

EA Laboratories

CSM: 72-0144 Permit No. 162-S
Media: Air, Water, Solid, Hazardous
Sort: Permit, Compliance, Legal, Misc.
19 Loveton Circle
Sparks, MD 21152
Telephone: 410-771-4920
Fax: 410-771-4407

①
5-2296
SW



May 22, 1996

REL
DAP

72-0144 162-SR-2
123-SF-2

3390
0123-SR-2

3389 0162-SR-2

Scanned

Mr. Al Eckert
Arkansas Department of Pollution Control and Ecology
Solid Waste Management Division
8001 National Drive
P.O. Box 8913
Little Rock, Arkansas 72219-8913

Re: Groundwater and Leachate Monitoring Data Submittal
Tontitown Landfill Permit Numbers 123-SR-2 and 162-SR-2

Dear Mr. Eckert:

In accordance with Chapter 12 of Regulation 22, Rules for Solid Waste Management, the Tontitown Landfill, Inc. has performed the first quarter groundwater sampling event at the subject facility on March 28, 1996. Analytical report numbers 960423 (groundwater Appendix I), 960424 (groundwater Appendix II), and 960426 (leachate) from EA Laboratories for samples collected during this event are enclosed. Included in the subject reports are copies of field parameter forms completed during the sampling event. Observations and measurements made in the field are listed on these forms.

If you have any questions concerning the enclosed analytical reports, please contact me at 410-771-4920. If you have any other questions concerning the environmental compliance at the subject site, please contact either Mr. Michael Dae of USA Waste at 404-799-1047 or Mr. Kevin Hodges of USA Waste at 501-751-7024.

Sincerely,

R. Thomas Randall
Laboratory Project Manager

enclosure

cc: Michael S. Dae, w/o enclosure
Kevin Hodges, w/o enclosure



29 April 1996

Mr. Mike Dae
Chambers USA Waste Services Company
2236 Bolton Road, N.W.
Atlanta, GA 30318

Re: Tontitown Landfill Groundwater Monitoring (70110.00)

Dear Mr. Dae:

Enclosed is our report on the analysis of twelve water samples and one field blank collected for the Chambers - Tontitown Landfill Groundwater Monitoring project on 28 March and 4 April 1996. The invoice is included.

Please contact me if you have any questions or require further information and refer to report 960423. Unless other arrangements are made, we reserve the right to dispose of your sample sixty (60) days from the date of this letter. We will retain the raw data for seven years from this date.

Sincerely,

A handwritten signature in cursive script that reads "R. Thomas Randall".

R. Thomas Randall
Laboratory Project Manager

enclosure

SITE NAME: TONTITOWN LANDFILLSAMPLING EVENT: MARCH 1996LOCATION: FAYETTEVILLE, ARKANSASSAMPLING DATE: MARCH 28, 1996

SAMPLE LOCATION	WELL DEPTH (ft) ¹	STATIC WATER LEVEL (ft) ²	WATER COLUMN (ft)	VOLUME IN WELL CASING (gal.)	VOLUME PURGED (gal.)	FIELD PARAMETERS (AVERAGE)				COMMENTS	WELL SEAL NUMBER	
						pH	COND (µS/cm)	TURB (NTU)	TEMP (°C)		ARRIVAL	DEPARTURE
MW-1	101.00	76.15	24.85	36.52	30.00	6.58	990.00	--	12.2	Well purged dry	None	None
MW-2	83.00	37.47	45.53	67.50	52.00	7.61	360.00	14.67	11.6	Well purged dry	None	None
MW-3	61.00	47.63	13.37	7.90	75.00	5.57	630.00	2.14	12.2		None	None
MW-4	48.00	39.36	8.64	9.00	2.50	6.05	1000.00	0.25	12.3	Well purged dry	None	None
MW-5	109.00	72.72	36.28	53.00	63.00	7.22	1110.00	1.70	12.1	Well purged dry	None	None
MW-6	105.00	28.85	76.15	111.00	425.00	6.10	510.00	--	13.1	Well purged dry	None	None
MW-7	154.00	109.05	44.95	30.00	119.00	6.92	700.00	1.53	12.3	Well purged dry	None	None
MW-8	60.00	38.36	21.64	50.00	17.00	7.34	580.00	3.61	12.0	Well purged dry	None	None
MW-10	86.00	59.72	26.28	27.10	6.00	7.77	450.00	2.24	11.4	Well purged dry	None	None
MW-11	110.00	62.03	47.97	31.40	33.00	6.88	530.00	4.60	12.1	Well purged dry	None	None

Notes:

¹ Obtained from historical semi-annual sampling data² Measured from the top of the well casing

Acronyms and Abbreviations:

Cond = Conductivity

ft = Feet

mg/L = Milligrams per liter

µS/cm = Microsiemens per centimeter

Turb = Turbidity

°F = Degrees Celsius

gal. = Gallon

NA = Not available

NTU = Nephelometric turbidity units

LABORATORY DATA REPORT

Prepared for:

Chambers
Tontitown Landfill Groundwater Monitoring

Prepared by:

EA Laboratories
19 Loveton Circle
Sparks, Maryland 21152

Report #60423

April 1996

TABLE OF CONTENTS
Chambers - Tontitown Landfill
EA Laboratories Report No. 960423

1. NARRATIVE
2. CHAIN OF CUSTODY
3. VOLATILES DATA
 - A. QC Summary
 1. Laboratory Control Sample
 2. Method Blank
 - B. Sample Data
 1. Data for Sample MW-11
 2. Data for Sample MW-02
 3. Data for Sample MW-08
 4. Data for Sample MW-10
 5. Data for Sample MW-05
 6. Data for Sample MW-06
 7. Data for Sample MW-07
 8. Data for Sample MW-01
 9. Data for Sample MW-01D
 10. Data for Sample MW-04
 11. Data for Sample Field Blank
 12. Data for Sample Trip Blank
 13. Data for Sample MW-3
 14. Data for Sample TripBlank
4. METALS DATA - 200 Series
 - A. Analytical Results
 - B. Quality Control Data
 1. Laboratory Control Sample
 2. Method Blank
5. METALS DATA - SW846 Series
 - A. Analytical Results

TABLE OF CONTENTS
Chambers - Tontitown Landfill
EA Laboratories Report No. 960423

B. Quality Control Data

1. Laboratory Control Sample
2. Method Blank

6. GENERAL CHEMISTRY DATA

A. Analytical Results

B. Quality Control Data

1. Laboratory Control Sample
2. Method Blank

I. NARRATIVE

**EA Laboratories
ANALYTICAL NARRATIVE**

Client: **Chambers USA**
Site: **Tontitown Landfill**
Project number: **70110.00**

EA Laboratories Report: **960423**
Laboratory Project Manager: **R. Thomas Randall**
Report Date: **29 April 1996**

This report contains the results of the analysis of twelve water samples and one field blank collected on 28 March and 4 April 1996 in support of the referenced project.

SAMPLE RECEIPT

The samples, field blank, and two trip blanks arrived by Federal Express at EA Laboratories on 29 March and 5 April 1996. Upon receipt, the samples and blanks were inspected and compared with the chain-of-custody records. The samples and blanks were then logged into the laboratory computer system with assigned laboratory accession numbers and released for analysis.

<u>Client Sample Designation</u>	<u>EA Lab Number</u>
MW-11	9603755
MW-02	9603756
MW-08	9603757
MW-10	9603758
MW-03	9603759
MW-05	9603760
MW-06	9603761
MW-07	9603762
MW-01	9603763
MW-01D	9603764
MW-04	9603765
FIELD BLANK	9603766
TRIP BLANK	9603767
MW-3	9604257
TRIP BLANK	9604258

Following this narrative section are a description of analytical methods (Table 1), a glossary of qualifiers (Table 2) and the original chain-of-custody records. Analytical results and quality control information are summarized in the appended data package which has been formatted to be consistent with the deliverable requirements of this project.

QUALITY CONTROL

The following sections are ordered as the data appears in this report. They contain observations made during sample analysis, summarize the results of quality control measurements, and

**EA Laboratories
ANALYTICAL NARRATIVE**

Client: **Chambers USA**
Site: **Tontitown Landfill**
Project number: **70110.00**

EA Laboratories Report: **960423**
Laboratory Project Manager: **R. Thomas Randall**
Report Date: **29 April 1996**

address the impact on data usability based upon project Data Quality Objectives. For each fractional analysis the narrative includes:

- **Sample chronology:** This section summarizes the sample history by fraction including the sample preparation method and date, analytical method, and analysis date. Anything unusual about the samples, digestates, or extracts is identified. Holding time compliance is evaluated in this section.
- **Laboratory method performance:** All quality control criteria for method performance must be met for all target analytes for data to be reported. These criteria generally apply to instrument tune, calibration, method blanks, and Laboratory Control Samples (LCS). In some instances where method criteria fail, useable data can be obtained and are reported with client approval. The narrative will then include a thorough discussion of the impact on data quality.
- **Sample performance:** Quality control field samples are analyzed to determine any measurement bias due to the sample matrix based on evaluation of matrix spikes (MS), matrix spike duplicates (MSD), and laboratory duplicates (D). If acceptance criteria are not met, matrix interferences are confirmed either by reanalysis or by inspection of the LCS results to verify that laboratory method performance is in control. Data are reported with appropriate qualifiers or discussion.

VOLATILES BY GC/MS - WATER (EA9603755 - EA9603758, EA9603760 - EA9603767, EA9604257, EA9604258)

Sample Chronology: Fourteen samples were analyzed on 9, 10 and 11 April 1996 for the Appendix I analyte list by USEPA SW-846, Methods 5030/8260. All specified holding times were met.

Laboratory Method Performance: All laboratory method performance criteria were met for the reported samples.

Sample Performance: All quality control criteria were met for the reported samples.

METALS - WATER (EA9603755-EA9603765)

Sample Chronology: Twelve samples were prepared on 17-24 April 1996 and analyzed for total

**EA Laboratories
ANALYTICAL NARRATIVE**

Client: **Chambers USA**
Site: **Tontitown Landfill**
Project number: **70110.00**

EA Laboratories Report: **960423**
Laboratory Project Manager: **R. Thomas Randall**
Report Date: **29 April 1996**

calcium, iron, magnesium, manganese, mercury, sodium, and potassium according to EPA methods 200.7/245.1 on 19-25 April 1996.

Laboratory Method Performance: All laboratory method performance criteria were met for the reported samples.

Sample Performance: All quality control criteria were met for the reported samples.

METALS - WATER (EA9603755-EA9603765)

Sample Chronology: Eleven samples were prepared on 17 April 1996 and analyzed for total Appendix I metals (SW846 methods 6010/7060/7421/7740/7841) on 19-22 April 1996.

Laboratory Method Performance: All laboratory method performance criteria were met for the reported samples.

Sample Performance: All quality control criteria were met for the reported samples.

GENERAL CHEMISTRY - WATER (EA9603755-EA9603765)

Sample Chronology: The above samples were analyzed according to the following USEPA methods. All holding times were met for the reported samples.

<u>Parameter</u>	<u>Method#</u>	<u>Prep Date</u>	<u>Analysis Date</u>
Sulfate	375.1	N/A	15 April 1996
NO3	353.2	N/A	20 April 1996
Ammonia	350.1	11 April 1996	12 April 1996
TDS	160.1	N/A	04 April 1996
TOC	415.2	N/A	18 April 1996
Cyanide	335.2	8 April 1996	09 April 1996
COD	410.4	16 April 1996	17 April 1996
Chloride	325.2	N/A	17 April 1996
Bicarbonate	310.1	N/A	22 April 1996

Laboratory Method Performance: All laboratory method performance criteria were met for the reported samples.

**EA Laboratories
ANALYTICAL NARRATIVE**

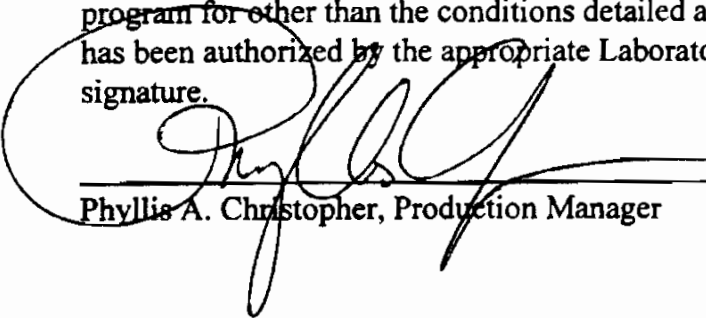
Client: **Chambers USA**
Site: **Tontitown Landfill**
Project number: **70110.00**

EA Laboratories Report: **960423**
Laboratory Project Manager: **R. Thomas Randall**
Report Date: **29 April 1996**

Sample Performance: All quality control criteria were met for the reported samples.

CERTIFICATION OF RESULTS

The Laboratory certifies that this report meets the project requirements for analytical data as stated in the Analytical Task Order (ATO) and the chain-of-custody. In addition, the Laboratory certifies that the data as reported meet the Data Quality Objectives for precision, accuracy, and completeness specified for this project or as stated in EA Laboratories Quality Assurance program for other than the conditions detailed above. Release of the data contained in this report has been authorized by the appropriate Laboratory Manager as verified by the following signature.



Phyllis A. Christopher, Production Manager

29 April 1996

TABLE I. ANALYTICAL METHODS

Parameter	Method	Method Number	Matrix	Reference
SAMPLE PREPARATION				
Total Metals Digestion	Nitric Acid - Hydrochloric Acid	200.0	W	(6)
Total Metals Digestion (FAA/ICP)	Nitric Acid - Hydrochloric Acid	3010	W	(3)
Total Metals Digestion (GFAA)	Nitric Acid	3020	W	(3)
ORGANICS				
Chemical Oxygen Demand	Colorimetric - Manual	410.4	W	(2)
Total Organic Carbon	Oxidation - Infrared	415.1	W	(2)
Volatile Organic Compounds	Gas Chromatography/Mass Spectrometry	8260	W	(3)
METALS				
Antimony	Atomic Emission - ICP	6010	W	(3)
Arsenic	Atomic Absorption - Furnace	7060	W	(3)
Barium	Atomic Emission - ICP	6010	W	(3)
Beryllium	Atomic Emission - ICP	6010	W	(3)
Cadmium	Atomic Emission - ICP	6010	W	(3)
Calcium	Atomic Emission - ICP	200.7	W	(5)
Chromium, Total	Atomic Emission - ICP	6010	W	(3)

TABLE 1. ANALYTICAL METHODS

Parameter	Method	Method Number	Matrix	Reference
Cobalt	Atomic Emission - ICP	6010	W	(3)
Copper	Atomic Emission - ICP	6010	W	(3)
Iron	Atomic Emission - ICP	200.7	W	(5)
Lead	Atomic Absorption - Furnace	7421	W	(3)
Magnesium	Atomic Emission - ICP	200.7	W	(5)
Manganese	Atomic Emission - ICP	200.7	W	(5)
Mercury	Atomic Absorption - Cold Vapor	245.1	W	(2)
Nickel	Atomic Emission - ICP	6010	W	(3)
Potassium	Atomic Emission - ICP	200.7	W	(5)
Selenium	Atomic Absorption - Furnace	7740	W	(3)
Silver	Atomic Emission - ICP	6010	W	(3)
Sodium	Atomic Emission - ICP	200.7	W	(5)
Thallium	Atomic Absorption - Furnace	7841	W	(3)
Vanadium	Atomic Emission - ICP	6010	W	(3)
Zinc	Atomic Emission - ICP	6010	W	(3)

TABLE I. ANALYTICAL METHODS

Parameter	Method	Method Number	Matrix	Reference
INORGANIC NONMETALS				
Bicarbonate/Carbonate	Calculation	406C	W	(1)
Chloride	Colorimetric - Automated Phenate	350.1	W	(2)
Cyanide, Total	Semiautomated Spectrophotometric	335.2 CLP-M	W	(4)
Nitrogen, Ammonia	Colorimetric - Automated Phenate	350.1	W	(2)
Nitrogen, Nitrate+Nitrite	Colorimetric - Cadmium Reduction	353.2	W	(2)
Sulfate	Colorimetric - Automated Phenate	350.1	W	(2)
PHYSICAL DETERMINATIONS				
Residue, Total Filterable	Gravimetric - 180C	160.1	W	(2)

Matrix codes:

W - Estuarine water, ground water, leachates, ocean water, surface water, and wastewater

References:

1. American Public Health Association, American Water Works Association, Water Pollution Control Federation. 1985. Standard Methods for the Examination of Water and Wastewater, 16th edition. APHA, Washington, D.C.
2. United States Environmental Protection Agency. 1979. Methods for Chemical Analysis of Water and Wastes. EPA-600/4-79-020. U.S. EPA, Cincinnati, Ohio.

TABLE 1. ANALYTICAL METHODS

Parameter	Method	Method Number	Matrix	Reference
3.	United States Environmental Protection Agency. August 1993. Test Methods for Evaluating Solid Waste. Physical/Chemical Methods. EPA SW-846, 3rd edition, including Final Update I. U.S. EPA, Washington, D.C.			
4.	United States Environmental Protection Agency. September 1991. U.S. EPA Contract Laboratory Program. Statement of Work for Inorganics Analysis. ILM02.1. U.S. EPA. Washington, D.C.			
5.	United States Environmental Protection Agency. 1987. Inductively coupled plasma-atomic emission spectrometric method for trace element analysis of water and wastes. 40 CFR Part 136, Appendix C.			
6.	United States Environmental Protection Agency. 1979. Guidelines establishing test procedures for the analysis of pollutants; proposed regulations. Federal Register 44(233):69464-69575.			

TABLE 2. ORGANIC ANALYSIS DATA QUALIFIERS

ND or U Indicates a compound on the target compound list (TCL) was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and, if a soil sample, for percent moisture. For example, 10 U is used for phenol in water if the sample final volume is the protocol-specified final volume. If a 1-to-10 dilution of the extract was necessary, the reported limit is (10 x 10 U) or 100 U. For a soil sample, the value is also adjusted for percent moisture. For example, if the sample had 24% moisture and a 1-to-10 dilution factor, the soil sample quantitation limit for phenol (330 U) would be corrected as follows:

$$\text{Reported limit} = (330 \text{ U}) \times \text{df} / \text{D}$$

where:

$$\text{df} = \text{dilution factor} = 10$$

$$\text{D} = (100 - \% \text{ moisture}) / 100 \text{ (At 24\% moisture, D} = (100-24) / 100 = 0.76)$$

$$\text{Reported limit} = (330 \text{ U}) \times 10 / 0.76 = 4300 \text{ U (rounded to two significant figures)}$$

For soil samples subjected to gel permeation chromatography (GPC) cleanup procedures, the contract required quantitation limit (CRQL) is also multiplied by 2 to account for the fact that only half of the extract is recovered. Note: If GPC procedures are employed, the factor of 2 is not included in the dilution factor reported; a "Y" is entered for GPC (Y/N).

- TR or J** Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, 2) when the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL but greater than zero, 3) when the retention time data indicate the presence of a compound that meets the pesticide/Aroclor identification criteria and the result is less than the CRQL but greater than zero. Note: the "J" code is not used and the compound is not reported as being identified for pesticide/Aroclor results less than the CRQL, if the technical judgement of the pesticide residue analysis expert determines that the peaks used for compound identification resulted from instrument noise or other interferences (column bleed, solvent contamination, etc.). For example, if the sample quantitation limit is 10 ug/L but a concentration of 3 ug/L is calculated, report it as 3 J. The sample quantitation limit must be adjusted for dilution as discussed for the U flag
- C** This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides with concentration equal to or greater than 10 ng/uL in the final extract must be confirmed by GC/MS.
- B** This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified TCL compound.
- E** This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag does not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and reanalyzed according to the specifications listed in the SOW. All such compounds with a response greater than full scale should have a concentration flagged with an "E" on Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses are reported on separate Forms I. The Form I for the diluted sample will have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak is considered separately; e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak separately exceeds 200 ug/L.
- D** This flag identifies all compounds identified in the analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.
- A** This flag indicates that a TIC is a suspected aldol-condensation product.
- X** Other specific flags may be required to properly define the results. If used, they are fully described and such description attached to the Sample Data Summary Package and the Case Narrative. The flags begin by using "X". If more than one flag is required, "Y" and "Z" are used, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.
- N** Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- P** This flag is used for GC analyses when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a "P".

2. CHAIN OF CUSTODY

Mike Duce

Company Name: Chambers USA
Project No. 70110.01
Dept.: Task:
Sample Storage Location: B5-B7

Project Manager or Contact: Kevin Hodges
Phone:
Project Name: Tentitown Landfill
Groundwater Monit
ATO Number: Apx I

Parameters/Method Numbers for Analysis

Chain of Custody Record



EA Laboratories
19 Loveton Circle
Sparks, MD 21162
Telephone: (410) 771-4920
Fax: (410) 771-4407

Report Deliverables:
1 2 3 4 D E

EDD: Yes/No

DUE TO CLIENT: 4/18/96

Page 1 of 1 Report #: 960423

* Date * Time Water Soil * Sample Identification
19 Characters

No. of Containers
APX I VOA 8260
APX I Metals 6010/9000
Sulfate 375.1
TDS 50206 / COD 400.4
Turbidity 5021208
Ammonia 350.1
Bicarbonate 130.1
Nitrate 353.2
Cyanide 335.2
Chloride SM 4300LE
Metals 200 series #
TOC

EA Labs Accession Number
Remarks

Table with columns for Date, Time, Water, Soil, Sample Identification, and various parameters. Rows include MW-111, MW-102, MW-108, MW-110, MW-103, MW-105, MW-106, MW-107, MW-101, MW-101DI, MW-104, Field Blanks, and Trip Blanks. Includes handwritten notes like 'Notes: Turbidity taken in field' and 'pH 5.58'.

49015

Samples by: (Signature) Paul Naett

Date/Time 3/28/96 1730

Relinquished by: (Signature) Paul Naett

Date/Time 3/28/96 1730

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Date/Time

Received by Laboratory: (Signature) Archer

Date/Time 3/29/96 945

Airbill Number:

Sample Shipped by: (Circle)

Cooler Temp 2-12°C pH: X Yes

Comments: BCLZ 912

Custody Seals Intact X Yes

Fed Ex. Puro. UPS Hand Carried Other:

NOTE: Please indicate method number for analyses requested. This will help clarify any questions with laboratory techniques.

3. VOLATILES DATA

A. QC Summary

LCS Recovery Report

Lab Name : EA Laboratories File ID : VA1A7731.D Instrument: VA1
 Sample : LCS,V3703,WATER,5ml Date Analyzed: 9 Apr 96 7:21 pm
 Matrix : WATER Date Sampled:
 Client : Project : Method : 8260W.M

Spike Compound	Spike Added	Spike Res	Spike %Rec	QC Limits % Rec
1,1-Dichloroethene	50	43.1	86	73-125
Benzene	50	48.4	97	77-124
Trichloroethene	50	44.5	89	65-131
Toluene	50	48.6	97	71-142
Chlorobenzene	50	47.0	94	70-145

* - Indicates values outside of QC limits

This LCS has been checked and is within outside current limits

James J. Fuchs 4/23/96 N/A
 Analyst Date Non-conformance form no.

LCS Recovery Report

Lab Name : EA Laboratories File ID : VA1A7753.D Instrument: VA1
 Sample : LCS, V3706, WATER, 5ml Date Analyzed: 10 Apr 96 10:03 pm
 Matrix : WATER Date Sampled:
 Client : Project : Method : 8260W.M

Spike Compound	Spike Added	Spike Res	Spike %Rec	QC Limits % Rec
1,1-Dichloroethene	50	42.7	85	73-125
Benzene	50	48.7	97	77-124
Trichloroethene	50	44.5	89	65-131
Toluene	50	48.7	97	71-142
Chlorobenzene	50	47.4	95	70-145

* - Indicates values outside of QC limits

This LCS has been checked and is within outside current limits

Analyst James J. F. [Signature] Date 4/22/96 Non-conformance form no. N/A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: VAIA7730
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VAIA7730.D
 Level: (low/med) _____ Date Received: _____
 % Moisture: not dec. _____ Date Analyzed: 4/9/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: VAIA7752
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VAIA7752.D
 Level: (low/med) _____ Date Received: _____
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	<u>ug/L</u>	Q
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

B. Sample Data

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11

Lab Name: EA LABORATORIES Contract: _____

Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9603755

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7734.D

Level: (low/med) _____ Date Received: 3/29/96

% Moisture: not dec. _____ Date Analyzed: 4/9/96

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	10	U
75-09-2	Methylene Chloride	5	U
75-15-0	Carbon Disulfide	5	U
107-13-1	Acrylonitrile	50	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
74-97-5	Bromochloromethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
74-95-3	Dibromomethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
591-78-6	2-Hexanone	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW02

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603756
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7735.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/9/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	<u>ug/L</u>	Q
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW08

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603757
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7736.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/9/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603758
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VAIA7739.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	ug/L	Q
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW05

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603760
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7740.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
			Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	4	J
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	10	U
75-09-2	Methylene Chloride	5	U
75-15-0	Carbon Disulfide	5	U
107-13-1	Acrylonitrile	50	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
74-97-5	Bromochloromethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
74-95-3	Dibromomethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
591-78-6	2-Hexanone	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW06

Lab Name: EA LABORATORIES Contract: _____

Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9603761

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7741.D

Level: (low/med) _____ Date Received: 3/29/96

% Moisture: not dec. _____ Date Analyzed: 4/10/96

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		4	J
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		2	J
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	J
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		2	J
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW07

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603762
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7742.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	ug/L	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		3	J
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		7	
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		1	J
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW01

Lab Name: EA LABORATORIES Contract: _____

Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9603763

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7743.D

Level: (low/med) _____ Date Received: 3/29/96

% Moisture: not dec. _____ Date Analyzed: 4/10/96

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		15	
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		7	
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		25	
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		10	
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		4	J
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW01D

Lab Name: EA LABORATORIES Contract: _____

Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9603764

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7744.D

Level: (low/med) _____ Date Received: 3/29/96

% Moisture: not dec. _____ Date Analyzed: 4/10/96

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	ug/L	Q
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		14	
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		7	
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		23	
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		9	
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		4	J
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

2

90

5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW04

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603765
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7745.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	7	
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	10	U
75-09-2	Methylene Chloride	5	U
75-15-0	Carbon Disulfide	5	U
107-13-1	Acrylonitrile	50	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	9	
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	17	
67-66-3	Chloroform	5	U
74-97-5	Bromochloromethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	3	J
79-01-6	Trichloroethene	4	J
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
74-95-3	Dibromomethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
591-78-6	2-Hexanone	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: EA LABORATORIES Contract: _____

Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 9603766

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7733.D

Level: (low/med) _____ Date Received: 3/29/96

% Moisture: not dec. _____ Date Analyzed: 4/9/96

GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
			Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	10	U
75-09-2	Methylene Chloride	5	U
75-15-0	Carbon Disulfide	5	U
107-13-1	Acrylonitrile	50	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
74-97-5	Bromochloromethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
74-95-3	Dibromomethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
591-78-6	2-Hexanone	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9603767
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7732.D
 Level: (low/med) _____ Date Received: 3/29/96
 % Moisture: not dec. _____ Date Analyzed: 4/9/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:	
		(ug/L or ug/Kg)	ug/L
			Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
67-64-1	Acetone	10	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	10	U
75-09-2	Methylene Chloride	5	U
75-15-0	Carbon Disulfide	5	U
107-13-1	Acrylonitrile	50	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
108-05-4	Vinyl acetate	10	U
78-93-3	2-Butanone	10	U
156-59-2	cis-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
74-97-5	Bromochloromethane	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
74-95-3	Dibromomethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
106-93-4	1,2-Dibromoethane (EDB)	5	U
591-78-6	2-Hexanone	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9604257
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7757.D
 Level: (low/med) _____ Date Received: 4/5/96
 % Moisture: not dec. _____ Date Analyzed: 4/11/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	Concentration Units:		Q
		(ug/L or ug/Kg)	<u>ug/L</u>	
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		8	
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		3	J
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		2	J
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: EA LABORATORIES Contract: _____
 Lab Code: EA ENG Case No.: _____ Method: 8260 SDG No.: _____
 Matrix: (soil/water) WATER Lab Sample ID: 9604258
 Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VA1A7754.D
 Level: (low/med) _____ Date Received: 4/5/96
 % Moisture: not dec. _____ Date Analyzed: 4/10/96
 GC Column: RTX 502.2 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg)	<u>ug/L</u>	Q
74-87-3	Chloromethane		5	U
75-01-4	Vinyl Chloride		5	U
74-83-9	Bromomethane		5	U
75-00-3	Chloroethane		5	U
75-69-4	Trichlorofluoromethane		5	U
67-64-1	Acetone		10	U
75-35-4	1,1-Dichloroethene		5	U
74-88-4	Iodomethane		10	U
75-09-2	Methylene Chloride		5	U
75-15-0	Carbon Disulfide		5	U
107-13-1	Acrylonitrile		50	U
156-60-5	trans-1,2-Dichloroethene		5	U
75-34-3	1,1-Dichloroethane		5	U
108-05-4	Vinyl acetate		10	U
78-93-3	2-Butanone		10	U
156-59-2	cis-1,2-Dichloroethene		5	U
67-66-3	Chloroform		5	U
74-97-5	Bromochloromethane		5	U
71-55-6	1,1,1-Trichloroethane		5	U
56-23-5	Carbon Tetrachloride		5	U
107-06-2	1,2-Dichloroethane		5	U
71-43-2	Benzene		5	U
79-01-6	Trichloroethene		5	U
78-87-5	1,2-Dichloropropane		5	U
75-27-4	Bromodichloromethane		5	U
74-95-3	Dibromomethane		5	U
108-10-1	4-Methyl-2-Pentanone		10	U
10061-01-5	cis-1,3-Dichloropropene		5	U
108-88-3	Toluene		5	U
10061-02-6	trans-1,3-Dichloropropene		5	U
79-00-5	1,1,2-Trichloroethane		5	U
106-93-4	1,2-Dibromoethane (EDB)		5	U
591-78-6	2-Hexanone		10	U

4. METALS DATA - 200 SERIES

A. Analytical Results

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603755 - MW-11

µg/L

Calcium	62300
Iron	<100
Magnesium	611
Manganese	<15.0
Mercury	<0.20
Sodium	2970
Potassium	<1000

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603756 - MW-02

ug/L

Calcium	35900
Iron	180
Magnesium	<1000
Manganese	<15.0
Mercury	<0.20
Sodium	5810
Potassium	4740

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603757 - MW-08

µg/L

Calcium	74500
Iron	<100
Magnesium	1150
Manganese	20.2
Mercury	<0.20
Sodium	4220
Potassium	1390

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603758 - MW-10

ug/L

Calcium	40000
Iron	<100
Magnesium	6760
Manganese	<15.0
Mercury	<0.20
Sodium	3090
Potassium	<1000

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603759 - MW-03

ug/L

Calcium	59300
Iron	723
Magnesium	1920
Manganese	1150
Mercury	<0.20
Sodium	2480
Potassium	1060

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603760 - MW-05

µg/L

Calcium	130000
Iron	178
Magnesium	2020
Manganese	<15.0
Mercury	<0.20
Sodium	11700
Potassium	2400

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603761 - MW-06

µg/L

Calcium	79100
Iron	<100
Magnesium	2240
Manganese	96.0
Mercury	<0.20
Sodium	6390
Potassium	<1000

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603762 - MW-07

µg/L

Calcium	127000
Iron	<100
Magnesium	2430
Manganese	1050
Mercury	<0.20
Sodium	5380
Potassium	1260

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603763 - MW-01

µg/L

Calcium	170000
Iron	1610
Magnesium	4180
Manganese	4810
Mercury	<0.20
Sodium	23000
Potassium	10400

METALS RESULTS FOR CHAMBERS REPORT # 960423
Sample EA9603764 - MW-01D

µg/L

Calcium	171000
Iron	1670
Magnesium	4190
Manganese	4830
Mercury	<0.20
Sodium	23400
Potassium	10300

METALS RESULTS FOR CHAMBERS REPORT # 960423

Sample EA9603765 - MW-04

µg/L

Calcium	203000
Iron	3190
Magnesium	3280
Manganese	10000
Mercury	<0.20
Sodium	5960
Potassium	1110

B. Quality Control Data

EA LABORATORIES
Method Blank Report

Client: Chambers

Project: Tontitown Landfill

Date Analyzed: 19-25 April 1996

Method: 200 series

Matrix: water

Units: $\mu\text{g/L}$

<u>Parameter</u>	<u>Reporting Limit</u>	<u>Blank result</u>
Calcium	1000	< 1000
Iron	100	< 100
Manganese	15.0	< 15.0
Manganese	1000	< 1000
Mercury	0.20	< 0.20
Sodium	1000	< 1000
Potassium	1000	< 1000

EA LABORATORIES
LCS Recovery Report

Client: Chambers
- Project: Tontitown Landfill
Date Analyzed: 19-25 April 1996

Matrix: water
Method: 200 series
Units: µg/L

Liquid LCS

<u>Parameter</u>	<u>True Conc.</u>	<u>Found Conc.</u>	<u>% rec</u>
Calcium	10000	9914	99.1
Iron	2000	2020	101.0
Magnesium	10000	9670	96.7
Manganese	1000	1010	101.0
Mercury	4.0	4.1	102.5
Potassium	10000	9510	95.1
Sodium	10000	9680	96.8

5. METALS DATA - SW846 SERIES

A. Analytical Results

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603755 **CLIENT ID: MW-11**

<u>ELEMENT</u>	<u>CONC. UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	<20.0

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603756 **CLIENT ID: MW-02**

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	<20.0

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603757 **CLIENT ID: MW-08**

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	<20.0

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603758 **CLIENT ID: MW-10**

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	<20.0

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603759 **CLIENT ID: MW-03**

<u>ELEMENT</u>	<u>CONC. UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	45.2

METALS RESULTS FOR CHAMBERS REPORT #960423

EA SAMPLE ID: 9603760

CLIENT ID: MW-05

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	3.6
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	78.2

metals found

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603761 **CLIENT ID: MW-06**

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	7.7
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	46.5

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603762 **CLIENT ID: MW-07**

<u>ELEMENT</u>	<u>CONC. UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	<40.0
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	94.6

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603763 **CLIENT ID: MW-01**

<u>ELEMENT</u>	<u>CONC, UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	70.1
Copper	<10.0
Lead	<3.0
Nickel	154
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	527

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603764 **CLIENT ID: MW-01D**

<u>ELEMENT</u>	<u>CONC. UG/L</u>
Antimony	11.7
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	71.5
Copper	<10.0
Lead	<3.0
Nickel	154
Selenium	<5.0
Silver	<10.0
Thallium	<10.0
Vanadium	<50.0
Zinc	535

METALS RESULTS FOR CHAMBERS REPORT #960423
EA SAMPLE ID: 9603765 **CLIENT ID: MW-04**

<u>ELEMENT</u>	<u>CONC. UG/L</u>
Antimony	<6.0
Arsenic	<10.0
Barium	<200
Beryllium	<5.0
Cadmium	<5.0
Chromium	<10.0
Cobalt	<50.0
Copper	<10.0
Lead	<3.0
Nickel	169
Selenium	<5.0
Silver	11.3
Thallium	<10.0
Vanadium	<50.0
Zinc	<20.0

B. Quality Control Data

EA LABORATORIES
Method Blank Report

Client: Chambers USA
Project: Tontitown Landfill
- Date Analyzed: 19-22 April 1996

Method: SW846
Matrix: water
Units: ug/L

<u>Parameter</u>	<u>Detection Limit</u>	<u>Blank result</u>
Antimony	6.0	< 6.0
Arsenic	10.0	< 10.0
Barium	200	< 200
Beryllium	5.0	< 5.0
Cadmium	5.0	< 5.0
Chromium	10.0	< 10.0
Cobalt	50.0	< 50.0
Copper	10.0	< 10.0
Lead	3.0	< 3.0
Nickel	40.0	< 40.0
Selenium	5.0	< 5.0
Silver	10.0	< 10.0
Thallium	10.0	< 10.0
Vanadium	50.0	< 50.0
Zinc	20.0	< 20.0

EA LABORATORIES
LCS Recovery Report

Client: Chambers USA
Project: Tontitown Landfill
Date Analyzed: 19-22 April 1996

Matrix: water
Method: SW846
Units: µg/L

Liquid LCS

Parameter	True Conc.	Found conc	% rec
Antimony	500	478	95.6
Arsenic	25.0	22.0	88.0
Barium	2000	2030	101.5
Beryllium	50.0	52.5	105.0
Cadmium	50.0	47.4	94.8
Chromium	200	207	103.5
Cobalt	500	530	106.0
Copper	250	260	104.0
Lead	25.0	23.7	94.8
Nickel	500	514	102.8
Selenium	50.0	45.1	90.2
Silver	1050	974	92.3
Thallium	25.0	20.0	80.0
Vanadium	500	535	107.0
Zinc	500	499	99.8

6. GENERAL CHEMISTRY DATA

A. Analytical Results

GENERAL CHEMISTRY RESULTS FOR TONTITOWN LANDFILL REPORT 960423

Sample Designation	Chloride mg/L	Cyanide, Total mg/L	Nitrogen, Ammonia mg N/L	Accession Number
MW-11	9.2	<0.01	0.21	3755
MW-02	10.0	<0.01	0.11	3756
MW-08	3.2	<0.01	0.12	3757
MW-10	2.3	<0.01	<0.1	3758
MW-03	2.4	<0.01	0.13	3759
MW-05	36.3	<0.01	<0.1	3760
MW-06	19.5	<0.01	<0.1	3761
MW-07	10.4	<0.01	<0.1	3762
MW-01	37.6	<0.01	0.16	3763
MW-01D	37.7	<0.01	0.29	3764
MW-04	10.9	<0.01	0.17	3765

GENERAL CHEMISTRY RESULTS FOR TONTITOWN LANDFILL REPORT 960423

Sample Designation	Bicarbonate mg CaCO ₃ /L	Carbonate mg CaCO ₃ /L	Chemical Oxy. Demand mg/L	Accession Number
MW-11	165	<0.4	<1.0	3755
MW-02	111	<0.4	<10.0	3756
MW-08	214	<0.4	<10.0	3757
MW-10	147	1.3	<10.0	3758
MW-03	177	<0.4	10.9	3759
MW-05	329	1.0	24.5	3760
MW-06	227	<0.4	10.9	3761
MW-07	377	<0.4	<10.0	3762
MW-01	515	<0.4	15.5	3763
MW-01D	525	<0.4	11.4	3764
MW-04	594	1.1	18.5	3765

GENERAL CHEMISTRY RESULTS FOR TONTITOWN LANDFILL
REPORT 960423

Sample Designation	Nitrogen, nitrate mg N/L	Org. Carbon, Total mg/L	Accession Number
MW-11	3.7	1.3	3755
MW-02	0.87	1.2	3756
MW-08	0.64	1.9	3757
MW-10	<0.05	1.8	3758
MW-03	<0.05	4.2	3759
MW-05	1.7	5.8	3760
MW-06	2.6	2.4	3761
MW-07	0.98	2.0	3762
MW-01	0.77	4.4	3763
MW-01D	0.76	3.9	3764
MW-04	<0.05	5.0	3765

GENERAL CHEMISTRY RESULTS FOR TONTITOWN LANDFILL
REPORT 960423

Sample Designation	Residue, Tot. Filt. mg/L	Sulfate mg/L	Accession Number
MW-11	188	<2.0	3755
MW-02	151	<2.0	3756
MW-08	228	<2.0	3757
MW-10	152	6.1	3758
MW-03	185	<2.0	3759
MW-05	423	3.9	3760
MW-06	400	<2.0	3761
MW-07	591	<2.0	3762
MW-01	416	<2.0	3763
MW-01D	625	<2.0	3764
MW-04	626	<2.0	3765

B. Quality Control Data

EA Laboratories
LCS Recovery Report

Client: Chambers USA
Project: Landfill Groundwater Monit.

Matrix: Water
Units: mg/L

<u>Parameter</u>	<u>True Conc</u>	<u>Found Conc</u>	<u>% rec</u>	<u>Limits</u>
Ammonia	0.50	0.48	96.0	81-108
TOC	20.0	19.9	99.5	96-104
COD	250	259	104	86-116
Cyanide	0.097	0.092	95.2	49-136
Total Diss. Solids	667	661	99.1	88-106
Sulfate	25.0	22.7	90.8	86-111
Chloride	10.0	9.60	96.0	95-106
Nitrate	0.50	0.50	100	94-106

EA Laboratories
Method Blank Report

Client: Chambers USA
Project: Landfill Groundwater Monitoring

Matrix: Water
Units: mg/L

<u>Parameter</u>	<u>Detection Limit</u>	<u>Blank Result</u>
Ammonia	0.10	< 0.10
COD	10.0	< 10.0
Cyanide	0.01	< 0.01
Total Dissolved Solids	10.0	< 10.0
Sulfate	2.00	< 2.00
TOC	1.00	< 1.00
Nitrate	0.05	< 0.05
Chloride	1.00	< 1.00