



ENGINEERING TECTONICS, P.A.
ENGINEERS • GEOLOGISTS • HYDROLOGISTS

P.O. Box 4798, Winston-Salem, NC 27115-4798 (919) 767-8807

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Fac/Perm/Co ID #	Date	Doc ID#
fc	05/15/09	DIN

July 8, 1991

County Managers Office
P.O. Box 366
Sparta, North Carolina 28675

Attention: Dan McMillan
Re: Alleghany County Landfill

Dear Sir:

On June 5, 1991, A representative from Engineering Tectonics obtained groundwater samples from the three monitoring wells installed at the county landfill on Dan Osborne Road. These samples were sent to a North Carolina Certified laboratory for analysis. Please find enclosed a copy of the results. A copy has also been sent to the proper State agency.

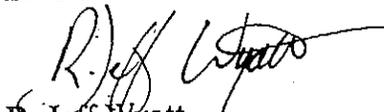
Well #1 has a high level of Total Organic Carbon and Total Organic Halogens. This could be attributed to organic materials buried in the landfill. Well #3 has a high level of Total Organic Halogens. This also could result from buried organic material.

Well #1 has a high level of Iron and Manganese and Well #2 has a high level of Iron. This is probably due to the native soils in the mountainous regions.

If you have any questions, please contact us at 919-727-0063.

Sincerely,

ENGINEERING TECTONICS


R. Jeff Wyatt
Hydrogeologic Technician

SHEALY ENVIRONMENTAL SERVICES, INC.
 BIOLOGISTS, TOXICOLOGISTS & CHEMISTS

400 GRAYMONT AVENUE
 COLUMBIA, SOUTH CAROLINA 29205
 (803) 254-9915

SC DHEC CERTIFICATION NO. 26103
 NC DEM NO. 001
 Fax (803) 254-9107

CERTIFICATE OF ANALYSIS

Client: ENGINEERING TECTONICS
 P.O. Box 4798
 Winston-Salem, NC 27115

Attention: Mr. Tom Cahill

Laboratory No.	Sample Description
91-4148	MW-1; Collected 06/05/91 at 1330
91-4149	MW-2; Collected 06/05/91 at 1349
91-4150	MW-3; Collected 06/05/91 at 1400

Date Received: 06/06/91
 Date Reported: 06/25/91

QA/QC Officer: *MWA*

RESULTS

PARAMETER	RESULTS			Analyst	Date Analyzed
	91-4148	91-4149	91-4150		
BOD (mg/l)	42	2.2	5.0	CAW	
Chloride (mg/l)	<5.0	<5.0	<5.0	CAW/VTB	06/10/91
COD (mg/l)	168	5.57	3.98	RRR	06/07/91
Fluoride (mg/l)	<0.10	<0.10	<0.10	RRR	06/10/91
Nitrate (mg/l)	0.042	0.698	0.985	MAW	06/11/91
pH (SU)	5.58	6.09	5.20	CAW	06/06/91
Specific Conductance (umhos/cm @ 25 C)	237	27.1	15.2	CAW/VTB	06/10/91
Sulfate (mg/l)	<5.0	<5.0	<5.0	CAW	06/12/91
TDS (mg/l)	180	24	16	RRR	06/07/91
TOC (mg/l)	34.4	<1.0	<1.0	MAW	06/12/91
TOX (mg/l)	141	<10	21	MAW	06/19/91
METALS (mg/l)				VTB	06/14/91
Arsenic	0.013	<0.009	<0.009		
Barium	0.087	0.013	0.032		
Cadmium	<0.001	<0.001	<0.001		
Chromium	0.003	<0.003	0.005		
Copper	<0.002	<0.002	<0.002		
Iron	63.9	0.374	0.128		
Lead	<0.011	<0.011	<0.011		
Manganese	5.40	0.027	0.012		
Mercury	<0.001	<0.001	<0.001	VTB	06/18/91
Selenium	<0.016	<0.016	<0.016		
Silver	<0.002	<0.002	<0.002		
Zinc	0.066	0.027	0.013		

Reported By: *Michael A. Woodrum*

Michael A. Woodrum, Laboratory Director

SHEALY ENVIRONMENTAL SERVICES, INC.

400 Graymont Avenue
Columbia, South Carolina 29205

Telephone No. (803) 254-9915 Fax No. (803) 254-9107

Client Name ENGINEERING TECTONICSAddress 2518 REYNOLDA RD.
W.D. N.C. 27106Attention JEFF WYATTTelephone No. 727-0063 P.O. No. _____

CHAIN OF CUSTODY RECORD

SAMPLE ANALYSIS REQUIRED

← PRESERVATION (CODE)

CODE: A = None
B = HNO3
C = H2SO4
D = NaOH
E = _____LAB
USE
ONLY

REMARKS

SESI
LAB I.D.

Sample ID (Location)	Yr. DATE	TIME	WELL	SOLID	CONF	GRAB	# of containers	pH Conductivity	BOD	Nutrients - Specify	METALS - Specify	TOC/TOX - Specify	BTEX	VOC - Specify Method Required	Pesticides/PCBs - Specify	Herbicides	Total Phenol	Oil & Grease	BNLs	Solids - Specify	Cyanides	Coliform - Specify Type	Toxicity - Specify	← PRESERVATION (CODE)	LAB USE ONLY		
ALLEGHANY CO. MW-1	6-30 6-3	1:30					4																		LANDFILL PARAMETERS	91-4148	
MW-2	↓	1:49																							AS ENCLOSED	91-4149	
MW-3	↓	2:00																									91-4150
SAMPLER Relinquished by (Sig.)			Date/Time		Received by (Sig.)		Hazards Associated with Sample																	Receipt TRC _____ mg/l			
Relinquished by (Sig.)			Date/Time		Received by (Sig.)		BUS																	Receipt pH _____ su			
Relinquished by (Sig.)			Date/Time		Received by (Sig.)																			Receipt Temp. _____ °C			
			Date/Time		Received by (Sig.)																			Custody Seal Intact (circle) YES NO NONE			