

# GeoScience & Technology, P. A.

"PRACTICAL ENVIRONMENTAL SOLUTIONS"

93

2050 Northpoint Drive • Suite A • Winston-Salem, NC 27106

October 12, 1993

(919) 896-1300 • FAX (919) 896-1020

Mr. Dan McMillian  
Alleghany Co. Manager  
P.O. Box 366  
Sparta N.C. 28675

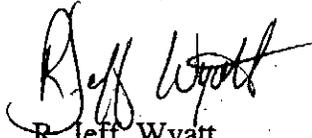
Dear Sir;

Please find enclosed a copy of the metals analyses performed on the groundwater samples obtained from the Alleghany County Landfill on August 30, 1993. These samples were obtained in order to correct a laboratory error on the first samples. The detection limits on the first samples were not in accordance with state regulations.

The analyses do not indicate any Cadmium or Mercury contamination above the 2L regulations. A copy of the results have been sent to the NCDEHNR Solid Waste Division in Raleigh.

Please feel free to contact us at 919/896-1300 if you have any questions or if we can assist you in any other matter.

Sincerely,  
GEOSCIENCE AND TECHNOLOGY, P.A.



R. Jeff. Wyatt  
Senior Hydrogeologic Technician

**AnalytiKEM Inc.**  
28 Springdale Road  
Cherry Hill, NJ 08003  
609/751-1122  
1-800-TRY-LAB1  
Fax: 609/751-0824

TEST REPORT NO. A60740

October 1, 1993

Prepared for:

Geo Science & Technology  
2050 North Point Drive  
Suite A  
Winston Salem, NC 27106

Attention: Jeff Wyatt

Project: Alleghany Co. Landfill

Certification No. NC 258

Date Sampled: August 30, 1993

Date of Sample Receipt: August 31, 1993

Reviewed &  
Approved by:

Name: Gerold J. Miller, Ph.D.

Title: QA/QC Manager

Analytical Results for Metals

Method Number	Parameter	Method Blank	Sample Designation		
			A60740-1 MW-1	A60740-2 MW-2	A60740-3 MW-3
3010/200/200.7	Cadmium, total	5.0 U	5.0 U	5.0 U	5.0 U
3020/245.1	Mercury, total	0.20 U	0.20 U	0.20 U	0.067 J
	Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)

U - Compound was analyzed for but not detected. The preceding number is the practical quantitation limit for the compound.

J - Compound was detected at levels below the practical quantitation limit. The level reported is approximate.

Case Narrative

The samples for this project were digested using SW846 Method 3010 and not Method 3030C as required. Method 3010 is a more aggressive digestion than Method 3030C. Therefore, the concentrations reported should reflect the maximum amount of metals in the sample.

Quality Control Data for Metals

Aqueous Matrix Spike/Matrix Spike Duplicate Recovery Data

<u>Parameter</u>	<u>Sample Spiked</u>	<u>Amount of Spike</u>	<u>Recovery</u>			<u>Control Limits</u>	
			<u>MS</u>	<u>MSD</u>	<u>RPD</u>	<u>Recovery</u>	<u>Max. RPD</u>
Cadmium	A84070-3	100	95	94	1	75-125	20
Mercury	A84070-5	0.2	132	128	3	75-125	20
Mercury	DI Water	0.2	122	--	--	75-125	20
Units		(ug)	(%)	(%)	(%)	(%)	(%)

Recovery:  2  out of  6  outside control limits

RPD:  0  out of  2  outside control limits

28 Springdale Road  
Cherry Hill, New Jersey 08003  
(609) 751-1122 • (215) 923-2068  
Fax: (609) 751-0824

2925 Richmond Avenue  
Houston, Texas 77098  
(713) 520-1495  
Fax: (713) 523-7107

**Analysis Request and  
Chain-of-Custody**

2324 Vernsdale Road  
Rock Hill, South Carolina 29730  
(803) 324-5310  
Fax: (803) 324-3982

S-2

Client: GEOSCIENCE TECH

Project: ALLEGHANY CO. LANDFILL

AnalytiKEM Contact: J. NEAL

LAB I.D. NO.	FIELD SAMPLE I.D. NO.	DATE	USE 24 HR. CLOCK TIME	MATRIX	40 ml vials	950 ml Org. Pres.	ml Unpres.	ml Unpres.	50 ml HNO <sub>3</sub>	ml H <sub>2</sub> SO <sub>4</sub>	ml H <sub>2</sub> SO <sub>4</sub>	ml NaOH	ANALYSIS REQUESTED PARAMETERS
	MW-1	8-30	11:30	H <sub>2</sub> O									CADMIUM + MERCURY
	MW-2	↓	11:00	↓									↓
	MW-3		11:45	↓									

1. Field Measurements:  
Data Sheets: Y N  
Filtered: Y Not Required

II. Field Conditions/Comments: \_\_\_\_\_

2. Chain of Custody  
Seal No. \_\_\_\_\_

III. Special Instructions: MUST HAVE: 1.1 ppb ON MERCURY 5.0 ppb ON CADMIUM  
(Detection Limits, Data Package, Etc.)

<b>Relinquished By:</b>	<b>Date/Time (use 24 hr. clock)</b>	<b>Received By:</b>	<b>Date/Time (use 24 hr. clock)</b>
Print Name: <u>[Signature]</u>	8-30 14:30	Print Name:	
Signature:		Signature:	
Print Name: <u>OPS</u>		Print Name: <u>Matthew Drumm</u>	8/31/93 190
Signature:		Signature: <u>[Signature]</u>	