19:15	MCK	74-95-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928291392 Project Sample Number: 92142922-015 Date Collected: 04/23/07 00:00
Client Sample ID: EQUIPMENT BLANK Matrix: Water Date Received: 04/24/07 09:00

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	ReqLmt
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:15	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:15	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 19:15	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 19:15	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:15	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:15	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 19:15	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:15	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:15	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 19:15	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 19:15	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 19:15	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 19:15	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 19:15	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 19:15	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 19:15	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 19:15	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 19:15	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 19:15	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 19:15	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 19:15	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 19:15	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 19:15	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 19:15	MCK			
o-Xylene	ND	ug/l	5.0	04/26/07 19:15	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/26/07 19:15	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/26/07 19:15	MCK	460-00-4		
Dibromofluoromethane (S)	95	%		04/26/07 19:15	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 19:15	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293489 Project Sample Number: 92142922-016 Date Collected: 04/24/07 11:15
Client Sample ID: MW-1A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	11:15			05/09/07	MPS			
Field pH	6.25			05/09/07	MPS			
Field Specific Conductance	105			05/09/07	MPS			
Field Temperature	13.0			05/09/07	MPS			
Static Water Level	19.37			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:26	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:26	JDA1	7440-38-2		
Barium	240	ug/l	100	05/04/07 19:26	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:26	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:26	JDA1	7440-43-9		
Chromium	16.	ug/l	10.	05/04/07 19:26	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:26	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:26	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:26	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:26	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:26	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:26	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:26	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:26	JDA1	7440-62-2		
Zinc	30.	ug/l	10.	05/04/07 19:26	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 19:47	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 19:47	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 19:47	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 19:47	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 19:47	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 19:47	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 19:47	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 19:47	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293489 Project Sample Number: 92142922-016 Date Collected: 04/24/07 11:15
Client Sample ID: MW-1A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 19:47	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 19:47	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 19:47	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 19:47	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 19:47	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 19:47	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 19:47	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 19:47	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 19:47	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 19:47	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:47	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 19:47	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 19:47	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 19:47	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:47	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 19:47	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 19:47	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:47	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 19:47	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 19:47	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 19:47	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 19:47	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 19:47	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 19:47	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 19:47	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 19:47	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 19:47	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 19:47	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 19:47	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 19:47	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 19:47	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 19:47	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 19:47	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 19:47	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293489 Project Sample Number: 92142922-016 Date Collected: 04/24/07 11:15
Client Sample ID: MW-1A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 19:47	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/26/07 19:47	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 19:47	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 19:47	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 19:47	MCK	17060-07-0		

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F

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293513 Project Sample Number: 92142922-017 Date Collected: 04/24/07 13:00
Client Sample ID: MW-4A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	13:00			05/09/07	MPS			
Field pH	8.02			05/09/07	MPS			
Field Specific Conductance	134			05/09/07	MPS			
Field Temperature	15.7			05/09/07	MPS			
Static Water Level	51.08			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:31	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:31	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 19:31	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:31	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:31	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:31	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:31	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:31	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:31	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:31	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:31	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:31	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:31	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:31	JDA1	7440-62-2		
Zinc	10.	ug/l	10.	05/04/07 19:31	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 20:03	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 20:03	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 20:03	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 20:03	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 20:03	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 20:03	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 20:03	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 20:03	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293513 Project Sample Number: 92142922-017 Date Collected: 04/24/07 13:00
Client Sample ID: MW-4A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 20:03	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 20:03	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 20:03	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 20:03	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 20:03	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 20:03	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 20:03	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 20:03	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 20:03	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 20:03	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:03	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:03	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 20:03	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 20:03	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:03	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:03	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 20:03	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:03	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:03	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 20:03	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 20:03	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 20:03	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 20:03	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 20:03	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 20:03	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 20:03	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 20:03	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 20:03	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 20:03	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 20:03	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 20:03	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 20:03	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 20:03	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 20:03	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293513 Project Sample Number: 92142922-017 Date Collected: 04/24/07 13:00
Client Sample ID: MW-4A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 20:03	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 20:03	MCK	2037-26-5		
4-Bromofluorobenzene (S)	103	%		04/26/07 20:03	MCK	460-00-4		
Dibromofluoromethane (S)	96	%		04/26/07 20:03	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	103	%		04/26/07 20:03	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293521 Project Sample Number: 92142922-018 Date Collected: 04/24/07 14:00
Client Sample ID: MW-5A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:00			05/09/07	MPS			
Field pH	5.22			05/09/07	MPS			
Field Specific Conductance	139			05/09/07	MPS			
Field Temperature	12.0			05/09/07	MPS			
Static Water Level	5.50			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:36	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:36	JDA1	7440-38-2		
Barium	240	ug/l	100	05/04/07 19:36	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:36	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:36	JDA1	7440-43-9		
Chromium	31.	ug/l	10.	05/04/07 19:36	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:36	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:36	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:36	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:36	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:36	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:36	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:36	JDA1	7440-28-0		
Vanadium	33.	ug/l	25.	05/04/07 19:36	JDA1	7440-62-2		
Zinc	39.	ug/l	10.	05/04/07 19:36	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 20:19	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 20:19	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 20:19	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 20:19	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 20:19	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 20:19	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 20:19	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 20:19	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293521 Project Sample Number: 92142922-018 Date Collected: 04/24/07 14:00
Client Sample ID: MW-5A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 20:19	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 20:19	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 20:19	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 20:19	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 20:19	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 20:19	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 20:19	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 20:19	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 20:19	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 20:19	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:19	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:19	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 20:19	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 20:19	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:19	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:19	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 20:19	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:19	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:19	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 20:19	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 20:19	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 20:19	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 20:19	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 20:19	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 20:19	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 20:19	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 20:19	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 20:19	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 20:19	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 20:19	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 20:19	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 20:19	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 20:19	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 20:19	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293521 Project Sample Number: 92142922-018 Date Collected: 04/24/07 14:00
Client Sample ID: MW-5A Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 20:19	MCK	95-47-6		
Toluene-d8 (S)	102	%		04/26/07 20:19	MCK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		04/26/07 20:19	MCK	460-00-4		
Dibromofluoromethane (S)	96	%		04/26/07 20:19	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	96	%		04/26/07 20:19	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293539 Project Sample Number: 92142922-019 Date Collected: 04/24/07 14:10
Client Sample ID: MW-5D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:10			05/09/07	MPS			
Field pH	5.84			05/09/07	MPS			
Field Specific Conductance	95			05/09/07	MPS			
Field Temperature	13.5			05/09/07	MPS			
Static Water Level	6.18			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:41	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:41	JDA1	7440-38-2		
Barium	250	ug/l	100	05/04/07 19:41	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:41	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:41	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:41	JDA1	7440-47-3		
Cobalt	10.	ug/l	10.	05/04/07 19:41	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:41	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:41	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:41	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:41	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:41	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:41	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:41	JDA1	7440-62-2		
Zinc	21.	ug/l	10.	05/04/07 19:41	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 20:35	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 20:35	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 20:35	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 20:35	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 20:35	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 20:35	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 20:35	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 20:35	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293539 Project Sample Number: 92142922-019 Date Collected: 04/24/07 14:10
Client Sample ID: MW-5D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 20:35	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 20:35	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 20:35	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 20:35	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 20:35	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 20:35	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 20:35	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 20:35	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 20:35	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 20:35	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:35	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:35	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 20:35	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 20:35	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:35	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:35	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 20:35	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:35	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:35	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 20:35	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 20:35	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 20:35	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 20:35	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 20:35	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 20:35	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 20:35	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 20:35	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 20:35	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 20:35	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 20:35	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 20:35	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 20:35	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 20:35	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 20:35	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293539 Project Sample Number: 92142922-019 Date Collected: 04/24/07 14:10
Client Sample ID: MW-5D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 20:35	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 20:35	MCK	2037-26-5		
4-Bromofluorobenzene (S)	101	%		04/26/07 20:35	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 20:35	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	93	%		04/26/07 20:35	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293547 Project Sample Number: 92142922-020 Date Collected: 04/24/07 12:30
Client Sample ID: MW-8 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	12:30			05/09/07	MPS			
Field pH	5.54			05/09/07	MPS			
Field Specific Conductance	336			05/09/07	MPS			
Field Temperature	15.4			05/09/07	MPS			
Static Water Level	30.74			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:46	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:46	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 19:46	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:46	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:46	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 19:46	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:46	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 19:46	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:46	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:46	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 19:46	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:46	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:46	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 19:46	JDA1	7440-62-2		
Zinc	12.	ug/l	10.	05/04/07 19:46	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 20:51	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 20:51	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 20:51	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 20:51	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 20:51	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 20:51	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 20:51	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 20:51	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293547 Project Sample Number: 92142922-020 Date Collected: 04/24/07 12:30
Client Sample ID: MW-8 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 20:51	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 20:51	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 20:51	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 20:51	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 20:51	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 20:51	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 20:51	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 20:51	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 20:51	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 20:51	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:51	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 20:51	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 20:51	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 20:51	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:51	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 20:51	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 20:51	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:51	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 20:51	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 20:51	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 20:51	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 20:51	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 20:51	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 20:51	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 20:51	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 20:51	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 20:51	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 20:51	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 20:51	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 20:51	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 20:51	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 20:51	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 20:51	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 20:51	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293547 Project Sample Number: 92142922-020 Date Collected: 04/24/07 12:30
Client Sample ID: MW-8 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 20:51	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 20:51	MCK	2037-26-5		
4-Bromofluorobenzene (S)	99	%		04/26/07 20:51	MCK	460-00-4		
Dibromofluoromethane (S)	96	%		04/26/07 20:51	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	99	%		04/26/07 20:51	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293554 Project Sample Number: 92142922-021 Date Collected: 04/24/07 15:10
Client Sample ID: MW-11S Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	15:10			05/09/07	MPS			
Field pH	6.04			05/09/07	MPS			
Field Specific Conductance	31			05/09/07	MPS			
Field Temperature	13.4			05/09/07	MPS			
Static Water Level	80.62			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 19:51	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 19:51	JDA1	7440-38-2		
Barium	290	ug/l	100	05/04/07 19:51	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 19:51	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 19:51	JDA1	7440-43-9		
Chromium	20.	ug/l	10.	05/04/07 19:51	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 19:51	JDA1	7440-48-4		
Copper	15.	ug/l	10.	05/04/07 19:51	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 19:51	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 19:51	JDA1	7440-02-0		
Selenium	12.	ug/l	10.	05/04/07 19:51	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 19:51	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 19:51	JDA1	7440-28-0		
Vanadium	43.	ug/l	25.	05/04/07 19:51	JDA1	7440-62-2		
Zinc	55.	ug/l	10.	05/04/07 19:51	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 21:07	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 21:07	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 21:07	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 21:07	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 21:07	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 21:07	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 21:07	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 21:07	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293554 Project Sample Number: 92142922-021 Date Collected: 04/24/07 15:10
Client Sample ID: MW-11S Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 21:07	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 21:07	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 21:07	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 21:07	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 21:07	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 21:07	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 21:07	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 21:07	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 21:07	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 21:07	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:07	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:07	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 21:07	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 21:07	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:07	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:07	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 21:07	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:07	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:07	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 21:07	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 21:07	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 21:07	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 21:07	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 21:07	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 21:07	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 21:07	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 21:07	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 21:07	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 21:07	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 21:07	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 21:07	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 21:07	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 21:07	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 21:07	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293554 Project Sample Number: 92142922-021 Date Collected: 04/24/07 15:10
Client Sample ID: MW-11S Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 21:07	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/26/07 21:07	MCK	2037-26-5		
4-Bromofluorobenzene (S)	104	%		04/26/07 21:07	MCK	460-00-4		
Dibromofluoromethane (S)	97	%		04/26/07 21:07	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	99	%		04/26/07 21:07	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293562 Project Sample Number: 92142922-022 Date Collected: 04/24/07 15:15
Client Sample ID: MW-11D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	15:15			05/09/07	MPS			
Field pH	7.08			05/09/07	MPS			
Field Specific Conductance	50			05/09/07	MPS			
Field Temperature	14.2			05/09/07	MPS			
Static Water Level	81.54			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 20:05	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 20:05	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 20:05	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 20:05	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 20:05	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 20:05	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 20:05	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 20:05	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 20:05	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 20:05	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 20:05	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 20:05	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 20:05	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 20:05	JDA1	7440-62-2		
Zinc	21.	ug/l	10.	05/04/07 20:05	JDA1	7440-66-6		
Date Digested	04/25/07 10:00			04/25/07 10:00				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 21:23	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 21:23	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 21:23	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 21:23	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 21:23	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 21:23	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 21:23	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 21:23	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293562 Project Sample Number: 92142922-022 Date Collected: 04/24/07 15:15
Client Sample ID: MW-11D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 21:23	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 21:23	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 21:23	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 21:23	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 21:23	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 21:23	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 21:23	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 21:23	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 21:23	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 21:23	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:23	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:23	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 21:23	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 21:23	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:23	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:23	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 21:23	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:23	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:23	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 21:23	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 21:23	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 21:23	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 21:23	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 21:23	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 21:23	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 21:23	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 21:23	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 21:23	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 21:23	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 21:23	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 21:23	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 21:23	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 21:23	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 21:23	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293562 Project Sample Number: 92142922-022 Date Collected: 04/24/07 15:15
Client Sample ID: MW-11D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 21:23	MCK	95-47-6		
Toluene-d8 (S)	103	%		04/26/07 21:23	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/26/07 21:23	MCK	460-00-4		
Dibromofluoromethane (S)	94	%		04/26/07 21:23	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 21:23	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293570 Project Sample Number: 92142922-023 Date Collected: 04/24/07 14:55
Client Sample ID: MW-12 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:55			05/09/07	MPS			
Field pH	5.60			05/09/07	MPS			
Field Specific Conductance	274			05/09/07	MPS			
Field Temperature	12.0			05/09/07	MPS			
Static Water Level	11.90			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 23:06	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 23:06	JDA1	7440-38-2		
Barium	160	ug/l	100	05/04/07 23:06	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 23:06	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 23:06	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 23:06	JDA1	7440-47-3		
Cobalt	92.	ug/l	10.	05/04/07 23:06	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 23:06	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 23:06	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 23:06	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 23:06	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 23:06	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 23:06	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 23:06	JDA1	7440-62-2		
Zinc	37.	ug/l	10.	05/04/07 23:06	JDA1	7440-66-6		
Date Digested	04/26/07 12:30			04/26/07 12:30				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 21:39	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 21:39	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 21:39	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 21:39	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 21:39	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 21:39	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 21:39	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 21:39	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293570 Project Sample Number: 92142922-023 Date Collected: 04/24/07 14:55
Client Sample ID: MW-12 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 21:39	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 21:39	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 21:39	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 21:39	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 21:39	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 21:39	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 21:39	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 21:39	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 21:39	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 21:39	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:39	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:39	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 21:39	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 21:39	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:39	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:39	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 21:39	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:39	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:39	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 21:39	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 21:39	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 21:39	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 21:39	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 21:39	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 21:39	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 21:39	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 21:39	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 21:39	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 21:39	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 21:39	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 21:39	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 21:39	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 21:39	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 21:39	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293570 Project Sample Number: 92142922-023 Date Collected: 04/24/07 14:55
Client Sample ID: MW-12 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 21:39	MCK	95-47-6		
Toluene-d8 (S)	102	%		04/26/07 21:39	MCK	2037-26-5		
4-Bromofluorobenzene (S)	99	%		04/26/07 21:39	MCK	460-00-4		
Dibromofluoromethane (S)	95	%		04/26/07 21:39	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	97	%		04/26/07 21:39	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293588 Project Sample Number: 92142922-024 Date Collected: 04/24/07 14:40
Client Sample ID: MW-13 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:40			05/09/07	MPS			
Field pH	5.69			05/09/07	MPS			
Field Specific Conductance	76			05/09/07	MPS			
Field Temperature	12.0			05/09/07	MPS			
Static Water Level	12.38			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 23:12	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 23:12	JDA1	7440-38-2		
Barium	120	ug/l	100	05/04/07 23:12	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 23:12	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 23:12	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 23:12	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 23:12	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 23:12	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 23:12	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 23:12	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 23:12	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 23:12	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 23:12	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 23:12	JDA1	7440-62-2		
Zinc	20.	ug/l	10.	05/04/07 23:12	JDA1	7440-66-6		
Date Digested	04/26/07 12:30			04/26/07 12:30				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/26/07 21:55	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/26/07 21:55	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/26/07 21:55	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/26/07 21:55	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/26/07 21:55	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/26/07 21:55	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/26/07 21:55	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/26/07 21:55	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293588 Project Sample Number: 92142922-024 Date Collected: 04/24/07 14:40
Client Sample ID: MW-13 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/26/07 21:55	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/26/07 21:55	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/26/07 21:55	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/26/07 21:55	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/26/07 21:55	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/26/07 21:55	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/26/07 21:55	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/26/07 21:55	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/26/07 21:55	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/26/07 21:55	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:55	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/26/07 21:55	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/26/07 21:55	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/26/07 21:55	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:55	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/26/07 21:55	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/26/07 21:55	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:55	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/26/07 21:55	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/26/07 21:55	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/26/07 21:55	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/26/07 21:55	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/26/07 21:55	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/26/07 21:55	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/26/07 21:55	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/26/07 21:55	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/26/07 21:55	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/26/07 21:55	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/26/07 21:55	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/26/07 21:55	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/26/07 21:55	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/26/07 21:55	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/26/07 21:55	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/26/07 21:55	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293588 Project Sample Number: 92142922-024 Date Collected: 04/24/07 14:40
Client Sample ID: MW-13 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/26/07 21:55	MCK	95-47-6		
Toluene-d8 (S)	102	%		04/26/07 21:55	MCK	2037-26-5		
4-Bromofluorobenzene (S)	97	%		04/26/07 21:55	MCK	460-00-4		
Dibromofluoromethane (S)	92	%		04/26/07 21:55	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		04/26/07 21:55	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293596 Project Sample Number: 92142922-025 Date Collected: 04/24/07 14:45
Client Sample ID: MW-13D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:45			05/09/07	MPS			
Field pH	6.68			05/09/07	MPS			
Field Specific Conductance	50			05/09/07	MPS			
Field Temperature	12.4			05/09/07	MPS			
Static Water Level	12.36			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 23:18	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 23:18	JDA1	7440-38-2		
Barium	ND	ug/l	100	05/04/07 23:18	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 23:18	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 23:18	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 23:18	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 23:18	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 23:18	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 23:18	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 23:18	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 23:18	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 23:18	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 23:18	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 23:18	JDA1	7440-62-2		
Zinc	12.	ug/l	10.	05/04/07 23:18	JDA1	7440-66-6		
Date Digested	04/26/07 12:30			04/26/07 12:30				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/27/07 18:36	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/27/07 18:36	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/27/07 18:36	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/27/07 18:36	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/27/07 18:36	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/27/07 18:36	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/27/07 18:36	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/27/07 18:36	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293596 Project Sample Number: 92142922-025 Date Collected: 04/24/07 14:45
Client Sample ID: MW-13D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/27/07 18:36	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/27/07 18:36	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/27/07 18:36	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/27/07 18:36	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/27/07 18:36	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/27/07 18:36	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/27/07 18:36	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/27/07 18:36	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/27/07 18:36	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/27/07 18:36	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/27/07 18:36	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/27/07 18:36	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/27/07 18:36	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/27/07 18:36	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 18:36	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 18:36	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/27/07 18:36	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 18:36	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 18:36	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/27/07 18:36	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/27/07 18:36	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/27/07 18:36	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/27/07 18:36	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/27/07 18:36	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/27/07 18:36	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/27/07 18:36	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/27/07 18:36	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/27/07 18:36	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/27/07 18:36	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/27/07 18:36	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/27/07 18:36	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/27/07 18:36	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/27/07 18:36	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/27/07 18:36	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293596 Project Sample Number: 92142922-025 Date Collected: 04/24/07 14:45
Client Sample ID: MW-13D Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/27/07 18:36	MCK	95-47-6		
Toluene-d8 (S)	101	%		04/27/07 18:36	MCK	2037-26-5		
4-Bromofluorobenzene (S)	98	%		04/27/07 18:36	MCK	460-00-4		
Dibromofluoromethane (S)	101	%		04/27/07 18:36	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	107	%		04/27/07 18:36	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293604 Project Sample Number: 92142922-026 Date Collected: 04/24/07 11:00
Client Sample ID: MW-14 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	11:00			05/09/07	MPS			
Field pH	6.27			05/09/07	MPS			
Field Specific Conductance	54			05/09/07	MPS			
Field Temperature	14.0			05/09/07	MPS			
Static Water Level	101.19			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 23:23	JDA1	7440-36-0		
Arsenic	ND	ug/l	10.	05/04/07 23:23	JDA1	7440-38-2		
Barium	200	ug/l	100	05/04/07 23:23	JDA1	7440-39-3		
Beryllium	ND	ug/l	1.0	05/04/07 23:23	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 23:23	JDA1	7440-43-9		
Chromium	ND	ug/l	10.	05/04/07 23:23	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 23:23	JDA1	7440-48-4		
Copper	ND	ug/l	10.	05/04/07 23:23	JDA1	7440-50-8		
Lead	ND	ug/l	10.	05/04/07 23:23	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 23:23	JDA1	7440-02-0		
Selenium	ND	ug/l	10.	05/04/07 23:23	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 23:23	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 23:23	JDA1	7440-28-0		
Vanadium	ND	ug/l	25.	05/04/07 23:23	JDA1	7440-62-2		
Zinc	30.	ug/l	10.	05/04/07 23:23	JDA1	7440-66-6		
Date Digested	04/26/07 12:30			04/26/07 12:30				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/27/07 18:52	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/27/07 18:52	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/27/07 18:52	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/27/07 18:52	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/27/07 18:52	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/27/07 18:52	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/27/07 18:52	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/27/07 18:52	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293604 Project Sample Number: 92142922-026 Date Collected: 04/24/07 11:00
Client Sample ID: MW-14 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/27/07 18:52	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/27/07 18:52	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/27/07 18:52	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/27/07 18:52	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/27/07 18:52	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/27/07 18:52	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/27/07 18:52	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/27/07 18:52	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/27/07 18:52	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/27/07 18:52	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/27/07 18:52	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/27/07 18:52	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/27/07 18:52	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/27/07 18:52	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 18:52	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 18:52	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/27/07 18:52	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 18:52	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 18:52	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/27/07 18:52	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/27/07 18:52	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/27/07 18:52	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/27/07 18:52	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/27/07 18:52	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/27/07 18:52	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/27/07 18:52	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/27/07 18:52	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/27/07 18:52	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/27/07 18:52	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/27/07 18:52	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/27/07 18:52	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/27/07 18:52	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/27/07 18:52	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/27/07 18:52	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293604 Project Sample Number: 92142922-026 Date Collected: 04/24/07 11:00
Client Sample ID: MW-14 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/27/07 18:52	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/27/07 18:52	MCK	2037-26-5		
4-Bromofluorobenzene (S)	100	%		04/27/07 18:52	MCK	460-00-4		
Dibromofluoromethane (S)	99	%		04/27/07 18:52	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	107	%		04/27/07 18:52	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293638 Project Sample Number: 92142922-027 Date Collected: 04/24/07 14:20
Client Sample ID: MW-15 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Field Services								
Monitoring Well Data	Method:							
Collected By	MPS			05/09/07	MPS			
Collected Date	4/24/07			05/09/07	MPS			
Collected Time	14:20			05/09/07	MPS			
Field pH	9.08			05/09/07	MPS			
Field Specific Conductance	46			05/09/07	MPS			
Field Temperature	12.5			05/09/07	MPS			
Static Water Level	9.08			05/09/07	MPS			
Metals								
Metals by Trace ICP	Prep/Method: EPA 3010 / EPA 6010							
Antimony	ND	ug/l	6.0	05/04/07 23:28	JDA1	7440-36-0		
Arsenic	12.	ug/l	10.	05/04/07 23:28	JDA1	7440-38-2		
Barium	600	ug/l	100	05/04/07 23:28	JDA1	7440-39-3		
Beryllium	4.9	ug/l	1.0	05/04/07 23:28	JDA1	7440-41-7		
Cadmium	ND	ug/l	1.0	05/04/07 23:28	JDA1	7440-43-9		
Chromium	17.	ug/l	10.	05/04/07 23:28	JDA1	7440-47-3		
Cobalt	ND	ug/l	10.	05/04/07 23:28	JDA1	7440-48-4		
Copper	26.	ug/l	10.	05/04/07 23:28	JDA1	7440-50-8		
Lead	69.	ug/l	10.	05/04/07 23:28	JDA1	7439-92-1		
Nickel	ND	ug/l	50.	05/04/07 23:28	JDA1	7440-02-0		
Selenium	18.	ug/l	10.	05/04/07 23:28	JDA1	7782-49-2		
Silver	ND	ug/l	10.	05/04/07 23:28	JDA1	7440-22-4		
Thallium	ND	ug/l	5.5	05/04/07 23:28	JDA1	7440-28-0		
Vanadium	26.	ug/l	25.	05/04/07 23:28	JDA1	7440-62-2		
Zinc	200	ug/l	10.	05/04/07 23:28	JDA1	7440-66-6		
Date Digested	04/26/07 12:30			04/26/07 12:30				
GC/MS Volatiles								
GC/MS VOCs by 8260	Method: EPA 8260							
Acetone	ND	ug/l	25.	04/27/07 19:08	MCK	67-64-1		
Acrylonitrile	ND	ug/l	25.	04/27/07 19:08	MCK	107-13-1		
Benzene	ND	ug/l	5.0	04/27/07 19:08	MCK	71-43-2		
Bromochloromethane	ND	ug/l	5.0	04/27/07 19:08	MCK	74-97-5		
Bromodichloromethane	ND	ug/l	5.0	04/27/07 19:08	MCK	75-27-4		
Bromoform	ND	ug/l	5.0	04/27/07 19:08	MCK	75-25-2		
Bromomethane	ND	ug/l	5.0	04/27/07 19:08	MCK	74-83-9		
2-Butanone (MEK)	ND	ug/l	10.	04/27/07 19:08	MCK	78-93-3		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293638 Project Sample Number: 92142922-027 Date Collected: 04/24/07 14:20
Client Sample ID: MW-15 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
Carbon disulfide	ND	ug/l	10.	04/27/07 19:08	MCK	75-15-0		
Carbon tetrachloride	ND	ug/l	5.0	04/27/07 19:08	MCK	56-23-5		
Chlorobenzene	ND	ug/l	5.0	04/27/07 19:08	MCK	108-90-7		
Chloroethane	ND	ug/l	10.	04/27/07 19:08	MCK	75-00-3		
Chloroform	ND	ug/l	5.0	04/27/07 19:08	MCK	67-66-3		
Chloromethane	ND	ug/l	5.0	04/27/07 19:08	MCK	74-87-3		
1,2-Dibromo-3-chloropropane	ND	ug/l	5.0	04/27/07 19:08	MCK	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	04/27/07 19:08	MCK	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	04/27/07 19:08	MCK	106-93-4		
Dibromomethane	ND	ug/l	5.0	04/27/07 19:08	MCK	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	04/27/07 19:08	MCK	95-50-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	04/27/07 19:08	MCK	106-46-7		
trans-1,4-Dichloro-2-butene	ND	ug/l	5.0	04/27/07 19:08	MCK	110-57-6		
1,1-Dichloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	04/27/07 19:08	MCK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 19:08	MCK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	04/27/07 19:08	MCK	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	04/27/07 19:08	MCK	78-87-5		
cis-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 19:08	MCK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	04/27/07 19:08	MCK	10061-02-6		
Ethylbenzene	ND	ug/l	5.0	04/27/07 19:08	MCK	100-41-4		
2-Hexanone	ND	ug/l	10.	04/27/07 19:08	MCK	591-78-6		
Iodomethane	ND	ug/l	10.	04/27/07 19:08	MCK	74-88-4		
Methylene chloride	ND	ug/l	5.0	04/27/07 19:08	MCK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/l	10.	04/27/07 19:08	MCK	108-10-1		
Styrene	ND	ug/l	5.0	04/27/07 19:08	MCK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	04/27/07 19:08	MCK	127-18-4		
Toluene	ND	ug/l	5.0	04/27/07 19:08	MCK	108-88-3		
1,1,1-Trichloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	04/27/07 19:08	MCK	79-00-5		
Trichloroethene	ND	ug/l	5.0	04/27/07 19:08	MCK	79-01-6		
Trichlorofluoromethane	ND	ug/l	10.	04/27/07 19:08	MCK	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	04/27/07 19:08	MCK	96-18-4		
Vinyl acetate	ND	ug/l	10.	04/27/07 19:08	MCK	108-05-4		
Vinyl chloride	ND	ug/l	5.0	04/27/07 19:08	MCK	75-01-4		
m&p-Xylene	ND	ug/l	10.	04/27/07 19:08	MCK			

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

Lab Sample No: 928293638 Project Sample Number: 92142922-027 Date Collected: 04/24/07 14:20
Client Sample ID: MW-15 Matrix: Water Date Received: 04/24/07 16:49

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
o-Xylene	ND	ug/l	5.0	04/27/07 19:08	MCK	95-47-6		
Toluene-d8 (S)	104	%		04/27/07 19:08	MCK	2037-26-5		
4-Bromofluorobenzene (S)	97	%		04/27/07 19:08	MCK	460-00-4		
Dibromofluoromethane (S)	99	%		04/27/07 19:08	MCK	1868-53-7		
1,2-Dichloroethane-d4 (S)	110	%		04/27/07 19:08	MCK	17060-07-0		

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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

PARAMETER FOOTNOTES

Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

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

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186987 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 928291103 928291137 928291145 928291160 928291178 928291194 928291202 928291285 928291335 928291343 928291350 928291368

METHOD BLANK: 928300821
Associated Lab Samples: 928291103 928291137 928291145 928291160 928291178 928291194 928291202 928291285 928291335 928291343 928291350 928291368

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	25.	
Acrylonitrile	ug/l	ND	25.	
Benzene	ug/l	ND	5.0	
Bromochloromethane	ug/l	ND	5.0	
Bromodichloromethane	ug/l	ND	5.0	
Bromoform	ug/l	ND	5.0	
Bromomethane	ug/l	ND	5.0	
2-Butanone (MEK)	ug/l	ND	10.	
Carbon disulfide	ug/l	ND	10.	
Carbon tetrachloride	ug/l	ND	5.0	
Chlorobenzene	ug/l	ND	5.0	
Chloroethane	ug/l	ND	10.	
Chloroform	ug/l	ND	5.0	
Chloromethane	ug/l	ND	5.0	
1,2-Dibromo-3-chloropropane	ug/l	ND	5.0	
Dibromochloromethane	ug/l	ND	5.0	
1,2-Dibromoethane (EDB)	ug/l	ND	5.0	
Dibromomethane	ug/l	ND	5.0	
1,2-Dichlorobenzene	ug/l	ND	5.0	
1,4-Dichlorobenzene	ug/l	ND	5.0	
trans-1,4-Dichloro-2-butene	ug/l	ND	5.0	
1,1-Dichloroethane	ug/l	ND	5.0	
1,2-Dichloroethane	ug/l	ND	5.0	
1,1-Dichloroethene	ug/l	ND	5.0	
cis-1,2-Dichloroethene	ug/l	ND	5.0	
trans-1,2-Dichloroethene	ug/l	ND	5.0	
1,2-Dichloropropane	ug/l	ND	5.0	
cis-1,3-Dichloropropene	ug/l	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

METHOD BLANK: 928300821
Associated Lab Samples: 928291103 928291137 928291145 928291160 928291178 928291194 928291202 928291285 928291335 928291343 928291350 928291368

Parameter	Units	Blank Result	Reporting Limit	Footnotes
trans-1,3-Dichloropropene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
2-Hexanone	ug/l	ND	10.	
Iodomethane	ug/l	ND	10.	
Methylene chloride	ug/l	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/l	ND	10.	
Styrene	ug/l	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	5.0	
Tetrachloroethene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
1,1,1-Trichloroethane	ug/l	ND	5.0	
1,1,2-Trichloroethane	ug/l	ND	5.0	
Trichloroethene	ug/l	ND	5.0	
Trichlorofluoromethane	ug/l	ND	10.	
1,2,3-Trichloropropane	ug/l	ND	5.0	
Vinyl acetate	ug/l	ND	10.	
Vinyl chloride	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	99		
4-Bromofluorobenzene (S)	%	100		
Dibromofluoromethane (S)	%	94		
1,2-Dichloroethane-d4 (S)	%	95		

LABORATORY CONTROL SAMPLE: 928300839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	59.40	59	
Acrylonitrile	ug/l	250.00	266.7	107	
Benzene	ug/l	50.00	56.08	112	
Bromochloromethane	ug/l	50.00	55.97	112	
Bromodichloromethane	ug/l	50.00	53.92	108	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Bromoform	ug/l	50.00	52.65	105	
Bromomethane	ug/l	50.00	57.78	116	
2-Butanone (MEK)	ug/l	100.00	79.78	80	
Carbon disulfide	ug/l	50.00	56.06	112	
Carbon tetrachloride	ug/l	50.00	59.89	120	
Chlorobenzene	ug/l	50.00	55.83	112	
Chloroethane	ug/l	50.00	52.22	104	
Chloroform	ug/l	50.00	53.28	107	
Chloromethane	ug/l	50.00	48.81	98	
1,2-Dibromo-3-chloropropane	ug/l	50.00	49.38	99	
Dibromochloromethane	ug/l	50.00	53.18	106	
1,2-Dibromoethane (EDB)	ug/l	50.00	52.59	105	
Dibromomethane	ug/l	50.00	56.03	112	
1,2-Dichlorobenzene	ug/l	50.00	56.20	112	
1,4-Dichlorobenzene	ug/l	50.00	57.23	114	
trans-1,4-Dichloro-2-butene	ug/l	50.00	51.06	102	
1,1-Dichloroethane	ug/l	50.00	58.53	117	
1,2-Dichloroethane	ug/l	50.00	54.01	108	
1,1-Dichloroethene	ug/l	50.00	50.76	102	
cis-1,2-Dichloroethene	ug/l	50.00	50.76	102	
trans-1,2-Dichloroethene	ug/l	50.00	50.76	102	
1,2-Dichloropropane	ug/l	50.00	59.50	119	
cis-1,3-Dichloropropene	ug/l	50.00	55.94	112	
trans-1,3-Dichloropropene	ug/l	50.00	55.94	112	
Ethylbenzene	ug/l	50.00	53.69	107	
2-Hexanone	ug/l	100.00	89.32	89	
Iodomethane	ug/l	100.00	114.0	114	
Methylene chloride	ug/l	50.00	54.91	110	
4-Methyl-2-pentanone (MIBK)	ug/l	100.00	97.44	97	
Styrene	ug/l	50.00	52.20	104	
1,1,1,2-Tetrachloroethane	ug/l	50.00	54.07	108	
1,1,2,2-Tetrachloroethane	ug/l	50.00	50.45	101	
Tetrachloroethene	ug/l	50.00	56.01	112	
Toluene	ug/l	50.00	55.50	111	
1,1,1-Trichloroethane	ug/l	50.00	56.75	113	
1,1,2-Trichloroethane	ug/l	50.00	53.43	107	
Trichloroethene	ug/l	50.00	59.80	120	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Trichlorofluoromethane	ug/l	50.00	58.69	117	
1,2,3-Trichloropropane	ug/l	50.00	54.63	109	
Vinyl acetate	ug/l	100.00	99.74	100	
Vinyl chloride	ug/l	50.00	60.58	121	
m&p-Xylene	ug/l	100.00	110.9	111	
o-Xylene	ug/l	50.00	54.29	109	
Toluene-d8 (S)				100	
4-Bromofluorobenzene (S)				100	
Dibromofluoromethane (S)				97	
1,2-Dichloroethane-d4 (S)				98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 928305341 928305358

Parameter	Units	928291137 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Benzene	ug/l	0	50.00	59.50	59.34	119	119	0	
Chlorobenzene	ug/l	0	50.00	56.45	55.51	113	111	2	
1,1-Dichloroethene	ug/l	0	50.00	50.15	49.97	100	100	0	
Toluene	ug/l	0	50.00	56.84	57.43	114	115	1	
Trichloroethene	ug/l	0	50.00	61.67	61.01	123	122	1	
Toluene-d8 (S)						101	102		
4-Bromofluorobenzene (S)						100	101		
Dibromofluoromethane (S)						95	97		
1,2-Dichloroethane-d4 (S)						103	98		

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186988 — Analysis Method: EPA 8260
QC Batch Method: EPA 8260 — Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 928291376 928291384 928291392 928293489 928293513 928293521 928293539 928293547 928293554 928293562 928293570 928293588

METHOD BLANK: 928300847
Associated Lab Samples: 928291376 928291384 928291392 928293489 928293513 928293521 928293539 928293547 928293554 928293562 928293570 928293588

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	25.	
Acrylonitrile	ug/l	ND	25.	
Benzene	ug/l	ND	5.0	
Bromochloromethane	ug/l	ND	5.0	
Bromodichloromethane	ug/l	ND	5.0	
Bromoform	ug/l	ND	5.0	
Bromomethane	ug/l	ND	5.0	
2-Butanone (MEK)	ug/l	ND	10.	
Carbon disulfide	ug/l	ND	10.	
Carbon tetrachloride	ug/l	ND	5.0	
Chlorobenzene	ug/l	ND	5.0	
Chloroethane	ug/l	ND	10.	
Chloroform	ug/l	ND	5.0	
Chloromethane	ug/l	ND	5.0	
1,2-Dibromo-3-chloropropane	ug/l	ND	5.0	
Dibromochloromethane	ug/l	ND	5.0	
1,2-Dibromoethane (EDB)	ug/l	ND	5.0	
Dibromomethane	ug/l	ND	5.0	
1,2-Dichlorobenzene	ug/l	ND	5.0	
1,4-Dichlorobenzene	ug/l	ND	5.0	
trans-1,4-Dichloro-2-butene	ug/l	ND	5.0	
1,1-Dichloroethane	ug/l	ND	5.0	
1,2-Dichloroethane	ug/l	ND	5.0	
1,1-Dichloroethene	ug/l	ND	5.0	
cis-1,2-Dichloroethene	ug/l	ND	5.0	
trans-1,2-Dichloroethene	ug/l	ND	5.0	
1,2-Dichloropropane	ug/l	ND	5.0	
cis-1,3-Dichloropropene	ug/l	ND	5.0	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

METHOD BLANK: 928300847
Associated Lab Samples: 928291376 928291384 928291392 928293489 928293513 928293521 928293539 928293547 928293554 928293562 928293570 928293588

Parameter	Units	Blank Result	Reporting Limit	Footnotes
trans-1,3-Dichloropropene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
2-Hexanone	ug/l	ND	10.	
Iodomethane	ug/l	ND	10.	
Methylene chloride	ug/l	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/l	ND	10.	
Styrene	ug/l	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	5.0	
Tetrachloroethene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
1,1,1-Trichloroethane	ug/l	ND	5.0	
1,1,2-Trichloroethane	ug/l	ND	5.0	
Trichloroethene	ug/l	ND	5.0	
Trichlorofluoromethane	ug/l	ND	10.	
1,2,3-Trichloropropane	ug/l	ND	5.0	
Vinyl acetate	ug/l	ND	10.	
Vinyl chloride	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	100		
4-Bromofluorobenzene (S)	%	104		
Dibromofluoromethane (S)	%	92		
1,2-Dichloroethane-d4 (S)	%	92		

LABORATORY CONTROL SAMPLE: 928300854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	59.40	59	
Acrylonitrile	ug/l	250.00	266.7	107	
Benzene	ug/l	50.00	56.08	112	
Bromochloromethane	ug/l	50.00	55.97	112	
Bromodichloromethane	ug/l	50.00	53.92	108	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Bromoform	ug/l	50.00	52.65	105	
Bromomethane	ug/l	50.00	57.78	116	
2-Butanone (MEK)	ug/l	100.00	79.78	80	
Carbon disulfide	ug/l	50.00	56.06	112	
Carbon tetrachloride	ug/l	50.00	59.89	120	
Chlorobenzene	ug/l	50.00	55.83	112	
Chloroethane	ug/l	50.00	52.22	104	
Chloroform	ug/l	50.00	53.28	107	
Chloromethane	ug/l	50.00	48.81	98	
1,2-Dibromo-3-chloropropane	ug/l	50.00	49.38	99	
Dibromochloromethane	ug/l	50.00	53.18	106	
1,2-Dibromoethane (EDB)	ug/l	50.00	52.59	105	
Dibromomethane	ug/l	50.00	56.03	112	
1,2-Dichlorobenzene	ug/l	50.00	56.20	112	
1,4-Dichlorobenzene	ug/l	50.00	57.23	114	
trans-1,4-Dichloro-2-butene	ug/l	50.00	51.06	102	
1,1-Dichloroethane	ug/l	50.00	58.53	117	
1,2-Dichloroethane	ug/l	50.00	54.01	108	
1,1-Dichloroethene	ug/l	50.00	50.76	102	
cis-1,2-Dichloroethene	ug/l	50.00	50.76	102	
trans-1,2-Dichloroethene	ug/l	50.00	50.76	102	
1,2-Dichloropropane	ug/l	50.00	59.50	119	
cis-1,3-Dichloropropene	ug/l	50.00	55.94	112	
trans-1,3-Dichloropropene	ug/l	50.00	55.94	112	
Ethylbenzene	ug/l	50.00	53.69	107	
2-Hexanone	ug/l	100.00	89.32	89	
Iodomethane	ug/l	100.00	114.0	114	
Methylene chloride	ug/l	50.00	54.91	110	
4-Methyl-2-pentanone (MIBK)	ug/l	100.00	97.44	97	
Styrene	ug/l	50.00	52.20	104	
1,1,1,2-Tetrachloroethane	ug/l	50.00	54.07	108	
1,1,2,2-Tetrachloroethane	ug/l	50.00	50.45	101	
Tetrachloroethene	ug/l	50.00	56.01	112	
Toluene	ug/l	50.00	55.50	111	
1,1,1-Trichloroethane	ug/l	50.00	56.75	113	
1,1,2-Trichloroethane	ug/l	50.00	53.43	107	
Trichloroethene	ug/l	50.00	59.80	120	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Trichlorofluoromethane	ug/l	50.00	58.69	117	
1,2,3-Trichloropropane	ug/l	50.00	54.63	109	
Vinyl acetate	ug/l	100.00	99.74	100	
Vinyl chloride	ug/l	50.00	60.58	121	
m&p-Xylene	ug/l	100.00	110.9	111	
o-Xylene	ug/l	50.00	54.29	109	
Toluene-d8 (S)				100	
4-Bromofluorobenzene (S)				100	
Dibromofluoromethane (S)				97	
1,2-Dichloroethane-d4 (S)				98	

MATRIX SPIKE: 928305382

Parameter	Units	928293489 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Benzene	ug/l	0	50.00	48.79	98	
Chlorobenzene	ug/l	0	50.00	45.34	91	
1,1-Dichloroethene	ug/l	0	50.00	39.45	79	
Toluene	ug/l	0	50.00	46.40	93	
Trichloroethene	ug/l	0	50.00	49.33	99	
Toluene-d8 (S)					101	
4-Bromofluorobenzene (S)					101	
Dibromofluoromethane (S)					97	
1,2-Dichloroethane-d4 (S)					97	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186989 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: GC/MS VOCs by 8260
Associated Lab Samples: 928293596 928293604 928293638

METHOD BLANK: 928300862
Associated Lab Samples: 928293596 928293604 928293638

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acetone	ug/l	ND	25.	
Acrylonitrile	ug/l	ND	25.	
Benzene	ug/l	ND	5.0	
Bromochloromethane	ug/l	ND	5.0	
Bromodichloromethane	ug/l	ND	5.0	
Bromoform	ug/l	ND	5.0	
Bromomethane	ug/l	ND	5.0	
2-Butanone (MEK)	ug/l	ND	10.	
Carbon disulfide	ug/l	ND	10.	
Carbon tetrachloride	ug/l	ND	5.0	
Chlorobenzene	ug/l	ND	5.0	
Chloroethane	ug/l	ND	10.	
Chloroform	ug/l	ND	5.0	
Chloromethane	ug/l	ND	5.0	
1,2-Dibromo-3-chloropropane	ug/l	ND	5.0	
Dibromochloromethane	ug/l	ND	5.0	
1,2-Dibromoethane (EDB)	ug/l	ND	5.0	
Dibromomethane	ug/l	ND	5.0	
1,2-Dichlorobenzene	ug/l	ND	5.0	
1,4-Dichlorobenzene	ug/l	ND	5.0	
trans-1,4-Dichloro-2-butene	ug/l	ND	5.0	
1,1-Dichloroethane	ug/l	ND	5.0	
1,2-Dichloroethane	ug/l	ND	5.0	
1,1-Dichloroethene	ug/l	ND	5.0	
cis-1,2-Dichloroethene	ug/l	ND	5.0	
trans-1,2-Dichloroethene	ug/l	ND	5.0	
1,2-Dichloropropane	ug/l	ND	5.0	
cis-1,3-Dichloropropene	ug/l	ND	5.0	
trans-1,3-Dichloropropene	ug/l	ND	5.0	
Ethylbenzene	ug/l	ND	5.0	
2-Hexanone	ug/l	ND	10.	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

METHOD BLANK: 928300862
Associated Lab Samples: 928293596 928293604 928293638

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Iodomethane	ug/l	ND	10.	
Methylene chloride	ug/l	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/l	ND	10.	
Styrene	ug/l	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	5.0	
Tetrachloroethene	ug/l	ND	5.0	
Toluene	ug/l	ND	5.0	
1,1,1-Trichloroethane	ug/l	ND	5.0	
1,1,2-Trichloroethane	ug/l	ND	5.0	
Trichloroethene	ug/l	ND	5.0	
Trichlorofluoromethane	ug/l	ND	10.	
1,2,3-Trichloropropane	ug/l	ND	5.0	
Vinyl acetate	ug/l	ND	10.	
Vinyl chloride	ug/l	ND	5.0	
m&p-Xylene	ug/l	ND	10.	
o-Xylene	ug/l	ND	5.0	
Toluene-d8 (S)	%	103		
4-Bromofluorobenzene (S)	%	101		
Dibromofluoromethane (S)	%	94		
1,2-Dichloroethane-d4 (S)	%	101		

LABORATORY CONTROL SAMPLE: 928300870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Acetone	ug/l	100.00	60.73	61	
Acrylonitrile	ug/l	250.00	321.2	128	
Benzene	ug/l	50.00	61.74	123	
Bromochloromethane	ug/l	50.00	59.23	118	
Bromodichloromethane	ug/l	50.00	58.85	118	
Bromoform	ug/l	50.00	54.30	109	
Bromomethane	ug/l	50.00	65.70	131	
2-Butanone (MEK)	ug/l	100.00	90.91	91	
Carbon disulfide	ug/l	50.00	63.64	127	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Carbon tetrachloride	ug/l	50.00	69.52	139	1
Chlorobenzene	ug/l	50.00	56.75	113	
Chloroethane	ug/l	50.00	51.16	102	
Chloroform	ug/l	50.00	57.64	115	
Chloromethane	ug/l	50.00	55.26	111	
1,2-Dibromo-3-chloropropane	ug/l	50.00	53.10	106	
Dibromochloromethane	ug/l	50.00	53.60	107	
1,2-Dibromoethane (EDB)	ug/l	50.00	54.05	108	
Dibromomethane	ug/l	50.00	63.08	126	1
1,2-Dichlorobenzene	ug/l	50.00	54.50	109	
1,4-Dichlorobenzene	ug/l	50.00	57.13	114	
trans-1,4-Dichloro-2-butene	ug/l	50.00	58.73	117	
1,1-Dichloroethane	ug/l	50.00	63.04	126	
1,2-Dichloroethane	ug/l	50.00	59.55	119	
1,1-Dichloroethene	ug/l	50.00	53.85	108	
cis-1,2-Dichloroethene	ug/l	50.00	53.85	108	
trans-1,2-Dichloroethene	ug/l	50.00	53.85	108	
1,2-Dichloropropane	ug/l	50.00	64.86	130	1
cis-1,3-Dichloropropene	ug/l	50.00	64.46	129	1
trans-1,3-Dichloropropene	ug/l	50.00	64.46	129	1
Ethylbenzene	ug/l	50.00	54.92	110	
2-Hexanone	ug/l	100.00	106.7	107	
Iodomethane	ug/l	100.00	120.9	121	
Methylene chloride	ug/l	50.00	58.39	117	
4-Methyl-2-pentanone (MIBK)	ug/l	100.00	120.2	120	
Styrene	ug/l	50.00	53.48	107	
1,1,1,2-Tetrachloroethane	ug/l	50.00	54.70	109	
1,1,2,2-Tetrachloroethane	ug/l	50.00	54.46	109	
Tetrachloroethene	ug/l	50.00	57.35	115	
Toluene	ug/l	50.00	59.01	118	
1,1,1-Trichloroethane	ug/l	50.00	61.92	124	
1,1,2-Trichloroethane	ug/l	50.00	59.71	119	
Trichloroethene	ug/l	50.00	64.61	129	
Trichlorofluoromethane	ug/l	50.00	65.03	130	
1,2,3-Trichloropropane	ug/l	50.00	54.53	109	
Vinyl acetate	ug/l	100.00	127.9	128	
Vinyl chloride	ug/l	50.00	65.44	131	1

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
m&p-Xylene	ug/l	100.00	112.9	113	
o-Xylene	ug/l	50.00	55.91	112	
Toluene-d8 (S)				103	
4-Bromofluorobenzene (S)				98	
Dibromofluoromethane (S)				100	
1,2-Dichloroethane-d4 (S)				108	

MATRIX SPIKE: 928310374

Parameter	Units	928299791 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Benzene	ug/l	0	50.00	61.86	124	
Chlorobenzene	ug/l	0	50.00	55.59	111	
1,1-Dichloroethene	ug/l	0	50.00	52.72	105	
Toluene	ug/l	0	50.00	59.14	118	
Trichloroethene	ug/l	0	50.00	63.19	126	
Toluene-d8 (S)					105	
4-Bromofluorobenzene (S)					97	
Dibromofluoromethane (S)					101	
1,2-Dichloroethane-d4 (S)					108	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186873 — Analysis Method: EPA 6010
QC Batch Method: EPA 3010 — Analysis Description: Metals by Trace ICP
Associated Lab Samples: 928291103 928291137

METHOD BLANK: 928294586
Associated Lab Samples: 928291103 928291137

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Antimony	ug/l	ND	5.0	
Arsenic	ug/l	ND	5.0	
Barium	ug/l	ND	5.0	
Beryllium	ug/l	ND	1.0	
Cadmium	ug/l	ND	1.0	
Chromium	ug/l	ND	5.0	
Cobalt	ug/l	ND	5.0	
Copper	ug/l	ND	2.0	
Lead	ug/l	ND	5.0	
Nickel	ug/l	ND	5.0	
Selenium	ug/l	ND	10.	
Silver	ug/l	ND	5.0	
Thallium	ug/l	ND	10.	
Vanadium	ug/l	ND	5.0	
Zinc	ug/l	ND	10.	

LABORATORY CONTROL SAMPLE: 928294594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Antimony	ug/l	500.00	461.0	92	
Arsenic	ug/l	500.00	465.0	93	
Barium	ug/l	500.00	440.0	88	
Beryllium	ug/l	500.00	469.0	94	
Cadmium	ug/l	500.00	469.0	94	
Chromium	ug/l	500.00	466.0	93	
Cobalt	ug/l	500.00	459.0	92	
Copper	ug/l	500.00	447.0	89	
Lead	ug/l	500.00	466.0	93	
Nickel	ug/l	500.00	468.0	94	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928294594

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Selenium	ug/l	500.00	455.0	91	
Silver	ug/l	250.00	220.0	88	
Thallium	ug/l	500.00	419.0	84	
Vanadium	ug/l	500.00	455.0	91	
Zinc	ug/l	500.00	463.0	93	

MATRIX SPIKE: 928294602

Parameter	Units	928278514 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Antimony	ug/l	0.08200	500.00	459.0	92	
Arsenic	ug/l	0	500.00	462.0	92	
Barium	ug/l		500.00	446.0		
Beryllium	ug/l	0	500.00	467.0	93	
Cadmium	ug/l	0	500.00	446.0	89	
Chromium	ug/l	0.08000	500.00	452.0	90	
Cobalt	ug/l		500.00	435.0		
Copper	ug/l	373.0	500.00	814.0	88	
Lead	ug/l	15.00	500.00	454.0	88	
Nickel	ug/l	0	500.00	439.0	88	
Selenium	ug/l	0.3770	500.00	448.0	90	
Silver	ug/l	0	250.00	213.0	85	
Thallium	ug/l	5.970	500.00	419.0	83	
Vanadium	ug/l		500.00	448.0		
Zinc	ug/l	287.0	500.00	717.0	86	

SAMPLE DUPLICATE: 928294610

Parameter	Units	928286046 Result	DUP Result	RPD	Footnotes
Antimony	ug/l	ND	ND	NC	
Arsenic	ug/l	ND	ND	NC	
Barium	ug/l	ND	ND	NC	
Beryllium	ug/l	ND	ND	NC	
Cadmium	ug/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

SAMPLE DUPLICATE: 928294610

Parameter	Units	928286046 Result	DUP Result	RPD	Footnotes
Chromium	ug/l	ND	10.00	0	
Cobalt	ug/l	ND	ND	NC	
Copper	ug/l	ND	ND	NC	
Lead	ug/l	ND	ND	NC	
Nickel	ug/l	ND	ND	NC	
Selenium	ug/l	ND	ND	NC	
Silver	ug/l	ND	ND	NC	
Thallium	ug/l	ND	7.900	0	
Vanadium	ug/l	ND	ND	NC	
Zinc	ug/l	13.00	14.00	8	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186876 — Analysis Method: EPA 6010
QC Batch Method: EPA 3010 — Analysis Description: Metals by Trace ICP
Associated Lab Samples: 928291145 928291160 928291178 928291194 928291202 928291285 928291335 928291343 928291350 928291368 928291376 928291392 928293489 928293513 928293521 928293539 928293547 928293554 928293562

METHOD BLANK: 928294701
Associated Lab Samples: 928291145 928291160 928291178 928291194 928291202 928291285 928291335 928291343 928291350 928291368 928291376 928291392 928293489 928293513 928293521 928293539 928293547 928293554 928293562

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Antimony	ug/l	ND	5.0	
Arsenic	ug/l	ND	5.0	
Barium	ug/l	ND	5.0	
Beryllium	ug/l	ND	1.0	
Cadmium	ug/l	ND	1.0	
Chromium	ug/l	ND	5.0	
Cobalt	ug/l	ND	5.0	
Copper	ug/l	ND	2.0	
Lead	ug/l	ND	5.0	
Nickel	ug/l	ND	5.0	
Selenium	ug/l	ND	10.	
Silver	ug/l	ND	5.0	
Thallium	ug/l	ND	10.	
Vanadium	ug/l	ND	5.0	
Zinc	ug/l	ND	10.	

LABORATORY CONTROL SAMPLE: 928294719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Antimony	ug/l	500.00	496.0	99	
Arsenic	ug/l	500.00	492.0	98	
Barium	ug/l	500.00	486.0	97	
Beryllium	ug/l	500.00	494.0	99	
Cadmium	ug/l	500.00	501.0	100	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928294719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Chromium	ug/l	500.00	500.0	100	
Cobalt	ug/l	500.00	485.0	97	
Copper	ug/l	500.00	490.0	98	
Lead	ug/l	500.00	501.0	100	
Nickel	ug/l	500.00	489.0	98	
Selenium	ug/l	500.00	502.0	100	
Silver	ug/l	250.00	246.0	98	
Thallium	ug/l	500.00	498.0	100	
Vanadium	ug/l	500.00	490.0	98	
Zinc	ug/l	500.00	488.0	98	

MATRIX SPIKE: 928294727

Parameter	Units	928280585 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Antimony	ug/l	0	500.00	450.0	90	
Arsenic	ug/l	1.320	500.00	471.0	94	
Barium	ug/l	9.530	500.00	374.0	73	2
Beryllium	ug/l	0	500.00	436.0	87	
Cadmium	ug/l	0	500.00	420.0	84	
Chromium	ug/l	1.770	500.00	408.0	81	
Cobalt	ug/l	0.4610	500.00	385.0	77	2
Copper	ug/l	105.0	500.00	526.0	84	
Lead	ug/l	0	500.00	390.0	78	2
Nickel	ug/l	1.620	500.00	388.0	77	2
Selenium	ug/l	3.840	500.00	478.0	95	
Silver	ug/l	0	250.00	227.0	91	
Thallium	ug/l	0	500.00	366.0	73	2
Vanadium	ug/l	0.7470	500.00	407.0	81	
Zinc	ug/l	86.00	500.00	530.0	89	

SAMPLE DUPLICATE: 928294735

Parameter	Units	928291145 Result	DUP Result	RPD	Footnotes

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

SAMPLE DUPLICATE: 928294735

Parameter	Units	928291145 Result	DUP Result	RPD	Footnotes
Antimony	ug/l	ND	ND	NC	
Arsenic	ug/l	ND	ND	NC	
Barium	ug/l	250.0	240.0	2	
Beryllium	ug/l	ND	ND	NC	
Cadmium	ug/l	ND	ND	NC	
Chromium	ug/l	ND	ND	NC	
Cobalt	ug/l	ND	ND	NC	
Copper	ug/l	ND	ND	NC	
Lead	ug/l	ND	ND	NC	
Nickel	ug/l	ND	ND	NC	
Selenium	ug/l	ND	ND	NC	
Silver	ug/l	ND	ND	NC	
Thallium	ug/l	ND	ND	NC	
Vanadium	ug/l	ND	ND	NC	
Zinc	ug/l	130.0	140.0	13	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186986 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: Metals by Trace ICP
Associated Lab Samples: 928293570 928293588 928293596 928293604 928293638

METHOD BLANK: 928300763
Associated Lab Samples: 928293570 928293588 928293596 928293604 928293638

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Antimony	ug/l	ND	5.0	
Arsenic	ug/l	ND	5.0	
Barium	ug/l	ND	5.0	
Beryllium	ug/l	ND	1.0	
Cadmium	ug/l	ND	1.0	
Chromium	ug/l	ND	5.0	
Cobalt	ug/l	ND	5.0	
Copper	ug/l	ND	2.0	
Lead	ug/l	ND	5.0	
Nickel	ug/l	ND	5.0	
Selenium	ug/l	ND	10.	
Silver	ug/l	ND	5.0	
Thallium	ug/l	ND	10.	
Vanadium	ug/l	ND	5.0	
Zinc	ug/l	ND	10.	

LABORATORY CONTROL SAMPLE: 928300771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Antimony	ug/l	500.00	503.0	101	
Arsenic	ug/l	500.00	502.0	100	
Barium	ug/l	500.00	496.0	99	
Beryllium	ug/l	500.00	518.0	104	
Cadmium	ug/l	500.00	510.0	102	
Chromium	ug/l	500.00	516.0	103	
Cobalt	ug/l	500.00	502.0	100	
Copper	ug/l	500.00	500.0	100	
Lead	ug/l	500.00	508.0	102	
Nickel	ug/l	500.00	503.0	101	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

LABORATORY CONTROL SAMPLE: 928300771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Selenium	ug/l	500.00	501.0	100	
Silver	ug/l	250.00	252.0	101	
Thallium	ug/l	500.00	496.0	99	
Vanadium	ug/l	500.00	508.0	102	
Zinc	ug/l	500.00	499.0	100	

MATRIX SPIKE: 928300789

Parameter	Units	928299783 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Antimony	ug/l	0.1330	500.00	511.0	102	
Arsenic	ug/l	0	500.00	510.0	102	
Barium	ug/l	24.70	500.00	522.0	100	
Beryllium	ug/l	0	500.00	526.0	105	
Cadmium	ug/l	0	500.00	508.0	102	
Chromium	ug/l	0	500.00	524.0	105	
Cobalt	ug/l	0	500.00	485.0	97	
Copper	ug/l	0	500.00	507.0	101	
Lead	ug/l	0	500.00	499.0	100	
Nickel	ug/l	0	500.00	508.0	102	
Selenium	ug/l	8.570	500.00	514.0	101	
Silver	ug/l	0.3440	250.00	251.0	100	
Thallium	ug/l	0	500.00	490.0	98	
Vanadium	ug/l	0.6100	500.00	517.0	103	
Zinc	ug/l	16.60	500.00	505.0	98	

SAMPLE DUPLICATE: 928300797

Parameter	Units	928299791 Result	DUP Result	RPD	Footnotes
Antimony	ug/l	ND	ND	NC	
Arsenic	ug/l	ND	ND	NC	
Barium	ug/l	ND	ND	NC	
Beryllium	ug/l	ND	ND	NC	
Cadmium	ug/l	ND	ND	NC	

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9800 Kincey Avenue, Suite 100
Huntersville, NC 28078
Phone: 704.875.9092
Fax: 704.875.9091

F

QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

SAMPLE DUPLICATE: 928300797

Parameter	Units	928299791 Result	DUP Result	RPD	Footnotes
Chromium	ug/l	ND	ND	NC	
Cobalt	ug/l	ND	ND	NC	
Copper	ug/l	ND	ND	NC	
Lead	ug/l	ND	ND	NC	
Nickel	ug/l	ND	ND	NC	
Selenium	ug/l	ND	ND	NC	
Silver	ug/l	ND	ND	NC	
Thallium	ug/l	ND	ND	NC	
Vanadium	ug/l	ND	ND	NC	
Zinc	ug/l	15.00	14.00	5	

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

REPORT OF LABORATORY ANALYSIS
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Charlotte Certification IDs
NC Wastewater 12
NC Drinking Water 37706
SC 99006
FL NELAP E87627

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186883 — Analysis Method: EPA 405.1
QC Batch Method: SM 5210B — Analysis Description: Biochemical Oxygen Demand, 5 d
Associated Lab Samples: 928291285

METHOD BLANK: 928294917
Associated Lab Samples: 928291285

Parameter	Units	Blank Result	Reporting Limit	Footnotes
BOD, 5 day	mg/l	ND	2.0	

LABORATORY CONTROL SAMPLE: 928294925

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
BOD, 5 day	mg/l	198.00	201.0	102	

SAMPLE DUPLICATE: 928294933

Parameter	Units	928291285 Result	DUP Result	RPD	Footnotes
BOD, 5 day	mg/l	89.00	89.00	0	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 186885 — Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 — Analysis Description: 48 Hour NO3 / NO2 / NOX
Associated Lab Samples: 928291285

METHOD BLANK: 928295005
Associated Lab Samples: 928291285

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Nitrate as N	mg/l	ND	0.10	
Nitrite as N	mg/l	ND	0.10	

LABORATORY CONTROL SAMPLE: 928295013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Nitrate as N	mg/l	5.000	5.380	108	

MATRIX SPIKE: 928295021

Parameter	Units	928293901 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Nitrate as N	mg/l	0.3300	5.000	5.770	109	

SAMPLE DUPLICATE: 928295039

Parameter	Units	928293919 Result	DUP Result	RPD	Footnotes
Nitrate as N	mg/l	0.3300	0.3200	3	
Nitrite as N	mg/l	ND	ND	NC	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 187333 — Analysis Method: EPA 375.4
QC Batch Method: EPA 375.4 — Analysis Description: Sulfate,Turbidimetric
Associated Lab Samples: 928291285

METHOD BLANK: 928316462
Associated Lab Samples: 928291285

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Sulfate	mg/l	ND	5.0	

LABORATORY CONTROL SAMPLE: 928316470

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Sulfate	mg/l	20.00	20.30	101	

MATRIX SPIKE: 928316488

Parameter	Units	928297878 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Sulfate	mg/l	13.03	20.00	37.37	122	

SAMPLE DUPLICATE: 928316496

Parameter	Units	928291285 Result	DUP Result	RPD	Footnotes
Sulfate	mg/l	2400	2400	1	

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QUALITY CONTROL DATA

Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QC Batch: 187578 — Analysis Method: EPA 410.4
QC Batch Method: SM 5220D — Analysis Description: Chemical Oxygen Demand
Associated Lab Samples: 928291285

METHOD BLANK: 928324730
Associated Lab Samples: 928291285

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Chemical Oxygen Demand	mg/l	ND	25.	

LABORATORY CONTROL SAMPLE: 928324748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	Footnotes
Chemical Oxygen Demand	mg/l	750.00	712.0	95	

MATRIX SPIKE: 928324755

Parameter	Units	928296714 Result	Spike Conc.	MS Result	MS % Rec	Footnotes
Chemical Oxygen Demand	mg/l	2256	3000.00	5180	98	

SAMPLE DUPLICATE: 928324763

Parameter	Units	928277995 Result	DUP Result	RPD	Footnotes
Chemical Oxygen Demand	mg/l	29.00	ND	NC	

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NC Drinking Water 37712
SC Environmental 99030
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Lab Project Number: 92142922
Client Project ID: White Oak Landfill-April

QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

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

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NC Drinking Water 37712
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical®

1026045

Section A — **Required** Client Information:

Company: HAYWOOD CO	
Address: Clyde	
Email To:	
Phone: 627-8042	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To: Steven King	
Copy To:	
Purchase Order No.:	
Project Name: White OAK	
Project Number:	

Section C — Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ Other_____

SITE LOCATION: ☐GA ☐IL ☐IN ☐MI ☐MN ☒NC ☐OH ☐SC ☐WI ☐OTHER _____

Section D — **Required** Client Information

SAMPLE ID

One Character per box.
(A-Z, 0-9 / -)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: pH Temp Spec-D Styrene Diene Terpolymers Acrylonitrile	Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	MW-14					4.24.07	1115		4			1	3						X X X X		92829348 9
2	MW-4A						1300		4			1	3						X X X X		3513
3	MW-5A						1400		4			1	3						X X X X		3521
4	MW-5D						1410		4			1	3						X X X X		3539
5	MW-2						1260		4			1	3						X X X X		3547
6	MW#1 1S						1510		4			1	3						X X X X		3554
7	MW-11D						1515		4			1	3						X X X X		3562
8	MW-12						1455		4			1	3						X X X X		3570
9	MW-13						1440		4			1	3						X X X X		3588
10	MW-13D						1445		4			1	3						X X X X		3596
11	MW-14						1100		4			1	3						X X X X		3604
12	MW-15						1420		4			1	3						X X X X		3638

Additional Comments:

Wells Need New Locks
(17 wells)

Fld time & mileage #1200

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Linda Clark	4.24.07	1600	Mark P Swann Pace	4.24.07	1600

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARK P. SWANN

SIGNATURE of SAMPLER: Mark P Swann Pace

DATE Signed (MM / DD / YY): 4-24-07

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 3

1030488

Section A Required Client Information:

Company	Haywood Co
Address	
Email To:	
Phone	Fax
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Steven King
Copy To:	
Purchase Order No.:	
Project Name:	White OAK Surface Waters
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☒ ~~NPDES~~ ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☒ RCRA ☐ Other

SITE LOCATION ☐GA ☐IL ☐IN ☐MI ☐MN ☒NC ☐OH ☐SC ☐WI ☐OTHER

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / .-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Filtered (Y/N)

Requested Analysis: pH Temp Spcond; Aqua I vons; Aqua I Metals; BOD; SO4; NO2+NO3; COD

Pace Project Number: 92142922

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Residual Chlorine (Y/N)	Lab I.D
1	SW-1					4-23-07	1200		4			1	4					X X	92829 1103
2	SW-2						1320		4			1	4					X	1137
3	SW-3						1345		4			1	4					X	1145
4	~~SW-4~~											~~1~~	~~4~~					X Gone	1160
5	SW-5					4-23-07	1730		4			1	4					1	1178
6	SW-6					4-23	1645		4			1	4						1194
7	SW-7					4-23	1630		4			1	4						1202
8	Sett POND						1405		4			1	4						1285
9	Leachate						1230		8	3	1	1	4					Y 1 Y X X X X	
10																			
11																			
12																			

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	4-23-07	1900	Mark P Swann Pasi	4-23-07	1900
Mark P Swann	4-24		[signature]	4/24	900

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: MARK P. SWANN

SIGNATURE of SAMPLER: Mark P Swann Pasi

DATE Signed (MM / DD / YY): 4-23-07

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL

ALLQ020rev.3.31Mar05

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: of 1032566

Section A Required Client Information:

Company	Haywood Co
Address	
Email To:	
Phone / Fax	
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Steven King
Copy To:	
Purchase Order No.:	
Project Name:	White Oak LF
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ Other

SITE LOCATION: ☐GA ☐IL ☐IN ☐MI ☐MN ☐NC ☐OH ☐SC ☐WI ☐OTHER

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Requested Analysis: pH Tcn Phenol Sulfide Hg Low Hg Chlor Fluor Meth Residual Chlorine (Y/N)	Pace Project Number / Lab I.D
1	MW-2					4.23.07	1450		4			1	3					X X X X		9282913135
2	MW-2D						1455		4			1	3					X X X X		1343
3	MW-3						1435		4			1	3					X X X X		1350
4	MW-3D						1435		4			1	3					X X X X		1368
5	MW-9						1330		4			1	3					X X X X		1376
6																				~~1377~~
7	TVL BLK								2				2					X		1384
8	EQUIP BLK								3				1 2					X X		1392
9																				
10																				
11																				
12																				

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	4/24/07	1900	Mark Swann Pace	4.23.07	1900
Mark Swann Pace	4.24				

SAMPLE CONDITION

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mark P. Swann

SIGNATURE of SAMPLER: Mark Swann Pace DATE Signed (MM / DD / YY): 4-23-07

SEE REVERSE SIDE FOR INSTRUCTIONS

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APPENDIX D

Statistical Calculations

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

COMPOUND	TOTAL	ND	DETECTED	%ND	STATISTICAL TEST
Total Antimony	214	208	6	97.2%	Poisson Prediction Limits
Total Arsenic	215	185	30	86.0%	Kruskal-Wallis
Total Barium	219	24	195	11.0%	ANOVA
Total Beryllium	215	164	51	76.3%	Kruskal-Wallis
Total Cadmium	217	164	53	75.6%	Kruskal-Wallis
Total Chromium	215	100	115	46.5%	Kruskal-Wallis
Total Cobalt	217	127	90	58.5%	Kruskal-Wallis
Total Copper	215	112	103	52.1%	Kruskal-Wallis
Total Lead	218	140	78	64.2%	Kruskal-Wallis
Total Nickel	216	117	99	54.2%	Kruskal-Wallis
Total Selenium	215	211	4	98.1%	Poisson Prediction Limits
Total Silver	215	212	3	98.6%	Poisson Prediction Limits
Total Thallium	215	198	17	92.1%	Poisson Prediction Limits
Total Vanadium	217	101	116	46.5%	Kruskal-Wallis
Total Zinc	217	47	170	21.7%	Kruskal-Wallis
Carbon Disulfide	134	125	9	93.3%	Poisson Prediction Limits

Sampling Event	# Detected
N 1	71
N 2	13
N 3	14
N 4	3
N 5	72
N 6	23
N 7	15
N 8	17
N 9	12
N 10	92
N 11	128
N 12	64
N 13	89
N 14	104
N 15	81
N 16	91
N 17	93
N 18	43
N 19	56
N 20	58

LEGEND FOR THE FOLLOWING PAGES:
ND = *Not Detected* at the method detection limit
MCL = *Maximum Contaminant Level*; NCAC 2L Standard
NE = *Not Established*; NC has not established a MCL
NP = *Not Present* during sampling event
NS = *Not Sampled*
NT = *Not Tested*
NA = information *Not Available*
MDL = *Method Detection Limit*

Total Detected Concentrations (per compound) =	1139
Total Detected Concentrations (per event) =	1139
Are all accounted for ?	Yes
Statistical Package Prepared By:	MSP
Statistical Package Checked By:	TJB

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Antimony**
MCL (µg/l): Not Established
Method: Poisson Prediction Limits
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**10**
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**10**
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**10**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**30**
04/09/01	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**10**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**10**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**10**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**10**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**30**
04/15/02	**15**	ND	NS	ND	ND	ND	NT	ND	ND	ND	ND	**11**	ND	ND	ND	ND	NS	**10**
09/26/02	ND	ND	ND	**12**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**98**	**10**
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	**10**
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12**	**5**
10/13/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**30**
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	**5**
04/25/07	ND	ND	ND	ND	ND	**20**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6**

1) If not detected (ND), use half of the detection limit.

04/24/00	5	-	-	5	5	5	5	5	5	5	5	5	5	-	-	-	-	
06/26/00	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/26/00	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
09/18/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/09/01	5	5	-	5	5	5	5	5	5	5	5	5	5	-	-	-	-	
09/18/01	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	-	
10/29/01	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	-	
01/30/02	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	-	
02/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/15/02	15	5	-	5	5	5	-	5	5	5	5	11	5	5	5	5	-	
09/26/02	5	5	5	12	5	5	5	5	5	5	5	5	5	5	5	5	98	
04/28/03	5	5	5	5	5	5	5	5	5	5	5	5	5	-	-	-	5	
10/30/03	2.5	2.5	-	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/20/04	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
10/21/04	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/18/05	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	12	
10/13/05	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/25/06	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
10/20/06	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	-	-	2.5	2.5	2.5	2.5	2.5	2.5	
04/25/07				3	3	20	3	3	3	3	3	3	3	3	3	3	3	

2) Set the total number of data values for background wells (through the previous sampling event) equal to 'n' = 14.
Use 1/2 of the method detection limit to calculate the Total Poisson Count of the Sum (T_n).

$n = 35$
$T_{n1} = 172.5$

3) Using Gibbons' formula, calculate the upper Poisson Prediction limit T^*_k:

$$T^*_k = cT_{n1} + ct^2/2 + ct[T_{n1}(1+1/c) + t^2/4]^{0.5}$$

where $c = k/n$
and where k = the number of future predicted measurements (one per well during the current sampling event)
and where t = the upper 99th percentile of the t-distribution with (n-1) degrees of freedom (Table 6 of the IFG).

$k = 14$
$n = 35$
$T_{n1} = 172.5$
$t[34,.01] = 2.4434$
$c = 0.4000$
$T_{n2} = 59$
$T^*_k = 94.2$

4) Compare the *Poisson Prediction Limit* (T^*_k) to the *Sum of the Concentrations Detected* (T_{n2}) in the wells during the most recent sampling event.
Since the Poisson Prediction Limit was not exceeded, there is no evidence of contamination.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Arsenic**
NC MCL (µg/l): 50
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	10
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	10
04/09/01	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	10
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**11**	ND	ND	NS	10
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**17**	ND	ND	NS	10
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	10
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	ND	NS	10
04/15/02	ND	ND	NS	ND	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	10
09/26/02	ND	**5.7**	ND	ND	ND	ND	ND	ND	**27**	ND	ND	ND	ND	**30**	**6.5**	ND	**68**	5
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	**24**	5
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	**6.2**	ND	**5.3**	ND	**6.3**	ND	ND	**81**	5
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**7.4**	ND	**9.2**	ND	ND	**30**	5
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**59**	5
04/18/05	ND	ND	ND	**10**	ND	ND	ND	ND	ND	ND	ND	**5.2**	ND	**21**	ND	ND	**65**	5
10/13/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**53**	**9.9**	ND	**44**	5
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12**	ND	ND	**42**	10
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	**11**	**25**	ND	**13**	5
04/25/07	ND	ND	ND	ND	ND	**280**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**12**	5
N_i	15	14	9	13	13	13	12	13	13	12	12	13	13	13	13	14	10	
sum of rank values (R_i)	1395.0	1397.0	837.0	1311.0	1209.0	1331.0	1116.0	1209.0	1321.0	1212.0	1116.0	1495.0	1209.0	2166.0	1519.0	1302.0	2075.0	
avg rank value (Rbar)	93.0	99.8	93.0	100.8	93.0	102.4	93.0	93.0	101.6	101.0	93.0	115.0	93.0	166.6	116.8	93.0	207.5	

	Number of each rank value																	Rank Value
rank value of NDs =	15	13	9	12	13	12	12	13	12	11	12	10	13	4	10	14	0	93
rank value of 5.2s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	186
rank value of 5.3s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	187
rank value of 5.7s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188
rank value of 6.2s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	189
rank value of 6.3s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	190
rank value of 6.5s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	191
rank value of 7.4s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	192
rank value of 9.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	193
rank value of 9.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	194
rank value of 10s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	195
rank value of 11s =	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	196.5
rank value of 12s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	198.5
rank value of 13s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	200
rank value of 17s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	201
rank value of 21s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	202
rank value of 24s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	203
rank value of 25s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	204
rank value of 27s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	205
rank value of 30s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	206.5
rank value of 42s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	208
rank value of 44s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	209
rank value of 53s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	210
rank value of 59s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	211
rank value of 65s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 68s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	213
rank value of 81s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	214
rank value of 280s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	215
n =	**15**	**14**	**9**	**13**	**13**	**13**	**12**	**13**	**13**	**12**	**12**	**13**	**13**	**13**	**13**	**14**	**10**	

Sum of rank value calculations

1395	1209	837	1116	1209	1116	1116	1209	1116	1023	1116	930	1209	372	930	1302	0
0	0	0	0	0	0	0	0	0	0	0	186	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	187	0	0	0	0	0
0	188	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	0
0	0	0	0	0	0	0	0	0	0	0	192	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	193	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	194	0	0
0	0	0	195	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	393	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	198.5	0	0	198.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
0	0	0	0	0	0	0	0	0	0	0	0	0	201	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	202	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	0	0
0	0	0	0	0	0	0	0	205	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	206.5	0	0	206.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
0	0	0	0	0	0	0	0	0	0	0	0	0	210	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214
0	0	0	0	0	215	0	0	0	0	0	0	0	0	0	0	0

sum of rank values (R_i)	**1395**	**1397**	**837**	**1311**	**1209**	**1331**	**1116**	**1209**	**1321**	**1212**	**1116**	**1495**	**1209**	**2166**	**1519**	**1302**	**2075**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	346569.5	132209	112437	136274	103788	112437	134234	122412	103788	171925	112437	360889	177489	121086	430563

$N_{i\,bg}$ = 38
N = 215
H = 44.13

Adjust H for ties:

T_i = 6E+06 sum of T1..T3

$H' = H/(1-(T_i/(N^3-N)))$
H' = 121.59
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =121.59. Therefore, there is evidence of significant differences between the well groups. Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	**MW-12**	MW-13S	MW-13D	**MW-15**
Rbar (well x) =	100.8	93.0	102.4	93.0	93.0	101.6	101.0	93.0	115.0	93.0	166.6	116.8	93.0	207.5
avg Rbar (background) =	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
Dx =	5.3	-2.5	6.9	-2.5	-2.5	6.1	5.5	-2.5	19.5	-2.5	71.1	21.3	-2.5	112.0
Cx =	46.6	46.6	46.6	48.0	46.6	46.6	48.0	48.0	46.6	46.6	46.6	46.6	45.3	51.5
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).

The Dx value for the above indicated wells do exceed the corresponding Cx value.

Therefore, we conclude that the concentration of Total Arsenic averaged over these compliance wells are significantly greater than that of the background wells.

Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Barium**
NC MCL (µg/l): 2000
Method: ANOVA
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	250	NS	NS	240	420	200	63	300	93	81	170	230	ND	NS	NS	NS	NS	5
06/26/00	300	67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
07/26/00	330	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
09/18/00	NS	NS	NS	330	92	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	500
04/09/01	1300	380	NS	180	330	120	80	290	360	80	140	970	130	NS	NS	NS	NS	5
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1800	4700	90	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3000	450	27	NS	5
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	980	360	41	NS	5
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	NS	1300	NS	500
04/15/02	1300	41	NS	ND	ND	160	23	190	460	180	250	1400	110	540	820	38	NS	5
09/26/02	330	500	750	4200	120	230	93	410	910	130	320	1400	140	8600	1600	46	11000	5
04/28/03	600	66	220	1800	160	140	110	92	360	95	140	800	140	NT	NT	NT	2800	5
10/30/03	320	100	NT	210	310	130	95	110	1200	580	190	270	130	920	320	29	4900	5
04/20/04	320	56	120	410	460	170	140	210	62	85	170	940	150	1600	860	36	2000	5
10/21/04	320	40	200	300	310	140	140	130	12	100	320	900	110	2700	1700	29	4900	5
04/18/05	480	55	160	7200	610	180	160	140	12	78	150	1000	140	2000	1000	31	3700	5
10/13/05	770	37	160	1700	870	250	160	140	27	110	290	810	150	5500	4400	27	2700	5
04/25/06	650	ND	ND	ND	1100	ND	ND	ND	ND	820	ND	750	ND	ND	1700	ND	2700	500
10/20/06	410	22	180	470	1100	ND	ND	ND	160	NS	NS	ND	ND	1800	1400	ND	650	5
04/25/07	290	ND	200	240	1300	1500	130	180	ND	240	250	ND	160	160	120	ND	600	100

If not detected (ND), use the natural log of half of the detection limit.

ln =	5.52146			5.48064	6.04025	5.29832	4.14313	5.70378	4.5326	4.39445	5.1358	5.43808	0.91629					
	5.70378	4.20469																
	5.79909	3.4012																
				5.79909	4.52179													
	7.17012	5.94017		5.19296	5.79909	4.78749	4.38203	5.66988	5.8861	4.38203	4.94164	6.8773	4.86753					
														7.49554	8.45532	4.49981		
														8.00637	6.10925	3.29584		
														6.88755	5.8861	3.71357		
														1.09861		7.17012		
	7.17012	3.71357		0.91629	0.91629	5.07517	3.13549	5.24702	6.13123	5.19296	5.52146	7.24423	4.70048	6.29157	6.7093	3.63759		
	5.79909	6.21461	6.62007	8.34284	4.78749	5.43808	4.5326	6.01616	6.81344	4.86753	5.76832	7.24423	4.94164	9.05952	7.37776	3.82864	9.30565	
	6.39693	4.18965	5.39363	7.49554	5.07517	4.94164	4.70048	4.52179	5.8861	4.55388	4.94164	6.68461	4.94164				7.93737	
	5.76832	4.60517		5.34711	5.73657	4.86753	4.55388	4.70048	7.09008	6.36303	5.24702	5.59842	4.86753	6.82437	5.76832	3.3673	8.49699	
	5.76832	4.02535	4.78749	6.01616	6.13123	5.1358	4.94164	5.34711	4.12713	4.44265	5.1358	6.84588	5.01064	7.37776	6.75693	3.58352	7.6009	
	5.76832	3.68888	5.29832	5.70378	5.73657	4.94164	4.94164	4.86753	2.48491	4.60517	5.76832	6.80239	4.70048	7.90101	7.43838	3.3673	8.49699	
	6.17379	4.00733	5.07517	8.88184	6.41346	5.19296	5.07517	4.94164	2.48491	4.35671	5.01064	6.90776	4.94164	7.6009	6.90776	3.43399	8.21609	
	6.64639	3.61092	5.07517	7.43838	6.76849	5.52146	5.07517	4.94164	3.29584	4.70048	5.66988	6.69703	5.01064	8.6125	8.38936	3.29584	7.90101	
	6.47697	5.52146	5.52146	5.52146	7.00307	5.52146	5.52146	5.52146	5.52146	6.7093	5.52146	6.62007	5.52146	5.52146	7.43838	5.52146	7.90101	
	6.01616	3.09104	5.19296	6.15273	7.00307	0.91629	0.91629	0.91629	5.07517			0.91629	0.91629	7.49554	7.24423	0.91629	6.47697	
	5.66988	3.91202	5.29832	5.48064	7.17012	7.31322	4.86753	5.19296	3.91202	5.48064	5.52146	3.91202	5.07517	5.07517	4.78749	3.91202	6.39693	

n_i =	15	14	9	14	14	13	13	13	13	12	12	13	13	14	13	14	10	
Xi. =	91.8487	60.1261	48.2626	83.7695	79.1027	64.9511	56.7865	63.5877	63.241	60.0488	64.1834	77.7883	56.4114	95.2479	89.2686	53.5433	78.7299	1186.9 = X..
Xi.bar =	6.12325	4.29472	5.36251	5.98353	5.65019	4.99624	4.36819	4.89137	4.86469	5.00407	5.34862	5.98372	4.33934	6.80342	6.86681	3.82452	7.87299	5.42 = X..bar
std dev =	0.53528	0.9501	0.51726	1.8798	1.59283	1.38393	1.18654	1.26929	1.53477	0.79675	0.31501	1.78105	1.53248	1.96866	1.04095	1.3652	0.89171	
$ni*(Xi.bar-X..bar)^2$ =	7.42635	17.7157	0.02936	4.45191	0.74425	2.33034	14.3715	3.62774	4.00334	2.07223	0.0605	4.13661	15.1711	26.8085	27.2267	35.621	60.1901	
$(Xi.^2/n_i)$ =	562.413	258.225	258.809	501.237	446.945	324.511	248.055	311.031	307.648	300.488	343.293	465.463	244.789	648.011	612.991	204.777	619.84	

	SS	df	MS	F	Fc
SSw	225.987	16	14.1242	8	1.67
SS_error	353.377	202	1.74939		
SSt	579.365	218			

The calculated F statistic is 8.07. The tabulated Fc value with 16 and 202 degrees of freedom and the a=0.05 level is 1.67 (Table 2 of IFG). Since the calculated value of F exceeds the tabulated value of Fc, the hypothesis of equal means must be rejected, and post hoc comparisons are necessary (see below).

Bonferroni t-statistics

	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15
$Xbar_i$ = avg per well =	5.98353	5.65019	4.99624	4.36819	4.89137	4.86469	5.00407	5.34862	5.98372	4.33934	6.80342	6.86681	3.82452	7.87299
$D_w = Xbar_i - Xbar_{up}$ =	0.71413	0.38078	-0.2732	-0.9012	-0.378	-0.4047	-0.2653	0.07921	0.71431	-0.9301	1.53401	1.59741	-1.4449	2.60359
$= [MS\text{-}error*(1/n_{up} + 1/n_i)]^{0.5}$ =	0.54693	0.54693	0.56209	0.56209	0.56209	0.56209	0.57928	0.57928	0.56209	0.56209	0.54693	0.56209	0.54693	0.62175
$D_i = SE_i * t_c$ =	1.27435	1.27435	1.30968	1.30968	1.30968	1.30968	1.34973	1.34973	1.30968	1.30968	1.27435	1.30968	1.27435	1.44868
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	Yes	Yes	-	Yes

38 = n_{up}
5.2694057 = $Xbar_{up}$(average background: MW-11S, MW-11D, & MW-14)
1.7493927 = MS_error
202 = degrees of freedom
14 = m (number of compliance wells)
2.33 = t_c (from Table 3 of IFG)

The F test was significant at the 5% level. The Bonferroni multiple comparisons procedure was then used to determine for which wells there was statistically significant evidence of contamination.
If the calculated D_w value exceeds the corresponding D_i value, it can be concluded that there is significant evidence of contamination.
Significant evidence of contamination is present in the 3 monitoring wells indicated above.
Perform a Shewart-CUSUM Control Chart evaluation to determine if intrawell statistical significance is present.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Barium**
AL MCL (µg/l): 2000
Method: Levene's Test for Homogeneity
Background: MW-12

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
4/24/2000	**250**	NS	NS	**240**	**420**	**200**	**63**	**300**	**93**	**81**	**170**	**230**	ND	NS	NS	NS	NS	**5**
6/26/2000	**300**	**67**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**5**
7/26/2000	**330**	**30**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**5**
9/18/2000	NS	NS	NS	**330**	**92**	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**500**
4/9/2001	**1300**	**380**	NS	**180**	**330**	**120**	**80**	**290**	**360**	**80**	**140**	**970**	**130**	NS	NS	NS	NS	**5**
9/18/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1800**	**4700**	**90**	NS	**5**
10/29/2001	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**3000**	**450**	**27**	NS	**5**
1/30/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**980**	**360**	**41**	NS	**5**
2/28/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**3**	NS	**1300**	NS	**500**
4/15/2002	**1300**	**41**	NS	ND	ND	**160**	**23**	**190**	**460**	**180**	**250**	**1400**	**110**	**540**	**820**	**38**	NS	**5**
9/26/2002	**330**	**500**	**750**	**4200**	**120**	**230**	**93**	**410**	**910**	**130**	**320**	**1400**	**140**	**8600**	**1600**	**46**	**11000**	**5**
4/28/2003	**600**	**66**	**220**	**1800**	**160**	**140**	**110**	**92**	**360**	**95**	**140**	**800**	**140**	NT	NT	NT	**2800**	**5**
10/30/2003	**320**	**100**	NT	**210**	**310**	**130**	**95**	**110**	**1200**	**580**	**190**	**270**	**130**	**920**	**320**	**29**	**4900**	**5**
4/20/2004	**320**	**56**	**120**	**410**	**460**	**170**	**140**	**210**	**62**	**85**	**170**	**940**	**150**	**1600**	**860**	**36**	**2000**	**5**
10/21/2004	**320**	**40**	**200**	**300**	**310**	**140**	**140**	**130**	**12**	**100**	**320**	**900**	**110**	**2700**	**1700**	**29**	**4900**	**5**
4/18/2005	**480**	**55**	**160**	**7200**	**610**	**180**	**160**	**140**	**12**	**78**	**150**	**1000**	**140**	**2000**	**1000**	**31**	**3700**	**5**
10/13/2005	**770**	**37**	**160**	**1700**	**870**	**250**	**160**	**140**	**27**	**110**	**290**	**810**	**150**	**5500**	**4400**	**27**	**2700**	**5**
4/25/2006	**650**	ND	ND	ND	**1100**	ND	ND	ND	ND	**820**	ND	**750**	ND	ND	**1700**	ND	**2700**	**500**
10/20/2006	**410**	**22**	**180**	**470**	**1100**	ND	ND	ND	**160**	NS	NS	ND	ND	**1800**	**1400**	ND	**650**	**5**
4/25/2007	**290**	ND	**200**	**240**	**1300**	**1500**	**130**	**180**	ND	**240**	**250**	ND	**160**	**160**	**120**	ND	**600**	**100**

If not detected (ND), use half of the detection limit.

	250			240	420	200	63	300	93	81	170	230	2.5					
	300	67																
	330	30																
				330	92													
	1300	380		180	330	120	80	290	360	80	140	970	130					
														1800	4700	90		
														3000	450	27		
														980	360	41		
														3		1300		
	1300	41		2.5	2.5	160	23	190	460	180	250	1400	110	540	820	38		
	330	500	750	4200	120	230	93	410	910	130	320	1400	140	8600	1600	46	11000	
	600	66	220	1800	160	140	110	92	360	95	140	800	140				2800	
	320	100		210	310	130	95	110	1200	580	190	270	130	920	320	29	4900	
	320	56	120	410	460	170	140	210	62	85	170	940	150	1600	860	36	2000	
	320	40	200	300	310	140	140	130	12	100	320	900	110	2700	1700	29	4900	
	480	55	160	7200	610	180	160	140	12	78	150	1000	140	2000	1000	31	3700	
	770	37	160	1700	870	250	160	140	27	110	290	810	150	5500	4400	27	2700	
	650	250	250	250	1100	250	250	250	250	820	250	750	250	250	1700	250	2700	
	410	22	180	470	1100	2.5	2.5	2.5	160			2.5	2.5	1800	1400	2.5	650	
	290	50	200	240	1300	1500	130	180	50	240	250	50	160	160	120	50	600	
n =	15	14	9	14	14	13	13	13	13	12	12	13	13	14	13	14	10	
bar x_i =	531.33	121	248.89	1252.3	513.18	267.12	111.27	188.04	304.31	214.92	220	732.5	124.23	2132.4	1494.6	142.61	3595	
z_{ij} =	281.33			1012.3	93.179	67.115	48.269	111.96	211.31	133.92	50	502.5	121.73					
	231.33	54																
	201.33	91																
				922.32	421.18													
	768.67	259		1072.3	183.18	147.12	31.269	101.96	55.692	134.92	80	237.5	5.7692					
														332.36	3205.4	52.607		
														867.64	1044.6	115.61		
														1152.4	1134.6	101.61		
														2129.4		1157.4		
	768.67	80		1249.8	510.68	107.12	88.269	1.9615	155.69	34.917	30	667.5	14.231	1592.4	674.62	104.61		
	201.33	379	501.11	2947.7	393.18	37.115	18.269	221.96	605.69	84.917	100	667.5	15.769	6467.6	105.38	96.607	7405	
	68.667	55	28.889	547.68	353.18	127.12	1.2692	96.038	55.692	119.92	80	67.5	15.769				795	
	211.33	21		1042.3	203.18	137.12	16.269	78.038	895.69	365.08	30	462.5	5.7692	1212.4	1174.6	113.61	1305	
	211.33	65	128.89	842.32	53.179	97.115	28.731	21.962	242.31	129.92	50	207.5	25.769	532.36	634.62	106.61	1595	
	211.33	81	48.889	952.32	203.18	127.12	28.731	58.038	292.31	114.92	100	167.5	14.231	567.64	205.38	113.61	1305	
	51.333	66	88.889	5947.7	96.821	87.115	48.731	48.038	292.31	136.92	70	267.5	15.769	132.36	494.62	111.61	105	
	238.67	84	88.889	447.68	356.82	17.115	48.731	48.038	277.31	104.92	70	77.5	25.769	3367.6	2905.4	115.61	895	
	118.67	129	1.1111	1002.3	586.82	17.115	138.73	61.962	54.308	605.08	30	17.5	125.77	1882.4	205.38	107.39	895	
	121.33	99	68.889	782.32	586.82	264.62	108.77	185.54	144.31			730	121.73	332.36	94.615	140.11	2945	
	241.33	71	48.889	1012.3	786.82	1232.9	18.731	8.0385	254.31	25.083	30	682.5	35.769	1972.4	1374.6	92.607	2995	
bar z_i =	261.78	109.57	111.6	1413	344.87	189.67	48.059	80.272	272.07	165.88	60	365.77	41.834	1610.1	1019.5	180.68	2024	
$n_i * \text{bar } z_i^2$ =	1E+06	168083	112101	3E+07	2E+06	467694	30026	83767	962294	330174	43200	2E+06	22751	4E+07	1E+07	457052	4E+07	

bar z = 488.15
N = 219

	SS	df	MS	F_{Ratio}	$F_{critical}$
Between Wells	7E+07	16	5E+06	4.05	1.67

Error	2E+08	202	1E+06
Total	3E+08	218	

Since the F-ratio = 4.05 exceeds the tabulated value of F-critical = 1.67 (see Table 2 of IFG) with 16 and 202 df,
the assumption of equal variances should be rejected.
Re-test the data set using the natural log of the above values.

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15
ln=	5.5215			5.4806	6.0403	5.2983	4.1431	5.7038	4.5326	4.3944	5.1358	5.4381	0.9163				
	5.7038	4.2047															
	5.7991	3.4012															
				5.7991	4.5218												
	7.1701	5.9402		5.193	5.7991	4.7875	4.382	5.6699	5.8861	4.382	4.9416	6.8773	4.8675				
														7.4955	8.4553	4.4998	
														8.0064	6.1092	3.2958	
														6.8876	5.8861	3.7136	
														1.0986		7.1701	
	7.1701	3.7136		0.9163	0.9163	5.0752	3.1355	5.247	6.1312	5.193	5.5215	7.2442	4.7005	6.2916	6.7093	3.6376	
	5.7991	6.2146	6.6201	8.3428	4.7875	5.4381	4.5326	6.0162	6.8134	4.8675	5.7683	7.2442	4.9416	9.0595	7.3778	3.8286	9.3057
	6.3969	4.1897	5.3936	7.4955	5.0752	4.9416	4.7005	4.5218	5.8861	4.5539	4.9416	6.6846	4.9416				7.9374
	5.7683	4.6052		5.3471	5.7366	4.8675	4.5539	4.7005	7.0901	6.363	5.247	5.5984	4.8675	6.8244	5.7683	3.3673	8.497
	5.7683	4.0254	4.7875	6.0162	6.1312	5.1358	4.9416	5.3471	4.1271	4.4427	5.1358	6.8459	5.0106	7.3778	6.7569	3.5835	7.6009
	5.7683	3.6889	5.2983	5.7038	5.7366	4.9416	4.9416	4.8675	2.4849	4.6052	5.7683	6.8024	4.7005	7.901	7.4384	3.3673	8.497
	6.1738	4.0073	5.0752	8.8818	6.4135	5.193	5.0752	4.9416	2.4849	4.3567	5.0106	6.9078	4.9416	7.6009	6.9078	3.434	8.2161
	6.6464	3.6109	5.0752	7.4384	6.7685	5.5215	5.0752	4.9416	3.2958	4.7005	5.6699	6.697	5.0106	8.6125	8.3894	3.2958	7.901
	6.477	5.5215	5.5215	5.5215	7.0031	5.5215	5.5215	5.5215	5.5215	6.7093	5.5215	6.6201	5.5215	5.5215	7.4384	5.5215	7.901
	6.0162	3.091	5.193	6.1527	7.0031	0.9163	0.9163	0.9163	5.0752			0.9163	0.9163	7.4955	7.2442	0.9163	6.477
	5.6699	3.912	5.2983	5.4806	7.1701	7.3132	4.8675	5.193	3.912	5.4806	5.5215	3.912	5.0752	5.0752	4.7875	3.912	6.3969
n =	15	14	9	14	14	13	13	13	13	12	12	13	13	14	13	14	10
bar x_i =	6.1232	4.2947	5.3625	5.9835	5.6502	4.9962	4.3682	4.8914	4.8647	5.0041	5.3486	5.9837	4.3393	6.8034	6.8668	3.8245	7.873
z_{ii} =	0.6018			0.5029	0.3901	0.3021	0.2251	0.8124	0.3321	0.6096	0.2128	0.5456	3.4231				
	0.4195	0.09															
	0.3242	0.8935															
				0.1844	1.1284												
	1.0469	1.6455		0.7906	0.1489	0.2087	0.0138	0.7785	1.0214	0.622	0.407	0.8936	0.5282				
														0.6921	1.5885	0.6753	
														1.2029	0.7576	0.5287	
														0.0841	0.9807	0.1109	
														5.7048		3.3456	
	1.0469	0.5811		5.0672	4.7339	0.0789	1.2327	0.3557	1.2665	0.1889	0.1728	1.2605	0.3611	0.5119	0.1575	0.1869	
	0.3242	1.9199	1.2576	2.3593	0.8627	0.4418	0.1644	1.1248	1.9488	0.1365	0.4197	1.2605	0.6023	2.2561	0.5109	0.0041	1.4327
	0.2737	0.1051	0.0311	1.512	0.575	0.0546	0.3323	0.3696	1.0214	0.4502	0.407	0.7009	0.6023				0.0644
	0.3549	0.3105		0.6364	0.0864	0.1287	0.1857	0.1909	2.2254	1.359	0.1016	0.3853	0.5282	0.021	1.0985	0.4572	0.624
	0.3549	0.2694	0.575	0.0326	0.481	0.1396	0.5734	0.4557	0.7376	0.5614	0.2128	0.8622	0.6713	0.5743	0.1099	0.241	0.2721
	0.3549	0.6058	0.0642	0.2798	0.0864	0.0546	0.5734	0.0238	2.3798	0.3989	0.4197	0.8187	0.3611	1.0976	0.5716	0.4572	0.624
	0.0505	0.2874	0.2873	2.8983	0.7633	0.1967	0.707	0.0503	2.3798	0.6474	0.338	0.924	0.6023	0.7975	0.0409	0.3905	0.3431
	0.5231	0.6838	0.2873	1.4549	1.1183	0.5252	0.707	0.0503	1.5689	0.3036	0.3213	0.7133	0.6713	1.8091	1.5225	0.5287	0.028
	0.3537	1.2267	0.159	0.4621	1.3529	0.5252	1.1533	0.6301	0.6568	1.7052	0.1728	0.6364	1.1821	1.282	0.5716	1.6969	0.028
	0.1071	1.2037	0.1696	0.1692	1.3529	4.0799	3.4519	3.9751	0.2105			5.0674	3.4231	0.6921	0.3774	2.9082	1.396
	0.4534	0.3827	0.0642	0.5029	1.5199	2.317	0.4993	0.3016	0.9527	0.4766	0.1728	2.0717	0.7358	1.7282	2.0793	0.0875	1.4761
bar z_i =	0.4393	0.7289	0.3217	1.2038	1.0429	0.6964	0.7553	0.7014	1.2847	0.6216	0.2799	1.2415	1.0532	1.3181	0.7975	0.8299	0.6288
n_i * bar z_i^2 =	2.8949	7.4388	0.9314	20.286	15.226	6.3046	7.4169	6.3963	21.457	4.6368	0.9399	20.039	14.421	24.324	8.2672	9.6428	3.9543
bar z =	0.8203																
N =	219																

	SS	df	MS	F_{Ratio}	$F_{critical}$
Between Wells	27.21	16	1.70	1.21	1.67
Error	283.95	202	1.41		
Total	311.17	218			

Since the F-ratio = 1.21 does not exceed the tabulated value of F-critical = 1.67 (see Table 2 of IFG) with 16 and 202 df,
the assumption of equal means should be accepted.
Proceed with further statistical tests using the log-transformed values shown above.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Barium**
NC MCL (µg/l): 2000
Method: Skewness Test for Normality
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
4/24/00	250	NS	NS	240	420	200	63	300	93	81	170	230	ND	NS	NS	NS	NS	5
6/26/00	300	67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
7/26/00	330	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
9/18/00	NS	NS	NS	330	92	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	500
4/9/01	1300	380	NS	180	330	120	80	290	360	80	140	970	130	NS	NS	NS	NS	5
9/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1800	4700	90	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3000	450	27	NS	5
1/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	980	360	41	NS	5
2/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3	NS	1300	NS	500
4/15/02	1300	41	NS	ND	ND	160	23	190	460	180	250	1400	110	540	820	38	NS	5
9/26/02	330	500	750	4200	120	230	93	410	910	130	320	1400	140	8600	1600	46	11000	5
4/28/03	600	66	220	1800	160	140	110	92	360	95	140	800	140	NT	NT	NT	2800	5
10/30/03	320	100	NT	210	310	130	95	110	1200	580	190	270	130	920	320	29	4900	5
4/20/04	320	56	120	410	460	170	140	210	62	85	170	940	150	1600	860	36	2000	5
10/21/04	320	40	200	300	310	140	140	130	12	100	320	900	110	2700	1700	29	4900	5
4/18/05	480	55	160	7200	610	180	160	140	12	78	150	1000	140	2000	1000	31	3700	5
10/13/05	770	37	160	1700	870	250	160	140	27	110	290	810	150	5500	4400	27	2700	5
4/25/06	650	ND	ND	ND	1100	ND	ND	ND	ND	820	ND	750	ND	ND	1700	ND	2700	500
10/20/06	410	22	180	470	1100	ND	ND	ND	160	NS	NS	ND	ND	1800	1400	ND	650	5
4/25/07	290	ND	200	240	1300	1500	130	180	ND	240	250	ND	160	160	120	ND	600	100

If not detected (ND), use half of the detection limit.

	250			240	420	200	63	300	93	81	170	230	2.5				
	300	67															
	330	30															
				330	92												
	1300	380		180	330	120	80	290	360	80	140	970	130				
														1800	4700	90	
														3000	450	27	
														980	360	41	
														3		1300	
	1300	41		2.5	2.5	160	23	190	460	180	250	1400	110	540	820	38	
	330	500	750	4200	120	230	93	410	910	130	320	1400	140	8600	1600	46	11000
	600	66	220	1800	160	140	110	92	360	95	140	800	140				2800
	320	100		210	310	130	95	110	1200	580	190	270	130	920	320	29	4900
	320	56	120	410	460	170	140	210	62	85	170	940	150	1600	860	36	2000
	320	40	200	300	310	140	140	130	12	100	320	900	110	2700	1700	29	4900
	480	55	160	7200	610	180	160	140	12	78	150	1000	140	2000	1000	31	3700
	770	37	160	1700	870	250	160	140	27	110	290	810	150	5500	4400	27	2700
	650	250	250	250	1100	250	250	250	250	820	250	750	250	250	1700	250	2700
	410	22	180	470	1100	2.5	2.5	2.5	160			2.5	2.5	1800	1400	2.5	650
	290	50	200	240	1300	1500	130	180	50	240	250	50	160	160	120	50	600

X_i values =	-9E+07			-9E+07	-2E+07	-1E+08	-2E+08	-6E+07	-2E+08	-2E+08	-1E+08	-1E+08	-3E+08				
	-6E+07	-2E+08															
	-5E+07	-3E+08															
				-5E+07	-2E+08												
	2E+08	-3E+07		-1E+08	-5E+07	-2E+08	-2E+08	-6E+07	-4E+07	-2E+08	-2E+08	2E+07	-2E+08				
														1E+09	6E+10	-2E+08	
														1E+10	-1E+07	-3E+08	
														2E+07	-4E+07	-3E+08	
														-3E+08		2E+08	
	2E+08	-3E+08		-3E+08	-3E+08	-2E+08	-3E+08	-1E+08	-1E+07	-1E+08	-9E+07	4E+08	-2E+08	-4E+06	2E+06	-3E+08	
	-5E+07	-7E+06	196104	4E+10	-2E+08	-1E+08	-2E+08	-2E+07	1E+07	-2E+08	-5E+07	4E+08	-2E+08	5E+11	7E+08	-3E+08	1E+12
	-8E+05	-2E+08	-1E+08	1E+09	-2E+08	-2E+08	-2E+08	-2E+08	-4E+07	-2E+08	-2E+08	1E+06	-2E+08				9E+09
	-5E+07	-2E+08		-1E+08	-6E+07	-2E+08	-2E+08	-2E+08	1E+08	-1E+06	-1E+08	-8E+07	-2E+08	1E+07	-5E+07	-3E+08	7E+10
	-5E+07	-3E+08	-2E+08	-2E+07	-1E+07	-1E+08	-2E+08	-1E+08	-2E+08	-2E+08	-1E+08	2E+07	-2E+08	7E+08	5E+06	-3E+08	2E+09
	-5E+07	-3E+08	-1E+08	-6E+07	-6E+07	-2E+08	-2E+08	-2E+08	-3E+08	-2E+08	-5E+07	9E+06	-2E+08	8E+09	1E+09	-3E+08	7E+10
	-1E+07	-3E+08	-2E+08	3E+11	-5E+05	-1E+08	-2E+08	-2E+08	-3E+08	-2E+08	-2E+08	3E+07	-2E+08	2E+09	3E+07	-3E+08	3E+10
	476346	-3E+08	-2E+08	1E+09	6E+06	-9E+07	-2E+08	-2E+08	-3E+08	-2E+08	-6E+07	2E+06	-2E+08	1E+11	5E+10	-3E+08	8E+09
	-73570	-9E+07	-9E+07	-9E+07	7E+07	-9E+07	-9E+07	-9E+07	-9E+07	2E+06	-9E+07	196104	-9E+07	-9E+07	1E+09	-9E+07	8E+09
	-2E+07	-3E+08	-1E+08	-1E+07	7E+07	-3E+08	-3E+08	-3E+08	-2E+08			-3E+08	-3E+08	1E+09	4E+08	-3E+08	-73570
	-6E+07	-3E+08	-1E+08	-9E+07	2E+08	5E+08	-2E+08	-1E+08	-3E+08	-9E+07	-9E+07	-3E+08	-2E+08	-2E+08	-2E+08	-3E+08	-8E+05

X_{bar} = 691.9
SD = 1362.6
N = 219
$1/N\Sigma_i(X_i-X_{bar})^3$ = 1E+10
γ_1 = 4.2669

Since the Coefficient of Skewness of 4.27 is greater than 1.0, the data appear to be significantly skewed.
Do not assume that the data follow a Normal distribution.
Perform the Skewness Test on the natural log of the values.

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15
ln =	5.5215			5.4806	6.0403	5.2983	4.1431	5.7038	4.5326	4.3944	5.1358	5.4381	0.9163				
	5.7038	4.2047															
	5.7991	3.4012															
				5.7991	4.5218												
	7.1701	5.9402		5.193	5.7991	4.7875	4.382	5.6699	5.8861	4.382	4.9416	6.8773	4.8675				
														7.4955	8.4553	4.4998	
														8.0064	6.1092	3.2958	
														6.8876	5.8861	3.7136	
														1.0986		7.1701	
	7.1701	3.7136		0.9163	0.9163	5.0752	3.1355	5.247	6.1312	5.193	5.5215	7.2442	4.7005	6.2916	6.7093	3.6376	
	5.7991	6.2146	6.6201	8.3428	4.7875	5.4381	4.5326	6.0162	6.8134	4.8675	5.7683	7.2442	4.9416	9.0595	7.3778	3.8286	9.3057
	6.3969	4.1897	5.3936	7.4955	5.0752	4.9416	4.7005	4.5218	5.8861	4.5539	4.9416	6.6846	4.9416				7.9374
	5.7683	4.6052		5.3471	5.7366	4.8675	4.5539	4.7005	7.0901	6.363	5.247	5.5984	4.8675	6.8244	5.7683	3.3673	8.497
	5.7683	4.0254	4.7875	6.0162	6.1312	5.1358	4.9416	5.3471	4.1271	4.4427	5.1358	6.8459	5.0106	7.3778	6.7569	3.5835	7.6009
	5.7683	3.6889	5.2983	5.7038	5.7366	4.9416	4.9416	4.8675	2.4849	4.6052	5.7683	6.8024	4.7005	7.901	7.4384	3.3673	8.497
	6.1738	4.0073	5.0752	8.8818	6.4135	5.193	5.0752	4.9416	2.4849	4.3567	5.0106	6.9078	4.9416	7.6009	6.9078	3.434	8.2161
	6.6464	3.6109	5.0752	7.4384	6.7685	5.5215	5.0752	4.9416	3.2958	4.7005	5.6699	6.697	5.0106	8.6125	8.3894	3.2958	7.901
	6.477	5.5215	5.5215	5.5215	7.0031	5.5215	5.5215	5.5215	5.5215	6.7093	5.5215	6.6201	5.5215	5.5215	7.4384	5.5215	7.901
	6.0162	3.091	5.193	6.1527	7.0031	0.9163	0.9163	0.9163	5.0752			0.9163	0.9163	7.4955	7.2442	0.9163	6.477
	5.6699	3.912	5.2983	5.4806	7.1701	7.3132	4.8675	5.193	3.912	5.4806	5.5215	3.912	5.0752	5.0752	4.7875	3.912	6.3969

X_i values =	0.0011			0.0002	0.2391	-0.002	-2.08	0.0229	-0.698	-1.077	-0.023	6E-06	-91.33				
	0.0229	-1.793															
	0.0546	-8.223															
				0.0546	-0.724												
	5.3639	0.1411		-0.012	0.0546	-0.253	-1.117	0.0157	0.1015	-1.117	-0.109	3.0973	-0.168				
														8.946	27.975	-0.778	
														17.309	0.328	-9.579	
														3.1631	0.1015	-4.966	
														-80.68		5.3639	
	5.3639	-4.966		-91.33	-91.33	-0.041	-11.92	-0.005	0.3603	-0.012	0.0011	6.0744	-0.372	0.6629	2.1451	-5.659	
	0.0546	0.5024	1.7299	24.979	-0.253	6E-06	-0.698	0.2123	2.7078	-0.168	0.0424	6.0744	-0.109	48.224	7.5081	-4.027	58.684
	0.9335	-1.861	-2E-05	8.946	-0.041	-0.109	-0.372	-0.724	0.1015	-0.649	-0.109	2.0242	-0.109				15.96
	0.0424	-0.54		-4E-04	0.0318	-0.168	-0.649	-0.372	4.6613	0.8396	-0.005	0.0057	-0.168	2.772	0.0424	-8.645	29.143
	0.0424	-2.71	-0.253	0.2123	0.3603	-0.023	-0.109	-4E-04	-2.159	-0.932	-0.023	2.9013	-0.068	7.5081	2.3916	-6.19	10.378
	0.0424	-5.184	-0.002	0.0229	0.0318	-0.109	-0.109	-0.168	-25.28	-0.54	0.0424	2.6439	-0.372	15.279	8.2272	-8.645	29.143
	0.4289	-2.817	-0.041	41.501	0.9816	-0.012	-0.041	-0.109	-25.28	-1.201	-0.068	3.2955	-0.109	10.378	3.2955	-7.829	21.869
	1.8462	-5.917	-0.041	8.2272	2.4542	0.0011	-0.041	-0.109	-9.579	-0.372	0.0157	2.0845	-0.068	32.55	26.191	-9.579	15.279
	1.1821	0.0011	0.0011	0.0011	3.9701	0.0011	0.0011	0.0011	0.0011	2.1451	0.0011	1.7299	0.0011	0.0011	8.2272	0.0011	15.279
	0.2123	-12.63	-0.012	0.394	3.9701	-91.33	-91.33	-91.33	-0.041			-91.33	-91.33	8.946	6.0744	-91.33	1.1821
	0.0157	-3.427	-0.002	0.0002	5.3639	6.7899	-0.168	-0.012	-3.427	0.0002	0.0011	-3.427	-0.041	-0.041	-0.253	-3.427	0.9335

X_{bar} = 5.4196
SD = 1.6302
N = 219
$1/N\Sigma_i(X_i-X_{bar})^3$ = -2.291
γ_1 = 0.5325

Since the Coefficient of Skewness of 0.53 is less than 1.0, the data appear not to be significantly skewed.
Proceed with further statistical tests using the log-transformed values shown above.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Beryllium**
NC MCL (µg/l): Not Established
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**4.4**	NS	NS	ND	**2**	ND	**2.2**	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**2**
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**2**
04/09/01	**2.3**	**7**	NS	ND	ND	ND	ND	ND	**2.4**	ND	ND	**4.8**	ND	NS	NS	NS	NS	**2**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**4**	**5.3**	ND	NS	**2**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**4.2**	ND	ND	NS	**2**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2.5**	ND	ND	NS	**2**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**2**
04/15/02	**2.1**	ND	NS	ND	ND	ND	ND	ND	**2.5**	ND	ND	**5**	ND	**2.1**	**2.2**	ND	NS	**2**
09/26/02	ND	**7**	**2.1**	**5.1**	ND	ND	ND	ND	**8.5**	ND	ND	**4.7**	ND	**13**	**3.6**	ND	**95**	**2**
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	**2**	ND	ND	**2.2**	ND	NT	NT	NT	**20**	**2**
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	**2.4**	ND	ND	ND	ND	ND	ND	ND	**33**	**1**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**21**	**1**
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.4**	ND	**1.4**	**1.2**	ND	**28**	**1**
04/18/05	ND	ND	ND	**7.2**	ND	ND	ND	ND	ND	ND	ND	**3.8**	ND	**3**	**1.5**	ND	**26**	**1**
10/13/05	ND	ND	ND	**3**	ND	ND	ND	ND	ND	ND	ND	**3.4**	ND	**11**	**9.5**	ND	**21**	**1**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	**2.1**	ND	ND	ND	ND	ND	ND	ND	**17**	**2**
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	**2.9**	**2.4**	ND	**5.7**	**1**
04/25/07	ND	ND	ND	ND	ND	**14**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**4.9**	**1**
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	13	13	13	10	
sum of rank values (R_i)	1532.5	1391.0	832.5	1409.5	1159.5	1197.0	1166.0	1072.5	1665.0	990.0	990.0	1795.5	1072.5	2013.0	1774.0	1072.5	2087.0	
avg rank value (Rbar)	102.2	99.4	92.5	108.4	89.2	92.1	89.7	82.5	128.1	82.5	82.5	138.1	82.5	154.8	136.5	82.5	208.7	
								Number of each rank value										Rank Value
rank value of NDs =	12	12	8	10	12	12	12	13	7	12	12	6	13	4	6	13	0	82.5
rank value of 1.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	165
rank value of 1.4s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	166.5
rank value of 1.5s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	168
rank value of 2s =	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	169.5
rank value of 2.1s =	1	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	172.5
rank value of 2.2s =	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	176
rank value of 2.3s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178
rank value of 2.4s =	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	180
rank value of 2.5s =	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	182.5
rank value of 2.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	184
rank value of 3s =	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	185.5
rank value of 3.4s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	187
rank value of 3.6s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	188
rank value of 3.8s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	189
rank value of 4s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	190
rank value of 4.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	191
rank value of 4.4s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192
rank value of 4.5s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	193
rank value of 4.7s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	194
rank value of 4.8s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	195
rank value of 4.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	196
rank value of 5.1s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	197
rank value of 5.3s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	198
rank value of 5.7s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	199
rank value of 7s =	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200.5
rank value of 7.2s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	202
rank value of 8.5s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	203
rank value of 9.5s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	204
rank value of 11s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	205
rank value of 13s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	206
rank value of 14s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	207
rank value of 17s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	208
rank value of 20s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	209
rank value of 21s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	210.5
rank value of 26s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 28s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	213
rank value of 33s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	214

rank value of 95s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	215

n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**13**	**13**	**13**	**10**	

Sum of rank value calculations

990	990	660	825	990	990	990	1072.5	577.5	990	990	495	1072.5	330	495	1072.5	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	165	0	0	
0	0	0	0	0	0	0	0	0	0	0	166.5	0	166.5	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	168	0	0	
0	0	0	0	169.5	0	0	0	169.5	0	0	0	0	0	0	0	0	
172.5	0	172.5	0	0	0	0	0	172.5	0	0	0	0	172.5	0	0	0	
0	0	0	0	0	0	176	0	0	0	0	176	0	0	176	0	0	
178	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	360	0	0	0	0	0	180	0	0	
0	0	0	0	0	0	0	0	182.5	0	0	0	0	182.5	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	184	0	0	0	
0	0	0	185.5	0	0	0	0	0	0	0	0	0	185.5	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	187	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	188	0	0	
0	0	0	0	0	0	0	0	0	0	0	189	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	0	0	
192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	193	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	194	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	195	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196	
0	0	0	197	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	198	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199	
0	401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	202	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	203	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	204	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	205	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	206	0	0	0	
0	0	0	0	0	207	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	214	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215	

sum of rank values (R_i)	**1532.5**	**1391**	**832.5**	**1409.5**	**1159.5**	**1197**	**1166**	**1072.5**	**1665**	**990**	**990**	**1795.5**	**1072.5**	**2013**	**1774**	**1072.5**	**2087**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	371250.9	152822	103418	110216	104581	88481	213248	81675	81675	247986	88481	311705	242083	88481	435557

$N_{i\,br}$ = 38
N = 215
H = 55.27

Adjust H for ties:

T_i = 4E+06 sum of T1..T8

$H' = H/(1-(T_i/(N^3-N)))$

H' = 99.38

Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =99.38.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$

P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG

N = total sample size

$N_{i\,bg}$ = total samples (N_i) of background data

N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	**MW-12**	MW-13S	MW-13D	**MW-15**
Rbar (well x) =	108.4	89.2	92.1	89.7	82.5	128.1	82.5	82.5	138.1	82.5	154.8	136.5	82.5	208.7
avg Rbar (background) =	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
Dx =	9.6	-9.6	-6.8	-9.1	-16.3	29.2	-16.3	-16.3	39.3	-16.3	56.0	37.6	-16.3	109.9
Cx =	46.6	46.6	46.6	46.6	46.6	46.6	48.0	48.0	46.6	46.6	46.6	46.6	46.6	51.5
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Beryllium averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Cadmium**
NC MCL (µg/l): 1.75
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**2**	NS	NS	ND	**1.3**	**1.2**	**1.3**	**2.1**	ND	ND	ND	**5.4**	ND	NS	NS	NS	NS	**1**
06/26/00	**1.6**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1**
07/26/00	**1.1**	**3.2**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**1**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**1**
04/09/01	**130**	**2**	NS	ND	ND	ND	**1.7**	**1.8**	**2.7**	ND	ND	**19**	ND	NS	NS	NS	NS	**1**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**10**	**8.9**	ND	NS	**1**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**16**	ND	ND	NS	**1**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**3.9**	ND	ND	NS	**1**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**4300**	NS	**2.5**	NS	**1**
04/15/02	**13**	ND	NS	ND	ND	ND	**4**	ND	**5.5**	**1.2**	ND	**19**	ND	**2.3**	**2.2**	ND	NS	**10**
09/26/02	ND	ND	**4.2**	**21**	ND	**10**	ND	**2.3**	**4.2**	ND	ND	**19**	ND	**27**	**5.4**	ND	**180**	**1**
04/28/03	**3.6**	ND	ND	**6**	ND	ND	ND	ND	**2.9**	ND	ND	**16**	ND	NT	NT	NT	**20**	**1**
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**8.8**	ND	**3.7**	**1.2**	ND	**8.9**	**1**
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1.6**	ND	**1**
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
10/13/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
10/20/06	**3.8**	ND	ND	ND	ND	ND	ND	ND	**1.5**	NS	NS	ND	ND	**4.6**	**4.7**	ND	**5.2**	**1**
04/25/07	ND	ND	ND	ND	ND	**2.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**1**
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	14	13	14	10	
sum of rank values (R_i)	1971.0	1352.5	852.5	1320.5	1159.5	1376.0	1359.5	1359.5	1591.5	1074.5	990.0	1813.5	1072.5	2091.5	1601.5	1345.5	1321.5	
avg rank value (Rbar)	131.4	96.6	94.7	101.6	89.2	105.8	104.6	104.6	122.4	89.5	82.5	139.5	82.5	149.4	123.2	96.1	132.2	

	Number of each rank value																	Rank Value
rank value of NDs =	8	12	8	11	12	10	10	10	8	11	12	7	13	6	8	12	6	82.5
rank value of 1.1s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
rank value of 1.2s =	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	167
rank value of 1.3s =	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	169.5
rank value of 1.5s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	171
rank value of 1.6s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	172.5
rank value of 1.7s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	174
rank value of 1.8s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	175
rank value of 2s =	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176.5
rank value of 2.1s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	178
rank value of 2.2s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	179.5
rank value of 2.3s =	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	181.5
rank value of 2.5s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	183
rank value of 2.7s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	184
rank value of 2.9s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	185
rank value of 3.2s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186
rank value of 3.6s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
rank value of 3.7s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	188
rank value of 3.8s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
rank value of 3.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	190
rank value of 4s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	191
rank value of 4.2s =	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	192.5
rank value of 4.6s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	194
rank value of 4.7s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	195
rank value of 5.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	196
rank value of 5.4s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	197.5
rank value of 5.5s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	199
rank value of 6s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	200
rank value of 8.8s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	201
rank value of 8.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	202.5
rank value of 10s =	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	204.5
rank value of 13s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	206
rank value of 16s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	207.5
rank value of 19s =	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	210
rank value of 20s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 21s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	213
rank value of 27s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	214
rank value of 130s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215

rank value of 180s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	216
rank value of 4300s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	217

n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**14**	**13**	**14**	**10**

Sum of rank value calculations

660	990	660	907.5	990	825	825	825	660	907.5	990	577.5	1072.5	495	660	990	495
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	167	0	0	0	167	0	0	0	0	167	0	0
0	0	0	0	169.5	0	169.5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	171	0	0	0	0	0	0	0	0
172.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172.5	0
0	0	0	0	0	0	174	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	175	0	0	0	0	0	0	0	0	0
176.5	176.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	178	0	0	0	0	0	0	0	0	0
0	0	0	0	0	179.5	0	0	0	0	0	0	0	0	179.5	0	0
0	0	0	0	0	0	0	181.5	0	0	0	0	0	181.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	0
0	0	0	0	0	0	0	0	184	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	185	0	0	0	0	0	0	0	0
0	186	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
187	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	188	0	0	0
189	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0
0	0	0	0	0	0	191	0	0	0	0	0	0	0	0	0	0
0	0	192.5	0	0	0	0	0	192.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	194	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	195	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
0	0	0	0	0	0	0	0	0	0	0	197.5	0	0	197.5	0	0
0	0	0	0	0	0	0	0	199	0	0	0	0	0	0	0	0
0	0	0	200	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	201	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	202.5	0	202.5
0	0	0	0	0	204.5	0	0	0	0	0	0	0	204.5	0	0	0
206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	207.5	0	207.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	630	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
0	0	0	213	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
0	0	0	0	0	0	0	0	0	0	0	0	0	217	0	0	0

sum of rank values (R_i)	**1971**	**1352.5**	**852.5**	**1320.5**	**1159.5**	**1376**	**1359.5**	**1359.5**	**1591.5**	**1074.5**	**990**	**1813.5**	**1072.5**	**2091.5**	**1601.5**	**1345.5**	**1321.5**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	458920.4	134132	103418	145644	142172	142172	194836	96213	81675	252983	88481	312455	197292	129312	174636

$N_{i\,bg}$ = 38
N = 217
H = 19.32

Adjust H for ties:

T_i = 4E+06 sum of T1..T7

$H' = H/(1-(T_i/(N^3-N)))$

Cadmium (K-W)
White Oak GW Stats First 2007.xls

H' = 34.00
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =34.00.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15
Rbar (well x) =	101.6	89.2	105.8	104.6	104.6	122.4	89.5	82.5	139.5	82.5	149.4	123.2	96.1	132.2
avg Rbar (background) =	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9	109.9
Dx =	-8.3	-20.7	-4.0	-5.3	-5.3	12.5	-20.4	-27.4	29.6	-27.4	39.5	13.3	-13.8	22.3
Cx =	47.0	47.0	47.0	47.0	47.0	47.0	48.4	48.4	47.0	47.0	45.7	47.0	45.7	52.0
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Compare each difference (Dx) with the corresponding critical value (Cx).
No compliance well's difference between average ranks exceeded its corresponding critical value at a 5% significance level. Therefore, we conclude that significant evidence of contamination does not exist at the 5% significance level.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Chromium**
NC MCL (µg/l): 50
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**15**	NS	NS	**18**	**17**	**11**	ND	**26**	**5.4**	ND	ND	**50**	ND	NS	NS	NS	NS	5
06/26/00	**22**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
07/26/00	**29**	**20**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	10
04/09/01	**130**	ND	NS	**11**	**8.4**	ND	ND	**20**	**27**	ND	ND	**160**	ND	NS	NS	NS	NS	5
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**51**	**66**	**5.4**	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**82**	ND	ND	NS	5
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**21**	ND	ND	NS	5
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	10
04/15/02	**170**	ND	NS	ND	ND	**5.7**	**7**	**10**	**56**	**13**	**7.1**	**180**	ND	**9.2**	**12**	ND	NS	5
09/26/02	**33**	**5.4**	**33**	**510**	ND	**5.2**	ND	**37**	**36**	**5.5**	**9.1**	**230**	ND	**180**	**52**	ND	**770**	5
04/28/03	ND	ND	ND	**89**	ND	ND	ND	ND	ND	ND	ND	**110**	ND	NT	NT	NT	**27**	5
10/30/03	**30**	ND	NT	ND	**6.2**	ND	ND	ND	**31**	**83**	ND	**4.6**	ND	**22**	**3.9**	ND	**140**	2
04/20/04	**33**	ND	**2.1**	**45**	**13**	ND	ND	**11**	**3.5**	ND	**2.9**	**190**	ND	**50**	**12**	ND	**68**	2
10/21/04	**21**	ND	**2.8**	**16**	**2**	ND	ND	ND	ND	ND	**5.5**	**120**	ND	**14**	**21**	ND	**140**	2
04/18/05	**49**	**12**	**8.3**	**680**	**2.9**	ND	ND	**3.2**	ND	ND	**2.4**	**210**	ND	**36**	**18**	ND	**100**	2
10/13/05	**52**	ND	**3.7**	**230**	**4.7**	ND	ND	ND	ND	**5.3**	**6.8**	**150**	ND	**130**	**130**	ND	**88**	2
04/25/06	**65**	ND	**16**	ND	ND	ND	ND	ND	**16**	**200**	ND	**100**	ND	ND	**20**	ND	**93**	10
10/20/06	**50**	ND	**11**	**24**	ND	ND	ND	ND	**17**	NS	NS	ND	ND	**43**	**31**	ND	**27**	5
04/25/07	**20**	ND	ND	**16**	ND	**410**	ND	ND	ND	**31**	ND	ND	ND	ND	ND	ND	**17**	10
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	13	13	13	10	
sum of rank values (R_i)	2449.0	958.0	985.0	1880.0	1152.0	1031.0	729.0	1206.5	1450.5	1237.0	1003.0	2212.5	656.5	1979.5	1720.0	722.0	1848.5	
avg rank value (Rbar)	163.3	68.4	109.4	144.6	88.6	79.3	56.1	92.8	111.6	103.1	83.6	170.2	50.5	152.3	132.3	55.5	184.9	

	Number of each rank value																Rank Value
rank value of NDs =	1	11	2	3	6	9	12	7	5	6	6	2	13	2	3	12	0	50.5
rank value of 2s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	101
rank value of 2.1s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
rank value of 2.4s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	103
rank value of 2.8s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104
rank value of 2.9s =	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	105.5
rank value of 3.2s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	107
rank value of 3.5s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	108
rank value of 3.7s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
rank value of 3.9s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	110
rank value of 4.6s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	111
rank value of 4.7s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	112
rank value of 5.2s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	113
rank value of 5.3s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	114
rank value of 5.4s =	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	116
rank value of 5.5s =	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	118.5
rank value of 5.7s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	120
rank value of 6.2s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	121
rank value of 6.8s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	122
rank value of 7s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	123
rank value of 7.1s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	124
rank value of 8.3s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125
rank value of 8.4s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	126
rank value of 9.1s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	127
rank value of 9.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	128
rank value of 10s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	129
rank value of 11s =	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	131.5
rank value of 12s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	135
rank value of 13s =	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	137.5
rank value of 14s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	139
rank value of 15s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
rank value of 16s =	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	142.5
rank value of 17s =	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	146
rank value of 18s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	148.5
rank value of 20s =	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	151.5
rank value of 21s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	155
rank value of 22s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	157.5
rank value of 24s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	159
rank value of 26s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	160
rank value of 27s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	162
rank value of 29s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164
rank value of 30s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
rank value of 31s =	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	167
rank value of 33s =	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170
rank value of 36s =	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	172.5
rank value of 37s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	174
rank value of 43s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	175
rank value of 45s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	176

rank value of 49s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
rank value of 50s =	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	179
rank value of 51s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	181
rank value of 52s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	182.5
rank value of 56s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	184
rank value of 65s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185
rank value of 66s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	186
rank value of 68s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	187
rank value of 82s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	188
rank value of 83s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	189
rank value of 88s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	190
rank value of 89s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	191
rank value of 93s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	192
rank value of 100s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	193.5
rank value of 110s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	195
rank value of 120s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	196
rank value of 130s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	198
rank value of 140s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	200.5
rank value of 150s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	202
rank value of 160s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	203
rank value of 170s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204
rank value of 180s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	205.5
rank value of 190s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	207
rank value of 200s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	208
rank value of 210s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	209
rank value of 230s =	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	210.5
rank value of 410s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	212
rank value of 510s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	213
rank value of 680s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	214
rank value of 770s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	215
n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**13**	**13**	**13**	**10**	

Sum of rank value calculations

50.5	555.5	101	151.5	303	454.5	606	353.5	252.5	303	303	101	656.5	101	151.5	606	0
0	0	0	0	101	0	0	0	0	0	0	0	0	0	0	0	0
0	0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	103	0	0	0	0	0	0
0	0	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	105.5	0	0	0	0	0	105.5	0	0	0	0	0	0
0	0	0	0	0	0	0	107	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	108	0	0	0	0	0	0	0	0
0	0	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	0	0
0	0	0	0	0	0	0	0	0	0	0	111	0	0	0	0	0
0	0	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	113	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	0	0
0	116	0	0	0	0	0	0	116	0	0	0	0	0	0	116	0
0	0	0	0	0	0	0	0	0	118.5	118.5	0	0	0	0	0	0
0	0	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	121	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	122	0	0	0	0	0	0
0	0	0	0	0	0	123	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	124	0	0	0	0	0	0
0	0	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	126	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	127	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	128	0	0	0
0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	0	0
0	0	131.5	131.5	0	131.5	0	131.5	0	0	0	0	0	0	0	0	0
0	135	0	0	0	0	0	0	0	0	0	0	0	0	270	0	0
0	0	0	0	137.5	0	0	0	0	137.5	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	139	0	0	0
140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	142.5	285	0	0	0	0	142.5	0	0	0	0	0	0	0	0
0	0	0	0	146	0	0	0	146	0	0	0	0	0	0	0	146
0	0	0	148.5	0	0	0	0	0	0	0	0	0	0	148.5	0	0
151.5	151.5	0	0	0	0	0	151.5	0	0	0	0	0	0	151.5	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	155	155	0	0
157.5	0	0	0	0	0	0	0	0	0	0	0	0	157.5	0	0	0
0	0	0	159	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	160	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	162	0	0	0	0	0	0	0	324
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	167	167	0	0	0	0	167	0	0
340	0	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	172.5	0	0	0	0	172.5	0	0	0
0	0	0	0	0	0	0	174	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	175	0	0	0
0	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0
177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

179	0	0	0	0	0	0	0	0	0	0	179	0	179	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	181	0	0	0
182.5	0	0	0	0	0	0	0	0	0	0	0	0	0	182.5	0	0
0	0	0	0	0	0	0	0	184	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	186	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	187
0	0	0	0	0	0	0	0	0	0	0	0	0	188	0	0	0
0	0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190
0	0	0	191	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192
0	0	0	0	0	0	0	0	0	0	0	193.5	0	0	0	0	193.5
0	0	0	0	0	0	0	0	0	0	0	195	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	196	0	0	0	0	0
198	0	0	0	0	0	0	0	0	0	0	0	0	198	198	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	401
0	0	0	0	0	0	0	0	0	0	0	202	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	203	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	205.5	0	205.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	207	0	0	0	0	0
0	0	0	0	0	0	0	0	0	208	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	209	0	0	0	0	0
0	0	0	210.5	0	0	0	0	0	0	0	210.5	0	0	0	0	0
0	0	0	0	0	212	0	0	0	0	0	0	0	0	0	0	0
0	0	0	213	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215
sum of rank values (R_i)	**2449**	**958**	**985**	**1880**	**1152**	**1031**	**729**	**1206.5**	**1450.5**	**1237**	**1003**	**2212.5**	**656.5**	**1979.5**	**1720**	**722**	**1848.5**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	507622.7	271877	102085	81766	40880	111972	161842	127514	83834	376550	33153	301417	227569	40099	341695

$N_{i\,bg}$ = 38
N = 215
H = 78.07

Adjust H for ties:

T_i = 1E+06 sum of T1..T3

$H' = H/(1-(T_i/(N^3-N)))$
H' = 86.80
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =86.80.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15
Rbar (well x) =	144.6	88.6	79.3	56.1	92.8	111.6	103.1	83.6	170.2	50.5	152.3	132.3	55.5	184.9
avg Rbar (background) =	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6
Dx =	29.0	-27.0	-36.3	-59.5	-22.8	-4.0	-12.5	-32.0	54.6	-65.1	36.7	16.7	-60.0	69.3
Cx =	46.6	46.6	46.6	46.6	46.6	46.6	48.0	48.0	46.6	46.6	46.6	46.6	46.6	51.5
Statistical Significance ?	-	-	-	-	-	-	-	-	**Yes**	-	-	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Chromium averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Cobalt**
NC MCL (µg/l): Not Established
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	ND	NS	NS	ND	**8.2**	**5.4**	ND	**14**	ND	ND	ND	**16**	ND	NS	NS	NS	NS	5
06/26/00	**10**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
07/26/00	**9.9**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	10
04/09/01	**54**	ND	NS	ND	ND	ND	**13**	**12**	**13**	ND	ND	**59**	**8.1**	NS	NS	NS	NS	5
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**54**	**53**	ND	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**87**	ND	ND	NS	5
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**28**	**5.7**	ND	NS	5
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**5.1**	NS	**15**	NS	10
04/15/02	**58**	ND	NS	ND	ND	ND	**18**	**8**	**21**	ND	ND	**82**	**6.8**	**13**	**12**	ND	NS	5
09/26/02	**13**	**5.4**	**16**	**100**	ND	**16**	**7.4**	**21**	**19**	ND	ND	**85**	**7.7**	**200**	**30**	ND	**560**	5
04/28/03	**21**	ND	ND	**37**	ND	ND	**6.9**	ND	**17**	ND	ND	**50**	ND	NT	NT	NT	**81**	5
10/30/03	**9**	ND	NT	ND	ND	ND	**5.7**	ND	**52**	**11**	ND	**8.8**	ND	**28**	ND	ND	**110**	5
04/20/04	**9.5**	ND	ND	**7.7**	**5.2**	ND	**13**	**6.4**	ND	ND	ND	**43**	ND	**47**	**7.4**	ND	**50**	5
10/21/04	**6.2**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**31**	ND	**42**	**12**	ND	**120**	5
04/18/05	**12**	ND	ND	**110**	ND	ND	ND	ND	ND	ND	ND	**36**	ND	**82**	**9.3**	ND	**70**	5
10/13/05	**21**	ND	ND	**32**	ND	ND	**5.1**	ND	ND	ND	ND	**29**	ND	**150**	**48**	ND	**56**	5
04/25/06	**16**	ND	ND	ND	ND	ND	ND	ND	ND	**22**	ND	**25**	ND	**170**	**12**	ND	**57**	10
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	**13**	ND	ND	5
04/25/07	ND	ND	ND	ND	ND	**260**	ND	ND	ND	ND	**10**	ND	ND	**92**	ND	ND	ND	10
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	14	13	14	10	
sum of rank values (R_i)	2158.0	963.5	680.5	1445.0	978.5	1156.0	1418.5	1289.0	1387.0	971.0	855.5	2166.5	1061.5	2551.0	1811.5	998.0	1762.0	
avg rank value (Rbar)	143.9	68.8	75.6	111.2	75.3	88.9	109.1	99.2	106.7	80.9	71.3	166.7	81.7	182.2	139.3	71.3	176.2	

	Number of each rank value																	Rank Value
rank value of NDs =	3	13	8	8	11	10	6	8	8	10	11	2	10	1	3	13	2	64
rank value of 5.1s =	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	128.5
rank value of 5.2s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	130
rank value of 5.4s =	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	131.5
rank value of 5.7s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	133.5
rank value of 6.2s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135
rank value of 6.4s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	136
rank value of 6.8s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	137
rank value of 6.9s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	138
rank value of 7.4s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	139.5
rank value of 7.7s =	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	141.5
rank value of 8.1s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	143
rank value of 8.2s =	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	144.5
rank value of 8.8s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	146
rank value of 9s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
rank value of 9.3s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	148
rank value of 9.5s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149
rank value of 9.9s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
rank value of 10s =	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	151.5
rank value of 11s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	153
rank value of 12s =	1	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	156
rank value of 13s =	1	0	0	0	0	0	2	0	1	0	0	0	0	1	1	0	0	161.5
rank value of 14s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	165
rank value of 15s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	166
rank value of 16s =	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	168.5
rank value of 17s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	171
rank value of 18s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	172
rank value of 19s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	173
rank value of 21s =	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	175.5
rank value of 22s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	178
rank value of 25s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	179
rank value of 28s =	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	180.5
rank value of 29s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	182
rank value of 30s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	183
rank value of 31s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	184
rank value of 32s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	185
rank value of 36s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	186
rank value of 37s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	187
rank value of 42s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	188
rank value of 43s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	189
rank value of 47s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	190
rank value of 48s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	191
rank value of 50s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	192.5
rank value of 52s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	194
rank value of 53s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	195
rank value of 54s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	196.5
rank value of 56s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	198
rank value of 57s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	199

rank value of 58s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
rank value of 59s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	201
rank value of 70s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	202
rank value of 81s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	203
rank value of 82s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	204.5
rank value of 85s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	206
rank value of 87s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	207
rank value of 92s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	208
rank value of 100s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	209
rank value of 110s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	210.5
rank value of 120s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 150s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	213
rank value of 170s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	214
rank value of 200s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	215
rank value of 260s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	216
rank value of 560s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	217

n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**14**	**13**	**14**	**10**

Sum of rank value calculations

192	832	512	512	704	640	384	512	512	640	704	128	640	64	192	832	128
0	0	0	0	0	0	128.5	0	0	0	0	0	0	128.5	0	0	0
0	0	0	0	130	0	0	0	0	0	0	0	0	0	0	0	0
0	131.5	0	0	0	131.5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	133.5	0	0	0	0	0	0	0	133.5	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	136	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	137	0	0	0	0
0	0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	139.5	0	0	0	0	0	0	0	139.5	0	0
0	0	0	141.5	0	0	0	0	0	0	0	0	141.5	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	143	0	0	0	0
0	0	0	0	144.5	0	0	144.5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	146	0	0	0	0	0
147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	148	0	0
149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151.5	0	0	0	0	0	0	0	0	0	151.5	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	153	0	0	0	0	0	0	0
156	0	0	0	0	0	0	156	0	0	0	0	0	0	468	0	0
161.5	0	0	0	0	0	323	0	161.5	0	0	0	0	161.5	161.5	0	0
0	0	0	0	0	0	0	165	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166	0
168.5	0	168.5	0	0	168.5	0	0	0	0	0	168.5	0	0	0	0	0
0	0	0	0	0	0	0	0	171	0	0	0	0	0	0	0	0
0	0	0	0	0	0	172	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	173	0	0	0	0	0	0	0	0
351	0	0	0	0	0	0	175.5	175.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	178	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	179	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	361	0	0	0
0	0	0	0	0	0	0	0	0	0	0	182	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	0	0
0	0	0	0	0	0	0	0	0	0	0	184	0	0	0	0	0
0	0	0	185	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	186	0	0	0	0	0
0	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	188	0	0	0
0	0	0	0	0	0	0	0	0	0	0	189	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	190	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	0
0	0	0	0	0	0	0	0	0	0	0	192.5	0	0	0	0	192.5
0	0	0	0	0	0	0	0	194	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	195	0	0
196.5	0	0	0	0	0	0	0	0	0	0	0	0	196.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	198
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199
200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	201	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	202
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
0	0	0	0	0	0	0	0	0	0	0	204.5	0	204.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	206	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	207	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	208	0	0	0
0	0	0	209	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	210.5	0	0	0	0	0	0	0	0	0	0	0	0	210.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
0	0	0	0	0	0	0	0	0	0	0	0	0	213	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	215	0	0	0
0	0	0	0	0	216	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217

sum of rank values (R_i)	**2158**	**963.5**	**680.5**	**1445**	**978.5**	**1156**	**1418.5**	**1289**	**1387**	**971**	**855.5**	**2166.5**	**1061.5**	**2551**	**1811.5**	**998**	**1762**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	380400.1	160617	73651	102795	154780	127809	147982	78570	60990	361056	86676	464829	252426	71143	310464

$N_{i\,bg}$ = 38
N = 217
H = 64.94

Adjust H for ties:

T_i = 2E+06 sum of T1..T7

$H' = H/(1-(T_i/(N^3-N)))$
H' = 81.23
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =81.23.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value $(C_x) = P\{N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Rbar (well x) =	111.2	75.3	88.9	109.1	99.2	106.7	80.9	71.3	166.7	81.7	182.2	139.3	71.3	176.2
avg Rbar (background) =	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1	100.1
Dx =	11.1	-24.8	-11.1	9.1	-0.9	6.6	-19.1	-28.8	66.6	-18.4	82.2	39.3	-28.8	76.1
Cx =	47.0	47.0	47.0	47.0	47.0	47.0	48.4	48.4	47.0	47.0	45.7	47.0	45.7	52.0
Statistical Significance ?	-	-	-	-	-	-	-	-	**Yes**	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Cobalt averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Copper**
NC MCL (µg/l): 1000
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**12**	NS	NS	ND	ND	**13**	ND	**27**	ND	ND	ND	**22**	ND	NS	NS	NS	NS	5
06/26/00	**17**	**6**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
07/26/00	**12**	**6.1**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	200
04/09/01	**77**	**8.4**	NS	ND	ND	**5.4**	ND	**26**	**38**	ND	ND	**110**	ND	NS	NS	NS	NS	5
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**35**	**44**	ND	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**47**	ND	ND	NS	5
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**16**	ND	ND	NS	5
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	200
04/15/02	**69**	ND	NS	ND	ND	ND	ND	**13**	**68**	**4.4**	**5.1**	**120**	**4.7**	**5.6**	**8.4**	ND	NS	2
09/26/02	**20**	**10**	**31**	**220**	ND	ND	**2.6**	**42**	**88**	**3.3**	**7.4**	**150**	**6.8**	**100**	**31**	ND	**450**	2
04/28/03	**24**	ND	**2.6**	**40**	ND	ND	ND	ND	**28**	ND	ND	**94**	ND	NT	NT	NT	**71**	2
10/30/03	**18**	ND	NT	ND	**2.3**	**2.6**	ND	**3**	**85**	**26**	ND	**4.4**	**2.9**	**16**	**2.7**	ND	**150**	2
04/20/04	**18**	ND	**2.8**	**12**	**5.3**	**2.3**	**4.3**	**13**	**7.4**	ND	**2.2**	**100**	**2.3**	**27**	**8**	ND	**89**	2
10/21/04	**11**	ND	ND	**2**	ND	ND	ND	ND	ND	ND	ND	**63**	ND	**11**	**14**	ND	**140**	2
04/18/05	**29**	ND	ND	**240**	ND	ND	ND	**3.8**	ND	ND	ND	**120**	ND	**25**	**12**	ND	**130**	2
10/13/05	**31**	**2.6**	**3.5**	**70**	ND	ND	ND	ND	**3**	**4.6**	**3.8**	**82**	ND	**75**	**72**	ND	**96**	2
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200
10/20/06	**26**	ND	ND	**9.6**	ND	ND	ND	ND	**20**	NS	NS	ND	ND	ND	ND	ND	**25**	5
04/25/07	**15**	ND	ND	ND	ND	**330**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**26**	**10**
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	13	13	13	10	
sum of rank values (R_i)	2422.0	1204.5	834.0	1555.5	874.5	1196.5	872.0	1444.0	1667.0	1019.0	975.0	2089.0	1025.5	1898.5	1570.5	734.5	1838.0	
avg rank value (Rbar)	161.5	86.0	92.7	119.7	67.3	92.0	67.1	111.1	128.2	84.9	81.3	160.7	78.9	146.0	120.8	56.5	183.8	

	Number of each rank value																	Rank Value
rank value of NDs =	1	9	5	6	11	8	11	6	5	8	8	3	9	3	5	13	1	56.5
rank value of 2s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	113
rank value of 2.2s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	114
rank value of 2.3s =	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	116
rank value of 2.6s =	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	119.5
rank value of 2.7s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	122
rank value of 2.8s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123
rank value of 2.9s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	124
rank value of 3s =	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	125.5
rank value of 3.3s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	127
rank value of 3.5s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
rank value of 3.8s =	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	129.5
rank value of 4.3s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	131
rank value of 4.4s =	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	132.5
rank value of 4.6s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	134
rank value of 4.7s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	135
rank value of 5.1s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	136
rank value of 5.3s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	137
rank value of 5.4s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	138
rank value of 5.6s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	139
rank value of 6s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
rank value of 6.1s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	141
rank value of 6.8s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	142
rank value of 7.4s =	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	143.5
rank value of 8s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	145
rank value of 8.4s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	146.5
rank value of 9.6s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	148
rank value of 10s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149
rank value of 11s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	150.5
rank value of 12s =	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	153.5
rank value of 13s =	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	157
rank value of 14s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	159
rank value of 15s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
rank value of 16s =	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	161.5
rank value of 17s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163
rank value of 18s =	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164.5
rank value of 20s =	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	166.5
rank value of 22s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	168
rank value of 24s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169
rank value of 25s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	170.5
rank value of 26s =	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	173.5
rank value of 27s =	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	176.5
rank value of 28s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	178
rank value of 29s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179
rank value of 31s =	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	181
rank value of 35s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	183
rank value of 38s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	184
rank value of 40s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	185

rank value of 42s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	186
rank value of 44s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	187
rank value of 47s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	188
rank value of 63s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	189
rank value of 68s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	190
rank value of 69s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	191
rank value of 70s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	192
rank value of 71s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	193
rank value of 72s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	194
rank value of 75s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	195
rank value of 77s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
rank value of 82s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	197
rank value of 85s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	198
rank value of 88s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	199
rank value of 89s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	200
rank value of 94s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	201
rank value of 96s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	202
rank value of 100s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	203.5
rank value of 110s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	205
rank value of 120s =	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	206.5
rank value of 130s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	208
rank value of 140s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	209
rank value of 150s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	210.5
rank value of 220s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	212
rank value of 240s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	213
rank value of 330s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	214
rank value of 450s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	215
n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**13**	**13**	**13**	**10**	

Sum of rank value calculations

56.5	508.5	282.5	339	621.5	452	621.5	339	282.5	452	452	169.5	508.5	169.5	282.5	734.5	56.5
0	0	0	113	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	0
0	0	0	0	116	116	0	0	0	0	0	0	116	0	0	0	0
0	119.5	119.5	0	0	119.5	119.5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	0	0
0	0	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	124	0	0	0	0
0	0	0	0	0	0	0	125.5	125.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	127	0	0	0	0	0	0	0
0	0	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	129.5	0	0	129.5	0	0	0	0	0	0
0	0	0	0	0	0	131	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	132.5	0	132.5	0	0	0	0	0
0	0	0	0	0	0	0	0	0	134	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	135	0	0	0	0
0	0	0	0	0	0	0	0	0	0	136	0	0	0	0	0	0
0	0	0	0	137	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	138	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	139	0	0	0
0	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	142	0	0	0	0
0	0	0	0	0	0	0	0	143.5	0	143.5	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	145	0	0
0	146.5	0	0	0	0	0	0	0	0	0	0	0	0	146.5	0	0
0	0	0	148	0	0	0	0	0	0	0	0	0	0	0	0	0
0	149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150.5	0	0	0	0	0	0	0	0	0	0	0	0	150.5	0	0	0
307	0	0	153.5	0	0	0	0	0	0	0	0	0	0	153.5	0	0
0	0	0	0	0	157	0	314	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	159	0	0
160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	323	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166.5	0	0	0	0	0	0	0	166.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	168	0	0	0	0	0
169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	170.5	0	0	170.5
173.5	0	0	0	0	0	0	173.5	0	173.5	0	0	0	0	0	0	173.5
0	0	0	0	0	0	0	176.5	0	0	0	0	0	176.5	0	0	0
0	0	0	0	0	0	0	0	178	0	0	0	0	0	0	0	0
179	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
181	0	181	0	0	0	0	0	0	0	0	0	0	0	181	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	183	0	0	0
0	0	0	0	0	0	0	0	184	0	0	0	0	0	0	0	0
0	0	0	185	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	186	0	0	0	0	0	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	187	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	188	0	0	0
0	0	0	0	0	0	0	0	0	0	0	189	0	0	0	0	0
0	0	0	0	0	0	0	0	190	0	0	0	0	0	0	0	0
191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	192	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193
0	0	0	0	0	0	0	0	0	0	0	0	0	0	194	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	195	0	0	0
196	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	197	0	0	0	0	0
0	0	0	0	0	0	0	0	198	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	199	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200
0	0	0	0	0	0	0	0	0	0	0	201	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	202
0	0	0	0	0	0	0	0	0	0	0	203.5	0	203.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	205	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	413	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
0	0	0	0	0	0	0	0	0	0	0	210.5	0	0	0	0	210.5
0	0	0	212	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	213	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	214	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215

sum of rank values (R_i)	**2422**	**1204.5**	**834**	**1555.5**	**874.5**	**1196.5**	**872**	**1444**	**1667**	**1019**	**975**	**2089**	**1025.5**	**1898.5**	**1570.5**	**734.5**	**1838**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	523580.5	186122	58827	110124	58491	160395	213761	86530	79219	335686	80896	277254	189728	41499	337824

$N_{i\,bg}$ = 38
N = 215
H = 59.99

Adjust H for ties:

T_i = 1E+06 sum of T1..T6

$H' = H/(1-(T_i/(N^3-N)))$
H' = 69.87
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =69.87.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	**MW-15**
Rbar (well x) =	119.7	67.3	92.0	67.1	111.1	128.2	84.9	81.3	160.7	78.9	146.0	120.8	56.5	183.8
avg Rbar (background) =	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
Dx =	2.3	-50.1	-25.3	-50.3	-6.3	10.8	-32.5	-36.1	43.3	-38.5	28.7	3.4	-60.9	66.4
Cx =	46.6	46.6	46.6	46.6	46.6	46.6	48.0	48.0	46.6	46.6	46.6	46.6	46.6	51.5
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	-	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Copper averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Lead**
NC MCL (µg/l): 15
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**35**	NS	NS	ND	ND	ND	ND	**11**	ND	**10**	ND	ND	ND	NS	NS	NS	NS	**10**
06/26/00	ND	**10**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**10**
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**10**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	**10**
04/09/01	ND	**59**	NS	ND	ND	ND	ND	ND	**18**	ND	ND	**2.5**	ND	NS	NS	NS	NS	**10**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**27**	ND	ND	NS	**10**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**43**	ND	ND	NS	**10**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**26**	ND	ND	NS	**10**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**11**	NS	**17**	NS	**10**
04/15/02	**13**	ND	NS	ND	ND	ND	ND	ND	**13**	ND	ND	**29**	ND	**14**	**10**	ND	NS	**10**
09/26/02	ND	**76**	**29**	ND	ND	ND	ND	ND	**150**	ND	ND	**20**	ND	**81**	ND	ND	**740**	**10**
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	**25**	ND	ND	ND	ND	NT	NT	NT	**300**	**10**
10/30/03	**8.7**	**12**	NT	ND	ND	ND	ND	ND	**39**	**25**	ND	**7.4**	ND	**29**	ND	ND	**640**	**5**
04/20/04	**7.2**	**7**	**5.2**	**6.4**	**5.4**	ND	ND	ND	**12**	ND	ND	**39**	ND	**43**	**12**	ND	**250**	**5**
10/21/04	**7.2**	**5.6**	**5.7**	ND	ND	ND	ND	ND	ND	ND	**5.6**	**24**	ND	**18**	**16**	ND	**430**	**5**
04/18/05	**13**	**8**	**5.2**	**73**	ND	ND	ND	ND	ND	ND	ND	**39**	ND	**40**	**13**	ND	**380**	**5**
10/13/05	**14**	**6.9**	ND	**20**	ND	ND	ND	ND	ND	ND	ND	**29**	ND	**110**	**62**	ND	**290**	**5**
04/25/06	**15**	ND	ND	ND	ND	ND	ND	ND	**53**	**34**	ND	**19**	ND	ND	**18**	ND	**300**	**10**
10/20/06	**20**	ND	ND	ND	ND	ND	ND	ND	**32**	NS	NS	ND	ND	**30**	**37**	ND	**89**	**5**
04/25/07	ND	ND	ND	ND	ND	**96**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**69**	**10**
N_i	15	14	9	13	13	13	13	13	14	12	12	13	13	14	13	14	10	
sum of rank values (R_i)	1920.5	1746.5	971.0	1235.0	990.0	1054.0	916.5	1005.5	1901.0	1164.0	921.0	1873.0	916.5	2394.5	1647.5	1088.5	2126.0	
avg rank value (Rbar)	128.0	124.8	107.9	95.0	76.2	81.1	70.5	77.3	135.8	97.0	76.8	144.1	70.5	171.0	126.7	77.8	212.6	

	Number of each rank value																	Rank Value
rank value of NDs =	6	6	5	10	12	12	13	12	6	9	11	4	13	2	6	13	0	70.5
rank value of 2.5s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	141
rank value of 5.2s =	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142.5
rank value of 5.4s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	144
rank value of 5.6s =	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	145.5
rank value of 5.7s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147
rank value of 6.4s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	148
rank value of 6.9s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	149
rank value of 7s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150
rank value of 7.2s =	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	151.5
rank value of 7.4s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	153
rank value of 8s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154
rank value of 8.7s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	155
rank value of 10s =	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	157
rank value of 11s =	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	159.5
rank value of 12s =	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	162
rank value of 13s =	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	165.5
rank value of 14s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	168.5
rank value of 15s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170
rank value of 16s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	171
rank value of 17s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	172
rank value of 18s =	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	174
rank value of 19s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	176
rank value of 20s =	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	178
rank value of 24s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	180
rank value of 25s =	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	181.5
rank value of 26s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	183
rank value of 27s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	184
rank value of 29s =	0	0	1	0	0	0	0	0	0	0	0	2	0	1	0	0	0	186.5
rank value of 30s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	189
rank value of 32s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	190
rank value of 34s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	191
rank value of 35s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192
rank value of 37s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	193
rank value of 39s =	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	195
rank value of 40s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	197
rank value of 43s =	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	198.5
rank value of 53s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	200

rank value of 59s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	201
rank value of 62s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	202
rank value of 69s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	203
rank value of 73s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	204
rank value of 76s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205
rank value of 81s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	206
rank value of 89s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	207
rank value of 96s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	208
rank value of 110s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	209
rank value of 150s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	210
rank value of 250s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	211
rank value of 290s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 300s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	213.5
rank value of 380s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	215
rank value of 430s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	216
rank value of 640s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	217
rank value of 740s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	218

n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**14**	**12**	**12**	**13**	**13**	**14**	**13**	**14**	**10**

Sum of rank value calculations

423	423	352.5	705	846	846	916.5	846	423	634.5	775.5	282	916.5	141	423	916.5	0
0	0	0	0	0	0	0	0	0	0	0	141	0	0	0	0	0
0	0	285	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0
0	145.5	0	0	0	0	0	0	0	0	145.5	0	0	0	0	0	0
0	0	147	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	148	0	0	0	0	0	0	0	0	0	0	0	0	0
0	149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
303	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	153	0	0	0	0	0
0	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	157	0	0	0	0	0	0	0	157	0	0	0	0	157	0	0
0	0	0	0	0	0	0	159.5	0	0	0	0	0	159.5	0	0	0
0	162	0	0	0	0	0	0	162	0	0	0	0	0	162	0	0
331	0	0	0	0	0	0	0	165.5	0	0	0	0	0	165.5	0	0
168.5	0	0	0	0	0	0	0	0	0	0	0	0	168.5	0	0	0
170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	171	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172	0
0	0	0	0	0	0	0	0	174	0	0	0	0	174	174	0	0
0	0	0	0	0	0	0	0	0	0	0	176	0	0	0	0	0
178	0	0	178	0	0	0	0	0	0	0	178	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	180	0	0	0	0	0
0	0	0	0	0	0	0	0	181.5	181.5	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	183	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	184	0	0	0
0	0	186.5	0	0	0	0	0	0	0	0	373	0	186.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	189	0	0	0
0	0	0	0	0	0	0	0	190	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	191	0	0	0	0	0	0	0
192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	193	0	0
0	0	0	0	0	0	0	0	195	0	0	390	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	197	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	397	0	0	0
0	0	0	0	0	0	0	0	200	0	0	0	0	0	0	0	0
0	201	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	202	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203
0	0	0	204	0	0	0	0	0	0	0	0	0	0	0	0	0
0	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	206	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	207
0	0	0	0	0	208	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	209	0	0	0

0	0	0	0	0	0	0	0	210	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	427
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	218

sum of rank values (R_i)	**1920.5**	**1746.5**	**971**	**1235**	**990**	**1054**	**916.5**	**1005.5**	**1901**	**1164**	**921**	**1873**	**916.5**	**2394.5**	**1647.5**	**1088.5**	**2126**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	566080.1	117325	75392	85455	64613	77772	258129	112908	70687	269856	64613	409545	208789	84631	451988

$N_{i\,bg}$ = 38
N = 218
H = 76.39

Adjust H for ties:

T_i = 3E+06 sum of T1..T6

$H' = H/(1-(T_i/(N^3-N)))$
H' = 103.91
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =103.91.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Rbar (well x) =	95.0	76.2	81.1	70.5	77.3	135.8	97.0	76.8	144.1	70.5	171.0	126.7	77.8	212.6
avg Rbar (background) =	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1	122.1
Dx =	-27.1	-45.9	-41.0	-51.6	-44.7	13.7	-25.1	-45.3	22.0	-51.6	49.0	4.7	-44.3	90.5
Cx =	47.2	47.2	47.2	47.2	47.2	45.9	48.7	48.7	47.2	47.2	45.9	47.2	45.9	52.2
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Lead averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Nickel**
NC MCL (µg/l): 100
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**15**	NS	NS	**17**	**12**	**8.3**	ND	**24**	**6.7**	ND	**5.6**	**22**	ND	NS	NS	NS	NS	**5**
06/26/00	**15**	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**5**
07/26/00	**16**	**9.7**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**5**
09/18/00	NS	NS	NS	**8.8**	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**50**
04/09/01	**76**	**7.2**	NS	**9.6**	**5.3**	ND	ND	**18**	**28**	ND	ND	**6.1**	**7.3**	NS	NS	NS	NS	**5**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**97**	**59**	ND	NS	**5**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**120**	ND	ND	NS	**5**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**49**	**5.5**	ND	NS	**5**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**50**
04/15/02	**74**	ND	NS	ND	ND	ND	**6**	**9**	**44**	**7.1**	**8.7**	**68**	**6.9**	**20**	**13**	ND	NS	**5**
09/26/02	**16**	**6.8**	**31**	**400**	ND	ND	ND	**27**	**40**	ND	**6.5**	**78**	**5.6**	**180**	**27**	ND	**430**	**5**
04/28/03	ND	ND	ND	**90**	ND	ND	ND	ND	ND	ND	ND	**26**	ND	NT	NT	NT	**70**	**5**
10/30/03	**19**	ND	NT	**6.9**	**6.9**	ND	ND	ND	**48**	**22**	ND	ND	**7.7**	**34**	ND	ND	**190**	**5**
04/20/04	**20**	ND	ND	**30**	**7.3**	ND	ND	**12**	**5.3**	ND	ND	**49**	**12**	**36**	**8.4**	ND	**110**	**5**
10/21/04	**12**	ND	ND	**13**	ND	ND	ND	ND	ND	ND	ND	**35**	ND	**23**	**14**	ND	**160**	**5**
04/18/05	**29**	**9.6**	**17**	**460**	ND	ND	**5.5**	**5.4**	ND	ND	ND	**59**	ND	**61**	**12**	ND	**170**	**5**
10/13/05	**29**	ND	ND	**160**	**6.8**	ND	ND	**6.1**	ND	ND	ND	**46**	ND	**160**	**72**	ND	**100**	**5**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**88**	**50**
10/20/06	**22**	ND	**8.3**	**25**	ND	ND	ND	ND	**13**	NS	NS	ND	ND	ND	ND	ND	**24**	**5**
04/25/07	ND	ND	ND	ND	ND	**330**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**50**
N_i	15	14	9	14	13	13	13	13	13	12	12	13	13	13	13	13	10	
sum of rank values (R_i)	2222.5	1151.0	839.0	2113.0	1142.5	1002.5	897.5	1408.5	1496.5	894.0	925.5	1855.5	1156.0	2095.0	1587.5	767.0	1882.5	
avg rank value (Rbar)	148.2	82.2	93.2	150.9	87.9	77.1	69.0	108.3	115.1	74.5	77.1	142.7	88.9	161.2	122.1	59.0	188.3	

	Number of each rank value																Rank Value
rank value of NDs =	3	10	6	3	8	11	11	6	6	10	9	4	8	3	5	13	1	59
rank value of 5.3s =	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	118.5
rank value of 5.4s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	120
rank value of 5.5s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	121.5
rank value of 5.6s =	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	123.5
rank value of 6.1s =	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	125.5
rank value of 6.2s =	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	127
rank value of 6.5s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	128
rank value of 6.7s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	129
rank value of 6.8s =	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	130.5
rank value of 6.9s =	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	133
rank value of 7.1s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	135
rank value of 7.2s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136
rank value of 7.3s =	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	137.5
rank value of 7.7s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	139
rank value of 8.3s =	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	140.5
rank value of 8.4s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	142
rank value of 8.7s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	143
rank value of 8.8s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	144
rank value of 9.2s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	145
rank value of 9.6s =	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	146.5
rank value of 9.7s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	148
rank value of 12s =	1	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0	0	151
rank value of 13s =	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	155
rank value of 14s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	157
rank value of 15s =	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158.5
rank value of 16s =	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160.5
rank value of 17s =	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	162.5
rank value of 18s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	164
rank value of 19s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
rank value of 20s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	166.5
rank value of 22s =	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	169
rank value of 23s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	171
rank value of 24s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	172.5
rank value of 25s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	174
rank value of 26s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	175
rank value of 27s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	176.5
rank value of 28s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	178
rank value of 29s =	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179.5
rank value of 30s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	181
rank value of 31s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182
rank value of 34s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	183
rank value of 35s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	184
rank value of 36s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	185
rank value of 40s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	186
rank value of 44s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	187
rank value of 46s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	188
rank value of 48s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	189

rank value of 49s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	190.5
rank value of 59s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	192.5
rank value of 61s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	194
rank value of 68s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	195
rank value of 70s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	196
rank value of 72s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	197
rank value of 74s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	198
rank value of 76s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	199
rank value of 78s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	200
rank value of 88s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	201
rank value of 90s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	202
rank value of 97s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	203
rank value of 100s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	204
rank value of 110s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	205
rank value of 120s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	206
rank value of 160s =	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	208
rank value of 170s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	210
rank value of 180s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	211
rank value of 190s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	212
rank value of 330s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	213
rank value of 400s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	214
rank value of 430s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	215
rank value of 460s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	216

n =	15	14	9	14	13	13	13	13	13	12	12	13	13	13	13	13	10

Sum of rank value calculations

177	590	354	177	472	649	649	354	354	590	531	236	472	177	295	767	59
0	0	0	0	118.5	0	0	0	118.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	121.5	0	0	0	0	0	0	0	121.5	0	0
0	0	0	0	0	0	0	0	0	0	123.5	0	123.5	0	0	0	0
0	0	0	0	0	0	0	125.5	0	0	0	125.5	0	0	0	0	0
0	0	0	0	0	0	127	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	128	0	0	0	0	0	0
0	0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	0
0	130.5	0	0	130.5	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	133	133	0	0	0	0	0	0	0	133	0	0	0	0
0	0	0	0	0	0	0	0	0	135	0	0	0	0	0	0	0
0	136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	137.5	0	0	0	0	0	0	0	137.5	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	139	0	0	0	0
0	0	140.5	0	0	140.5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	0	0
0	0	0	0	0	0	0	0	0	0	143	0	0	0	0	0	0
0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	145	0	0	0	0	0	0	0	0	0
0	146.5	0	146.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
151	0	0	0	151	0	0	151	0	0	0	0	151	0	151	0	0
0	0	0	155	0	0	0	0	155	0	0	0	0	0	155	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	157	0	0
317	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
321	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	162.5	162.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	164	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166.5	0	0	0	0	0	0	0	0	0	0	0	0	166.5	0	0	0
169	0	0	0	0	0	0	0	0	169	0	169	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	171	0	0	0
0	0	0	0	0	0	0	172.5	0	0	0	0	0	0	0	0	172.5
0	0	0	174	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	175	0	0	0	0	0
0	0	0	0	0	0	0	176.5	0	0	0	0	0	0	176.5	0	0
0	0	0	0	0	0	0	0	178	0	0	0	0	0	0	0	0
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	181	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	183	0	0	0
0	0	0	0	0	0	0	0	0	0	0	184	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	185	0	0	0
0	0	0	0	0	0	0	0	186	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	187	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	188	0	0	0	0	0
0	0	0	0	0	0	0	0	189	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	190.5	0	190.5	0	0	0

0	0	0	0	0	0	0	0	0	0	0	192.5	0	0	192.5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	194	0	0	0
0	0	0	0	0	0	0	0	0	0	0	195	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196
0	0	0	0	0	0	0	0	0	0	0	0	0	0	197	0	0
198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	200	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	201
0	0	0	202	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	203	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205
0	0	0	0	0	0	0	0	0	0	0	0	0	206	0	0	0
0	0	0	208	0	0	0	0	0	0	0	0	0	208	0	0	208
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	210
0	0	0	0	0	0	0	0	0	0	0	0	0	211	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
0	0	0	0	0	213	0	0	0	0	0	0	0	0	0	0	0
0	0	0	214	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	215
0	0	0	216	0	0	0	0	0	0	0	0	0	0	0	0	0
sum of rank values (R_i)	**2222.5**	**1151**	**839**	**2113**	**1142.5**	**1002.5**	**897.5**	**1408.5**	**1496.5**	**894**	**925.5**	**1855.5**	**1156**	**2095**	**1587.5**	**767**	**1882.5**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	466977.8	318912	100408	77308	61962	152606	172270	66603	71379	264837	102795	337617	193858	45253	354381

$N_{i\,bg}$ = 38
N = 216
H = 62.56

Adjust H for ties:

T_i = 2E+06 sum of T1..T8

$H' = H/(1-(T_i/(N^3-N)))$
H' = 74.38
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =74.38.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	**MW-12**	MW-13S	MW-13D	MW-15
Rbar (well x) =	150.9	87.9	77.1	69.0	108.3	115.1	74.5	77.1	142.7	88.9	161.2	122.1	59.0	188.3
avg Rbar (background) =	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9
Dx =	40.1	-23.0	-33.7	-41.8	-2.5	4.3	-36.4	-33.7	31.9	-21.9	50.3	11.3	-51.9	77.4
Cx =	45.5	46.8	46.8	46.8	46.8	46.8	48.2	48.2	46.8	46.8	46.8	46.8	46.8	51.8
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Nickel averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Selenium**
MCL (µg/l): 50
Method: Poisson Prediction Limits
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	20
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	20
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	20
04/09/01	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	20
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	20
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	20
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	20
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	20
04/15/02	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	20
09/26/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	20
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
04/20/04	ND	ND	ND	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
10/13/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	10
04/25/07	12	ND	ND	ND	ND	460	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	10

1) If not detected (ND), use half of the detection limit.

04/24/00	10	-	-	10	10	10	10	10	10	10	10	10	10	-	-	-	-	
06/26/00	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/26/00	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
09/18/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/09/01	10	10	-	10	10	10	10	10	10	10	10	10	10	-	-	-	-	
09/18/01	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	-	
10/29/01	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	-	
01/30/02	-	-	-	-	-	-	-	-	-	-	-	-	-	10	10	10	-	
02/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/15/02	10	10	-	10	10	10	10	10	10	10	10	10	10	10	10	10	-	
09/26/02	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
04/28/03	10	10	10	10	10	10	10	10	10	10	10	10	10	-	-	-	10	
10/30/03	2.5	2.5	-	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/20/04	2.5	2.5	2.5	2.5	2.5	5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
10/21/04	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/18/05	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
10/13/05	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	
04/25/06	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	
10/20/06	5	5	5	5	5	5	5	5	5	-	-	5	5	5	5	5	5	
04/25/07				5	5	460	5	5	5	5	5	5	5	5	5	5	18	

2) Set the total number of data values for background wells (through the previous sampling event) equal to 'n' = 14.
Use 1/2 of the method detection limit to calculate the Total Poisson Count of the Sum (T_n).

$n = 35$
$T_{n1} = 230$

3) Using Gibbons' formula, calculate the upper Poisson Prediction limit T^*_k:

$$T^*_k = cT_{n1} + ct^2/2 + ct[T_{n1}(1+1/c) + t^2/4]^{0.5}$$

where c = k/n
and where k = the number of future predicted measurements (one per well during the current sampling event)
and where t = the upper 99th percentile of the t-distribution with (n-1) degrees of freedom (Table 6 of the IFG).

$k = 14$
$n = 35$
$T_{n1} = 230$
$t[34,.01] = 2.4434$
$c = 0.4000$
$T_{n2} = 538$
$T^*_k = 120.9$

4) Compare the *Poisson Prediction Limit* (T^*_k) to the *Sum of the Concentrations Detected* (T_{n2}) in the wells during the most recent sampling event.
Since the Poisson Prediction Limit was exceeded, Wilcoxon Rank Sum Tests must be performed to test the possibility that the detected concentrations are statistically significant.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Selenium**
MCL (µg/l): 50
Method: Wilcoxon Rank Sum
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-2D	MDL
04/24/00	ND	NS	NS	ND	**20**
06/26/00	ND	ND	NS	NS	**20**
07/26/00	ND	ND	NS	NS	**20**
09/18/00	NS	NS	NS	NS	**20**
04/09/01	ND	ND	NS	ND	**20**
09/18/01	NS	NS	NS	NS	**20**
10/29/01	NS	NS	NS	NS	**20**
01/30/02	NS	NS	NS	NS	**20**
02/28/02	NS	NS	NS	NS	**20**
04/15/02	ND	ND	NS	ND	**20**
09/26/02	ND	ND	ND	ND	**20**
04/28/03	ND	ND	ND	ND	**20**
10/30/03	ND	ND	NT	ND	**5**
04/20/04	ND	ND	ND	**5**	**5**
10/21/04	ND	ND	ND	ND	**5**
04/18/05	ND	ND	ND	ND	**5**
10/13/05	ND	ND	ND	ND	**5**
04/25/06	ND	ND	ND	ND	**20**
10/20/06	ND	ND	ND	ND	**10**
04/25/07	**12**	ND	ND	**460**	**10**

1) Rank the N = 51 observations from the smallest to the largest from background wells and compliance well MW-2D.

n =	13			
m =	38			
N =	51			
Ci (MW-2D) =	369.5			
# samples =	15	14	9	13
sum of rank values (Ri) =	393.0	343.0	220.5	369.5
avg rank value (Rbar) =	26.2	24.5	24.5	28.4

	Number of each rank value				Rank Value
rank value of NDs =	14	14	9	11	24.5
rank value of 5s =	0	0	0	1	49
rank value of 12s =	1	0	0	0	50
rank value of 460s =	0	0	0	1	51
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
# samples =	**15**	**14**	**9**	**13**	

	Sum of rank value calculations			
	343	343	220.5	269.5
	0	0	0	49
	50	0	0	0
	0	0	0	51
	0	0	0	0
	0	0	0	0
	0	0	0	0
sum of rank values (R_i)	**393**	**343**	**220.5**	**369.5**

2) Compute the Wilcoxon statistic by adding up the compliance well ranks and subtracting n/(n+1)/2.
W = Ci - 1/2(n(n+1))

W = 278.5

3) Compute the expected value and standard deviation of W.

$E(W) = 1/2mn$

$SD(W) = ((mn(N+1)/12)*(1-\Sigma^{g}_{i=1} (t_i^3 - t_i)/(N^3 - N)))^{0.5}$

E(W) = 247

Adjustment for tie values:

Tie Values:	$(t_i^3 - t_i)/(N^3 - N) =$
ND	0.834
5	0.000
12	0.000
460	0.000
0	0.000
0	0.000
0	0.000

SD(W) = 18.870

4) Form the appropriate Z-score.

$Z = (W - E(W) - 0.5)/SD(W)$

Z = 1.643

5) Compare the observed Z-score to the upper 0.01 percentile of the normal distribution.

Z = 1.643

$Z_{0.01} = 2.326$

Since Z is smaller, there is not significant evidence of contamination at the compliance well at the 1 percent significance level.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Selenium**
MCL (µg/l): 50
Method: Wilcoxon Rank Sum
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-15	MDL
04/24/00	ND	NS	NS	NS	**20**
06/26/00	ND	ND	NS	NS	**20**
07/26/00	ND	ND	NS	NS	**20**
09/18/00	NS	NS	NS	NS	**20**
04/09/01	ND	ND	NS	NS	**20**
09/18/01	NS	NS	NS	NS	**20**
10/29/01	NS	NS	NS	NS	**20**
01/30/02	NS	NS	NS	NS	**20**
02/28/02	NS	NS	NS	NS	**20**
04/15/02	ND	ND	NS	NS	**20**
09/26/02	ND	ND	ND	ND	**20**
04/28/03	ND	ND	ND	ND	**20**
10/30/03	ND	ND	NT	ND	**5**
04/20/04	ND	ND	ND	ND	**5**
10/21/04	ND	ND	ND	ND	**5**
04/18/05	ND	ND	ND	ND	**5**
10/13/05	ND	ND	ND	ND	**5**
04/25/06	ND	ND	ND	ND	**20**
10/20/06	ND	ND	ND	ND	**10**
04/25/07	**12**	ND	ND	**18**	**10**

1) Rank the N = 48 observations from the smallest to the largest from background wells and compliance well MW-15.

n =	10			
m =	38			
N =	48			
Ci (MW-15) =	259.5			
# samples =	15	14	9	10
sum of rank values (Ri) =	376.0	329.0	211.5	259.5
avg rank value (Rbar) =	25.1	23.5	23.5	26.0

	Number of each rank value				Rank Value
rank value of NDs =	14	14	9	9	23.5
rank value of 12s =	1	0	0	0	47
rank value of 18s =	0	0	0	1	48
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
# samples =	**15**	**14**	**9**	**10**	

	Sum of rank value calculations			
	329	329	211.5	211.5
	47	0	0	0
	0	0	0	48
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
sum of rank values (R_i)	**376**	**329**	**211.5**	**259.5**

2) Compute the Wilcoxon statistic by adding up the compliance well ranks and subtracting n/(n+1)/2.
W = Ci - 1/2(n(n+1))

W = 204.5

3) Compute the expected value and standard deviation of W.

$E(W) = 1/2mn$

$SD(W) = ((mn(N+1)/12)*(1-\Sigma^{g}_{i=1} (t_i^3 - t_i)/(N^3 - N)))^{0.5}$

E(W) = 190

Adjustment for tie values:

Tie Values:	$(t_i^3 - t_i)/(N^3 - N) =$
ND	0.880
12	0.000
18	0.000
0	0.000
0	0.000
0	0.000
0	0.000

SD(W) = 13.640

4) Form the appropriate Z-score.

$Z = (W - E(W) - 0.5)/SD(W)$

Z = 1.026

5) Compare the observed Z-score to the upper 0.01 percentile of the normal distribution.

Z = 1.026

$Z_{0.01} = 2.326$

Since Z is smaller, there is not significant evidence of contamination at the compliance well at the 1 percent significance level.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Silver**
MCL (µg/l): 17.5
Method: Poisson Prediction Limits
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**3.7**	NS	NS	ND	ND	ND	**6.9**	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**2**
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**10**
04/09/01	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	NS	NS	**2**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**10**
04/15/02	ND	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	**2**
09/26/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
04/28/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	**2**
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
10/13/05	**2.9**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	**5**
04/25/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**

1) If not detected (ND), use half of the detection limit.

04/24/00	3.7	-	-	1	1	1	6.9	1	1	1	1	1	1	-	-	-	-
06/26/00	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/26/00	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09/18/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/09/01	1	1	-	1	1	1	1	1	1	1	1	1	1	-	-	-	-
09/18/01	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
10/29/01	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
01/30/02	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
02/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/15/02	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-
09/26/02	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
04/28/03	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	1
10/30/03	1	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1
04/20/04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10/21/04	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
04/18/05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10/13/05	2.9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
04/25/06	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10/20/06	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	-	-	2.5	2.5	2.5	2.5	2.5	2.5
04/25/07				5	5	5	5	5	5	5	5	5	5	5	5	5	5

2) Set the total number of data values for background wells (through the previous sampling event) equal to 'n' = 14.
Use 1/2 of the method detection limit to calculate the Total Poisson Count of the Sum (T_n).

n = 35
T_{n1} = 56.1

3) Using Gibbons' formula, calculate the upper Poisson Prediction limit T^*_k:

$$T^*_k = cT_{n1} + ct^2/2 + ct[T_{n1}(1+1/c) + t^2/4]^{0.5}$$

where c = k/n
and where k = the number of future predicted measurements (one per well during the current sampling event)
and where t = the upper 99th percentile of the t-distribution with (n-1) degrees of freedom (Table 6 of the IFG).

k = 14
n = 35
T_{n1} = 56.1
t [34,.01] = 2.4434
c = 0.4000
T_{n2} = 70
T^*_k = 37.4

4) Compare the *Poisson Prediction Limit* (T^*_k) to the *Sum of the Concentrations Detected* (T_{n2}) in the wells during the most recent sampling event.
Since the Poisson Prediction Limit was exceeded, Wilcoxon Rank Sum Tests must be performed to test the possibility that the detected concentrations are statistically significant.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Silver**
MCL (µg/l): 17.5
Method: Wilcoxon Rank Sum
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-3	MDL
04/24/00	**3.7**	NS	NS	**6.9**	**2**
06/26/00	ND	ND	NS	NS	**2**
07/26/00	ND	ND	NS	NS	**2**
09/18/00	NS	NS	NS	NS	**10**
04/09/01	ND	ND	NS	ND	**2**
09/18/01	NS	NS	NS	NS	**2**
10/29/01	NS	NS	NS	NS	**2**
01/30/02	NS	NS	NS	NS	**2**
02/28/02	NS	NS	NS	NS	**10**
04/15/02	ND	ND	NS	ND	**2**
09/26/02	ND	ND	ND	ND	**2**
04/28/03	ND	ND	ND	ND	**2**
10/30/03	ND	ND	NT	ND	**2**
04/20/04	ND	ND	ND	ND	**2**
10/21/04	ND	ND	ND	ND	**2**
04/18/05	ND	ND	ND	ND	**2**
10/13/05	**2.9**	ND	ND	ND	**2**
04/25/06	ND	ND	ND	ND	**10**
10/20/06	ND	ND	ND	ND	**5**
04/25/07	ND	ND	ND	ND	**10**

1) Rank the N = 51 observations from the smallest to the largest from background wells and compliance well MW-3.

n =	13				
m =	38				
N =	51				
Ci (MW-3) =	345.0				
# samples =	15	14	9	13	
sum of rank values (Ri) =	417.5	343.0	220.5	345.0	
avg rank value (Rbar) =	27.8	24.5	24.5	26.5	

	Number of each rank value				Rank Value
rank value of NDs =	13	14	9	12	24.5
rank value of 2.9s =	1	0	0	0	49
rank value of 3.7s =	1	0	0	0	50
rank value of 6.9s =	0	0	0	1	51
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
# samples =	**15**	**14**	**9**	**13**	

	Sum of rank value calculations			
	318.5	343	220.5	294
	49	0	0	0
	50	0	0	0
	0	0	0	51
	0	0	0	0
	0	0	0	0
	0	0	0	0
sum of rank values (R_i)	**417.5**	**343**	**220.5**	**345**

2) Compute the Wilcoxon statistic by adding up the compliance well ranks and subtracting n/(n+1)/2.
W = Ci - 1/2(n(n+1))

W = 254

3) Compute the expected value and standard deviation of W.

$E(W) = 1/2mn$

$SD(W) = ((mn(N+1)/12)*(1-\Sigma^{g}_{i=1} (t_i^3 - t_i)/(N^3 - N)))^{0.5}$

E(W) = 247

Adjustment for tie values:

Tie Values:	$(t_i^3 - t_i)/(N^3 - N) =$
ND	0.834
2.9	0.000
3.7	0.000
6.9	0.000
0	0.000
0	0.000
0	0.000

SD(W) = 18.870

4) Form the appropriate Z-score.

$Z = (W - E(W) - 0.5)/SD(W)$

Z = 0.344

5) Compare the observed Z-score to the upper 0.01 percentile of the normal distribution.

Z = 0.344

$Z_{0.01} = 2.326$

Since Z is smaller, there is not significant evidence of contamination at the compliance well at the 1 percent significance level.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Thallium**
MCL (µg/l): Not Established
Method: Poisson Prediction Limits
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	**2**	NS	NS	ND	**3**	**2**	**4**	ND	**2**	ND	**3**	**5**	ND	NS	NS	NS	NS	**2**
06/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
07/26/00	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**2**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**20**
04/09/01	**40**	ND	NS	ND	ND	ND	ND	ND	ND	**30**	ND	ND	ND	NS	NS	NS	NS	**2**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	NS	**2**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**20**
04/15/02	**40**	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	**2**
09/26/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**65**	**2**
04/28/03	ND	ND	ND	**1.6**	ND	ND	ND	ND	**1.4**	ND	ND	ND	**1**	NT	NT	NT	**15**	**1**
10/30/03	ND	ND	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/21/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/13/05	**22**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	**10**
04/25/07	ND	ND	ND	ND	ND	**35**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**6**

1) If not detected (ND), use half of the detection limit.

04/24/00	2	-	-	1	3	2	4	1	2	1	3	5	1	-	-	-	-
06/26/00	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/26/00	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
09/18/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/09/01	40	1	-	1	1	1	1	1	1	30	1	1	1	-	-	-	-
09/18/01	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
10/29/01	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
01/30/02	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-
02/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
04/15/02	40	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	-
09/26/02	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	65
04/28/03	0.5	0.5	0.5	1.6	0.5	0.5	0.5	0.5	1.4	0.5	0.5	0.5	1	-	-	-	15
10/30/03	5	5	-	5	5	5	5	5	5	5	5	5	5	5	5	5	5
04/20/04	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10/21/04	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
04/18/05	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10/13/05	22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
04/25/06	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10/20/06	5	5	5	5	5	5	5	5	5	-	-	5	5	5	5	5	5
04/25/07				2.75	2.75	35	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75

2) Set the total number of data values for background wells (through the previous sampling event) equal to 'n' = 14.
Use 1/2 of the method detection limit to calculate the Total Poisson Count of the Sum (T_n).

$n = 35$
$T_{n1} = 209.5$

3) Using Gibbons' formula, calculate the upper Poisson Prediction limit T^*_k:

$$T^*_k = cT_{n1} + ct^2/2 + ct[T_{n1}(1+1/c) + t^2/4]^{0.5}$$

where c = k/n
and where k = the number of future predicted measurements (one per well during the current sampling event)
and where t = the upper 99th percentile of the t-distribution with (n-1) degrees of freedom (Table 6 of the IFG).

$k = 14$
$n = 35$
$T_{n1} = 209.5$
$t[34,.01] = 2.4434$
$c = 0.4000$
$T_{n2} = 70.75$
$T^*_k = 111.5$

4) Compare the *Poisson Prediction Limit* (T^*_k) to the *Sum of the Concentrations Detected* (T_{n2}) in the wells during the most recent sampling event.
Since the Poisson Prediction Limit was not exceeded, there is no evidence of contamination.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Total Vanadium**
NC MCL (µg/l): Not Established
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	17	NS	NS	19	32	21	ND	29	8.9	ND	ND	78	ND	NS	NS	NS	NS	5
06/26/00	40	6.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
07/26/00	45	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	40
04/09/01	250	1.4	NS	13	19	9.3	ND	24	41	ND	ND	230	8	NS	NS	NS	NS	5
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	160	170	6.4	NS	5
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	250	9.2	ND	NS	5
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	83	12	ND	NS	5
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	NS	58	NS	40
04/15/02	240	ND	NS	ND	ND	11	21	14	69	17	12	260	ND	37	37	ND	NS	5
09/26/02	58	16	44	640	ND	ND	ND	42	50	8.7	17	310	8.8	530	130	ND	1000	5
04/28/03	89	ND	9.6	170	6.8	6.8	ND	ND	37	ND	ND	230	ND	NT	NT	NT	130	5
10/30/03	54	ND	NT	6.6	16	ND	ND	ND	92	82	5.9	14	ND	82	13	ND	200	5
04/20/04	55	ND	ND	45	25	ND	ND	13	5.1	ND	5.6	240	ND	140	33	ND	88	5
10/21/04	41	ND	ND	18	ND	ND	ND	ND	ND	ND	10	160	ND	46	59	ND	210	5
04/18/05	85	ND	ND	680	5.4	ND	ND	ND	ND	ND	ND	240	ND	100	44	ND	110	5
10/13/05	82	ND	ND	210	8.9	ND	ND	ND	ND	ND	5.7	170	ND	330	310	ND	82	5
04/25/06	110	ND	ND	ND	ND	ND	ND	ND	ND	160	ND	120	ND	ND	54	ND	85	40
10/20/06	79	ND	ND	28	ND	ND	ND	ND	23	NS	NS	ND	ND	120	100	ND	30	5
04/25/07	43	ND	ND	ND	ND	300	ND	ND	ND	33	ND	ND	ND	ND	ND	ND	26	25
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	14	13	14	10	
sum of rank values (R_i)	2560.0	901.5	635.5	1792.5	1194.0	1109.0	750.5	1104.5	1435.0	1120.0	1001.5	2213.5	789.0	2354.5	1990.5	888.5	1813.0	
avg rank value (Rbar)	170.7	64.4	70.6	137.9	91.8	85.3	57.7	85.0	110.4	93.3	83.5	170.3	60.7	168.2	153.1	63.5	181.3	

	Number of each rank value																	Rank Value
rank value of NDs =	0	11	7	3	6	8	12	8	5	7	6	2	11	2	1	12	0	51
rank value of 1.4s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102
rank value of 5.1s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	103
rank value of 5.4s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	104
rank value of 5.6s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	105
rank value of 5.7s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	106
rank value of 5.9s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	107
rank value of 6.3s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
rank value of 6.4s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	109
rank value of 6.6s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	110
rank value of 6.8s =	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	111.5
rank value of 8s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	113
rank value of 8.7s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	114
rank value of 8.8s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	115
rank value of 8.9s =	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	116.5
rank value of 9.2s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	118
rank value of 9.3s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	119
rank value of 9.6s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
rank value of 10s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	121
rank value of 11s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	122
rank value of 12s =	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	123.5
rank value of 13s =	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	126
rank value of 14s =	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	128.5
rank value of 16s =	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	130.5
rank value of 17s =	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	133
rank value of 18s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	135
rank value of 19s =	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	136.5
rank value of 21s =	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	138.5
rank value of 23s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	140
rank value of 24s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	141
rank value of 25s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	142
rank value of 26s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	143
rank value of 28s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	144
rank value of 29s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	145
rank value of 30s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	146
rank value of 32s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	147
rank value of 33s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	148.5
rank value of 37s =	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	151
rank value of 40s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153
rank value of 41s =	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	154.5
rank value of 42s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	156
rank value of 43s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157
rank value of 44s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	158.5
rank value of 45s =	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	160.5
rank value of 46s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	162
rank value of 50s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	163
rank value of 54s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	164.5
rank value of 55s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166

rank value of 58s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	167.5
rank value of 59s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	169
rank value of 69s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	170
rank value of 78s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	171
rank value of 79s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
rank value of 82s =	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	174.5
rank value of 83s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	177
rank value of 85s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	178.5
rank value of 88s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	180
rank value of 89s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	181
rank value of 92s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	182
rank value of 100s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	183.5
rank value of 110s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	185.5
rank value of 120s =	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	187.5
rank value of 130s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	189.5
rank value of 140s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	191
rank value of 160s =	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	193
rank value of 170s =	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	196
rank value of 200s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	198.5
rank value of 210s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	200.5
rank value of 230s =	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	202.5
rank value of 240s =	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	205
rank value of 250s =	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	207.5
rank value of 260s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	209
rank value of 300s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	210
rank value of 310s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	211.5
rank value of 330s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	213
rank value of 530s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	214
rank value of 640s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	215
rank value of 680s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	216
rank value of 1000s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	217
n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**14**	**13**	**14**	**10**	

Sum of rank value calculations

0	561	357	153	306	408	612	408	255	357	306	102	561	102	51	612	0
0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0
0	0	0	0	104	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	105	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	106	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	107	0	0	0	0	0	0
0	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	0
0	0	0	110	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	111.5	111.5	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	113	0	0	0	0
0	0	0	0	0	0	0	0	0	114	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	115	0	0	0	0
0	0	0	0	116.5	0	0	0	116.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	0	0
0	0	0	0	0	119	0	0	0	0	0	0	0	0	0	0	0
0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	121	0	0	0	0	0	0
0	0	0	0	0	122	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	123.5	0	0	0	123.5	0	0
0	0	0	126	0	0	0	126	0	0	0	0	0	0	126	0	0
0	0	0	0	0	0	0	128.5	0	0	0	128.5	0	0	0	0	0
0	130.5	0	0	130.5	0	0	0	0	0	0	0	0	0	0	0	0
133	0	0	0	0	0	0	0	0	133	133	0	0	0	0	0	0
0	0	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	136.5	136.5	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	138.5	138.5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	140	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	141	0	0	0	0	0	0	0	0	0
0	0	0	0	142	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	145	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146
0	0	0	0	147	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	148.5	0	0	0	0	148.5	0	0
0	0	0	0	0	0	0	0	151	0	0	0	0	151	151	0	0
153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154.5	0	0	0	0	0	0	0	154.5	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	156	0	0	0	0	0	0	0	0	0
157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	158.5	0	0	0	0	0	0	0	0	0	0	0	158.5	0	0
160.5	0	0	160.5	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	162	0	0	0
0	0	0	0	0	0	0	0	163	0	0	0	0	0	0	0	0
164.5	0	0	0	0	0	0	0	0	0	0	0	0	0	164.5	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
167.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167.5	0

0	0	0	0	0	0	0	0	0	0	0	0	0	0	169	0	0
0	0	0	0	0	0	0	0	170	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	171	0	0	0	0	0
172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174.5	0	0	0	0	0	0	0	0	174.5	0	0	0	174.5	0	0	174.5
0	0	0	0	0	0	0	0	0	0	0	0	0	177	0	0	0
178.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	178.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180
181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	182	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	183.5	183.5	0	0
185.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185.5
0	0	0	0	0	0	0	0	0	0	0	187.5	0	187.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	189.5	0	189.5
0	0	0	0	0	0	0	0	0	0	0	0	0	191	0	0	0
0	0	0	0	0	0	0	0	0	193	0	193	0	193	0	0	0
0	0	0	196	0	0	0	0	0	0	0	196	0	0	196	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	198.5	0	0	198.5
0	0	0	200.5	0	0	0	0	0	0	0	0	0	0	0	0	200.5
0	0	0	0	0	0	0	0	0	0	0	405	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	410	0	0	0	0	0
207.5	0	0	0	0	0	0	0	0	0	0	0	0	207.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	209	0	0	0	0	0
0	0	0	0	0	210	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	211.5	0	0	211.5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	213	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	214	0	0	0
0	0	0	215	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	216	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217
sum of rank values (R_i)	**2560**	**901.5**	**635.5**	**1792.5**	**1194**	**1109**	**750.5**	**1104.5**	**1435**	**1120**	**1001.5**	**2213.5**	**789**	**2354.5**	**1990.5**	**888.5**	**1813**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2)/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	441721.3	247158	109664	94606	43327	93840	158402	104533	83584	376891	47886	395976	304776	56388	328697

$N_{i\,bg}$ = 38
N = 217
H = 78.45

Adjust H for ties:

T_i = 1E+06 sum of T1..T3

$H' = H/(1-(T_i/(N^3-N)))$
H' = 87.25
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =87.25.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Rbar (well x) =	137.9	91.8	85.3	57.7	85.0	110.4	93.3	83.5	170.3	60.7	168.2	153.1	63.5	181.3
avg Rbar (background) =	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8
Dx =	30.1	-16.0	-22.5	-50.1	-22.9	2.6	-14.5	-24.4	62.5	-47.1	60.4	45.3	-44.4	73.5
Cx =	47.0	47.0	47.0	47.0	47.0	47.0	48.4	48.4	47.0	47.0	45.7	47.0	45.7	52.0
Statistical Significance ?	-	-	-	-	-	-	-	-	**Yes**	-	**Yes**	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Vanadium averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: Total Zinc
NC MCL (µg/l): 1050
Method: Kruskal-Wallis
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	150	NS	NS	35	48	36	12	43	28	12	14	68	ND	NS	NS	NS	NS	10
06/26/00	37	12	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10
07/26/00	65	66	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	50
04/09/01	230	130	NS	12	24	18	17	33	75	ND	ND	200	3	NS	NS	NS	NS	10
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	130	220	ND	NS	10
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	200	17	ND	NS	10
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	62	16	11	NS	10
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	180	NS	58	NS	50
04/15/02	230	16	NS	ND	ND	13	33	38	120	37	31	230	52	51	79	ND	NS	10
09/26/02	57	120	110	580	ND	20	ND	56	250	17	20	280	43	510	110	15	4800	10
04/28/03	86	14	31	160	16	ND	ND	ND	81	ND	ND	190	240	NT	NT	NT	800	10
10/30/03	55	22	NT	17	26	10	ND	ND	140	100	12	26	64	61	24	13	1800	10
04/20/04	55	10	ND	44	30	11	14	19	23	ND	ND	220	160	120	36	15	770	10
10/21/04	29	ND	ND	17	ND	14	ND	12	15	11	11	70	55	27	31	15	1200	10
04/18/05	83	ND	ND	780	ND	30	13	10	ND	ND	13	240	200	96	38	14	1200	10
10/13/05	92	13	12	230	19	25	ND	ND	14	23	36	170	81	330	280	11	800	10
04/25/06	130	ND	88	ND	ND	ND	ND	ND	110	180	ND	120	120	ND	56	ND	780	50
10/20/06	74	ND	20	37	ND	ND	ND	ND	55	NS	NS	ND	82	110	75	ND	200	10
04/25/07	55	21	30	30	22	830	22	15	10	39	21	12	74	37	20	12	200	10
N_i	15	14	9	13	13	13	13	13	13	12	12	13	13	14	13	14	10	
sum of rank values (R_i)	2364.0	1141.5	797.5	1582.5	886.0	1066.0	683.0	934.0	1631.0	1018.5	792.5	2036.5	1862.5	2175.5	1775.0	822.5	2084.5	
avg rank value (Rbar)	157.6	81.5	88.6	121.7	68.2	82.0	52.5	71.8	125.5	84.9	66.0	156.7	143.3	155.4	136.5	58.8	208.5	

	Number of each rank value																	Rank Value
rank value of NDs =	0	4	3	2	6	3	7	5	1	4	4	1	1	1	0	5	0	24
rank value of 3s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	48
rank value of 10s =	0	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	50.5
rank value of 11s =	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	2	0	55
rank value of 12s =	0	1	1	1	0	0	1	1	0	1	1	1	0	0	0	1	0	62
rank value of 13s =	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	69
rank value of 14s =	0	1	0	0	0	1	1	0	1	0	1	0	0	0	0	1	0	74.5
rank value of 15s =	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	0	80
rank value of 16s =	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	84
rank value of 17s =	0	0	0	2	0	0	1	0	0	1	0	0	0	0	1	0	0	88
rank value of 18s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	91
rank value of 19s =	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	92.5
rank value of 20s =	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	95.5
rank value of 21s =	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	98.5
rank value of 22s =	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	101
rank value of 23s =	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	103.5
rank value of 24s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	105.5
rank value of 25s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	107
rank value of 26s =	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	108.5
rank value of 27s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	110
rank value of 28s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	111
rank value of 29s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
rank value of 30s =	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	114.5
rank value of 31s =	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	118
rank value of 33s =	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	120.5
rank value of 35s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	122
rank value of 36s =	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	124
rank value of 37s =	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	127.5
rank value of 38s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	130.5
rank value of 39s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	132
rank value of 43s =	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	133.5
rank value of 44s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	135
rank value of 48s =	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	136
rank value of 51s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	137
rank value of 52s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	138
rank value of 55s =	3	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	141
rank value of 56s =	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	144.5
rank value of 57s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146
rank value of 58s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	147
rank value of 61s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	148
rank value of 62s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	149
rank value of 64s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	150
rank value of 65s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	151
rank value of 66s =	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152
rank value of 68s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	153
rank value of 70s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	154
rank value of 74s =	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	155.5
rank value of 75s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	157.5
rank value of 79s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	159
rank value of 81s =	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	160.5

rank value of 82s =	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	162
rank value of 83s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163
rank value of 86s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164
rank value of 88s =	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	165
rank value of 92s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	166
rank value of 96s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	167
rank value of 100s =	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	168
rank value of 110s =	0	0	1	0	0	0	0	0	1	0	0	0	0	1	1	0	0	170.5
rank value of 120s =	0	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	175
rank value of 130s =	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	179
rank value of 140s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	181
rank value of 150s =	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	182
rank value of 160s =	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	183.5
rank value of 170s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	185
rank value of 180s =	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	186.5
rank value of 190s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	188
rank value of 200s =	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	2	191
rank value of 220s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	194.5
rank value of 230s =	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	197.5
rank value of 240s =	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	200.5
rank value of 250s =	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	202
rank value of 280s =	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	203.5
rank value of 330s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	205
rank value of 510s =	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	206
rank value of 580s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	207
rank value of 770s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	208
rank value of 780s =	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	209.5
rank value of 800s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	211.5
rank value of 830s =	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	213
rank value of 1200s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	214.5
rank value of 1800s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	216
rank value of 4800s =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	217
n =	**15**	**14**	**9**	**13**	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**13**	**13**	**14**	**13**	**14**	**10**	

Sum of rank value calculations

0	96	72	48	144	72	168	120	24	96	24	24	24	0	120	0
0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0
0	50.5	0	0	0	50.5	0	50.5	50.5	0	0	0	0	0	0	0	0
0	0	0	0	0	55	0	0	0	55	55	0	0	0	0	110	0
0	62	62	62	0	0	62	62	0	62	62	62	0	0	0	62	0
0	69	0	0	0	69	69	0	0	0	69	0	0	0	0	69	0
0	74.5	0	0	0	74.5	74.5	0	74.5	0	74.5	0	0	0	0	74.5	0
0	0	0	0	0	0	0	80	80	0	0	0	0	0	0	240	0
0	84	0	0	84	0	0	0	0	0	0	0	0	0	84	0	0
0	0	0	176	0	0	88	0	0	88	0	0	0	0	88	0	0
0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	92.5	0	0	92.5	0	0	0	0	0	0	0	0	0
0	0	95.5	0	0	95.5	0	0	0	0	95.5	0	0	0	95.5	0	0
0	98.5	0	0	0	0	0	0	0	0	98.5	0	0	0	0	0	0
0	101	0	0	101	0	101	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	103.5	103.5	0	0	0	0	0	0	0
0	0	0	0	105.5	0	0	0	0	0	0	0	0	0	105.5	0	0
0	0	0	0	0	107	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	108.5	0	0	0	0	0	0	108.5	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	110	0	0	0
0	0	0	0	0	0	0	0	111	0	0	0	0	0	0	0	0
112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	114.5	114.5	114.5	114.5	0	0	0	0	0	0	0	0	0	0	0
0	0	118	0	0	0	0	0	0	0	118	0	0	0	118	0	0
0	0	0	0	0	0	120.5	120.5	0	0	0	0	0	0	0	0	0
0	0	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	124	0	0	0	0	124	0	0	0	124	0	0
127.5	0	0	127.5	0	0	0	0	0	127.5	0	0	0	127.5	0	0	0
0	0	0	0	0	0	0	130.5	0	0	0	0	0	0	130.5	0	0
0	0	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0
0	0	0	0	0	0	0	133.5	0	0	0	0	133.5	0	0	0	0
0	0	0	135	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	136	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	137	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	138	0	0	0	0
423	0	0	0	0	0	0	0	141	0	0	0	141	0	0	0	0
0	0	0	0	0	0	0	144.5	0	0	0	0	0	0	144.5	0	0
146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	147	0
0	0	0	0	0	0	0	0	0	0	0	0	0	148	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	149	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	150	0	0	0	0
151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	153	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	154	0	0	0	0	0
155.5	0	0	0	0	0	0	0	0	0	0	0	155.5	0	0	0	0
0	0	0	0	0	0	0	0	157.5	0	0	0	0	0	157.5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	159	0	0
0	0	0	0	0	0	0	0	160.5	0	0	0	160.5	0	0	0	0

0	0	0	0	0	0	0	0	0	0	0	0	162	0	0	0	0
163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0
166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	167	0	0	0
0	0	0	0	0	0	0	0	0	168	0	0	0	0	0	0	0
0	0	170.5	0	0	0	0	0	170.5	0	0	0	0	170.5	170.5	0	0
0	175	0	0	0	0	0	0	175	0	0	175	175	175	0	0	0
179	179	0	0	0	0	0	0	0	0	0	0	0	179	0	0	0
0	0	0	0	0	0	0	0	181	0	0	0	0	0	0	0	0
182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	183.5	0	0	0	0	0	0	0	0	183.5	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	185	0	0	0	0	0
0	0	0	0	0	0	0	0	0	186.5	0	0	0	186.5	0	0	0
0	0	0	0	0	0	0	0	0	0	0	188	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	191	191	191	0	0	382
0	0	0	0	0	0	0	0	0	0	0	194.5	0	0	194.5	0	0
395	0	0	197.5	0	0	0	0	0	0	0	197.5	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	200.5	200.5	0	0	0	0
0	0	0	0	0	0	0	0	202	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	203.5	0	0	203.5	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	205	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	206	0	0	0
0	0	0	207	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	208
0	0	0	209.5	0	0	0	0	0	0	0	0	0	0	0	0	209.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	423
0	0	0	0	0	213	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	429
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	217

sum of rank values (R_i)	**2364**	**1141.5**	**797.5**	**1582.5**	**886**	**1066**	**683**	**934**	**1631**	**1018.5**	**792.5**	**2036.5**	**1862.5**	**2175.5**	**1775**	**822.5**	**2084.5**

Compute the Kruskal-Wallis statistic:

$$H = \{[12/N(N+1)] * [\Sigma^{K}_{i=1} (R_i^2/N_i]\} - 3(N+1)$$

Well =	**Background**	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Ri^2/N_i =	487258.1	192639	60384	87412	35884	67104	204628	86445	52338	319026	266839	338057	242356	48322	434514

$N_{i\,bg}$ = 38
N = 217
H = 87.52

Adjust H for ties:

T_i = 106146 sum of T1..T13

$H' = H/(1-(T_i/(N^3-N)))$
H' = 88.44
Chi-square = 23.68

Compare the calculated value H' to the tabulated Chi-square value with K-1 = # groups -1 = 17df at the 5% significance level from Table 1 of the IFG. The value is 23.68 which is less than H' =88.44.
Therefore, there is evidence of significant differences between the well groups.
Post-hoc pairwise comparisons are necessary (see below).

Calculate the critical values to compare each compliance well to the background wells:

Critical Value (C_x) = $P(N(N+1)/12)^{0.5} * (1/N_{i\,bg}+1/N_x)^{0.5}$
P = 2.33 Percentile of Standard Normal Distribution
from Table 4 of IFG
N = total sample size
$N_{i\,bg}$ = total samples (N_i) of background data
N_x = total samples (N_i) of well x

Difference between average ranks (Dx) = Rbar (well x) - avg Rbar (background)

Well =	**MW-1A**	**MW-2**	**MW-2D**	**MW-3**	**MW-3D**	**MW-4A**	**MW-5A**	**MW-5D**	**MW-8**	**MW-9**	**MW-12**	**MW-13S**	**MW-13D**	**MW-15**
Rbar (well x) =	121.7	68.2	82.0	52.5	71.8	125.5	84.9	66.0	156.7	143.3	155.4	136.5	58.8	208.5
avg Rbar (background) =	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2	113.2
Dx =	8.5	-45.1	-31.2	-60.7	-41.4	12.2	-28.4	-47.2	43.4	30.0	42.2	23.3	-54.5	95.2
Cx =	47.0	47.0	47.0	47.0	47.0	47.0	48.4	48.4	47.0	47.0	45.7	47.0	45.7	52.0
Statistical Significance ?	-	-	-	-	-	-	-	-	-	-	-	-	-	**Yes**

Compare each difference (Dx) with the corresponding critical value (Cx).
The Dx value for the above indicated wells do exceed the corresponding Cx value.
Therefore, we conclude that the concentration of Total Zinc averaged over these compliance wells are significantly greater than that of the background wells.
Shewart-CUSUM Control Charts should be performed for each failing well to check for statistical significance.

White Oak Landfill
Haywood County, North Carolina
BLE Project Number J07-1957-03

Compound: **Carbon Disulfide**
MCL (µg/l): 700
Method: Poisson Prediction Limits
Background: MW-11S, MW-11D, & MW-14

	MW-11S	MW-11D	MW-14	MW-1A	MW-2	MW-2D	MW-3	MW-3D	MW-4A	MW-5A	MW-5D	MW-8	MW-9	MW-12	MW-13S	MW-13D	MW-15	MDL
04/24/00	NT	NS	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	**100**
06/26/00	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**100**
07/26/00	NT	NT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	**100**
09/18/00	NS	NS	NS	NT	NT	NS	NS	NS	NT	NS	NS	NS	NS	NS	NS	NS	NS	**100**
04/09/01	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	NS	NS	NS	**100**
09/18/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	**100**
10/29/01	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	**100**
01/30/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NT	NT	NS	**100**
02/28/02	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NT	NS	NT	NS	**100**
04/15/02	NT	NT	NS	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NS	**100**
09/26/02	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**100**
04/28/03	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	**100**
10/30/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	**28**	**15**	ND	ND	ND	ND	ND	ND	**10**
04/20/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/21/04	ND	**24**	ND	ND	ND	ND	ND	ND	**15**	**14**	**19**	ND	ND	ND	ND	ND	ND	**10**
04/18/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	**53**	**17**	ND	ND	ND	ND	**16**	ND	**10**
10/13/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
04/25/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**
10/20/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NS	ND	ND	ND	ND	ND	ND	**10**
04/25/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**10**

1) If not detected (ND), use half of the detection limit.

04/24/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
06/26/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
07/26/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
09/18/00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/09/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
09/18/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/29/01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
01/30/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
02/28/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/15/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
09/26/02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
04/28/03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10/30/03	5	5	5	5	5	5	5	5	5	28	15	5	5	5	5	5	5	
04/20/04	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
10/21/04	5	24	5	5	5	5	5	5	15	14	19	5	5	5	5	5	5	
04/18/05	5	5	5	5	5	5	5	5	5	53	17	5	5	5	5	16	5	
10/13/05	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
04/25/06	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
10/20/06	5	5	5	5	5	5	5	5	5	-	-	5	5	5	5	5	5	
04/25/07				5	5	5	5	5	5	5	5	5	5	5	5	5	5	

2) Set the total number of data values for background wells (through the previous sampling event) equal to 'n' = 7.
Use 1/2 of the method detection limit to calculate the Total Poisson Count of the Sum (T_n).

$n = 21$
$T_{n1} = 124$

3) Using Gibbons' formula, calculate the upper Poisson Prediction limit T^*_k:

$$T^*_k = cT_{n1} + ct^2/2 + ct[T_{n1}(1+1/c) + t^2/4]^{0.5}$$

where $c = k/n$
and where k = the number of future predicted measurements (one per well during the current sampling event)
and where t = the upper 99th percentile of the t-distribution with (n-1) degrees of freedom (Table 6 of the IFG).

$k = 14$
$n = 21$
$T_{n1} = 124$
$t[20,.01] = 2.528$
$c = 0.6667$
$T_{n2} = 70$
$T^*_k = 114.5$

4) Compare the *Poisson Prediction Limit* (T^*_k) to the *Sum of the Concentrations Detected* (T_{n2}) in the wells during the most recent sampling event.
Since the Poisson Prediction Limit was not exceeded, there is no evidence of contamination.