WEL' LOG AND DRILLING REP('T

ORIGINAL

950973

State of Ohio

PLEASE USE PENCIL. DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 OD Length of casing 16½

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Date of completion 9/23/65

BAILING OR PUMPING TEST

Pumping Rate 60 G.P.M. Duration of test 2 hrs.

Drawdown 60 ft. Date .....

Static level-depth to water 16 ft.

Quality (clear, cloudy, taste, odor) Clear

Hardness

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	8 Ft.
Shale	8	54
water 16		

US EPA RECORDS CENT

556109

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N

Non-Responsive

W E.

S.

See reverse side for instructions

Drilling Firm Hobart Sherman

Address Jackson Route 5

Date Sept 23/65

Signed Hobart Sherman

5

WELL LOG AND DRILLING REPORT

ORIGINAL

28

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 30' 6"

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 15 G.P.M. Duration of test ..... hrs.

Drawdown 50 ft. Date .....

Developed capacity .....

Static level—depth to water 50 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	4 Ft.
Yellow sandrock	4	22
Blue shale	22	45
Brown shale & sand	45	55
Blue shale	55	70
Coal	70	74
Blue shale	74	90
Gray sandrock	90	116

Water at 35 and 90 feet.

SKETCH SHOWING LOCATION

Locate in reference to numbered

Non-Responsive

Drilling Firm Joe Forsley & Sons Date Feb. 8, 1954

Address Rte 1, Jackson, O. Signed B. J. Forsley

3

ORIGINAL

48

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

Non-Responsive

Casing diameter 6 OD Length of casing 21' 7"
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....
Date of completion Oct 24 1950

Pumping rate 10 G.P.M. Duration of test Bailer test hrs.
Drawdown ..... ft. Date .....
Developed capacity .....
Static level—depth to water 60 ft.
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	16 Ft.
Shale	16"	65
Sandstone	65"	70
Shale	70	77
Water at 65		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

W.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Hubert Sherman
Address Rt 5 Columbus O

Date Oct 24 1950
Signed Hubert Sherman

6

WELL LOG AND DRILLING REPORT

ORIGINAL
78

State of Ohio

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 55

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 3 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 22 3 ft.

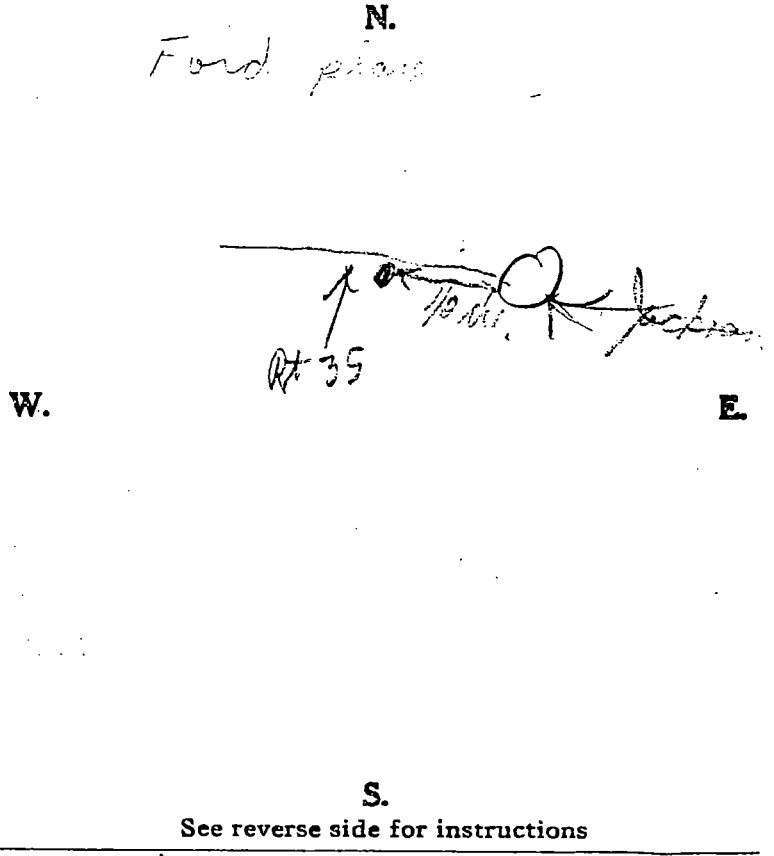
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Surface	0 Feet	3 Ft.
Shale	3	23
Sandrock	23	55

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Ramsey Drilling

Address Wellston Ohio

Date June 19/54

Signed Don Ramsey Jr

A16

WELL LOG AND DRILLING REPORT

ORIGINAL

E

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 34'9"

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 22 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 60 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	3 Ft.
Clay	3	27
Quicksand	27	33
Blue shale	33	56
Dark blue shale (gas)	56	56
Water at	74	

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

W.

Non-Responsive

[redacted]

RECEIVED
1954 MAR 22 56
NATURAL RESOURCES
DIVISION OF WATER

Drilling Firm Fawley & Son Date Aug. 1955

Address Rt 1, Jackson Signed B. J. Fawley

A/8

ORIGINAL

I

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 10'4"
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....
Date of completion .....

BAILING OR PUMPING TEST

Pumping rate 15 G.P.M. Duration of test ..... hrs.
Drawdown ..... ft. Date .....
Developed capacity .....
Static level—depth to water 10 ft.
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	5 Ft.
yellow sandrock	5	27
water at 23 ft		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N

Non-Responsive

W

S.

See reverse side for instructions

Drilling Firm Jim Finchley + Sons Date July 1959
Address Route 1 Jackson, Ohio Signed Jim Finchley

A23

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio

Non-Responsive

[redacted]

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 50 ft

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 2 80 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 45 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	2 Ft.
Clay	2	48
Brown sandy shale	48	65
Blue shale	65	77
white sand	77	80
water at 77 feet		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

[redacted]

Drilling Firm Joe Foosley & Sons Date July 23, 1953

Address Route 1, Jackson Signed B. J. Foosley

A26

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio

DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 ins. Length of casing 45 ft.

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate Cooling Coil G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 8 ft. ..... ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
dirt	0 Feet	12 Ft.
Quicksand	12	42
Blue Shale	42	45
Grey Sandrock	45	92
18 in. Cavity at 45 ft		
Water at 45 ft		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

Drilling Firm Joe Fordney & Son Date April 2 to 10, 1952

Address Route #1 Jackson Ohio Signed Joseph F. Fordney

A27.

ORIGINAL
44

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1500 Dublin Road
Columbus, Ohio

No. 218981

County Jackson Township Lick Section of Township 21

Owner Hillside Chapel Address Route #4 Jackson, O

Location of property One mile Northeast of Jackson

CONSTRUCTION DETAILS

Casing diameter 6" O.D. Length of casing 27'

Type of screen Length of screen —

Type of pump —

Capacity of pump —

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping rate 5 ~~Bailed~~ G.P.M. Duration of test hrs.

Drawdown ft. Date

Developed capacity

Static level—depth to water 30' ft.

Pump installed by

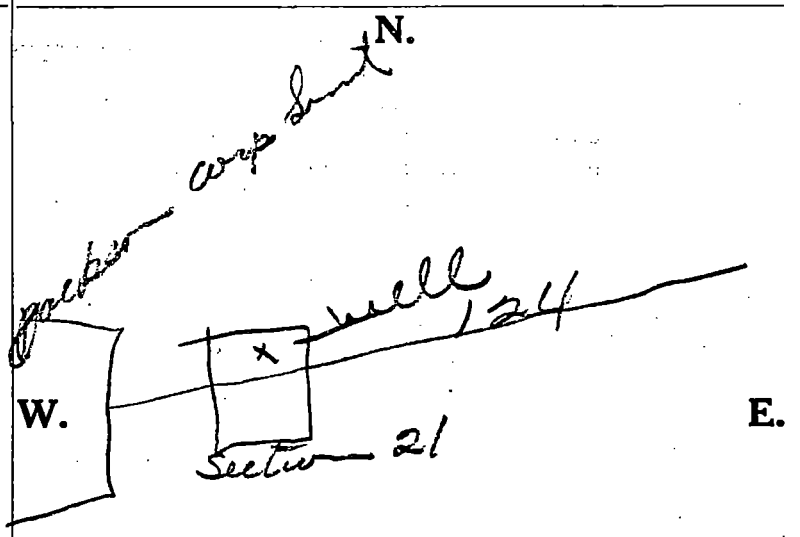
WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	23 Ft.
Sandstone	23 "	35'
Slate	35 "	38'
Sandstone	38'	42'
Slate	42'	78'
Sandstone	78'	79

Water at 34'

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



S.

See reverse side for instructions

Drilling Firm Hubert Sherman Date May 6, 1960

Address Rt. # 3 Jackson Signed Hubert Sherman

36

WELL LOG AND DRILLING REPORT

ORIGINAL 69

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

No. 152196

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 15' 6"

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 20 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 10 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Soft sandstone	0 Feet	10 Ft.
Quicksand	10	12
Yellow sandrock	12	35
water at 30 ft.		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Forshey Sons

Address Jackson

Date Dec. 19, 1955

Signed B. J. Forshey

44

WELL LOG AND DRILLING REPORT

ORIGINAL 69

State of Ohio

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 5½'

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 600 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 50 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	4 Ft.
Sandrock	4	90
First water at 90 feet		

1,954,800
385,000-S

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Joe Forsley & Son

Address Route 1, Jackson

Date May 13 to 15, 1952

Signed B. J. Forsley

45

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

ORIGINAL
69

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 13 ft.
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....
Date of completion Aug 17, 1956

BAILING OR PUMPING TEST

Pumping rate 600+ ~~G.P.M.~~ GPH Duration of test ..... hrs.
Drawdown ..... ft. Date Aug 17, 1956
Developed capacity .....
Static level—depth to water 45 ft.
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	3 Ft.
Soft yellow sandrock	3	8
Brown sandrock	8	30
Light yellow sandrock	30	80
30 g.p.h. at 55 ft.		
600+ g.p.h. at 75 ft.		

RECEIVED

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

W

See reverse side for instructions

Drilling Firm Joe Hosley & Sons
Address Route 1 Jackson, O.

Date Aug. 17, 1956
Signed Joe Hosley

45

ORIGINAL
47

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6.00 Length of casing 21'2

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Date of completion Sept. 7, 1960

BAILING OR PUMPING TEST

Pumping rate 8 G.P.M. Bailer Test Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 45 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	17 Ft.
Lime	19"	55
Limestone	55"	59
Water at 55		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

Non-Responsive

W.

S.

See reverse side for instructions

Drilling Firm Hobart Shaner

Address R.R. 4 Carrollton, O.

Date Sept. 7, 1960

Signed Hobart Shaner

A1

ROSS INERATION SERVICES, INC. US. A Facility ID #OHD048415665

394 GILES ROAD ● GRAFTON, OHIO 44044

(216) 748-2171 ● (216) 235-3050 CLEVELAND LINE

WASTE PRODUCT SURVEY

11570 *

I. Generator: THE GOODYEAR TIRE + RUBBER CO US/EPA ID #: OHD000817379

Mailing Address: 1020 E. MAIN ST

Plant Address: JACKSON, OHIO 45640

Business Contact: LLOYD HAYNES Phone: (614) 286-4111

Technical Contact: NED NIEHOFF Phone: (614) 286-4111

THIS INFORMATION IS BEING REQUIRED TO COMPLY WITH RCRA 40 CFR PART 265.13 GENERAL WASTE ANALYSIS.

II. GENERAL WASTE INFORMATION

Waste Material Name: WASTE ACETONE MIXTURE

Generator Code(if used): N/A

Describe process that generates waste: SOLVENT USED TO CLEAN RESIN FROM MIXING TANKS

SIC Code(optional): 3079

Is this Waste "Hazardous" as defined by RCRA Part 261? NO (YES) (circle)

If yes, list applicable EPA Hazardous Waste Number(s) below.

F003

Rate of Generation: 3 DRUMS/WEEK Current Accumulation Drums: 108 Bulk: N/A

Specify all types of containerization for which you request quotation.
55 gallon steel drums X ; 70 gallon recovery drum N/A ; (with fiber or steel drums inside); 55 gallon fiber drum N/A ; 5 gallon pail N/A ; Bulk N/A ; Other N/A
If bulk, I would like a quote for pumping charge. (circle) (NO) YES

III. WASTE STREAM CHEMICAL COMPOSITION

Components including contaminants	Concentration Range WT%	Average WT% Must Total 100%	TLV (if published) +ACGIH	OSHA
ACETONE	0 to 2	1%	750	N/A
SOLID RESIN MIXTURE	100 98	99%	N/A	
(NO HAZARDOUS MATERIAL CONTAINED)	N/A	N/A		
N/A				

Attach to this form any additional information which must be known to treat, store or dispose of the waste in accordance with RCRA Section 265.13, including but not limited to data developed under RCRA 261, laboratory analysis, technical publications or safety data sheets.

*If applicable, this waste stream was previously described by W.P.S.# 4949

12/1/81

11570

IV. SPECIFIC ANALYSIS OF WASTE

ANSWER EVERY ITEM IN THIS SECTION
DO NOT LEAVE BLANKS. If the specific element is not present, indicate "none".

Organic Bound Sulfur* N/A %WT
" " Chlorine* N/A %WT
" " Fluorine* N/A %WT
" " Bromine* N/A %WT
" " Iodine* N/A %WT
" " Nitrogen N/A %WT
" "Phosphorus N/A %WT
(Base %WT on Molecular Structure)

Metals

Lead* N/A PPM
Mercury* N/A PPM
Arsenic N/A PPM
Barium N/A PPM
Cadmium N/A PPM
Chromium N/A PPM
Selenium N/A PPM
Silver N/A PPM

*These items are specifically required by RCRA Part 265 Subpart O

Does this waste contain PCBS? (circle)

(NO) YES If yes, give the concentration and attach supporting documentation.

_____ _____ PPM

Does this waste contain Insecticides, Pesticides, Herbicides or Rodenticidies?

(NO) YES If yes, identify each in the space below and the concentrations.

_____ _____ PPM

_____ _____ PPM

V. TOXICITY

Check applicable data

NA Ingestion; explain _____
NA Inhalation; explain _____
NA Dermal; explain _____
NA Eyes; explain _____
NA Other; explain _____
NA Carcinogen(suspected or known); explain

_____ _____

VI. PHYSICAL PROPERTIES

Physical State @70°F (circle)

Liquid Semisolid (Solid)

Slurry Sludge Gas

Viscosity @ 70°F _____ sus / cps

Is material pourable/pumpable? (circle)

(NO) YES

Is waste multi-layered? (NO) YES

1.(top) _____ % 3. _____ %

2. _____ % 4. _____ %

Dissolved Solids N/A %WT

Suspended Solids N/A %WT
(identify and indicate % by WT)

BTU Value/lbs.* 4500

*Specifically required by RCRA Part 265 Subpart O.

Flash Point: Unk °F

Specific Gravity: 1.7

pH: NA

Characteristics

Color: Grey, brown

Odor: Ketone, Styrene

Other: _____

VII. REACTIVITY

(circle) (Stable) Unstable

Handling conditions to avoid None

_____

Chemical Incompatibility NA

_____

12-1-81

Re: Jackson County
Goodyear Tire & Rubber Company
Hazardous Materials
#04-40-0283

Goodyear Tire and Rubber Company
1020 East Main Street
Jackson, Ohio 45640

May 20, 1983

Attention: Lloyd Haynes

Dear Sir:

This acknowledges the receipt of your May 5, 1983 letter which includes your coorections to the deficiencies noted in the January 26, 1983 inspection. The following matters require further attention because the corrections did not appear to adequately address the violations:

1. Waste Analysis, 3745-65-13 - Please describe how waste streams are "reviewed". You should indicate testing frequency, sampling methods, and analytical parameters (i.e., waste composition and flash point).

2. Personnel Training, 3745-65-16 - Please describe your formal training program, and who will conduct training. All applicable employees must be trained in the implementation of the contingency plan.

3. Contingency Plan, 3745-65-52 - The contingency plan included in your letter did not contain an Emergency Coordinator name, address, and phone number, and did not contain specific fire and spill procedures. Exactly how will the Emergency Coordinator and plant personnel handle a solvent fire, a leaking drum, or a large solvent spill? Specify equipment use, etc.

4. Operating Record, 3745-65-73 (Appendix enclosed) - The operating record should contain the EPA hazardous waste number (F003, etc.) and handling method (stored, reclaimed, or disposed off-site).

5. Closure Plan - Please describe how the storage area will be decontaminated, including the soil beneath the drum storage area.

Please correct these deficiencies within 30 days, and submit the amended documents to this office. If you have any questions regarding these or other requirements, please call me at this office.

Sincerely,

Brian J. Blair
Inspector
Division of Hazardous Materials Management

BJB:dm

cc: Paula Cotter, DHMM, C.O.

Southeast District Office
2195 Front St., Logan, Ohio 43138 (614) 385-8501

Richard F. Celeste, Governor
Robert H. Maynard, Director

The Goodyear Tire & Rubber Company

JACKSON, OHIO 45640

PHONE (614) 286-4111

May 5, 1983

Ohio EPA
Southeast District Office
2195 Front Street
Logan, OH 43138

Attention: Brian Blair

Enclosed are the corrections of the violations noted on your inspection of The Goodyear Tire and Rubber Company facility on January 26, 1983.

The attached information shall be incorporated into the Hazardous Waste program for this facility.

If you have any questions or comments, please feel free to contact us.

Lloyd Haynes
Lloyd Haynes
Safety and Training Manager

LH:sle

Enclosure

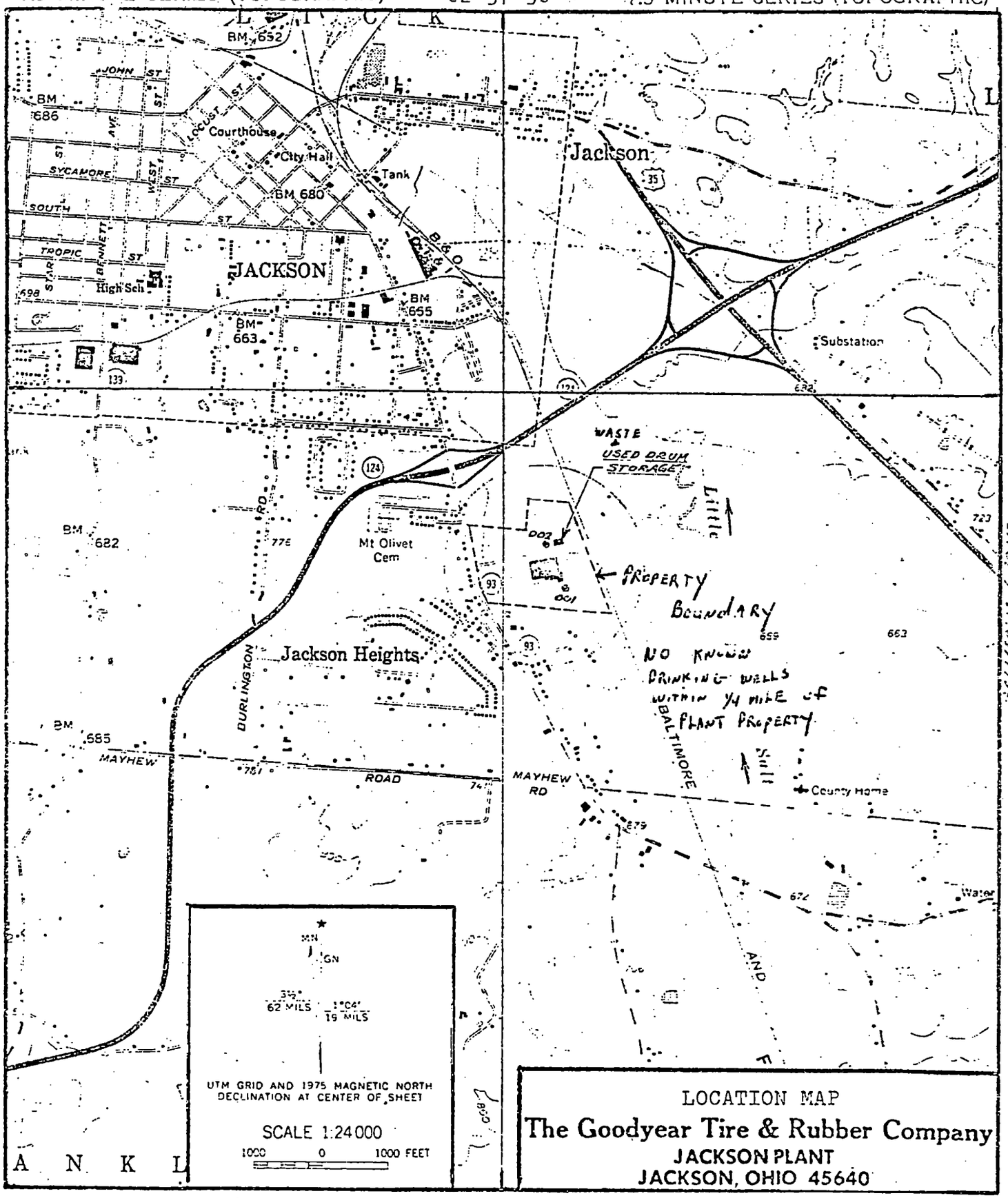
RECEIVED
MAY 6 1983
OHIO ENVIRONMENTAL PROTECTION AGENCY
SOUTHEAST DISTRICT

81-HW-0283

JACKSON QUADRANGLE
OHIO–JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

82°37'30"

WELLSTON QUADRANGLE
OHIO–JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



LOCATION MAP
The Goodyear Tire & Rubber Company
JACKSON PLANT
JACKSON, OHIO 45640

82°37'30"

FORM 3510-3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER: T O H D 0 0 0 8 1 7 3 7 9 — T/A C: I

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

C	YR.	MO.	DAY
8	6 6	0 9	1 3

[ ] 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(yr., mo., & day)* OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	V	ACRE-FEET	A
LITERS	L	TONS PER HOUR	D	HECTARE-METER	F
CUBIC YARDS	Y	METRIC TONS PER HOUR	W	ACRES	B
CUBIC METERS	C	GALLONS PER HOUR	E	HECTARES	Q
GALLONS PER DAY	U	LITERS PER HOUR	H		

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below):* A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP T/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	14,520	G		7				
2					8				
3					9				
4					10				

81-HW-0283

III. PROCESSES (continued)

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

81-HW-0283

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S00004

EPA I.D. NUMBER (enter from page 1)		FOR OFFICIAL USE ONLY	
W 0 H D 0 0 0 8 1 7 3 7 9	T/A C 1	W DUP.	T/A C 2 DUP

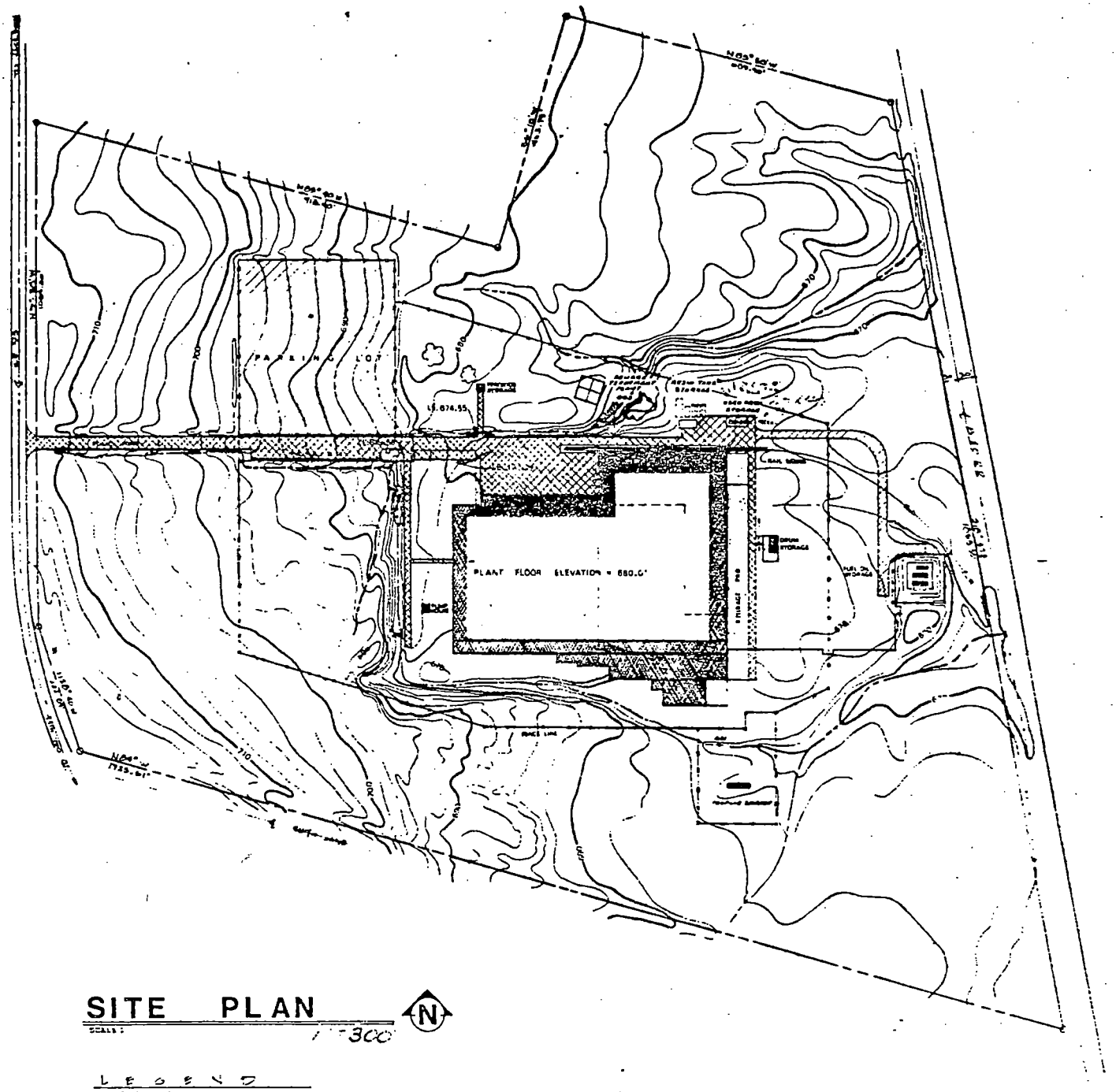
IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F 0 0 1	200	P	S 0 1				
2	U 2 2 6			S 0 1				Included in above
3	F 0 0 2	28,800	P	S 0 1				
4	F 0 0 3	143,000	P	S 0 1				
5	U 0 0 2			S 0 1				Included in above
6	F 0 0 5	52,000	P	S 0 1				
7	U 0 5 7			S 0 1				Included in above
8	U 0 8 0			S 0 1				Included in above
9	U 1 4 0			S 0 1				Included in above
10	U 1 5 9			S 0 1				Included in above
11	U 1 6 1			S 0 1				Included in above
12	U 2 2 0			S 0 1				Included in above
13	U 2 3 9			S 0 1				Included in above
14	F 0 1 7	113,000	P	S 0 1				
15	F 0 1 8	52,000	P	S 0 1				
16	U 1 9 6	5	P	S 0 1				
17	U 2 3 8	100	P	S 0 1				
18	D 0 0 1	100	P	S 0 1				STYRENE
19	D 0 0 2	100	P	S 0 1				ACID & BASE
20	D 0 0 3	100	P	S 0 1				PEROXIDE
21								
22								
23								
24								
25								
26								

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Incident	0 45	1		45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 3	1		3	8.2
3 Containment	0 15	1		15	8.3
4 Waste Characteristics Toxicity	0 1 2 3	5		15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 5	4		20	
Distance to a Critical Habitat	0 1 2 3	4		12	
Total Targets Score				32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5				21,600	
7 Divide line 6 by 21,600 and multiply by 100		S_{DC} =			

FIGURE 12
DIRECT CONTACT WORK SHEET

THE GOODYEAR TIRE & RUBBER COMPANY
JACKSON OHIO PLANT



SITE PLAN

SCALE: 1" = 300'

N

LEGEND

ASPHALT PAVED SURFACE

STONE OR GRAVEL SURFACE

GROUNDED SURFACE

WELL LOG AND DRILLING REPORT

ORIGINAL

28

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio

PLEASE USE PENCIL OR TYPEWRITER. DO NOT USE INK.

No. 261760

County Jackson Township Liberty Section of Township 18

Owner Ohio State Patrol Post Address Route 23 Jackson O

Location of property State Rt. 35 west of Jackson

CONSTRUCTION DETAILS

Casing diameter 6" O.D. Length of casing 50'6"

Type of screen Length of screen

Type of pump Submersible

Capacity of pump 600

Depth of pump setting 111'

Date of completion Nov. 7, 1961

BAILING OR PUMPING TEST

~~Pumping rate~~ Calculated 4 G.P.M. Duration of test 1 hrs.

Drawdown 30 ft. Date

Developed capacity

Static level—depth to water 63 ft.

Pump installed by Hobart Sherman

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Drift	0 Feet	20 Ft.
Slate	20	35
Sandstone	35	45
Slate	45	85
White Sandstone	85	116
Water at	35	95

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

State Rt. 35 - well

W. E.

S.

REFERENCE 2

SITE NAME JACKSON SANITARY LANDFILL

SITE ID OHD 980993554

See reverse side for instructions

Drilling Firm Hobart Sherman Date Nov. 7 1961

Address Route #5 Jackson O Signed Hobart Sherman

3

WELL LOG AND DRILLING REPORT

ORIGINAL

48

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 8 Length of casing 15
Type of screen None Length of screen None.
Type of pump Jet
Capacity of pump 7 GPM.
Depth of pump setting 35 ft.

PUMPING TEST

Pumping rate 4 G.P.M. Duration of test 1 hrs.
Drawdown 51 ft. Date 15 June 56
Developed capacity 4 GPM.
Static level—depth to water 23 ft. ft.
Pump installed by H Kessler.

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	Ft.
yellow ~~sandstone~~ Clay.	0	6
yellow sand rock	6	38
Blue sand rock.	38	51

REFERENCE 2
SITE NAME
SITE ID

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

W

Non-Responsive

See reverse side for instructions

Drilling Firm Kessler Drilling Co.
Address Wellston Ohio.
Date 16 June 56
Signed H Kessler

2

ORIGINAL

49

WELL LOG AND DRILLING REPORT

State of Ohio

DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 8 in. Length of casing	Pumping rate 15 G.P.M. Duration of test hrs.
Type of screen Length of screen	Drawdown ft. Date
Type of pump	Developed capacity
Capacity of pump	Static level—depth to water 70 ft.
Depth of pump setting	Pump installed by
Date of completion Feb 27 1950	

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Sandstone	0 Feet	50 Ft.
Slate	50 "	55
Sandstone	55 "	75
Water	at	75

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

W

See reverse side for instructions

Drilling Firm Ehlert Morris

Address Tiffin Ohio

Date Feb 27 1950

Signed Earl Ehlert

4

WELL LOG AND DRILLING REPORT

ORIGINAL

49

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 Length of casing 63

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 3 G.P.M. Duration of test ..... hrs.

Drawdown 95 ft. Date .....

Developed capacity 3 Gal per min

Static level—depth to water 77 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Surface	0 Feet	3 Ft.
Sandy Shale	3	30
Sandrock.	30	45
Shale	45	63
Sandrock.	63	99

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

Non-Responsive

W.

S.

See reverse side for instructions

Drilling Firm Lem Ramsey Date Oct 12/55

Address Rt 1 Wellston O Signed Lem Ramsey Jr.

4

ORIGINAL

WELL LOG AND DRILLING REPORT

State of Ohio

DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 8 Length of casing 16 ft.

Type of screen None Length of screen None.

Type of pump Set.

Capacity of pump 600 at 25 ft.

Depth of pump setting 25 ft.

Date of completion 30 Nov 1960

BAILING OR PUMPING TEST

Pumping rate 25 G.P.M. Duration of test 2 hrs.

Drawdown 52 ft. Date 28 Nov 60.

Developed capacity 25 GPM. (?)

Static level—depth to water 15 ft. ft.

Pump installed by Driller H Kessler.

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From 0 Feet	To Ft.
Surface.	0	3
Yellow sand.	3	6
Yellow sand rock.	6	11
Blue shale & sand rock.	11	28
White sand rock very hard.	28	52.

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Kessler Drilling Co.

Address pt 3 Wellston Ohio

Date 30 Nov 1960

Signed H Kessler.

WELL LOG AND DRILLING REPORT

ORIGINAL

33

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

PLEASE USE PENCIL

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 O.D. Length of casing 42
Type of screen — Length of screen
Type of pump —
Capacity of pump —
Depth of pump setting —
Date of completion

BAILING OR PUMPING TEST

Pumping rate 10 G.P.M. Bailer test Duration of test 1 hrs.
Drawdown 45 ft. Date 8/20/63
Developed capacity 10
Static level—depth to water 5 ft.
Pump installed by —

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Drill	0 Feet	4 Ft.
Sand	4	27
w Sandstone soft	27	28
Coal	28	29½
white clay	29½	41
" Sandstone ?	41	64
T Silica gravel		
water 28		
" 52		
" 60		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Hobart Sheets
Address Jackson RFD 5
Date 8/20/63
Signed Hobart Sheets

7

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6" O.D. Length of casing 42 ft

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 20 G.P.M. Duration of test ..... hrs.

Drawdown 20 ft. Date 10/26, 54

Developed capacity 20 GPM

Static level of completed well 4 ft ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Surface	0 Feet	3 Ft.
Quicksand	3	25
White Sand stone	25	27
Coal	27	28½
Sandy clay	28½	40
White sand stone	40	56

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Pulfent & Davis Coal Co Date 10-26-54

Address Wellston, Ohio Signed [illegible] Harry Martin Driller.

7

ORIGINAL

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 30'8"
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....
Date of completion .....

BAILING OR PUMPING TEST

Pumping rate 70 G.P.M. Duration of test ..... hrs.
Drawdown ..... ft. Date .....
Developed capacity .....
Static level—depth to water 20 ft.
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Sandy yellow clay	0 Feet	6 Ft.
soft yellow sandrock	6	12
quicksand	12	20
soft yellow sandrock	20	25
gray shale	25	30
gray sandrock	30	45
sandy gray shale	45	55
water at 31 ft		

REFERENCE 2
SITE NAME JACKSON SANITARY LA
SITE ID OHA 980 993555

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

N

W

Non-Responsive

See reverse side for instructions

Drilling Firm Joe Forshey & Sons Date November 1960
Address Route 1, Jackson, Ohio Signed Jim Forshey

A2C

Ground-Water Resources of Jackson and Vinton Counties

by Alfred C. Walker

REFERENCE 3
SITE NAME Jackson Sanitary Landfill
SITE ID OHD 980993554

Index Map

Scale in Miles 1:135,000

0 1 2 3 4 5

AREAS IN WHICH YIELDS OF 5 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED.

The Black Hand (or "Big Injun") sandstone is present at greatly varying depths, depending upon topography and structure. (Note contours on top of the Black Hand sandstone). Water is more highly mineralized in the east. Dependable long-term yields seldom exceed 25 gallons per minute.

Coarse-grained sandstones, which may be encountered at shallower depths, yield adequate farm and domestic supplies.

Silt, sand and locally fine gravel beneath 15 to 25 feet of clay. Properly developed wells in coarse material may yield as much as 25 gallons per minute.

AREAS IN WHICH YIELDS OF LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED.

Alluvium in stream valleys consists predominately of clay and sand. Limited yields, generally less than 3 gallons per minute, are available. Similar yields are available from the underlying bedrock.

Bedrock, consisting of layers of sandstone, shale, fireclay, coal and limestone. Average yield for drilled wells is around 2 gallons per minute.

Contours on the top of the Black Hand sandstone. Altitude in feet above mean sea level. (After Norris and Mayer, 1982).

39° 5'

PIKE

SYMBOLS

- Water Well
- Industrial Well
- Public Supply Well

Ss - Sandstone
Sh - Shale
M - Mine opening
S - Sand
G - Gravel

275-SS,SH-0
3

Depth (ft) - Water-bearing formation-yield (gpm)
Depth to bedrock (ft.)

38° 55'

N

Published 1985

ODNR
OHIO DEPARTMENT OF NATURAL RESOURCES

Naturally OHIO the heart of it all!

Richard F. Celeste, Governor • Lt. Gov. Myrl H. Shoemaker, Director

REFERENCE 3
SITE NAME JACKSON SANITARY LANDFILL
SITE ID OHD980993554

43

3

The
regi
geo
the
Info

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

ERED

PRC

June 14, 1995

Mr. Brian Freeman
U.S. Environmental Protection Agency
Contract Analytical Services Section
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Jackson County Landfill Site, Case No. 23650

Mr. Freeman:

I have enclosed the following documents for samples collected at the Jackson County Landfill Site during the week of June 5, 1995:

- OTR/COC Records
- ITR/COC Records
- CRL/SDR Reports

The samples were shipped under Case No. 23650. If you have any questions, please call me at (312) 856-8752.

Sincerely,

Mildred Yarbrough

Mildred Yarbrough
Sample Coordinator

contains recycled fiber and is recyclable

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

PRC

June 14, 1995

Ms. Loren Minnich
U.S. EPA Contract Laboratory Program
Sample Management Office
300 North Lee Street
Alexandria, VA 22314

Re: Jackson County Landfill Site, Case No. 23650

Ms. Minnich:

I have enclosed the following documents for samples collected at the Jackson County Landfill Site during the week of June 5, 1995:

- CRL/SDR Reports
- OTR/COC Records
- ITR/COC Records

The samples were shipped under Case No. 23650. If you have any questions, please call me at (312) 856-8752.

Sincerely,

Mildred Yarbrough

Mildred Yarbrough
Sample Coordinator

contains recycled fiber and is recyclable

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY.

CASE NUMBER/SAS No. 23650 SITE NAME Jackson County Landfill LABORATORY COMPUCH DATE SHIPPED 6/9/95

SUPERFUND DU NUMBER JEA102 EPA RPM or OSC (S M S I/(CES) CERCLIS # OHD 980 933 554 PAGE ___ OF ___

ACTIVITY NUMBER ZZ

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS: ACID BASE NEUTRAL CPDS ORGANIC SCAN UG L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG L PES 17144	WATER CHLORINATED PESTICIDES UG L PES17134	TOTAL METALS IN WATER UG L MET111	WATER CYANIDE UG L MIN74919	NITRATE NITRITE MG L MIN7284	AMMONIA MG L MIN7294	RESIDUE, FILTERABLE TDS MG L MIN7382	RESIDUE NON-FILT TSS MG L MIN7372			SEDIMENTS or SOILS: ACID BASE NEUTRAL CPDS ORGANIC SCAN MG KG TOX215722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG KG TOX215E22	SEDIMENTS POLYCHLORINATED BIPHENYLS MG KG PES[illegible]	SEDIMENTS CHLORINATED PESTICIDES MG KG [illegible]	TOTAL METALS MG KG MET[illegible]	CYANIDE MG KG MIN[illegible]	EP TOXICITY METALS MG KG	AMMONIA MG KG	MIN[illegible] MG KG			
952F54S01	EAMS1														X	X	X	X								
952F54D01	EAMS2														X	X	X	X								
952F54S02	EAMS3														X	X	X	X								
952F54S03	EAMS4														X	X	X	X								
952F54S04	EAMS5														X	X	X	X								

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 23650

1. Project Code:
Account Code:
2. Region No.: 5
Sampling Co.: PRC
4. Date Shipped: 6/9/95
Carrier: Fed Ex

Regional Information: TFA 102
Sampler (Name): Scott Brockway
Airbill Number: 1403534344

Non-Superfund Program:
Sampler Signature: [signature]
5. Ship To: Compuchem Laboratories
3308 Chapel Hill/Nelson Hwy
Research Triangle Park, NC 27709
ATTN: Richard Bloom

Site Name: Jackson County Landfill
3. Purpose*
Lead: [Y] SF, [ ] PRP, [ ] ST, [ ] FED
Early Action: [ ] CLEM, [ ] PA, [ ] REM, [ ] RI, [Y] SI, [ ] ESI
Long-Term Action: [ ] FS, [ ] RD, [ ] RA, [ ] O&M, [ ] NPLD

City, State: Jackson, OH
Site Spill ID: ZZ

6. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

7. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) / Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 7) / Other:	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
EAMS 1	5	L	G	5	X				5-092806-807	SS-1	6/9/95 1130	MEABH 1		—
EAMS 1						X	X		5-092808		1130			—
EAMS 2					X				5-092810-811	SS-1D	1130	MEABH 2		D(EAMS 1)
EAMS 2						X	X		5-092812		1130			D(EAMS 1)
EAMS 3					X				5-092814-815	SS-2	1200	MEABH 3		—
EAMS 3						X	X		5-092816		1200			—
EAMS 4					X				5-092818-819	SS-3	1315	MEABH 4		—
EAMS 4						X	X		5-092820		1315			—
EAMS 5					X				5-092822-823	SS-4	1345	MEABH 5		—
EAMS 5						X	X		5-092824		1345			—

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: EAMS 3
Additional Sampler Signatures: C. [illegible] [illegible]
Chain of Custody Seal Number(s): 45797, 45798

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/9/95 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

A21-012-3 REV. 3/93

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

359908

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY.

CASE NUMBER/SAS No 23650 SITE NAME Jackson Co. Landfill LABORATORY IEA DATE SHIPPED 6/9/95

SUPERFUND DU NUMBER TFA102 EPA RPM or OSC (S M S)/(CES) CERCLIS # OHD 980 933 559 PAGE 1 OF 1

ACTIVITY NUMBER 78

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS: ACID BASE NEUTRAL CPDS ORGANIC SCAN UG L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG L PES17144	WATER CHLORINATED PESTICIDES UG L PES17134	TOTAL METALS IN WATER UG L MET111	WATER CYANIDE UG L MIN74919	NITRATE NITRITE MG L MIN7284	AMMONIA MG L MIN7294	RESIDUE FILTERABLE TDS MG L MIN7382	RESIDUE NONFILT TSS MG L MIN7372			SEDIMENTS or BIOLS: ACID BASE NEUTRAL CPDS ORGANIC SCAN MG KG TOX715772	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG KG TOX715E72	SEDIMENTS POLYCHLORINATED BIPHENYLS MG KG PES	SEDIMENTS CHLORINATED PESTICIDES MG KG	TOTAL METALS MG KG MET	CYANIDE MG KG MIN4930	EP TOXICITY METALS MG KG	AMMONIA MG KG MIN7933				
952F5A30		MEABH1																X	X							
952F5A01		MEABH2																X	X							
952F5A02		MEABH3																X	X							
952F5A03		MEABH4																X	X							
952F5A04		MEABH5																X	X							

EPA United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 23650

1. Project Code:
Account Code:
2. Region No.: 5
Sampling Co.: PRC
4. Date Shipped: 6/9/95
Carrier: Fed Ex

Regional Information: TFA 102
Sampler (Name): Scott Brockway
Airbill Number: 1403534370

Non-Superfund Program
Sampler Signature: [signature]
5. Ship To: Industrial Environmental Analysts, Inc.
3000 Weston Parkway
Cary, NC 27513
ATTN: Linda Mitchell

Site Name: Jackson County Landfill
City, State: Jackson, OH
Site Spill ID: 22

3. Purpose:
Lead: [X] SF [ ] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI
Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

6. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (specify in Column A)

7. Preservative (Enter in Column D)
1. HCl
2. HNO_3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (specify in Column D)
N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 7) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
MEABH 1	5	L	G	6		X	X					5-092809	SS-1	6/9/95 1130	EAMS 1		—
MEABH 2	↓	↓	↓	↓		X	X					5-092813	SS-1D	↓ 1130	EAMS 2		D(MEABH1)
MEABH 3	↓	↓	↓	↓		X	X					5-092817	SS-2	↓ 1200	EAMS 3		—
MEABH 4	↓	↓	↓	↓		X	X					5-092821	SS-3	↓ 1315	EAMS 4		—
MEABH 5	↓	↓	↓	↓		X	X					5-092825	SS-4	↓ 1345	EAMS 5		—

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: MEABH 3
Additional Sampler Signatures: [signature]
Chain of Custody Seal Number(s): 46085, 46086

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/9/95 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

A21-012-5 REV. 3/93

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

359037

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY.

CASE NUMBER/SAS No 23650 SITE NAME Jackson County Landfill LABORATORY RECMD DATE SHIPPED 6/9/95

SUPERFUND DU NUMBER _____ EPA RPM or OSC (S M S)/(CES) _____ CERCLIS # OHD 980 933 554 PAGE 1 OF 1

ACTIVITY NUMBER

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS: ACID BASE NEUTRAL CPDS ORGANIC SCAN UG L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG L TOX17584	WATER POLYCHLORINATED BIPHENYLS UG L PES 17144	WATER CHLORINATED PESTICIDES UG L PES17134	TOTAL METALS IN WATER UG L MET111	WATER CYANIDE UG L MIN74919	NITRATE NITRITE MG L MIN7284	AMMONIA MG L MIN7284	RESIDUE, FILTERABLE TDS MG L MIN7362	RESIDUE NON-FILT TSS MG L MIN7372			SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG KG TOX215772	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG KG TOX215822	SEDIMENTS POLYCHLORINATED BIPHENYLS MG KG PES[illegible]	SEDIMENTS CHLORINATED PESTICIDES MG KG [illegible]	TOTAL METALS MG KG MET[illegible]	CYANIDE MG KG MIN[illegible]	EP TOXICITY METALS MG KG	AMMONIA MG KG MIN[illegible]				
95ZF54305	EAMS6														X	X	X	X								
95ZFA506	EAMS7														X	X	X	X								
95ZF54D06	EAMS8														X	X	X	X								
95ZF54D07	EAMS9														X	X	X	X								

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 23650

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		5	PRC	6/9/95	Fed Ex

Regional Information: TFA 102

Sampler (Name): Scott Brockway

Airbill Number: 1403534355

Non-Superfund Program

Sampler Signature: [signature]

Site Name: Jackson County Landfill

City, State: Jackson, OH

Site Spill ID: ZZ

3. Purpose*
- Lead: ☒ SF, ☐ PRP, ☐ ST, ☐ FED
- Early Action: ☐ CLEM, ☐ PA, ☐ REM, ☐ RI, ☒ SI, ☐ ESI
- Long-Term Action: ☐ FS, ☐ RD, ☐ RA, ☐ O&M, ☐ NPLD

5. Ship To: RECRA Environmental, 8320 Guilford Rd., Bldg F, Columbia, MD 21046
ATTN: Linda Shafernich

6. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

7. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 7) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank S = Spike D = Duplicate R = Rinsate PE = Perform. Eval. — = Not a QC Sample)
EAMS6	5	L	G	5	X				5-092826 - 827	SD-1	6/9/95 1100	MEABH6		—
EAMS6	↓	↓	↓	↓		X	X		5-092828	↓	1100	↓		—
EAMS7	↓	↓	↓	↓	X				5-092830 - 831	SD-2	1000	MEABH7		—
EAMS7	↓	↓	↓	↓		X	X		5-092832	↓	1000	↓		—
EAMS8	↓	↓	↓	↓	X				5-092834 - 835	SD-2D	1000	MEABH8		D(EAMS7)
EAMS8	↓	↓	↓	↓		X	X		5-092836	↓	1000	↓		D(EAMS7)
EAMS9	↓	↓	↓	↓	X				5-092838 - 839	SD-3	1245	MEABH9		—
EAMS9	↓	↓	↓	↓		X	X		5-092840	↓	1245	↓		—

Shipment for Case Complete? (Y/N): Y

Page 1 of 1

Sample(s) to be Used for Laboratory QC: EAMS6

Additional Sampler Signatures: [signature]

Chain of Custody Seal Number(s): 46087, 46088

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/9/95 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	

A21-012-3 REV. 3/93

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

359907

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY.

CASE NUMBER/SAS No 23650 SITE NAME Jackson Co. Landfill LABORATORY CHEM DATE SHIPPED 6/9/95

SUPERFUND DU NUMBER _____ EPA RPM or OSC (S M S I/ICES) _____ CERCLIS # OHD 980 933 554 PAGE 1 OF 1

ACTIVITY NUMBER

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	WATER OR LIQUIDS: ACID BASE NEUTRAL CPDS ORGANIC SCAN UG L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG L PES17144	WATER CHLORINATED PESTICIDES UG L PES17134	TOTAL METALS IN WATER UG L MET7111	WATER CYANIDE UG L MIN74919	NITRATE NITRITE MG L MIN7284	AMMONIA MG L MIN7294	RESIDUE FILTERABLE TDS MG L MIN7362	RESIDUE NON-FILT TSS MG L MIN7372			SEDIMENTS or SOILS: ACID BASE NEUTRAL CPDS ORGANIC SCAN MG KG TOX15722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG KG TOX15662	SEDIMENTS POLYCHLORINATED BIPHENYLS MG KG PES	SEDIMENTS CHLORINATED PESTICIDES MG KG	TOTAL METALS MG KG MET	CYANIDE MG KG MIN4890	EP TOXICITY METALS MG KG	AMMONIA MG KG MIN2925				
95ZF5A505		MEABH6																X	X							
95ZF5A506		MEABH7																X	X							
95ZF5A006		MEABH8																X	X							
95ZF5A007		MEABH9																X	X							

EPA United States Environmental Protection Agency Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

SAS No. (if applicable):

Case No.: 23650

1. Project Code:
Account Code:
2. Region No.: 5
Sampling Co.: PRC
4. Date Shipped: 6/9/95
Carrier: Fed Ex

Regional Information: TFA 102
Sampler (Name): Scott Brockway
Airbill Number: 1403534366

Non-Superfund Program:
Sampler Signature: [signature]
5. Ship To: Chem Tech Consulting, 110 Route 4, Englewood, NJ 07631, ATTN: Dirya Mehta

Site Name: Jackson County Landfill
City, State: Jackson, OH
Site Spill ID: ZZ

3. Purpose*
Lead: [X] SF [ ] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI
Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

6. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (specify in Column A)

7. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (specify in Column D)
N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 7) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
MEABH 6	5	L	G	6		X	X					5-092829	SD-1	6/9/95 1110	EAMS6		—
MEABH 7	↓	↓	↓	↓		X	X					5-092833	SD-2	1000	EAMS7		—
MEABH 8	↓	↓	↓	↓		X	X					5-092837	SD-2D	1000	EAMS8		D(MEABH7)
MEABH 9	↓	↓	↓	↓		X	X					5-092841	SD-3	1245	EAMS9		—

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: MEABH 6
Additional Sampler Signatures: [signature]
Chain of Custody Seal Number(s): 45799, 45800

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/9/95 1800				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	

A21-012-5 REV. 3/93

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

359036

ROSS INERATION SERVICES, INC. US. A Facility ID #OHD048415665

394 GILES ROAD ● GRAFTON, OHIO 44044

(216) 748-2171 ● (216) 235-3050 CLEVELAND LINE

WASTE PRODUCT SURVEY

11570

ENTERED

I. Generator: THE GOODYEAR TIRE & RUBBER CO US/EPA ID #: OHD000817379

Mailing Address: 1020 E. MAIN ST

Plant Address: JACKSON, OHIO 45640

Business Contact: LLOYD HAYNES Phone: (614) 286-4111

Technical Contact: NED NIEHOFF Phone: (614) 286-4111

THIS INFORMATION IS BEING REQUIRED TO COMPLY WITH RCRA 40 CFR PART 265.13 GENERAL WASTE ANALYSIS.

II. GENERAL WASTE INFORMATION

Waste Material Name: WASTE ACETONE MIXTURE

Generator Code(if used): N/A

Describe process that generates waste: SOLVENT USED TO CLEAN RESIN FROM MIXING TANKS

SIC Code(optional): 3079

Is this Waste "Hazardous" as defined by RCRA Part 261? NO (YES) (circle)
If yes, list applicable EPA Hazardous Waste Number(s) below.
F003

Rate of Generation: 3 DRUMS/WEEK Current Accumulation Drums: 108 Bulk: N/A

Specify all types of containerization for which you request quotation.
55 gallon steel drums X ; 70 gallon recovery drum N/A ; (with fiber or steel drums inside); 55 gallon fiber drum N/A ; 5 gallon pail N/A ; Bulk N/A ; Other N/A
If bulk, I would like a quote for pumping charge. (circle) (NO) YES

III. WASTE STREAM CHEMICAL COMPOSITION

Components including contaminants	Concentration Range WT%	Average WT% Must Total 100%	TLV (if published) +ACGIH	OSHA
ACETONE	0 to 2	1%	750	N/A
SOLID RESIN MIXTURE	98	99%	N/A	
(NO HAZARDOUS MATERIAL CONTAINED)	N/A	N/A		
N/A				

Attach to this form any additional information which must be known to treat, store or dispose of the waste in accordance with RCRA Section 265.13, including but not limited to data developed under RCRA 261, laboratory analysis, technical publications or safety data sheets.

*If applicable, this waste stream was previously described by W.P.S.# 4949

12/1/81

IV. SPECIFIC ANALYSIS OF WASTE

ANSWER EVERY ITEM IN THIS SECTION
DO NOT LEAVE BLANKS. If the specific element is not present, indicate "none".

Organic Bound Sulfur* N/A %WT
" " Chlorine* N/A %WT
" " Fluorine* N/A %WT
" " Bromine* N/A %WT
" " Iodine* N/A %WT
" " Nitrogen N/A %WT
" "Phosphorus N/A %WT
(Base %WT on Molecular Structure)

Metals

Lead* N/A PPM
Mercury* N/A PPM
Arsenic N/A PPM
Barium N/A PPM
Cadmium N/A PPM
Chromium N/A PPM
Selenium N/A PPM
Silver N/A PPM

*These items are specifically required by RCRA Part 265 Subpart O

Does this waste contain PCBS? (circle)

(NO) YES If yes, give the concentration and attach supporting documentation.

_____ _____ PPM

Does this waste contain Insecticides, Pesticides, Herbicides or Rodenticidies?

(NO) YES If yes, identify each in the space below and the concentrations.

_____ _____ PPM

_____ _____ PPM

V. TOXICITY

Check applicable data

NA Ingestion; explain _____
NA Inhalation; explain _____
NA Dermal; explain _____
NA Eyes; explain _____
NA Other; explain _____
NA Carcinogen (suspected or known); explain

_____

VI. PHYSICAL PROPERTIES

Physical State @70°F (circle)

Liquid Semisolid (Solid)

Slurry Sludge Gas

Viscosity @ 70°F _____ sus. cps

Is material pourable/pumpable? (circle)

(NO) YES

Is waste multi-layered? (NO) YES

1. (top) _____ % 3. _____ %

2. _____ % 4. _____ %

Dissolved Solids N/A %WT

Suspended Solids N/A %WT
(identify and indicate % by WT)

BTU Value/lbs.* 4500

*Specifically required by RCRA Part 265 Subpart O.

Flash Point: Unk °F

Specific Gravity: 1.7

pH: NA

Characteristics

Color: Grey, brown

Odor: Ketone, Styrene

Other: _____

VII. REACTIVITY

(circle) (Stable) Unstable

Handling conditions to avoid None

_____

Chemical Incompatibility NA

_____

WEL' LOG AND DRILLING REP('T

State of Ohio

ORIGINAL

ENTERED

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 00 Length of casing 16 5

Type of screen _____ Length of screen _____

Type of pump _____

Capacity of pump _____

Depth of pump setting _____

Date of completion 9/23/64

BAILING OR PUMPING TEST

Pumping Rate 60 G.P.M. Duration of test 2 hrs.

Drawdown 60 ft. Date _____

Static level-depth to water 16 ft.

Quality (clear, cloudy, taste, odor) Clear

Hardness _____

Pump installed by _____

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	8 Ft.
Shale	8	54
Water 16		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Hobart Sherman

Address Jackson Route 5

Date Sept 23/65

Signed Hobart Sherman

5

WELL LOG AND DRILLING REPORT

ORIGINAL

23

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Columbus, Ohio

№ 101936

County Jackson Township Lick Section of Township or Lot Number Lot # 14

Owner State of Ohio (Highway Patrol) Address Jackson, Ohio

Location of property 2 mi. north of Jackson on U.S. 35

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 30' 6"

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

PUMPING TEST

Pumping rate 15 G.P.M. Duration of test hrs.

Drawdown 50 ft. Date

Developed capacity

Static level—depth to water 50 ft.

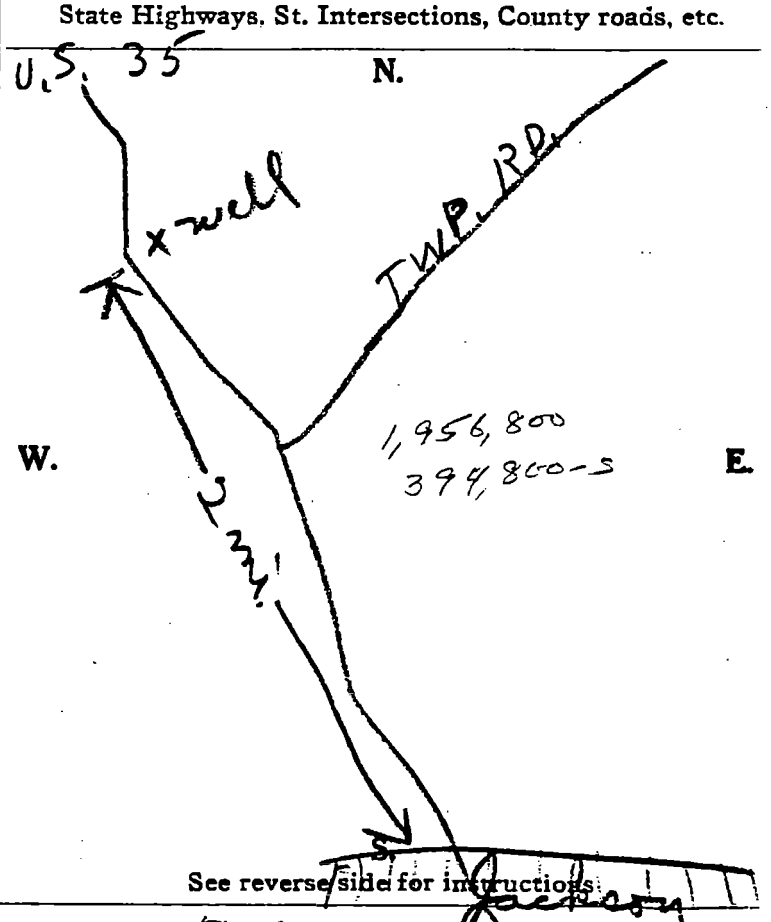
Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	4 Ft.
Yellow sandrock	4	22
Blue shale	22	45
Brown shale & sand	45	55
Blue shale	55	70
Coal	70	74
Blue shale	74	90
Gray sandrock	90	116
Water at 35 and 90 feet.		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Joe Forsley & Sons Date Feb. 8, 1954

Address Rte 1, Jackson, O. Signed B. J. Forsley

3

WELL LOG AND DRILLING REPORT

State of Ohio

43

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 OD Length of casing [illegible]

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Date of completion Oct 24 1950

BAILING OR PUMPING TEST

Pumping rate 10 G.P.M. Duration of test [illegible] hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water [illegible] ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	16 Ft.
Slate	16"	65
Sandstone	65"	90
Slate	90	97
Water at 65		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

W.

S.

See reverse side for instructions

Drilling Firm Hahn & Thomas

Address Rt 5 Carrollton O

Date Oct 24 1950

Signed Hahn & Thomas

6

WELL LOG AND DRILLING REPORT

ORIGINAL
78

State of Ohio

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 55

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 3 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 22 3 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Surface	0 Feet	3 Ft.
Shale	3	23
Sandrock	23	55

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Ramsey Drilling

Address Wellston Ohio

Date June 12/54

Signed Don Ramsey Jr

A16

WELL LOG AND DRILLING REPORT

ORIGINAL

E

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 74'9"

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 72 G.P.M. Duration of test ..... hrs

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 60 ft

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Soil	0 Feet	3 Ft.
Clay	3	27
Gravel	27	33
Blue shale	33	56
Dark blue shale (Eng)	56	56
Total	74	

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

W

See reverse side for instructions

Drilling Firm W. J. Fawley & Sons Date Aug. 1955

Address Rt. 1, Jackson Signed B. J. Fawley

A18

ORIGINAL

I 2

WELL LOG AND DRILLING REPORT

State of Ohio

DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 10'4"

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Date of completion .....

BAILING OR PUMPING TEST

Pumping rate 15 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 10 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	5 Ft.
yellow sandrock	5	27
water at 53 ft		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm [illegible] Date July 1959

Address Route 1 [illegible] Ohio Signed Jim [illegible]

A23

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 50 ft

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 2 80 G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 45 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	2 Ft.
Clay	2	48
Brown sandy shale	48	65
Blue shale	65	77
white sand	77	80
water at 77 feet		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Joe Foshey & Sons Date July 23, 1953

Address Bentonville, Jackson Signed B. J. Foshey

A26

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 in. Length of casing 45 ft.

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate [redacted] G.P.M. Duration of test ..... hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 5 ft. ..... ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
dirt	0 Feet	12 Ft.
Quicksand	12	42
Blue Shale	42	45
Grey Sandrock	45	92
18 in. Cavity at 45 ft		
Water at 45 ft		

SKETCH SHOWING LOCATION

Locate in reference to numbered

Non-Responsive

Drilling Firm Joe Fordyce & Son Date April 2 to 10, 1952

Address Route #1 Jackson Ohio Signed [illegible]

A27

ORIGINAL
44

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6" O.D. Length of casing 27'
Type of screen ____ Length of screen ____
Type of pump ____
Capacity of pump ____
Depth of pump setting ____
Date of completion ____

BAILING OR PUMPING TEST

Pumping rate 5 ~~Bailing~~ G.P.M. Duration of test ____ hrs.
Drawdown ____ ft. Date ____
Developed capacity ____
Static level—depth to water 30' ft.
Pump installed by ____

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	23 Ft.
Sandstone	23 "	35'
Slate	35 "	38'
Sandstone	38'	42'
Slate	42'	78'
Sandstone	78'	79

Water at 34'

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

S.

See reverse side for instructions

Drilling Firm Hubert Sherman
Address Rte # 3 Jackson

Date May 6, 1960
Signed Hubert Sherman

36

WELL LOG AND DRILLING REPORT

ORIGINAL
69

State of Ohio
DEPARTMENT OF NATURAL RESOURCES

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8" Length of casing 15' 6"
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....

PUMPING TEST

Pumping rate 20 G.P.M. Duration of test ..... hrs
Drawdown ..... ft. Date .....
Developed capacity .....
Static level—depth to water 10 ft
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Soft sandstone	0 Feet	10 Ft.
Quicksand	10	12
Yellow sandrock	12	35
water at 30 ft.		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Forshey Sons
Address Jackson
Date Dec. 19, 1955
Signed B. J. Forshey

44

WELL LOG AND DRILLING REPORT

ORIGINAL

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6" Length of casing 5½'

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

PUMPING TEST

Pumping rate 600 G.P.M. Duration of test ..... hrs

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 90 ft

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	4 Ft.
Sandrock	4	90
First water at 90 feet		

1,954,800
385,000-S

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Joe Forsley & Son

Address Route 1, Jackson

Date May 13 & 15, 1952

Signed B. J. Forsley

45

WELL LOG AND DRILLING REPORT

ORIGINAL

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 13 ft.
Type of screen ..... Length of screen .....
Type of pump .....
Capacity of pump .....
Depth of pump setting .....
Date of completion Aug 17, 1956

BAILING OR PUMPING TEST

Pumping rate 600+ ~~G.P.M.~~ GPH Duration of test ..... hrs.
Drawdown ..... ft. Date Aug 17, 1956
Developed capacity .....
Static level—depth to water 45 ft.
Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Dirt	0 Feet	3 Ft.
Soft yellow sandrock	3	5
Brown sandrock	5	30
Light yellow sandrock	30	50

30 g.p.h. at 55 ft.
600+ g.p.h. at 75 ft.

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Joe Hoskey & Sons
Address Route 1 Jackson, O.

Date Aug. 17, 1956
Signed Joe Hoskey

45

ORIGINAL
47

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water

Non-Responsive

CONSTRUCTION DETAILS

Casing diameter 6 C.I. Length of casing 31'2

Type of screen ..... Length of screen .....

Type of pump .....

Capacity of pump .....

Depth of pump setting .....

Date of completion Sept. 7, 1960

BAILING OR PUMPING TEST

Pumping rate 8 G.P.M. Duration of test Bailer test hrs.

Drawdown ..... ft. Date .....

Developed capacity .....

Static level—depth to water 45 ft.

Pump installed by .....

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Clay	0 Feet	[illegible] Ft.
Lime	19"	55
Limestone	55"	59
Water at 55		

SKETCH SHOWING LOCATION

Locate in reference to numbered State Highways, St. Intersections, County roads, etc.

Non-Responsive

See reverse side for instructions

Drilling Firm Helmer Sherman

Address R.R. #5 Springfield, O

Date Sept. 7, 1960

Signed Helmer Sherman

A1

OhioEPA
State of Ohio Environmental Protection Agency
Southeast District Office
2195 Front Street
Logan, Ohio 43138-9031
(614) 385-8501

ENTERED

Toward A Cleaner Environment
15 Year Anniversary 1972 - 1987

Richard F. Celeste
Governor

March 8, 1988

RE: JACKSON COUNTY
JACKSON LANDFILL
SOLID WASTE FILE

Burgess & Niple, Limited
5085 Reed Road
Columbus, Ohio 43220

Attention: John Noyes

Dear Mr. Noyes:

At our August 26, 1987 meeting, we discussed in detail the requirements of the Director's August 2, 1987 Order for immediate installation of leachate collection and treatment and areas of the landfill where leachate has historically been observed. My letters dated January 27, 1988 and February 12, 1988 again clearly stated our position.

However, I have again discussed your concern with the location of the leachate problem areas with both Jerry Roberts and Mike Nihiser. We all concur that the predominent location of leachate discharge, observed during all previous inspections made by this office, has been along the outerslopes of the landfill.

Considering the geology, hydrology and past landfill construction, this would be the logical place for leachate to discharge. We expect that the zone of saturation within the landfill is at the interface of the solid waste and the bottom of the old strip mine pit. The easiest route of escape would be at the toe of the outside slopes or into ground water via fractures in the underlying bedrock.

Mr. Fields is well aware of our concern for leachate discharge at the outslopes. Over the years he has made attempts to remedy the problem by covering the seeps with soil with little or no permanent success. Mr. Roberts indicated that during the April 20, 1987 inspection, he observed and discussed with Mr. Fields leachate discharges at both the outslope area and the southwest working area. Recently, Mr. Fields acknowledged leachate in the outslope area in his February 26, 1988 letter responding to Mr. Nihiser's notes on his February 9, 1988 inspection.

AUG 17 1995

ENTERED

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on July 14, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: PRC Patricia J Scott for D. Wesolowski 07/24/95

We have reviewed the data for the following case:

SITE NAME: Jackson County Landfill (OH)

CASE NUMBER: 23650 SDG NUMBER: EAMS1

Number and Type of Samples: 5 (Soil)

Sample Numbers: EAMS1-5

Laboratory: Compuchem Hrs. for Review: 8

Following are our findings:

The data are acceptable and usable with the qualifications described in the attached narrative.

Patricia J Scott

Ref
EPA 1995 d

cc: Regional TPO

NARRATIVE

LABORATORY; COMPU
SITE: JACKSON COUNTY LANDFILL (OH)

Case Number 23650
SDG# EAMS1

This case consisted of 5 soil samples numbered EAMS1-5, which were sampled on June 9, 1995 and which were submitted for routine low level analysis. These samples were received by the laboratory in good condition, and run without any significant problems.

The original volatile analysis was preformed within the technical holding time of 14 days after sample collection; therefore, the results are acceptable. All pesticide and semivolatile sample extractions were performed within 14 days and all analysis within 40 days after extractions; therefore, the results are acceptable. Sample EAMS3 was used for the MS/MSD analysis. Sample EAMS2 was identified as a duplicate of sample EAMS1.

This reviewers comments are contained in the following pages of this narrative.

Reviewed by M. Kaminsky Lockheed/ESAT
JULY 18, 1995

1. Holding Times:
This case consisted of 5 soil samples numbered EAMS1-5, which were sampled on June 9, 1995 and which were submitted for routine low level analysis. These samples were received by the laboratory in good condition, and run without any significant problems.

The original volatile analysis was preformed within the technical holding time of 14 days after sample collection; therefore, the results are acceptable. All pesticide and semivolatile sample extractions were performed within 14 days and all analysis within 40 days after extractions; therefore, the results are acceptable.

2.GC/MS Tuning and GC Instrument Performance:
All GC/MS tuning complied with the mass list and ion abundance criteria for BFB, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks.
GC/MS tuning complied with the mass list and ion abundance criteria for DFTPP, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks.
GC Resolution Check Mixtures met the 60% resolution criteria.
Endrin and DDT degradation checks using PEM Mix on~~e~~ the DB-608 and RTX-1701 columns were <20%; therefore, the results are acceptable.
The Florisil Cartridge Check and GPC calibration check met the QC criteria; therefore, the results are acceptable.

3.Calibration:
Initial and continuing calibrations of VOC, Semi-Voc, and Pesticide standards were evaluated for the target compound list(TCL) and TICs and outliers were recorded on the outlier forms included as part of this narrative.

4.Method Blank:
The volatile blank VBLKG4 contained the common laboratory chemicals acetone, and methylene chloride and 1 TIC. Volatile blank VBLKG5 contained only the above mentioned two common laboratory chemicals. Volatile blank VBLKK3 contained the common laboratory chemical methylene chloride and 1 TIC. Concentrations of these common laboratory chemicals in any sample

are flagged as undetected (U) when the sample results are less than 10 times the blank results. Concentrations of the TICs associated with the contaminated blanks are flagged as undetected (U) when the sample results are less than 5 times the blank results in the associated samples.

The semi-volatile blank SBLK64 did contain the common laboratory chemical diethylphthalate and 2 TICs at an elevated level. Concentrations of this common laboratory chemical in any sample are flagged as undetected (U) when the sample results ~~is~~ are less than 10 times the blank results. Concentrations of all TICs are flagged as undetected (U) when the sample results are less than 5 times the blank results in the associated samples.

The Pesticide blank PBLK49 was found to be clean, therefore, no qualification of the pesticide data is necessary due to blank contamination.
Associated samples are included on form (IV).

5.Surrogate Recoveries:
The volatile, semi-volatile, and pesticide fractions had no system monitoring compounds out of control so no qualification of the data is required.

6.MS/MSD and RPD (LABORATORY CONTROL SAMPLE):
Sample EAMS3 was used for spiking for the VOA, Semi-VOA and Pesticide/PCB low level samples.
All MS/MSD recoveries were in control so no qualification of the data is needed.

7.Field blanks and Field Duplicates and other QC:
Samples EAMS1 and EAMS2 were indicated as field duplicates on the chain of custody. Sample EASM1 contained ethylbenzene and xylene, and 1 TIC in the volatile fraction; sample EASM2 contained acetone, ethylbenzene, xylene and one TIC in the volatile fraction. In the semi-volatile fraction sample EAMS1 and EAMS2 contained 1,4-dichlorobenzene, naphthalene, bis(2-ethylhexyl)phthalate and 22 TICs and 29 TICs respectively. In the pesticide/PCB fraction sample EAMS1 reported 3 TCLs and EAMS2 reported 6 TCLS.

Not. identified compound.

8.Internal Standards:
Internal standards in all fractions met QC requirements, so no qualification is needed.

Reviewed by M. Kaminsky Lockheed/ESAT
JULY 18, 1995

9.Compound Quantification and Reported Detection Limits:
All target compounds and TICs were properly reported in the volatile, semi-volatile, and pesticide fractions; therefore data is acceptable. All CRQLs have been properly adjusted for moisture and dilutions and were properly reported.

10.Compound Identification:
Target compounds and TICs were identified by 'best fit' library search method and appear to be correct.

11.System Performance:
Base line indicated acceptable performance; therefore data is acceptable in the volatile, semi-volatile fractions, and pesticide fractions.

12.Additional Information:
None.

Reviewed by M. Kaminsky Lockheed/ESAT
JULY 18, 1995

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: Compuc

COLUMN: DB624 SITE NAME: Jackson County LF

HEATED PURGE (Y/N): Y

Instrument# F50051		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/04 2243			6/13 1810			6/14 0655								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01	1.979			1.462	26.1	J									
Bromomethane	0.10	2.257			1.478	34.5	J									
Vinyl chloride	0.10	2.536			1.665	34.3	J	1.843	27.3	J						
Chloroethane	0.01	1.518			0.909	40.1	J	1.103	27.3	J						
Methylene chloride	0.01	2.000	51.0	J	1.438	28.1	J									
Acetone	0.01	0.445			0.313	29.7	J	0.292	34.4	J						
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01															
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01	0.502						0.245	31.3	J						
2-Hexanone	0.01	0.376						0.227	34.4	J						
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene	0.20															
1,2-Dichloroethane-d4																

Samples affected:

	VBLK64	VBLK65
	EAMS1	EAM3MS
	EAMS3	EAM3MSD
	EAMS4	
	EAMS5	

Reviewer's Init/Date: MK 7-18-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R".

* = These flags should be applied to the analytes on the sample data sheets.

= Minimum Relative Response Factor

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: Compuc

COLUMN: DB 624 SITE NAME: Jackson County LF

HEATED PURGE (Y/N): Y

Instrument#		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/09 0129			6/14 1837											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01															
Bromomethane	0.10															
Vinyl chloride	0.10															
Chloroethane	0.01															
Methylene chloride	0.01															
Acetone	0.01	0.27	41.9	J												
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01															
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10	0.304			0.390	28.1	J									
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01															
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene	0.20															
1,2-Dichloroethane-d4																

Samples affected: VBLKK3, EAMS2

Reviewer's Init/Date: MK 7-18-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R".

* = These flags should be applied to the analytes on the sample data sheets.

= Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 23650 LABORATORY: Compu

COLUMN: SITE NAME: Jackson CLF

Instrument#		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/09 0031			6/22 0821											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
2-Methylphenol	0.70	0.810			1.072	32.3	J									
2,2'-Oxybis(1-chl-propane)	0.01	1.09			1.456	42.7	J									
4-Methylphenol	0.60	0.866			1.150	32.6	J									
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxy)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01															
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01	0.586			0.327	44.2	J									
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01															
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01	0.312			0.128	39.6	J									
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:

SBLK64
EAMS 3
EAMS 3MS
EAMS 3MSD
EAMS 4
EAMS 5
EAMS 1
EAMS 2

Reviewer's Init/Date: MK 7-18

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
# = Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 23650
COLUMN:

LABORATORY: Compuchem
SITE NAME: Jackson C LF

Instrument# OWA02		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/09 0031			6/22 0825											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01	0.252			0.377	48.8	J									
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fluoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: MK 7-19

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
# = Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: Compu

COLUMN: DB608 SITE NAME: Jackson CLF

Instrument# Varian 62		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6-12 0231			6/16 0805											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

PBLK49
CMAS 3
EMAS 1
EMAS 5
EMAS 4
EMAS 2

Reviewer's Init/Date: MK 7-18-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: Compuchem

COLUMN: RTX-701 SITE NAME: Jackson CHT

Instrument# Varian 03		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/12 0231			6/16 0805											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

	PBLK 49			
	EAMS 3			
	EAMS 1			
	EAMS 5			
	EAMS 4			
	EAMS 2			

Reviewer's Init/Date: MK 7-18-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: Compu

COLUMN: DB608 SITE NAME: Jackson CLF

Instrument# Vanm02		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6 22 1027			6/26 0 1851											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

EBMS3MS
EBMS3MSD

Reviewer's Init/Date: MK 2-18-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23656 LABORATORY: Compex

COLUMN: RTX701 SITE NAME: Jackson CLF

Instrument#		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6/22 1027			6/26 0155											
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

	EAMS3 MS			
	EAMS3MSD			

Reviewer's Init/Date: MR 7-18-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utinized in this document, the following code letters and associated definitions are provide:

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL).

U Indicates that the compound was analyzed for, but not detected. The sample quantitation limit corrected for dilution and percent moisture is reported.

J Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound but the result is less than the sample quantitation limit, but greater than zero. The flag is also used to indicate a reported result having an associated QC problem.

R Indicates the data are unusable. (Note: The analyte may or may not be present.)

N Indicates presumptive evidence of a compound. This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search.

P Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns. The lower of the two results is reported.

C Indicates pesticide results that have been confirmed by GC/MS.

B Indicates the analyte is detected in the associated blank as well as the sample.

E Indicates compounds whose concentrations exceed the calibration range of the instrument.

D Indicates an identified compound in an analysis has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analysis.

A Indicates tentatively identified compounds that are suspected to be aldol condensation products.

G Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method.

L Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method.

T Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample.

X, Y, Z are reserved for laboratory defined flags.

EPA United States Environmental Protection Agency Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (if applicable):
Case No.: 23650

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

2. Region No.: 5
Sampling Co.: PRC
Sampler (Name): Scott Buckway
Sampler Signature:
3. Purpose*: Lead [X] SF [ ] PRP [ ] ST [ ] FED; Early Action [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

4. Date Shipped: 6/9/95
Carrier: Fed Ex
Airbill Number: 1402534344
5. Ship To: Compuchem Laboratories, 3308 Chapel Hill/Nelson Hwy, Research Triangle Park, NC 2770
ATTN: Richard Blotta

6. Date Received -- Received by: 6-10-1995 Lane Randon
Laboratory Contract Number: 68D50009
Unit Price: 805.00
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

J CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
EAMS1	5	L	G	5	X				5-092806-807	SS-1	6/9/95 1130	MEHBH1			729	814
EAMS1	↓	↓	↓	↓		X	X		5-092808		1130				↓	↓
EAMS2	↓	↓	↓	↓	X				5-092810-811	SS-1D	1130	MEHBH2			↓	824
EAMS2	↓	↓	↓	↓		X	X		5-092812		1130				↓	↓
EAMS3	↓	↓	↓	↓	X				5-092814-815	SS-2	1200	MEHBH3			↓	826
EAMS3	↓	↓	↓	↓		X	X		5-092816		1200				↓	↓
EAMS4	↓	↓	↓	↓	X				5-092818-819	SS-3	1315	MEHBH4			↓	827
EAMS4	↓	↓	↓	↓		X	X		5-092820		1315				↓	↓
EAMS5	↓	↓	↓	↓	X				5-092822-823	SS-4	1345	MEHBH5			↓	828
EAMS5	↓	↓	↓	↓		X	X		5-092824		1345				↓	↓

Shipment for Case Complete? (Y/N): (Y)
Page 1 of 1
Sample(s) to be Used for Laboratory QC: EAMS3
Additional Sampler Signatures: C. [illegible] Keith [illegible]
Chain of Custody Seal Number(s): 45797, 45798

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[illegible]	[illegible]				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Condition of Samples on Receipt?	
		Lane Randon	6/10/95 9:00am	SAMPLES REC'D IN GOOD CONDITION Samples 4°C 9:00 am 6/10/95	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-4 REV. 3/93

359908

23650 EAMS1 SAMPLE PACKAGE

COMPUCHEM
ENVIRONMENTAL
CORPORATION

SDG NARRATIVE
CASE # 23650
SDG # EAMS1
CONTRACT # 68D50009

Sample Identifications: EAMS1, EAMS2, EAMS3, EAMS4, EAMS5

The five (5) soil samples listed above were received intact, properly refrigerated, with proper documentation, in a sealed shipping container, on June 10, 1995. The samples were scheduled for the requested analyses of the volatile, semivolatile, and pesticide/PCB fractions. These samples were analyzed following Statement of Work (SOW) Document No. OLM03.1 protocol. The samples were received at a temperature of 4 degrees Celsius. The pH values of these soil samples ranged from 6.9 to 8.4 and the percent moistures ranged from 23 to 39.

All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for Case 23650, SDG EAMS1, are included in the sample data sections.

Volatiles
All samples were analyzed within holding time requirements. The common laboratory solvents methylene chloride and acetone and the Target Compound List (TCL) analytes ethylbenzene and xylene were identified above the Contract Required Quantitation Limit (CRQL) in these samples. Tentatively Identified Compounds (TICs) were found in some of these samples. These TICs could be characterized as carbon dioxide, laboratory artifacts, alcohols, an unknown, and a semivolatile TCL.

The system monitoring compounds met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria. The common laboratory solvents methylene chloride and acetone were found in the method blanks at concentrations within acceptance criteria limits. A single TIC was found in two of the method blanks. The associated volatile holding blank met all quality control criteria.

EAMS3 was used as the original to prepare the duplicate matrix spikes. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

In the analyses of the Initial and Continuing Calibration Standards, the operator performed manual integrations and/or manual edits of one or more of the Target Compound List (TCL) analytes. These manual integrations or edits are indicated by an "M", an "H", an

"L", an "MH", or an "ML" flag present on the quantitation report. An Extracted Ion Current Profile (EICP) has been provided for each analyte requiring a manual integration. These manual edits and/or manual integrations were required for the following reasons: 1)TCL analytes were incorrectly integrated by the automatic integration routine, and 2)the operator selected an alternate peak for a TCL analyte than that chosen by the computer software.

Semivolatiles

All samples were extracted and analyzed within holding time requirements. The TCL analyte bis(2-ethylhexyl)phthalate was identified above the CRQL in two of these samples. TICs were found in these samples. These TICs could be characterized as aldols, unknowns, alcohols, carboxylic acids, a PAH, a polynuclear aromatic hydrocarbon (PNA), VOA TCLs, phenolics, amides, an aldehyde, aromatics, and laboratory artifacts. Some of the other TICs were assessed as alkanes. The TICs which were characterized as alkanes have been summarized on the Form 1FAs which are located in the narrative section of this SDG. The TIC spectra for the alkanes are located in the data section for each of the individual samples.

The 'X' flag is used to denote indistinguishable coeluting isomers. We have provided an Extracted Ion Current Profile (EICP) for each pair of isomers flagged with an 'X' on the Form I.

The associated method blank met all quality control criteria. TCL analyte diethylphthalate was found in the method blank at a concentration within acceptance criteria limits. TICs were found in the method blank.

All of the surrogates met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples.

EAMS3 was used as the original to prepare the duplicate matrix spikes. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

In the analyses of the Initial and Continuing Calibration Standards, as well method blank SBLK64 and samples EAMS1, EAMS2, and EAMS5, the operator performed manual integrations and/or manual edits of one or more analytes. These manual integrations or edits are indicated by an "M", an "H", an "L", an "MH", or an "ML" flag present on the quantitation report. An Extracted Ion Current Profile (EICP) has been provided for each analyte requiring a manual integration. These manual edits and/or manual integrations were required for the following reasons: 1)TCL analytes were incorrectly integrated by the automatic integration routine, 2)the operator selected an alternate library search match than that chosen by the computer software, 3)TCL analytes were initially not found by the automatic integration

routine, and 4)the operator selected an alternate peak for a TCL analyte than that chosen by the computer software.

Pesticides/PCBs
All samples were extracted and analyzed within holding time requirements. There were no pesticide/PCB TCL analytes confirmed by dual column analysis above the CRQL in these samples.

All advisory surrogate recovery criteria were met. The associated method blank met all quality control criteria. No TCL analytes were found in the method blank.

EAMS3 was used as the original to prepare the duplicate matrix spikes. The associated duplicate matrix spikes met all advisory accuracy and precision criteria.

In the analyses of Aroclor Initial Calibration Standard AR1221B1, Performance Evaluation Mixture PEM9A, and Individual Standard Mixtures INDBMRR, INDBLAU, INDBMR7, INDBHB6, and INDBLAY the operator performed manual integrations and/or manual edits of one or more of the TCL analytes. These manual integrations or edits are indicated by an "M". Extracted Ion Current Profiles (EICPs) have been provided for each analyte requiring a manual integration. These manual edits and/or manual integrations were required because TCL analytes were incorrectly integrated by the automatic integration routine.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jean M. Zimmerman
Jean M. Zimmerman
Final Technical Reviewer
July 12, 1995

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKG4	106	90	105		0
02	EAMS1	110	89	106		0
03	EAMS3	104	88	105		0
04	EAMS4	110	91	106		0
05	EAMS5	107	90	106		0
06	VBLKG5	96	86	99		0
07	EAMS3MS	97	85	92		0
08	EAMS3MSD	101	88	95		0
09	VBLKK3	105	99	101		0
10	EAMS2	108	100	97		0
11	VHBLK95	104	95	94		0
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix Spike - EPA Sample No.: EAMS3 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	64.94	0.000	53.60	82	59-172
Trichloroethene	64.94	0.000	60.34	93	62-137
Benzene	64.94	0.000	67.06	103	66-142
Toluene	64.94	0.000	60.73	94	59-139
Chlorobenzene	64.94	0.000	62.78	97	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	64.94	55.16	85	4	22	59-172
Trichloroethene	64.94	60.96	94	1	24	62-137
Benzene	64.94	67.76	104	1	21	66-142
Toluene	64.94	61.77	95	1	21	59-139
Chlorobenzene	64.94	64.33	99	2	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKG4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Lab File ID: GH030012C51 Lab Sample ID: 730012

Date Analyzed: 06/14/95 Time Analyzed: 0012

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50051

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EAMS1	729814	GH029814C51	0149
02	EAMS3	729826	GH029826C51	0333
03	EAMS4	729827	GH029827C51	0409
04	EAMS5	729828	GH029828C51	0446
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKG5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Lab File ID: GH030013C51 Lab Sample ID: 730013

Date Analyzed: 06/14/95 Time Analyzed: 0745

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: F50051

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EAMS3MS	729815	GH029815A51	0845
02	EAMS3MSD	729816	GH029816A51	0932
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKK3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Lab File ID: GH030774B13 Lab Sample ID: 730774

Date Analyzed: 06/14/95 Time Analyzed: 1933

GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: OWA13

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EAMS2	729824	GR029824B13	2245
02	VHBLK95	729841	GH029841C13	0107
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKG4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730012

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030012C51

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	J
67-64-1	Acetone	28	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKG4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730012

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030012C51

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	27.42	16	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKG5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730013

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030013C51

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	J
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKG5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730013

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030013C51

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKK3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730774

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030774B13

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	24	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (Total)	10	U

FORM I VOA OLM03.0

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKK3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730774

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH030774B13

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.71	10	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029814C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 29 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	14	U
74-83-9	Bromomethane	14	U
75-01-4	Vinyl Chloride	14	U
75-00-3	Chloroethane	14	U
75-09-2	Methylene Chloride	16	B U m ← 7-18.
67-64-1	Acetone	17	B U
75-15-0	Carbon Disulfide	14	U
75-35-4	1,1-Dichloroethene	14	U
75-34-3	1,1-Dichloroethane	14	U
540-59-0	1,2-Dichloroethene (total)	14	U
67-66-3	Chloroform	14	U
107-06-2	1,2-Dichloroethane	14	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	14	U
56-23-5	Carbon Tetrachloride	14	U
75-27-4	Bromodichloromethane	14	U
78-87-5	1,2-Dichloropropane	14	U
10061-01-5	cis-1,3-Dichloropropene	14	U
79-01-6	Trichloroethene	14	U
124-48-1	Dibromochloromethane	14	U
79-00-5	1,1,2-Trichloroethane	14	U
71-43-2	Benzene	14	U
10061-02-6	trans-1,3-Dichloropropene	14	U
75-25-2	Bromoform	14	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	14	U
79-34-5	1,1,2,2-Tetrachloroethane	14	U
108-88-3	Toluene	14	U
108-90-7	Chlorobenzene	14	U
100-41-4	Ethylbenzene	59	
100-42-5	Styrene	14	U
1330-20-7	Xylene (Total)	25	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS1
SS-1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029814C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 29 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	SEMI TCL (NOT IN TIC TOTAL)	26.17	10	J
2.	LABORATORY ARTIFACT	27.39	7	JBU m K
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GR029824B13

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 39 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	16	U
74-83-9	Bromomethane	16	U
75-01-4	Vinyl Chloride	16	U
75-00-3	Chloroethane	16	U
75-09-2	Methylene Chloride	30	B U m 14 7-18-95
67-64-1	Acetone	180	
75-15-0	Carbon Disulfide	16	U
75-35-4	1,1-Dichloroethene	16	U
75-34-3	1,1-Dichloroethane	16	U
540-59-0	1,2-Dichloroethene (total)	16	U
67-66-3	Chloroform	16	U
107-06-2	1,2-Dichloroethane	16	U
78-93-3	2-Butanone	16	U
71-55-6	1,1,1-Trichloroethane	16	U
56-23-5	Carbon Tetrachloride	16	U
75-27-4	Bromodichloromethane	16	U
78-87-5	1,2-Dichloropropane	16	U
10061-01-5	cis-1,3-Dichloropropene	16	U
79-01-6	Trichloroethene	16	U
124-48-1	Dibromochloromethane	16	U
79-00-5	1,1,2-Trichloroethane	16	U
71-43-2	Benzene	16	U
10061-02-6	trans-1,3-Dichloropropene	16	U
75-25-2	Bromoform	16	U
108-10-1	4-Methyl-2-Pentanone	16	U
591-78-6	2-Hexanone	16	U
127-18-4	Tetrachloroethene	16	U
79-34-5	1,1,2,2-Tetrachloroethane	16	U
108-88-3	Toluene	16	U
108-90-7	Chlorobenzene	16	U
100-41-4	Ethylbenzene	40	
100-42-5	Styrene	16	U
1330-20-7	Xylene (Total)	15	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GR029824B13

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 39 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CO2 (NOT IN TIC TOTAL)	0.72	411	JB
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029826C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	~~12~~ 13	JB U MK 7-1
67-64-1	Acetone	26	B U MK 7-18
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U

FORM I VOA OLM03.0

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029826C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	75-65-0	2-PROPANOL, 2-METHYL-	13.78	33	NJ
2.		UNKNOWN	23.53	8	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029827C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	14	BU MK 7-18-95
67-64-1	Acetone	25	BU
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U

FORM I VOA OLM03.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029827C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-65-0	2-PROPANOL, 2-METHYL-	13.81	8	NJ
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029828C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	21	BU
67-64-1	Acetone	17	BU
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (Total)	13	U

FORM I VOA OLM03.0

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 5.0 (g/mL) g Lab File ID: GH029828C51

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/14/95

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I VOA-TIC OLM03.0

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLK64	51	52	58	50	54	41	54	49	0
02	EAMS3	54	56	64	57	63	42	61	53	0
03	EAMS3MS	59	55	61	60	63	43	62	51	0
04	EAMS3MSD	58	55	64	58	63	49	61	50	0
05	EAMS4	62	60	66	60	68	48	65	58	0
06	EAMS5	60	61	61	55	64	48	62	54	0
07	EAMS1	78	70	75	67	76	48	71	62	0
08	EAMS2	63	58	61	57	64	46	62	53	0
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

			QC LIMITS	
S1	(NBZ)	= Nitrobenzene-d5	(23-120)	
S2	(FBP)	= 2-Fluorobiphenyl	(30-115)	
S3	(TPH)	= Terphenyl-d14	(18-137)	
S4	(PHL)	= Phenol-d5	(24-113)	
S5	(2FP)	= 2-Fluorophenol	(25-121)	
S6	(TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7	(2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8	(DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix Spike - EPA Sample No.: EAMS3 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	3247	0.000	1992	61	26- 90
2-Chlorophenol	3247	0.000	1876	58	25-102
1,4-Dichlorobenzene	2164	0.000	1170	54	28-104
N-Nitroso-di-n-prop.(1)	2164	0.000	1076	50	41-126
1,2,4-Trichlorobenzene	2164	0.000	1217	56	38-107
4-Chloro-3-methylphenol	3247	0.000	2157	66	26-103
Acenaphthene	2164	0.000	1199	55	31-137
4-Nitrophenol	3247	0.000	1282	39	11-114
2,4-Dinitrotoluene	2164	0.000	1113	51	28- 89
Pentachlorophenol	3247	0.000	1107	34	17-109
Pyrene	2164	0.000	1283	59	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	3247	2027	62	2	35	26- 90
2-Chlorophenol	3247	1891	58	0	50	25-102
1,4-Dichlorobenzene	2164	1184	55	2	27	28-104
N-Nitroso-di-n-prop.(1)	2164	1104	51	2	38	41-126
1,2,4-Trichlorobenzene	2164	1223	56	0	23	38-107
4-Chloro-3-methylphenol	3247	2166	67	2	33	26-103
Acenaphthene	2164	1266	58	5	19	31-137
4-Nitrophenol	3247	1210	37	5	50	11-114
2,4-Dinitrotoluene	2164	1215	56	9	47	28- 89
Pentachlorophenol	3247	1172	36	6	47	17-109
Pyrene	2164	1388	64	8	36	35-142

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK64

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Lab File ID: GH030254A02 Lab Sample ID: 730254

Instrument ID: OWA02 Date Extracted: 06/14/95

Matrix: (soil/water) SOIL Date Analyzed: 06/22/95

Level:(low/med) LOW Time Analyzed: 0911

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EAMS3	729826	GH029826A02	06/22/95
02	EAMS3MS	729818	GH029818A02	06/22/95
03	EAMS3MSD	729819	GH029819A02	06/22/95
04	EAMS4	729827	GH029827A02	06/22/95
05	EAMS5	729828	GH029828A02	06/22/95
06	EAMS1	729814	GH029814A02	06/22/95
07	EAMS2	729824	GH029824A02	06/22/95
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK64

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730254

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH030254A02

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK64

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730254

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH030254A02

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	34	J
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK64

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730254

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH030254A02

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: ____

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL (BC)	4.46	2306	AJ
2.		UNKNOWN (BC)	4.68	124	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC OLM03.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029814A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 29 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	460	U
111-44-4	bis(2-Chloroethyl)ether	460	U
95-57-8	2-Chlorophenol	460	U
541-73-1	1,3-Dichlorobenzene	460	U
106-46-7	1,4-Dichlorobenzene	92	J
95-50-1	1,2-Dichlorobenzene	460	U
95-48-7	2-Methylphenol	460	U
108-60-1	2,2'-oxybis(1-Chloropropane)	460	U
106-44-5	4-Methylphenol	460	U
621-64-7	N-Nitroso-di-n-propylamine	460	U
67-72-1	Hexachloroethane	460	U
98-95-3	Nitrobenzene	460	U
78-59-1	Isophorone	460	U
88-75-5	2-Nitrophenol	460	U
105-67-9	2,4-Dimethylphenol	460	U
111-91-1	bis(2-Chloroethoxy)methane	460	U
120-83-2	2,4-Dichlorophenol	460	U
120-82-1	1,2,4-Trichlorobenzene	460	U
91-20-3	Naphthalene	50	J
106-47-8	4-Chloroaniline	460	U
87-68-3	Hexachlorobutadiene	460	U
59-50-7	4-Chloro-3-methylphenol	460	U
91-57-6	2-Methylnaphthalene	460	U
77-47-4	Hexachlorocyclopentadiene	460	U
88-06-2	2,4,6-Trichlorophenol	460	U
95-95-4	2,4,5-Trichlorophenol	1200	U
91-58-7	2-Chloronaphthalene	460	U
88-74-4	2-Nitroaniline	1200	U
131-11-3	Dimethylphthalate	460	U
208-96-8	Acenaphthylene	460	U
606-20-2	2,6-Dinitrotoluene	460	U
99-09-2	3-Nitroaniline	1200	U
83-32-9	Acenaphthene	460	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029814A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 29 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1200	U
100-02-7	4-Nitrophenol	1200	U
132-64-9	Dibenzofuran	460	U
121-14-2	2,4-Dinitrotoluene	460	U
84-66-2	Diethylphthalate	47	JBU
7005-72-3	4-Chlorophenyl-phenylether	460	U
86-73-7	Fluorene	460	U
100-01-6	4-Nitroaniline	1200	U
534-52-1	4,6-Dinitro-2-methylphenol	1200	U
86-30-6	N-nitrosodiphenylamine (1)	460	U
101-55-3	4-Bromophenyl-phenylether	460	U
118-74-1	Hexachlorobenzene	460	U
87-86-5	Pentachlorophenol	1200	U
85-01-8	Phenanthrene	460	U
120-12-7	Anthracene	460	U
86-74-8	Carbazole	460	U
84-74-2	Di-n-butylphthalate	460	U
206-44-0	Fluoranthene	460	U
129-00-0	Pyrene	460	U
85-68-7	Butylbenzylphthalate	460	U
91-94-1	3,3'-Dichlorobenzidine	460	U
56-55-3	Benzo(a)anthracene	460	U
218-01-9	Chrysene	460	U
117-81-7	bis(2-Ethylhexyl)phthalate	610	
117-84-0	Di-n-octylphthalate	460	U
205-99-2	Benzo(b)fluoranthene	460	U
207-08-9	Benzo(k)fluoranthene	460	U
50-32-8	Benzo(a)pyrene	460	U
193-39-5	Indeno(1,2,3-cd)pyrene	460	U
53-70-3	Dibenzo(a,h)anthracene	460	U
191-24-2	Benzo(g,h,i)perylene	460	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029814A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 29 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.0

Number TICs found: 24

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	4.49	5539	AJB U
2.	UNKNOWN (BC)	4.69	122	JB U
3.	VOA TCL	4.73	1303	J
4.	VOA TCL	5.09	196	J
5.	UNKNOWN	5.52	102	J
6.	ETHYLMETHYLBENZENE	6.16	135	J
7.	UNKNOWN	6.25	424	J
8.	UNKNOWN	6.44	108	J
9.	UNKNOWN	7.65	112	J
10.	UNKNOWN	8.77	717	J
11.	SUBSTITUTED PHENOL	11.00	126	J
12.	UNKNOWN	11.55	154	J
13. 3622-84-2	BENZENESULFONAMIDE, N-BUTYL-	12.17	595	NJ
14.	UNKNOWN CARBOXYLIC ACID	12.90	175	J
15.	LABORATORY ARTIFACT	12.99	122	J
16.	UNKNOWN	13.69	154	J
17.	UNKNOWN	14.00	1197	J
18.	UNKNOWN	17.54	204	J
19.	UNKNOWN	17.92	714	J
20.	UNKNOWN	18.46	170	J
21.	UNKNOWN	20.91	289	J
22.	UNKNOWN	21.55	269	J
23.	UNKNOWN	24.59	891	J
24.	UNKNOWN	25.65	476	J
25.			Total =	
26.			TIC	
27.				
28.				
29.				
30.				

FORM I SV-TIC OLM03.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029824A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 39 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	540	U
111-44-4	bis(2-Chloroethyl)ether	540	U
95-57-8	2-Chlorophenol	540	U
541-73-1	1,3-Dichlorobenzene	540	U
106-46-7	1,4-Dichlorobenzene	130	J
95-50-1	1,2-Dichlorobenzene	540	U
95-48-7	2-Methylphenol	540	U
108-60-1	2,2'-oxybis(1-Chloropropane)	540	U
106-44-5	4-Methylphenol	540	U
621-64-7	N-Nitroso-di-n-propylamine	540	U
67-72-1	Hexachloroethane	540	U
98-95-3	Nitrobenzene	540	U
78-59-1	Isophorone	540	U
88-75-5	2-Nitrophenol	540	U
105-67-9	2,4-Dimethylphenol	540	U
111-91-1	bis(2-Chloroethoxy)methane	540	U
120-83-2	2,4-Dichlorophenol	540	U
120-82-1	1,2,4-Trichlorobenzene	540	U
91-20-3	Naphthalene	80	J
106-47-8	4-Chloroaniline	540	U
87-68-3	Hexachlorobutadiene	540	U
59-50-7	4-Chloro-3-methylphenol	540	U
91-57-6	2-Methylnaphthalene	540	U
77-47-4	Hexachlorocyclopentadiene	540	U
88-06-2	2,4,6-Trichlorophenol	540	U
95-95-4	2,4,5-Trichlorophenol	1400	U
91-58-7	2-Chloronaphthalene	540	U
88-74-4	2-Nitroaniline	1400	U
131-11-3	Dimethylphthalate	540	U
208-96-8	Acenaphthylene	540	U
606-20-2	2,6-Dinitrotoluene	540	U
99-09-2	3-Nitroaniline	1400	U
83-32-9	Acenaphthene	540	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029824A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 39 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1400	U
100-02-7	4-Nitrophenol	1400	U
132-64-9	Dibenzofuran	540	U
121-14-2	2,4-Dinitrotoluene	540	U
84-66-2	Diethylphthalate	540	U
7005-72-3	4-Chlorophenyl-phenylether	540	U
86-73-7	Fluorene	540	U
100-01-6	4-Nitroaniline	1400	U
534-52-1	4,6-Dinitro-2-methylphenol	1400	U
86-30-6	N-nitrosodiphenylamine (1)	540	U
101-55-3	4-Bromophenyl-phenylether	540	U
118-74-1	Hexachlorobenzene	540	U
87-86-5	Pentachlorophenol	1400	U
85-01-8	Phenanthrene	540	U
120-12-7	Anthracene	540	U
86-74-8	Carbazole	540	U
84-74-2	Di-n-butylphthalate	540	U
206-44-0	Fluoranthene	540	U
129-00-0	Pyrene	540	U
85-68-7	Butylbenzylphthalate	540	U
91-94-1	3,3'-Dichlorobenzidine	540	U
56-55-3	Benzo(a)anthracene	540	U
218-01-9	Chrysene	540	U
117-81-7	bis(2-Ethylhexyl)phthalate	830	
117-84-0	Di-n-octylphthalate	540	U
205-99-2	Benzo(b)fluoranthene	540	U
207-08-9	Benzo(k)fluoranthene	540	U
50-32-8	Benzo(a)pyrene	540	U
193-39-5	Indeno(1,2,3-cd)pyrene	540	U
53-70-3	Dibenzo(a,h)anthracene	540	U
191-24-2	Benzo(g,h,i)perylene	540	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS2

Lab Name: CompuChem Env. Corp. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029824A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 39 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

Number TICs found: 32

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	4.51	5323	AJBV
2.	VOA TCL	4.74	2010	J
3.	VOA TCL	5.10	191	J
4.	ETHYLMETHYLBENZENE	6.18	272	J
5.	UNKNOWN	6.26	465	J
6.	UNKNOWN	7.96	198	J
7.	UNKNOWN	8.80	535	J
8.	SUBSTITUTED PHENOL	11.03	254	J
9.	UNKNOWN	11.52	414	J
10.	UNKNOWN	11.57	206	J
11. 3622-84-2	BENZENESULFONAMIDE, N-BUTYL-	12.19	630	NJ
12.	UNKNOWN	12.93	239	J
13.	UNKNOWN	13.71	296	J
14.	UNKNOWN	13.92	153	J
15.	UNKNOWN	14.03	2703	J
16.	UNKNOWN	14.38	298	J
17.	UNKNOWN	14.74	221	J
18.	UNKNOWN	14.84	323	J
19.	UNKNOWN	14.95	246	J
20.	UNKNOWN	15.10	341	J
21.	UNKNOWN	15.46	204	J
22.	UNKNOWN	17.16	192	J
23.	UNKNOWN	17.57	732	J
24.	UNKNOWN	18.47	1212	J
25.	UNKNOWN	20.93	1528	J
26.	UNKNOWN	21.22	543	J
27.	UNKNOWN	21.58	842	J
28.	UNKNOWN	23.52	311	J
29.	UNKNOWN	24.01	510	J
30.	UNKNOWN	24.62	1235	J

Total = see next page

FORM I SV-TIC OLM03.0

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS2

Lab Name: CompuChem Env. Corp. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029824A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 39 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

Number TICs found: 32

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	24.93	339	J
2.	UNKNOWN	25.69	581	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC OLM03.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029826A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	69	J
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029826A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	53	J
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	430	U
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029826A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.9

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL (BC)	4.48	3213	AJBUMC 7-1
2.		UNKNOWN	6.25	617	J
3.		UNKNOWN	8.78	417	J
4.		UNKNOWN	12.57	194	J
5.		UNKNOWN	13.98	233	J
6.		UNKNOWN	14.38	136	J
7.		UNKNOWN	14.67	494	J
8.	5384-21-4	PHENOL, 4,4'-METHYLENEBIS[2,	14.89	2474	NJ
9.		UNKNOWN AMIDE	17.34	163	J
10.		UNKNOWN	17.54	107	J
11.		UNKNOWN	18.18	92	J
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC OLM03.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029827A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	62	J
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029827A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	64	J
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029827A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

Number TICs found: 15

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	4.49	4000	AJB U mK 7-18
2.	UNKNOWN (BC)	4.69	90	JB U
3.	UNKNOWN	5.94	390	J
4.	UNKNOWN	6.25	236	J
5.	UNKNOWN	8.78	1017	J
6.	UNKNOWN PNA	9.68	148	J
7.	UNKNOWN	14.00	148	J
8.	UNKNOWN	14.32	105	J
9.	UNKNOWN PAH	14.65	235	J
10.	SUBSTITUTED PHENOL	14.90	302	J
11.	UNKNOWN	15.16	99	J
12.	UNKNOWN AMIDE	17.34	92	J
13.	UNKNOWN	17.54	194	J
14.	UNKNOWN	18.18	141	J
15.	UNKNOWN	18.49	144	J
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC OLM03.0

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029828A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500(uL) Date Analyzed: 06/22/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029828A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)phthalate	430	U
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	430	U
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 30.0 (g/mL) g Lab File ID: GH029828A02

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/14/95

Concentrated Extract Volume: 500 (uL) Date Analyzed: 06/22/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.4

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL (BC)	4.49	3429	AJB
2.	UNKNOWN (BC)	4.70	158	JB
3.	UNKNOWN	5.55	210	J
4.	UNKNOWN	6.04	382	J
5.	UNKNOWN	6.33	262	J
6.	UNKNOWN	13.24	98	J
7.	UNKNOWN	13.53	88	J
8.	UNKNOWN	13.75	93	J
9.	UNKNOWN	14.11	128	J
10.	UNKNOWN	15.14	91	J
11.	UNKNOWN ALCOHOL	15.73	167	J
12.	UNKNOWN	16.86	380	J
13.	UNKNOWN ALCOHOL	17.73	260	J
14.	UNKNOWN	18.44	114	J
15.	UNKNOWN ALDEHYDE	19.67	366	J
16.	UNKNOWN	20.66	191	J
17.	UNKNOWN	23.35	1147	J
18.	UNKNOWN	24.54	1526	J
19.	UNKNOWN	27.08	494	J
20.	UNKNOWN	29.75	1200	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC OLM03.0

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

GC Column (1): DB-608 ID: 0.53 (mm) GC Column (2): RTX-1701 ID: 0.53 (m

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK49	77	82	89	87			0
02	EAMS2	51	76	100	93			0
03	EAMS3MS	97	90	110	110			0
04	EAMS1	51	79	88	90			0
05	EAMS3	71	70	77	80			0
06	EAMS5	70	75	85	97			0
07	EAMS3MSD	95	91	110	100			0
08	EAMS4	84	80	85	92			0
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values.
* Values outside of QC Limits
D Surrogate diluted out.

FORM II PEST-1 OLM03.0

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix Spike - EPA Sample No.: EAMS3

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
gamma-BHC (Lindane)	21.431	0.00	19	89	46-127
Heptachlor	21.431	0.00	16	75	35-130
Aldrin	21.431	0.20	17	78	34-132
Dieldrin	42.861	0.00	38	89	31-134
Endrin	42.861	0.00	42	98	42-139
4,4'-DDT	42.861	0.00	39	91	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	21.431	17	79	12	50	46-127
Heptachlor	21.431	17	79	5	31	35-130
Aldrin	21.431	16	74	5	43	34-132
Dieldrin	42.861	37	86	3	38	31-134
Endrin	42.861	41	96	2	45	42-139
4,4'-DDT	42.861	38	89	2	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

FORM III PEST-2 OLM03.0

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK49

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Lab Sample ID: 730353 Lab File ID:

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 06/13/95

Date Analyzed (1): 06/16/95 Date Analyzed (2): 06/16/95

Time Analyzed (1): 1415 Time Analyzed (2): 1415

Instrument ID (1): VARIAN02 Instrument ID (2): VARIAN03

GC Column (1): DB-608 ID: 0.53 (mm) GC Column (2): RTX-1701 ID: 0.53 (mm

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EAMS2	729824	06/16/95	06/16/95
02	EAMS3MS	729821	06/26/95	06/26/95
03	EAMS3	729826	06/16/95	06/16/95
04	EAMS1	729814	06/16/95	06/16/95
05	EAMS5	729828	06/16/95	06/16/95
06	EAMS3MSD	729822	06/26/95	06/26/95
07	EAMS4	729827	06/16/95	06/16/95
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

Comments:

FORM IV PEST OLM03.0

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK49

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 730353

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS1

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729814

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 29 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: 8.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	0.18	JP
58-89-9	gamma-BHC (Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	0.32	JP
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.6	U
72-55-9	4,4'-DDE	4.6	U
72-20-8	Endrin	4.6	U
33213-65-9	Endosulfan II	4.6	U
72-54-8	4,4'-DDD	4.6	U
1031-07-8	Endosulfan sulfate	4.6	U
50-29-3	4,4'-DDT	4.6	U
72-43-5	Methoxychlor	24	U
53494-70-5	Endrin ketone	4.6	U
7421-93-4	Endrin aldehyde	4.6	U
5103-71-9	alpha-Chlordane	0.45	J
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240	U
12674-11-2	Aroclor-1016	46	U
11104-28-2	Aroclor-1221	94	U
11141-16-5	Aroclor-1232	46	U
53469-21-9	Aroclor-1242	46	U
12672-29-6	Aroclor-1248	46	U
11097-69-1	Aroclor-1254	46	U
11096-82-5	Aroclor-1260	46	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS2

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729824

Sample wt/vol: 30.4 (g/ml) G Lab File ID:

% Moisture: 39 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: 7.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.8	U
319-85-7	beta-BHC	2.8	U
319-86-8	delta-BHC	0.99	JP
58-89-9	gamma-BHC (Lindane)	2.8	U
76-44-8	Heptachlor	2.8	U
309-00-2	Aldrin	2.8	U
1024-57-3	Heptachlor epoxide	0.22	JP
959-98-8	Endosulfan I	2.8	U
60-57-1	Dieldrin	5.3	U
72-55-9	4,4'-DDE	0.58	JP
72-20-8	Endrin	0.30	JP
33213-65-9	Endosulfan II	5.3	U
72-54-8	4,4'-DDD	5.3	U
1031-07-8	Endosulfan sulfate	5.3	U
50-29-3	4,4'-DDT	5.3	U
72-43-5	Methoxychlor	28	U
53494-70-5	Endrin ketone	5.3	U
7421-93-4	Endrin aldehyde	5.3	U
5103-71-9	alpha-Chlordane	2.0	J
5103-74-2	gamma-Chlordane	1.1	JP
8001-35-2	Toxaphene	280	U
12674-11-2	Aroclor-1016	53	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	53	U
53469-21-9	Aroclor-1242	53	U
12672-29-6	Aroclor-1248	53	U
11097-69-1	Aroclor-1254	53	U
11096-82-5	Aroclor-1260	53	U

FORM I PEST OLM03.0

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS3

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729826

Sample wt/vol: 30.4 (g/ml) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	0.73	J
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	0.20	JP
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4'-DDE	4.2	U
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4'-DDD	0.49	J
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4'-DDT	4.2	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	42	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	42	U
53469-21-9	Aroclor-1242	42	U
12672-29-6	Aroclor-1248	42	U
11097-69-1	Aroclor-1254	42	U
11096-82-5	Aroclor-1260	42	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS4

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729827

Sample wt/vol: 30.2 (g/ml) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: 7.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	0.33	JP
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS5

Lab Name: COMPUCHEM ENV. CORP. Contract: 68D50009

Lab Code: COMPU Case No.: 23650 SAS No.: SDG No.: EAMS1

Matrix: (soil/water) SOIL Lab Sample ID: 729828

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/13/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) Y pH: 8.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	0.15	JP
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	0.32	JP
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: OHD980993554

Case No: 23650 Site Name Location: Jackson County Landfill

Contractor or EPA Lab: Compuchem Data User: PRC

No. of Samples: 5 Date Sampled or Data Received: 7-14-95

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No _____
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No _____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No _____
No of samples claimed: 5 No. of samples received: 5

Received by: Lynette Burnett Date: 7-14-95

Received by LSSS: Allison C Harvey Date: 7-17-95

Review started: 7-18-95 Reviewer Signature: M Kane

Total time spent on review: 8 Date review completed: 7-18-95

Copied by: Patricia J Swift Date: 07/24/95

Mailed to user by: A. C. Harvey Date: 8-16-95

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: Mildred Jackson Date: AUG 17 1995

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 23650 SDG No. EAMS2 SDG Nos. To Follow _____ _____ _____ SAS No. _____ Date Recvd 7/14/95

EPA Lab ID: Compuchem

Lab Location: R.T.P. NC

Region: ___ Audit No.: _____

Re-Submitted CSF? Yes ___ No ___

Box No(s): _____

COMMENTS:

H2 Custody seals were present

Over for additional comments.

ORIGINALS	YES	NO	N/A
CUSTODY SEALS			
1. Present on package?	✓		
2. Intact upon receipt?	✓		
FORM DC-2			
3. Numbering scheme accurate?	✓		
4. Are enclosed documents listed?	✓		
5. Are listed documents enclosed?	✓		
FORM DC-1			
6. Present?	✓		
7. Complete?	✓		
8. Accurate?	✓		
CHAIN-OF-CUSTODY RECORD(s)			
9. Signed?	✓		
10. Dated?	✓		
TRAFFIC REPORT(s) PACKING LIST(s)			
11. Signed?	✓		
12. Dated?	✓		
AIRBILLS/AIRBILL STICKER			
13. Present?	✓		
14. Signed?	✓		
15. Dated?	✓		
SAMPLE TAGS			
16. Does DC-1 list tags as being included?	✓		
17. Present?	✓		
OTHER DOCUMENTS			
18. Complete?	✓		
19. Legible?	✓		
20. Original?	✓		
20a. If "NO," does the copy indicate where original documents are located?	✓		

Received by: Lynette Burnett — Lynette Burnett / DATA COORD — Date 7/14/95

Audited by: [signature] — M Kaminski / ESAT — Date 7/12/95

Audited by: _____ — _____ — Date __/__/__

Signature — Printed Name/Title

TO BE COMPLETED BY CEAT

Date Recvd by CEAT: ___/___/___ Date Entered: ___/___/___ Date Reviewed: ___/___/___

Entered by: _____ _____

Reviewed by: _____ _____

Signature — Printed Name/Title

JUL 11 1995

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ENTERED

DATE: 07-06-95

SUBJECT: Review of Region V CLP Data
Received for Review on June 27, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section
L. Finkelberg for D. Wesolowski

TO: Data User: PRC

We have reviewed the data for the following case:

SITE NAME: Jackson County LF (OH)

CASE NUMBER: 23650 SDG NUMBER: MEABH1

Number and Type of Samples: 5 (soil)

Sample Numbers: MEABH1-5

Laboratory: IEA Hrs. for Review: 4.5 +0.5 T.M.

Following are our findings:

The matrix spike recovery for Sb is out of control. All data are usable with the qualification described in the attached review.

L. Finkelberg
07-06-95

cc: Regional TPO

NARRATIVE

SITE: JACKSON COUNTY LF CASE: 23650
LABORATORY: IEA SDG: MEABH1

The laboratory's portion of case 23650 contains 5 low level soil samples assayed for total metals and total cyanide. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT: All forms are originals. All of the raw data sheets are originals. Those sheets photocopied are from bound lab books. The originals that are present are sample tags, Federal Express airbill, chain of custody forms and Form DC-1. All forms are present and in the order indicated on the Form DC-2 [inventory sheet].

ICP ANALYSES: The duplicate RPD for Pb (26.6%) was flagged by the laboratory. The duplicate difference does not exceed the technical criterion (35%) for soil samples. All the Pb data are acceptable.

The duplicate RPD for Mn (20.5%) was flagged by the laboratory. The duplicate difference does not exceed the technical criterion (35%) for soil samples. The Mn data are not qualified on this basis. The matrix spike recovery for Mn (199.1%) was not flagged by the laboratory because the sample concentration was more than 4x the spike level. All Mn data are acceptable.

The matrix spike recovery for Sb (40.6%) is out of control. All the Sb data are estimated (UJ) due to possible elevation of the detection limit.

OTHER ANALYSES: All Hg and CN data are acceptable.

Samples MEABH1/2 are field duplicates with field RPDs for Al (36.6%), Ca (74.2%) and Fe (50.8%) that are out of control. All the Al, Ca and Fe data are estimated (J) due to poor precision.

Reviewed by: James Redlin James Redlin, Lockheed/ESAT
Date: 6/30/95

DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utinized in this document, the following code letters and associated definitions are provide:

U Indicates the material was analyzed, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J Indicates the associated value is an estimated quantity.

R Indicates the data are unusable. (Note: The analyte may or may not be present.)

UJ Indicates the material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

E Indicates the reported value is estimated because of the presence of interferences. An explanatory note shall be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-IN (if it is an isolated problem).

M Indicates duplicate injection precision is not met.

N Indictaes the spike sample recovery is not within control limits.

S Indicates the reported value was determined by the Method of Standard Addition (MSA).

W Indicates the post-digestion spike for furnace AA analysis is out of control limits (85%-115%), while sample absorbance is less than 50% of the spike absorbance.

+ Indicates the correlation coefficient for the MSA is less than 0.995.

* Indicates the duplicate analysis is not within control limits.

Note: Entering "S", "W" or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650 SAS No.: _____ SDG No.:MEABH1

SOW No.: ILM03.0

EPA Sample No.	Lab Sample ID
MEABH1	950620001
MEABH2	950620002
MEABH3	950620003
MEABH3D	950620003D
MEABH3S	950620003S
MEABH4	950620004
MEABH5	950620005

RECEIVED
JUN 27 1995
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES
If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Donald C. Stogner Name: Donald C. Stogner

Date: 6-21-95 Title: Manager, Inorganics

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEABH5

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water): SOIL_ Lab Sample ID: 950620005

Level (low/med): LOW__ Date Received: 06/10/95

% Solids: _82.9

Prelim. Code

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5980			P
7440-36-0	Antimony	0.42	U	N	P
7440-38-2	Arsenic	3.6			P
7440-39-3	Barium	58.0			P
7440-41-7	Beryllium	0.55	B		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	717	B		P
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt	8.2	B		P
7440-50-8	Copper	4.1	B		P
7439-89-6	Iron	8880			P
7439-92-1	Lead	17.9		*	P
7439-95-4	Magnesium	600	B		P
7439-96-5	Manganese	809		*	P
7439-97-6	Mercury	0.11	U		CV
7440-02-0	Nickel	7.6	B		P
7440-09-7	Potassium	582	B		P
7782-49-2	Selenium	0.62	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	48.0	U		P
7440-28-0	Thallium	0.70	B		P
7440-62-2	Vanadium	12.0			P
7440-66-6	Zinc	27.9			P
	Cyanide	0.52	U		CA

Method of Analysis.

P = inductively coupled plasma.

CV = Cold Vapor.

B = less that CRDL → than instrument detection limit

= J @ Data Validator.

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEABH1 SS-1

ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

atrix (soil/water): SOIL_ Lab Sample ID: 950620001

evel (low/med): LOW__ Date Received: 06/10/95

Solids: _59.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4530			P
7440-36-0	Antimony	0.58	U	N	P
7440-38-2	Arsenic	2.7	B		P
7440-39-3	Barium	141			P
7440-41-7	Beryllium	0.58	B		P
7440-43-9	Cadmium	0.32	B		P
7440-70-2	Calcium	14000			P
7440-47-3	Chromium	8.1			P
7440-48-4	Cobalt	5.9	B		P
7440-50-8	Copper	4.6	B		P
7439-89-6	Iron	47400			P
7439-92-1	Lead	7.9		*	P
7439-95-4	Magnesium	2080			P
7439-96-5	Manganese	400		*	P
7439-97-6	Mercury	0.14	U		CV
7440-02-0	Nickel	9.7	B		P
7440-09-7	Potassium	1720			P
7782-49-2	Selenium	0.86	U		P
7440-22-4	Silver	0.29	U		P
7440-23-5	Sodium	1460			P
7440-28-0	Thallium	1.2	B		P
7440-62-2	Vanadium	9.2	B		P
7440-66-6	Zinc	56.7			P
	Cyanide	0.77	U		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEABH2 SS-1D

ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

atrix (soil/water): SOIL_ Lab Sample ID: 950620002

evel (low/med): LOW__ Date Received: 06/10/95

Solids: _52.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6560			P
7440-36-0	Antimony	0.63	U	N	P
7440-38-2	Arsenic	2.1	B		P
7440-39-3	Barium	49.0	B		P
7440-41-7	Beryllium	0.93	B		P
7440-43-9	Cadmium	0.32	U		P
7440-70-2	Calcium	6420			P
7440-47-3	Chromium	12.4			P
7440-48-4	Cobalt	7.9	B		P
7440-50-8	Copper	15.7			P
7439-89-6	Iron	28200			P
7439-92-1	Lead	11.0		*	P
7439-95-4	Magnesium	2310			P
7439-96-5	Manganese	297		*	P
7439-97-6	Mercury	0.16	U		CV
7440-02-0	Nickel	17.7			P
7440-09-7	Potassium	1940			P
7782-49-2	Selenium	0.95	U		P
7440-22-4	Silver	0.32	U		P
7440-23-5	Sodium	1140	B		P
7440-28-0	Thallium	0.95	U		P
7440-62-2	Vanadium	11.8	B		P
7440-66-6	Zinc	57.8			P
	Cyanide	0.89	U		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEABH3
SS-2

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water): SOIL_ Lab Sample ID: 950620003

Level (low/med): LOW__ Date Received: 06/10/95

% Solids: _74.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	7610			P
7440-36-0	Antimony_	0.49	U	N	P
7440-38-2	Arsenic_	4.6			P
7440-39-3	Barium___	38.6	B		P
7440-41-7	Beryllium	1.0	B		P
7440-43-9	Cadmium__	0.24	U		P
7440-70-2	Calcium__	2140			P
7440-47-3	Chromium_	14.2			P
7440-48-4	Cobalt___	14.1			P
7440-50-8	Copper___	11.5			P
7439-89-6	Iron____	16500			P
7439-92-1	Lead____	9.6		*	P
7439-95-4	Magnesium	1550			P
7439-96-5	Manganese	420		*	P
7439-97-6	Mercury__	0.12	U		CV
7440-02-0	Nickel___	23.6			P
7440-09-7	Potassium	1780			P
7782-49-2	Selenium_	0.73	U		P
7440-22-4	Silver___	0.24	U		P
7440-23-5	Sodium___	362	B		P
7440-28-0	Thallium_	0.73	U		P
7440-62-2	Vanadium_	14.9			P
7440-66-6	Zinc____	41.0			P
_____	Cyanide__	0.60	U		CA
_____	_____	_____			

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEABH4
SS-3

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water): SOIL_ Lab Sample ID: 950620004

Level (low/med): LOW__ Date Received: 06/10/95

% Solids: _51.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4880			P
7440-36-0	Antimony	0.69	U	N	P
7440-38-2	Arsenic	6.6			P
7440-39-3	Barium	1160			P
7440-41-7	Beryllium	0.67	B		P
7440-43-9	Cadmium	0.81	B		P
7440-70-2	Calcium	16000			P
7440-47-3	Chromium	19.5			P
7440-48-4	Cobalt	9.3	B		P
7440-50-8	Copper	10.0			P
7439-89-6	Iron	109000			P
7439-92-1	Lead	10.8		*	P
7439-95-4	Magnesium	2760			P
7439-96-5	Manganese	346		*	P
7439-97-6	Mercury	1.2			CV
7440-02-0	Nickel	22.8			P
7440-09-7	Potassium	2730			P
7782-49-2	Selenium	1.0	U		P
7440-22-4	Silver	0.34	U		P
7440-23-5	Sodium	2140			P
7440-28-0	Thallium	1.8	B		P
7440-62-2	Vanadium	14.1	B		P
7440-66-6	Zinc	41.6			P
	Cyanide	0.83	U		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: _____ Artifacts: _____

Comments:

FORM I - IN ILM03.0

U.S. EPA - CLP

3
BLANKS

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Preparation Blank Matrix (soil/water): SOIL_

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	34.5	B	31.5	B	42.4	B	26.6	B	6.134	B	P
Antimony	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Barium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	16.6	B	9.6	B	5.0	U	-10.8	B	1.159	B	P
Chromium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Copper	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Iron	40.0	U	40.0	U	40.0	U	40.0	U	8.000	U	P
Lead	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Magnesium	28.4	B	23.9	B	24.7	B	12.4	B	0.800	U	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.100	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Potassium	31.0	U	31.0	U	31.0	U	39.5	B	6.200	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	231.0	U	231.0	U	-314.4	B	231.0	U	-102.632	B	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	0.412	B	P
Cyanide	10.0	U	10.0	U	10.0	U			0.500	U	CA

U.S. EPA - CLP

3
BLANKS

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			24.0	U	24.0	U					P
Antimony			2.0	U	2.0	U					P
Arsenic			3.0	U	3.0	U					P
Barium			1.0	U	1.0	U					P
Beryllium			1.0	U	1.0	U					P
Cadmium			1.0	U	1.0	U					P
Calcium			-6.3	B	5.2	B					P
Chromium			1.0	U	1.0	U					P
Cobalt			1.0	U	1.0	U					P
Copper			1.0	U	1.0	U					P
Iron			40.0	U	40.0	U					P
Lead			2.0	U	2.0	U					P
Magnesium			11.3	B	13.8	B					P
Manganese			1.0	U	1.0	U					P
Mercury											NR
Nickel			1.0	U	1.0	U					P
Potassium			31.0	U	31.0	U					P
Selenium			3.0	U	3.0	U					P
Silver			1.0	U	1.0	U					P
Sodium			231.0	U	231.0	U					P
Thallium			3.0	U	3.0	U					P
Vanadium			1.0	U	1.0	U					P
Zinc			1.0	U	1.0	U					P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U			P
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

reparation Blank Matrix (soil/water): _____

reparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt			1.0	U	1.0	U					P
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEABH3S

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water): SOIL__ Level (low/med): LOW___

% Solids for Sample: _74.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	42.1564		0.4874	U	103.91	40.6	N	P
Arsenic	75-125	387.1401		4.6276		415.65	92.0		P
Barium	75-125	429.2649		38.5762	B	415.65	94.0		P
Beryllium	75-125	11.1582		1.0156	B	10.39	97.6		P
Cadmium	75-125	9.6361		0.2437	U	10.39	92.7		P
Calcium									NR
Chromium	75-125	59.1236		14.1957		41.57	108.1		P
Cobalt	75-125	111.7575		14.1274		104.73	93.2		P
Copper	75-125	61.1167		11.5481		51.96	95.4		P
Iron									NR
Lead	75-125	105.6464		9.6298		103.91	92.4		P
Magnesium									NR
Manganese		627.1054		420.2452		103.91	199.1		P
Mercury	75-125	0.6201		0.1219	U	0.58	106.9		CV
Nickel	75-125	123.3175		23.5830		103.91	96.0		P
Potassium									NR
Selenium	75-125	386.5501		0.7312	U	415.65	93.0		P
Silver	75-125	9.2169		0.2437	U	10.39	88.7		P
Sodium									NR
Thallium	75-125	383.7716		0.7312	U	415.65	92.3		P
Vanadium	75-125	117.0372		14.8686		103.91	98.3		P
Zinc	75-125	146.3682		41.0178		103.91	101.4		P
Cyanide	75-125	5.4995		0.6038	U	5.49	100.2		CA

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEABH3A

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water) : SOIL__ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony		118.32		2.00	U	120.0	98.6		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEABH3D

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _74.6 % Solids for Duplicate: __75.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		7610.3371		8984.5291		16.6		P
Antimony		0.4874	U	0.4359	U			P
Arsenic	2.4	4.6276		5.5274		17.7		P
Barium		38.5762	B	41.3788	B	7.0		P
Beryllium	1.2	1.0156	B	1.2468		20.4		P
Cadmium		0.2437	U	0.2180	U			P
Calcium	1218.6	2135.5167		1810.1269		16.5		P
Chromium		14.1957		16.8397		17.0		P
Cobalt	12.9	14.1274		14.8199		4.8		P
Copper	6.1	11.5481		12.6489		9.1		P
Iron		16474.3156		19015.2732		14.3		P
Lead		9.6298		12.5827		26.6	*	P
Magnesium	1218.6	1545.4299		1729.3838		11.2		P
Manganese		420.2452		341.9623		20.5	*	P
Mercury		0.1219	U	0.1219	U			CV
Nickel	9.7	23.5830		27.5688		15.6		P
Potassium	1218.6	1777.4645		1984.1662		11.0		P
Selenium		0.7312	U	0.6539	U			P
Silver		0.2437	U	0.2180	U			P
Sodium		362.2747	B	311.3026	B	15.1		P
Thallium		0.7312	U	0.6539	U			P
Vanadium	12.2	14.8686		18.2770		20.6		P
Zinc		41.0178		46.6218		12.8		P
Cyanide		0.6038	U	0.4622	U			CA

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

CP ID Number: TJA61T_____ Date: 04/18/95

lame AA ID Number : _____

urnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	24.0	P
Antimony	206.84		60	2.0	P
Arsenic	189.04		10	3.0	P
Barium	493.41		200	1.0	P
Beryllium	313.04		5	1.0	P
Cadmium	226.50		5	1.0	P
Calcium	317.93		5000	5.0	P
Chromium	267.72		10	1.0	P
Cobalt	228.62		50	1.0	P
Copper	324.75		25	1.0	P
Iron	271.44		100	40.0	P
Lead	220.35		3	2.0	P
Magnesium	279.08		5000	4.0	P
Manganese	257.61		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	31.0	P
Selenium	196.03		5	3.0	P
Silver	328.07		10	1.0	P
Sodium	330.23		5000	231.0	P
Thallium	190.86		10	3.0	P
Vanadium	292.40		50	1.0	P
Zinc	213.86		20	1.0	P

Comments:

FORM X - IN ILM03.0

U.S. EPA - CLP

10
Instrument Detection Limits (Quarterly)

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.: MEABH1

CLP ID Number: _____ Date: 04/15/95

Flame AA ID Number : 3200A_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

Instrument ID Number: TJA61T_____ Method: P_

Start Date: 06/16/95 End Date: 06/17/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1535		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	1542		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
S	1.00	1551		X		X	X				X	X	X	X	X		X		X		X	X		X	X		
S	1.00	1600																									
S	1.00	1606			X																						
S	1.00	1611			X																						
S	1.00	1621								X						X				X			X				
S	1.00	1629		X						X				X		X											
ICV	1.00	1655		X			X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
ICV	1.00	1703			X	X									X						X			X			
ICB	1.00	1712		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSA	1.00	1725		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1734		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1745			X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	1754		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	1802			X					X						X				X			X				
CCB	1.00	1811		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBS	1.00	1820		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSS	1.00	1828		X	X	X	X	X	X		X		X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSS	10.00	1837								X																	
MEABH3	1.00	1845		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH3D	1.00	1854		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH3S	1.00	1902			X	X	X	X	X		X		X		X		X		X		X	X		X	X	X	
MEABH3L	5.00	1911		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH1	1.00	1919		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH2	1.00	1928		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH4	1.00	1936		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1945		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	1954			X					X						X				X			X				
CCB	1.00	2002		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH5	1.00	2011		X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH3A	1.00	2019			X																						

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

Instrument ID Number: TJA61T_____ Method: P_

Start Date: 06/16/95 End Date: 06/17/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2028																									
ZZZZZZ	1.00	2036																									
ZZZZZZ	1.00	2045																									
ZZZZZZ	1.00	2053																									
ZZZZZZ	1.00	2102																									
ZZZZZZ	5.00	2110																									
ZZZZZZ	1.00	2119																									
CCV	1.00	2128		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	2136			X					X						X				X			X				
CCB	1.00	2145		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	2153																									
ZZZZZZ	1.00	2202																									
ZZZZZZ	1.00	2210																									
ZZZZZZ	1.00	2219																									
ZZZZZZ	1.00	2227																									
ZZZZZZ	5.00	2236																									
ZZZZZZ	1.00	2244																									
ZZZZZZ	1.00	2253																									
ZZZZZZ	1.00	2301																									
CCV	1.00	2310		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	2319			X					X						X				X			X				
CCB	1.00	2327		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	5.00	2337																									
ICSA	1.00	2346		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	2354		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	0006			X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X	
CCV	1.00	0014		X		X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X	
CCV	1.00	0023			X					X						X				X			X				
CCB	1.00	0031		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

U.S. EPA - CLP

14
ANALYSIS RUN LOG

ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

nstrument ID Number: TJA61T_____ Method: P_

tart Date: 06/20/95 End Date: 06/20/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0828										X															
S	1.00	0835										X															
S	1.00	0844										X															
S	1.00	0850																									
S	1.00	0855																									
S	1.00	0900																									
S	1.00	0907																									
S	1.00	0918																									
S	1.00	0929																									
ICV	1.00	0939										X															
ICV	1.00	0948																									
ICB	1.00	0957										X															
ICSA	1.00	1005										X															
ICSAB	1.00	1015										X															
CRI	1.00	1026										X															
CCV	1.00	1035										X															
CCV	1.00	1043																									
CCB	1.00	1052										X															
PBS	1.00	1100										X															
LCSS	1.00	1109										X															
LCSS	10.00	1117																									
MEABH3	1.00	1126										X															
MEABH3S	1.00	1135										X															
MEABH3D	1.00	1143										X															
MEABH2	1.00	1155										X															
MEABH4	1.00	1203										X															
MEABH3L	5.00	1212										X															
CCV	1.00	1220										X															
CCV	1.00	1229																									
CCB	1.00	1238										X															
MEABH5	1.00	1247										X															
ZZZZZZ	1.00	1255																									

U.S. EPA - CLP

14
ANALYSIS RUN LOG

.ab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

.ab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

:nstrument ID Number: TJA61T_____ Method: P_

:tart Date: 06/20/95 End Date: 06/20/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1304																									
ZZZZZZ	1.00	1313																									
ZZZZZZ	1.00	1322																									
ZZZZZZ	1.00	1330																									
ZZZZZZ	1.00	1339																									
ZZZZZZ	1.00	1348																									
ZZZZZZ	1.00	1356																									
ZZZZZZ	5.00	1405																									
CCV	1.00	1414										X															
CCV	1.00	1423																									
CCB	1.00	1431										X															
MEABH1	1.00	1441										X															
ZZZZZZ	1.00	1503																									
ZZZZZZ	1.00	1512																									
ZZZZZZ	1.00	1520																									
ZZZZZZ	1.00	1529																									
MEABH3A	1.00	1538																									
ZZZZZZ	1.00	1547																									
CCV	1.00	1556										X															
CCV	1.00	1604																									
CCB	1.00	1613										X															
ICSA	1.00	1624										X															
ICSAB	1.00	1633										X															
CRI	1.00	1644										X															
CCV	1.00	1653										X															
CCV	1.00	1702																									
CCB	1.00	1711										X															

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

Instrument ID Number: 3200A_____ Method: CV

Start Date: 06/15/95 End Date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1536																X									
S0.5	1.00	1542																X									
S1.0	1.00	1547																X									
S3.0	1.00	1553																X									
S5.0	1.00	1559																X									
S10.0	1.00	1604																X									
ICV	1.00	1610																X									
ICB	1.00	1616																X									
CRA	1.00	1621																X									
CCV	1.00	1627																X									
CCB	1.00	1633																X									
PBS	1.00	1638																X									
LCSS	5.00	1644																X									
MEABH1	1.00	1650																X									
MEABH2	1.00	1655																X									
MEABH3	1.00	1701																X									
MEABH3D	1.00	1707																X									
MEABH3S	1.00	1712																X									
MEABH4	1.00	1718																X									
MEABH5	1.00	1723																X									
CCV	1.00	1729																X									
CCB	1.00	1735																X									

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: INDUSTRIAL_AND_ENVIRONMEN Contract: 68-D3-0041

Lab Code: IEA___ Case No.: 23650_ SAS No.: _____ SDG No.:MEABH1

Instrument ID Number: LACHAT_____ Method: CA

Start Date: 06/16/95 End Date: 06/16/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S400	1.00	1556																									X
S200	1.00	1557																									X
S100	1.00	1558																									X
S50	1.00	1559																									X
S20	1.00	1600																									X
S10	1.00	1601																									X
S0	1.00	1602																									X
ICV	1.00	1605																									X
ICB	1.00	1606																									X
CCV	1.00	1606																									X
CCB	1.00	1607																									X
PBS	1.00	1608																									X
LCSS	1.00	1609																									X
MEABH1	1.00	1609																									X
MEABH2	1.00	1610																									X
MEABH3	1.00	1611																									X
MEABH3S	1.00	1611																									X
MEABH3D	1.00	1612																									X
MEABH4	1.00	1613																									X
MEABH5	1.00	1614																									X
ZZZZZZ	1.00	1614																									
CCV	1.00	1615																									X
CCB	1.00	1616																									X

FORM XIV - IN ILM03.0

IEA SDG NARRATIVE INORGANIC/METALS FRACTION

RECEIVED
JUN 27 1995
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

CASE: 23650 SDG NO.: MEABH1 CONTRACT: 68-D3-0041

Sample Numbers: 950620001 (MEABH1), 950620002 (MEABH2), 950620003 (MEABH3), 950620004 (MEABH4), and 950620005 (MEABH5) for TAL Metals and Cyanide Analysis

This case was closed on June 10, 1995. The temperature of the samples upon receipt by the Industrial and Environmental Analysts, Inc. (IEA) was 4_°C. All samples were received intact.

Each sample has been assigned a 9-character IEA lab identification number.

The "*" flag is used to identify the sample duplicate analysis exceeds the 20% RPD criteria. The following sample(s) are flagged with a "*" for the metal(s) listed:

Sample ID	Metal
All Samples	Lead, Manganese

The "N" flag is applied to any samples that do not meet acceptable spike recovery control limits of 75 to 125%. The following sample(s) are flagged with a "N" for the metal(s) listed:

Sample ID	Metal
All Samples	Antimony

Any nonconformances associated with the analysis of samples in this case are noted as follows:

All samples were redigested for cobalt due to a failed LCSS, batch number 61495-8. The redigest batch number is 061995-06.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the laboratory manager or his designee, as verified by the following signature.

Donald Stogner 06/21/95

Donald Stogner
Inorganic Lab Manager
IEA, Inc.

IEA, Inc Doc# RPF00900.NC

002

EPA United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analyis)

SAS No. (if applicable):
Case No.: 22650

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (specify in Column D)
N. Not preserved

2. Region No.: 5
Sampling Co.: PRC
4. Date Shipped: 6/9/95
Carrier: Fed Ex
6. Date Received -- Received by: 6/10/95 S. Paschal
Sampler (Name): Scott Brockway
Airbill Number: 1403534370
Laboratory Contract Number:
Unit Price:
Sampler Signature:
5. Ship To: Industrial Environmental Analysts, 3000 Weston Parkway Cary, NC 27513 ATTN: Linda Mitchell
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

3. Purpose*
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 2) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
MEABH 1	5	L	G	6		X	X					5-092809	SS-1	6/9/95 1130	EAMS1			–	
MEABH 2	↓	↓	↓	↓		X	X					5-092813	SS-1D	↓ 1130	EAMS2			D/MEABH1	
MEABH 3	↓	↓	↓	↓		X	X					5-092817	SS-2	↓ 1200	EAMS3			–	
MEABH 4	↓	↓	↓	↓		X	X					5-092821	SS-3	1315	EAMS4			–	
MEABH 5	↓	↓	↓	↓		X	X					5-092825	SS-4	↓ 1345	EAMS5			–	

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: MEABH 3
Additional Sampler Signatures: [signature]
Chain of Custody Seal Number(s): 46085, 46086

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/10/95				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) S. Paschal	Date / Time 6/10/95 0930	Remarks: Is custody seal intact? Y/N/none 4°C QW9506018	

A21-012-6 REV. 3/93

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

306

359037

Page ___ of ___

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 23650 SITE: Jackson County LF MATRIX: Soil WATER SAMPLE SPK: ___

DATA SET: MEABH1 LAB: IEA CONC: Low WATER SAMPLE DUP: ___

LAB QC # ___ REVIEWED BY: J. Redly SOIL SAMPLE SPK: MEABH3

DATE: 6/28/95 SOIL SAMPLE DUP: MEABH3

FORM #		FORM 2	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD		
ELEMENT	HOLD TIME	INITIAL CALIB	CONTI N CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	LCS AQ	LCS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP RPD	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	GFAA DUP	GFAA ANALYT SPIKE
ALUMINUM	M	OK	OK	~~424~~	~~42.6~~	~~6.134~~	OK			a	OK		OK				36.6				
ANTIMONY								40.6													
ARSENIC																					
BARIUM																					
BERYLLIUM																					
CADMIUM																					
CALCIUM				~~16.6~~		~~1.159~~											74.2				
CHROMIUM																	~~42.0~~				
COBALT																					
COPPER																					
IRON																	50.8				
LEAD									26.6	(<35%)											
MAGNESIUM				~~28.4~~																	
MANGANESE									20.5	(<35%)											
MERCURY																					
NICKEL																					
POTASSIUM				~~39.5~~																	
SELENIUM																					
SILVER																					
SODIUM																					
THALLIUM																					
TIN																					
VANADIUM																					
ZINC						~~0.410~~															
CYANIDE																					

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: OHD980993554

Case No: 23650 Site Name Location: Jackson County LF

Contractor or EPA Lab: IEA Data User: PRC

No. of Samples: 5 Date Sampled or Data Received: 6-27-95

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No ✓
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ✓
If no, which traffic report or packing list numbers are missing?

Are basic data forms in? Yes ✓ No ✓
No of samples claimed: 5 No. of samples received: 5

Received by: Lynette Burnett Date: 6-27-95

Received by LSSS: Allison C Harvey Date: 6-28-95

Review started: 6-28-95 Reviewer Signature: J. Rollen

Total time spent on review: 4.5 +0.5 T.R. Date review completed: 6/29/95

Copied by: L. Finkelberg Date: 07-06-95

Mailed to user by: _____ Date: _____

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: Mildred Jackson Date: JUL 11 1995

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

Received by Data Mgmt. Coordinator for Files. Data: _____

JUL 11 1995 JUL 11 1995 JUL 11 1995 Page 1 of 10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ENTERED

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on June 26, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: PRC Patricia J Scott for D. Wesolowski 07/05/95

We have reviewed the data for the following case:

SITE NAME: Jackson County LF (OH)

CASE NUMBER: 23650 SDG NUMBER: EAMS6

Number and Type of Samples: 4 (Soil)

Sample Numbers: EAMS6-9

Laboratory: RECRA (MO) Hrs. for Review: 5

Following are our findings:

The data are acceptable and usable with the qualifications described in the attached narrative.

Patricia J Scott

cc: Regional TPO

NARRATIVE

CASE: 23650
SDG# EAMS6
LABORATORY: RECRA ENVIRONMENTAL
SITE: Jackson County Landfill (OH)

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

This review covers four soil samples (EAMS6 through EAMS9) for complete organic analysis at low levels. All samples were collected on 6/9/95 and were received by the lab on 6/10/95.

The reviewer's narrative and data qualifiers follow.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 28 June 1995

NARRATIVE

CASE: 23650
SDG# EAMS6
LABORATORY: RECRA ENVIRONMENTAL
SITE: Jackson County Landfill (OH)

1. Holding Times:

All samples were analyzed for volatiles well within the fourteen day holding time from date of sampling for soil samples.

All samples were extracted for semi-volatiles and pesticides/PCBs well within the fourteen day holding times for these fractions; all extracts were very promptly analyzed.

2. GC/MS Tuning and GC Instrument Performance:

The GC/MS tuning and mass calibration were all within the required Q.C. limits. All pesticide breakdown results were near zero, which is ideal. All pesticide resolution checks were at or near the ideal 100%.

3. Calibration:

The few volatile calibration outliers are listed on the outliers form; there were no semi-volatile or pesticide calibration outliers, but the forms are included for reference. All RPDs in the pesticide calibration verification summaries (Pest-1) were far below the maximum permissible 25%.

4. Method Blanks:

Both volatile method blanks contained the common contaminants methylene chloride and acetone plus an unknown TIC identified as column bleed; each of the samples also contained these compounds except that EAMS7 and EAMS8 contained no acetone and EAMS7 contained no column bleed TIC. In addition, VBLK1 contained the common contaminant butanone; of its associated samples, only EAMS9 contained this compound.

The semi-volatile method blank contained the target compounds indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene and benzo(g,h,i)-perylene (each only a small fraction of CRQL) plus three unknown TICs. All of the samples also contained these three TICs, but only EAMS9 contained the three target compounds.

The pesticide method blank contained no target analytes.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 28 June 1995

NARRATIVE

CASE: 23650
SDG# EAMS6
LABORATORY: RECRA ENVIRONMENTAL
SITE: Jackson County Landfill (OH)

Target analytes and TICs found in both the sample and the associated method blank, and therefore flagged "B" by the lab, are further flagged "U" by the reviewer if the analytes are present in the sample at no more than five times (or ten times for common contaminants) the amount in the method blank. If the value is less than CRQL, it is deleted and raised to CRQL by the reviewer.

5. Surrogate Recoveries:

All surrogate recoveries for all fractions were within the Q.C. limits.

6. Matrix Spikes and Matrix Spike Duplicates:

All MS and MSD recoveries and RPDs for all fractions were within the Q.C. limits.

7. Field Duplicates and Field Blanks:

Sample EAMS8 was identified as a duplicate of EAMS7; neither sample contained any target analytes above CRQL, but EAMS7 contained three semi-volatile TICs not found in EAMS8.

No samples in this case were identified as field blanks.

8. Internal Standards Performance:

All volatile and semi-volatile IS areas were well within the Q.C. limits.

9. Compound Identification:

The compound identifications for all fractions appear to be satisfactory.

10. Compound Quantitation and Reported Detection Limits:

The correct limits were used and the proper adjustments were made for percent moisture.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 28 June 1995

NARRATIVE

CASE: 23650
SDG# EAMS6
LABORATORY: RECRA ENVIRONMENTAL
SITE: Jackson County Landfill (OH)

11. System Performance:

All aspects of the system performance appear to be satisfactory.

12. Additional Case-Specific Problems:

None noted.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 28 June 1995

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: RECRA (MD)

COLUMN: DB-624 SITE NAME: Jackson County LF (OH)

HEATED PURGE (Y/N): Y

Instrument#		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:		6-19-95 11:10			6-19-95 15:44			6-20-95 11:52								
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01															
Bromomethane	0.10															
Vinyl chloride	0.10															
Chloroethane	0.01															
Methylene chloride	0.01	2.499	41.5	J	2.054			1.605	35.8	J						
Acetone	0.01	.578	56.4	J	.452			.336	41.9	J						
Carbon disulfide	0.01															
1,1-Dichloroethene	0.10															
1,1-Dichloroethane	0.20															
1,2-Dichloroethene (total)																
Chloroform	0.20															
1,2-Dichloroethane	0.10															
2-Butanone	0.01															
1,1,1-Trichloroethane	0.10															
Carbon tetrachloride	0.10															
Bromodichloromethane	0.20															
1,2-Dichloropropane																
cis-1,3-Dichloropropene	0.20															
Trichloroethene	0.30															
Dibromochloromethane	0.10															
1,1,2-Trichloroethane	0.10															
Benzene	0.50															
tran-1,3-Dichloropropene	0.10															
Bromoform	0.10															
4-Methyl-2-pentanone	0.01															
2-Hexanone	0.01															
Tetrachloroethene	0.20															
1,1,2,2-Tetrachloroethane	0.50															
Toluene	0.40															
Chlorobenzene	0.50															
Ethylbenzene	0.10															
Styrene	0.30															
Xylene (total)	0.30															
Toluene-d8																
Bromofluorobenzene	0.20															
1,2-Dichloroethane-d4																

Samples affected:

VBLK1	VBLK2
EAMS6MS	EAMS6
EAMS6MSD	
EAMS7	
EAMS8	
EAMS9	

Reviewer's Init/Date: AV 6-27-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.

= Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 1 of 2)

CASE\SAS#: 23650
COLUMN: —

LABORATORY: REC-RA ENV.
SITE NAME: Jackson County LF (OH)

Instrument# 700606		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 6-20-95		6-20-95 11:48														
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Phenol	0.80															
bis(2-chloroethyl) Ether	0.70															
2-Chlorophenol	0.70															
1,3-Dichlorobenzene																
1,4-Dichlorobenzene																
1,2-Dichlorobenzene																
2-Methylphenol	0.70															
2,2'-Oxybis(1-chl-propane)	0.01															
4-Methylphenol	0.60															
N-nitroso-di-n-propylamine	0.50															
Hexachloroethane	0.30															
Nitrobenzene	0.20															
Isophorone	0.40															
2-Nitrophenol	0.10															
2,4-Dimethylphenol	0.20															
bis-(2-chloroethoxyl)methane	0.30															
2,4-Dichlorophenol	0.20															
1,2,4-Trichlorobenzene	0.20															
Naphthalene	0.70															
4-Chloroaniline	0.01															
Hexachlorobutadiene	0.01															
4-Chloro-3-methylphenol	0.20															
2-Methylnaphthalene	0.40															
Hexachlorocyclopentadiene	0.01															
2,4,6-Trichlorophenol	0.20															
2,4,5-Trichlorophenol	0.20															
2-Chloronaphthalene	0.80															
2-Nitroaniline	0.01															
Dimethyl phthlate	0.01															
Acenaphthylene	1.30															
2,6-Dinitrotoluene	0.20															
3-Nitroaniline	0.01															
Acenaphthene	0.30															
2,4-Dinitrophenol	0.01															
4-Nitrophenol	0.01															
Dibenzofuran	0.80															
2,4-Dinitrotoluene	0.20															

Affected samples:

SBLK1
EAMS6
EAMS6MS
EAMS6MSD
EAMS7
EAMS8
EAMS9

Reviewer's Init/Date: AV 6-27-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.

\# = Minimum Relative Response Factor

CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\SAS#: 23650
COLUMN: —

LABORATORY: RECRA ENV.
SITE NAME: Jackson County LF (OH)

Instrument# 700606		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 6-20-95		6-20-95 11:48														
	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Diethylphthalate	0.01															
4-Chlorophenyl-phenylether	0.40															
Fluorene	0.90															
4-Nitroaniline	0.01															
4,6-Dinitro-2-methylphenol	0.01															
N-nitrosodiphenylamine	0.01															
4-Bromophenyl-phenylether	0.10															
Hexachlorobenzene	0.10															
Pentachlorophenol	0.05															
Phenanthrene	0.70															
Anthracene	0.70															
Carbazole																
Di-n-butylphthalate	0.01															
Fluoranthene	0.60															
Pyrene	0.60															
Butylbenzylphthalate	0.01															
3,3'-Dichlorobenzidine	0.01															
Benzo(a)anthracene	0.80															
Chrysene	0.70															
bis(2-Ethylhexyl)phthalate	0.01															
Di-n-octyl phthalate	0.01															
Benzo(b)fluoranthene	0.70															
Benzo(k)fluoranthene	0.70															
Benzo(a)pyrene	0.70															
Indeno(1,2,3-cd)pyrene	0.50															
Dibenz(a,h)anthrancene	0.40															
Benzo(g,h,i)perylene	0.50															
Nitrobenzene-d5	0.01															
2-Fluorobiphenyl	0.70															
Terphenyl-d14	0.50															
Phenol-d5	0.80															
2-Fluorophenol	0.60															
2,4,6-Tribromophenol	0.01															
2-Chlorophenol-d4																
1,2-Dichlorobenzene-d4																

Reviewer's Init/Date: AV 6-27-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.
# = Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: RECRA ENVIRON.

COLUMN: RTX-5 SITE NAME: Jackson County LF p(+)

Instrument# GC-32		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time: 6-20-95		6-20-95 21:21			6-21-95 18:48											
6-21-95	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01															
beta-BHC	0.40															
delta-BHC	0.90															
gamma-BHC	0.01															
Heptachlor	0.01															
Aldrin	0.01															
Heptachlor epoxide	0.10															
Endosulfan I	0.10															
Dieldrin	0.05															
4, 4'-DDE	0.70															
Endrin	0.70															
Endosulfan II	0.01															
4, 4'-DDD	0.60															
Endosulfan sulfate	0.60															
4, 4'-DDT	0.01															
Methoxychlor	0.01															
Endrin ketone	0.80															
Endrin aldehyde	0.70															
alpha chlordane	0.01															
gamma chlordane	0.01															
Arochlor 1016																
Arochlor 1221																
Arochlor 1232																
Arochlor 1242																
Arochlor 1248																
Arochlor 1254																
Arochlor 1260																

Affected samples:

PBLK1

EAMS6
EAMS6MS
EAMS6MSD
EAMS7
EAMS8
EAMS9

Reviewer's Init/Date: AV 6-27-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS
(Page 1 of 1)

CASE\SAS#: 23650 LABORATORY: RECRA ENVIR.

COLUMN: RTX-35 SITE NAME: Jackson County LF (OH)

Instrument#	GC-31		Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
Date/Time:	6-20-95		6-20-95 21:21			6-21-95 18:48											
	6-21-95	#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC		0.01															
beta-BHC		0.40															
delta-BHC		0.90															
gamma-BHC		0.01															
Heptachlor		0.01															
Aldrin		0.01															
Heptachlor epoxide		0.10															
Endosulfan I		0.10															
Dieldrin		0.05															
4, 4'-DDE		0.70															
Endrin		0.70															
Endosulfan II		0.01															
4, 4'-DDD		0.60															
Endosulfan sulfate		0.60															
4, 4'-DDT		0.01															
Methoxychlor		0.01															
Endrin ketone		0.80															
Endrin aldehyde		0.70															
alpha chlordane		0.01															
gamma chlordane		0.01															
Arochlor 1016																	
Arochlor 1221																	
Arochlor 1232																	
Arochlor 1242																	
Arochlor 1248																	
Arochlor 1254																	
Arochlor 1260																	

Affected samples:

PBLK1

EAMS6
EAMS6MS
EAMS6MSD
EAMS7
EAMS8
EAMS9

Reviewer's Init/Date: AV 6-27-95

* These flags should be applied to the analytes on the sample data sheets.
\# Minimum Relative Response Factor

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utinized in this document, the following code letters and associated definitions are provide:

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL).

U Indicates that the compound was analyzed for, but not detected. The sample quantitation limit corrected for dilution and percent moisture is reported.

J Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound but the result is less than the sample quantitation limit, but greater than zero. The flag is also used to indicate a reported result having an associated QC problem.

R Indicates the data are unusable. (Note: The analyte may or may not be present.)

N Indicates presumptive evidence of a compound. This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search.

P Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns. The lower of the two results is reported.

C Indicates pesticide results that have been confirmed by GC/MS.

B Indicates the analyte is detected in the associated blank as well as the sample.

E Indicates compounds whose concentrations exceed the calibration range of the instrument.

D Indicates an identified compound in an analysis has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analysis.

A Indicates tentatively identified compounds that are suspected to be aldol condensation products.

G Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method.

L Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method.

T Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample.

X, Y, Z are reserved for laboratory defined flags.

EPA United States Environmental Protection Agency Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (If applicable):
Case No.: 23650

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (Specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaHSO4
4. H2SO4
5. Ice only
6. Other (Specify in Column D)
N. Not preserved

2. Region No.: 5
Sampling Co.: PRC
4. Date Shipped: 6/9/95
Carrier: Fed Ex
6. Date Received -- Received by: 6/10/95 [signature]

Sampler (Name): Scott Brockway
Airbill Number: 1403534355
Laboratory Contract Number: 68D5-0010
Unit Price:

Sampler Signature: [signature]
5. Ship To: RECRA Environmental 8320 Guilford Rd., Bldg F Columbia, MD 21046 ATTN: Linda Shafernich
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

3. Purpose*
Lead: [X] SF [ ] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI
Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

	J CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
First	EAMS6	5	L	G	5	X				5-092826 - 827	SD-1	6/9/95 1100	MEABH6				
	EAMS6	↓	↓	↓	↓		X	X		5-092828	↓	1100	↓				
	EAMS7	↓	↓	↓	↓	X				5-092830 - 831	SD-2	1000	MEABH7				
	EAMS7	↓	↓	↓	↓		X	X		5-092832	↓	1000	↓				
	EAMS8	↓	↓	↓	↓	X				5-092834 - 835	SD-2D	1000	MEABH8				
	EAMS8	↓	↓	↓	↓		X	X		5-092836	↓	1000	↓				
	EAMS9	↓	↓	↓	↓	X				5-092838 - 839	SD-3	1245	MEABH9				
Last	EAMS9	↓	↓	↓	↓		X	X		5-092840	↓	1245	↓				

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: EAMS6
Additional Sampler Signatures: [signature]
Chain of Custody Seal Number(s): 46087, 46088

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	6/9/95 [illegible]				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature) EAMS6	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [signature]	Date / Time 6/10/95 1130	Remarks Is custody seal intact? Y/N/none: No temp. blank, ice intact	

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-4 REV. 3/93

000010

359907

ANALYTICAL RESULTS

Prepared For

The United States Environmental Protection Agency
Region V
536 S Clark Street
Tenth Floor, 5SCLL
Chicago, Illinois 60605

RECEIVED
JUN 2 0 1995
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Prepared By

Recra Environmental, Inc.
8320 Guilford Road, Building F
Columbia, Maryland 21046

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical result is indicated on the specific data table. The method numbers presented refer to the following U.S. Environmental Protection Agency reference.

* U.S. Environmental Protection Agency 8/94 Organic Statement of Work, OLMO3.1.

COMMENTS

Comments pertain to data on all pages of this report.

It is RECRA Environmental's policy to report positive identifications to a level of approximately ten percent of CRQL.

The Volatile sample pH data has been reported in tabular format and is located directly behind the GC Column Summary portion of the Case Narrative.

The protocol required Alkane summaries are reported in tabular format, listed by retention time in minutes, and are located directly behind the Volatile sample pH data, directly preceding the Fraction Notes portion of the Case Narrative.

GCMS quantitation reports for both samples and standards contained within this sample data package often require manual integration of the areas of the quantitation ion for select constituents. When such manual integration is required, the quantitation report for said constituents are flagged with an "M". The need for manual integration includes, but is not necessarily limited to, the autoquantitation program's failure to integrate peaks of interest or the failure to correctly integrate said peaks due to poor geometry, peak tailing or peak resolution. Manual edits of Form 1 data, if performed, are flagged with an "X" qualifier.

RECRA
ENVIRONMENTAL
INC.

1ASE/SDG: 23650 EAMS6

SAMPLE INFORMATION: EAMS6
EAMS6MS
EAMS6MSD
EAMS7
EAMS8
EAMS9

Recra Environmental, Inc. of Columbia, Maryland received the above referenced samples from the USEPA on June 10, 1995. This sample delivery group contains 4 soils for Organic analyses. These analyses were performed according to instructions in the IFB document for this contract.

VOLATILE ANALYSIS

There were no deviations from protocol during these analyses.

SEMIVOLATILE DATA

There were no deviations from protocol during these analyses.

PESTICIDE/PCB DATA

There were no deviations from protocol during these analyses.

Please accept forms PEST 6H,I,and J. The Statement of Work requires these forms to be printed in chronological order with both analytical columns on one form. The software utilized is incapable of producing the forms in this fashion. The resolution has been reported in chronological order with one column per form. Please note that the laboratory is working closely with the vendor to resolve this issue.

I certify that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his designee, as verified by the following signature.

Susan L. Tinsmith
Laboratory Manager

6/23/95
Date

RECRA
ENVIRONMENTAL
INC.

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	EAMS6	99	97	99	0	0
02	EAMS7	105	113	117	0	0
03	EAMS8	103	112	121	0	0
04	EAMS9	103	109	119	0	0
05	EAMS6MS	103	110	111	0	0
06	EAMS6MSD	103	113	116	0	0
07	VBLK1	101	105	111	0	0
08	VBLK2	100	98	98	0	0

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(84-138)
SMC2 (BFB)	= Bromofluorobenzene	(59-113)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix Spike - EPA Sample No.: EAMS6 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	61.70	0	53.11	86	59-172
Trichloroethene	61.70	0	43.14	70	62-137
Benzene	61.70	0	49.46	80	66-142
Toluene	61.70	0	41.78	68	59-139
Chlorobenzene	61.70	0	37.68	61	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	61.70	56.89	92	7	22	59-172
Trichloroethene	61.70	46.94	76	8	24	62-137
Benzene	61.70	53.43	87	8	21	66-142
Toluene	61.70	44.89	73	7	21	59-139
Chlorobenzene	61.70	40.52	66	8	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Lab File ID: FQ181 Lab Sample ID: BM001447

Date Analyzed: 06/19/95 Time Analyzed: 1627

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) Y

Instrument ID: 70055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EAMS7	B5015002	FQ186	1856
02	EAMS8	B5015003	FQ187	1927
03	EAMS9	B5015004	FQ188	1957
04	EAMS6MS	B5015001MS	FQ184	1751
05	EAMS6MSD	B5015001SD	FQ185	1822

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Lab File ID: FQ205 Lab Sample ID: BM001448

Date Analyzed: 06/20/95 Time Analyzed: 1220

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) Y

Instrument ID: 70055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EAMS6	B5015001	FQ207	1321

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: BM001447

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ181

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	J
67-64-1	Acetone	18	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	5	J
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-02-6	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-01-5	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: BM001447

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ181

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.72	9	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: BM001448

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ205

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-02-6	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-01-5	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: BM001448

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ205

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.74	11	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ207

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 19 Date Analyzed: 06/20/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	12	BJ
67-64-1	Acetone	22	B
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	5	J
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-02-6	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-01-5	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	12	U
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

AV
6-27-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ207

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 19 Date Analyzed: 06/20/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.73	7	BJU

AV
6-27-95

Total = 0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ186

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 24 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	13 ~~10~~	BJU
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-02-6	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-01-5	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

AV
6-27-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ186

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 24 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ187

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	13 ~~10~~	BJ U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-02-6	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-01-5	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

AV
6-27-95

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ187

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	11.67	9	J
2.	UNKNOWN COLUMN BLEED	15.73	19	BJ U

AV
6-27-95

Total = 9

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ188

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	13	U
75-00-3	Chloroethane	13	U
75-09-2	Methylene Chloride	13 ~~5~~	BJ V
67-64-1	Acetone	32	B V
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	13 ~~8~~	BJ V
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-02-6	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-01-5	trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	13	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	13	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	13	U
100-42-5	Styrene	13	U
1330-20-7	Xylene (total)	13	U

AV
6-27-95

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FQ188

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: not dec. 23 Date Analyzed: 06/19/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 624920	Disulfide, dimethyl	10.38	7	JN
2.	UNKNOWN COLUMN BLEED	15.75	9	BJ V

AV
6-27-95

Total = 7

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	EAMS6	83	76	75	66	58	79	68	69	0
02	EAMS7	81	77	68	62	55	74	65	69	0
03	EAMS8	79	76	70	64	54	66	65	70	0
04	EAMS9	82	76	69	68	57	78	68	68	0
05	EAMS6MS	83	79	70	66	60	81	67	74	0
06	EAMS6MSD	82	76	72	64	59	80	65	71	0
07	SBLK1	86	78	84	65	52	63	63	73	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix Spike - EPA Sample No.: EAMS6 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	3090	0	1908	62	26- 90
2-Chlorophenol	3090	0	1787	58	25-102
1,4-Dichlorobenzene	2060	0	1666	81	28-104
N-Nitroso-di-n-prop.(1)	2060	0	1290	63	41-126
1,2,4-Trichlorobenzene	2060	0	1447	70	38-107
4-Chloro-3-methylphenol	3090	0	2142	69	26-103
Acenaphthene	2060	0	1543	75	31-137
4-Nitrophenol	3090	0	2268	73	11-114
2,4-Dinitrotoluene	2060	0	1748	85	28- 89
Pentachlorophenol	3090	0	2280	74	17-109
Pyrene	2060	0	1467	71	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	3090	1963	64	3	35	26- 90
2-Chlorophenol	3090	1830	59	2	50	25-102
1,4-Dichlorobenzene	2060	1657	80	1	27	28-104
N-Nitroso-di-n-prop.(1)	2060	1307	63	0	38	41-126
1,2,4-Trichlorobenzene	2060	1472	71	1	23	38-107
4-Chloro-3-methylphenol	3090	2210	72	4	33	26-103
Acenaphthene	2060	1586	77	3	19	31-137
4-Nitrophenol	3090	2465	80	9	50	11-114
2,4-Dinitrotoluene	2060	1825	89	5	47	28- 89
Pentachlorophenol	3090	2241	73	1	47	17-109
Pyrene	2060	1581	77	8	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Lab File ID: GJ991 Lab Sample ID: B5B0026501

Instrument ID: 700606 Date Extracted: 06/12/95

Matrix: (soil/water) SOIL Date Analyzed: 06/20/95

Level:(low/med) LOW Time Analyzed: 1517

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EAMS6	B5015001	GJ996	06/20/95
02	EAMS7	B5015002	GJ994	06/20/95
03	EAMS8	B5015003	GJ995	06/20/95
04	EAMS9	B5015004	GJ999	06/20/95
05	EAMS6MS	B5015001MS	GJ997	06/20/95
06	EAMS6MSD	B5015001SD	GJ998	06/20/95

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5B0026501

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ991

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5B0026501

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ991

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-Methylphenol	830	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	42	J
53-70-3	Dibenz(a,h)Anthracene	47	J
191-24-2	Benzo(g,h,i)Perylene	41	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5B0026501

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ991

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.25	290	J
2.	UNKNOWN	6.70	94	J
3.	UNKNOWN	8.97	160	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ996

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-Di-n-Propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
111-91-1	bis(2-Chloroethoxy)Methane	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
59-50-7	4-Chloro-3-Methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethyl Phthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ996

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	410	U
121-14-2	2,4-Dinitrotoluene	410	U
84-66-2	Diethylphthalate	410	U
7005-72-3	4-Chlorophenyl-phenylether	410	U
86-73-7	Fluorene	410	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	410	U
101-55-3	4-Bromophenyl-phenylether	410	U
118-74-1	Hexachlorobenzene	410	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	27	J
120-12-7	Anthracene	410	U
86-74-8	Carbazole	410	U
84-74-2	Di-n-Butylphthalate	410	U
206-44-0	Fluoranthene	23	J
129-00-0	Pyrene	410	U
85-68-7	Butylbenzylphthalate	410	U
91-94-1	3,3'-Dichlorobenzidine	410	U
56-55-3	Benzo(a)Anthracene	410	U
218-01-9	Chrysene	410	U
117-81-7	Bis(2-Ethylhexyl)Phthalate	80	J
117-84-0	Di-n-Octyl Phthalate	410	U
205-99-2	Benzo(b)Fluoranthene	410	U
207-08-9	Benzo(k)Fluoranthene	410	U
50-32-8	Benzo(a)Pyrene	410	U
193-39-5	Indeno(1,2,3-cd)Pyrene	410	U
53-70-3	Dibenz(a,h)Anthracene	410	U
191-24-2	Benzo(g,h,i)Perylene	410	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ996

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 19 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.12	110	J
2.	UNKNOWN	6.25	600	BJU
3.	UNKNOWN	6.70	120	BJU
4.	UNKNOWN	6.90	100	J
5.	UNKNOWN	7.18	200	J
6.	UNKNOWN	8.98	210	BJU
7.	UNKNOWN	10.28	180	J
8. 3622842	Benzenesulfonamide, N-butyl-	15.40	170	JN
9. 57103	Hexadecanoic acid	16.52	140	JN
10.	UNKNOWN ALCOHOL	20.55	340	J
11.	UNKNOWN	26.47	100	J

AV
6-27-95

Total=1340

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ994

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 24 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)Ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-Di-n-Propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)Methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-Methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethyl Phthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ994

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 24 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-Butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)Anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)Phthalate	38	J
117-84-0	Di-n-Octyl Phthalate	430	U
205-99-2	Benzo(b)Fluoranthene	430	U
207-08-9	Benzo(k)Fluoranthene	430	U
50-32-8	Benzo(a)Pyrene	430	U
193-39-5	Indeno(1,2,3-cd)Pyrene	430	U
53-70-3	Dibenz(a,h)Anthracene	430	U
191-24-2	Benzo(g,h,i)Perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ994

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 24 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.25	710	BJ~~U~~
2.	UNKNOWN	6.70	130	BJ~~U~~
3.	UNKNOWN	7.18	110	J
4.	UNKNOWN	8.98	200	BJ~~U~~
5. 57103	Hexadecanoic acid	16.52	110	JN
6.	UNKNOWN ALCOHOL	20.53	380	J

AV
6-27-95

Total = 600

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ995

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)Ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-Di-n-Propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)Methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-Methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethyl Phthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ995

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-Butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	430	U
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)Anthracene	430	U
218-01-9	Chrysene	430	U
117-81-7	bis(2-Ethylhexyl)Phthalate	22	J
117-84-0	Di-n-Octyl Phthalate	430	U
205-99-2	Benzo(b)Fluoranthene	430	U
207-08-9	Benzo(k)Fluoranthene	430	U
50-32-8	Benzo(a)Pyrene	430	U
193-39-5	Indeno(1,2,3-cd)Pyrene	430	U
53-70-3	Dibenz(a,h)Anthracene	430	U
191-24-2	Benzo(g,h,i)Perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ995

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.25	780	BJ
2.	UNKNOWN	6.72	110	BJ
3.	UNKNOWN	8.98	180	BJ

AV
6-27-95

Total = 0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ999

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	bis(2-Chloroethyl)Ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-Di-n-Propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
111-91-1	bis(2-Chloroethoxy)Methane	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-Methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethyl Phthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	430	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ999

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	430	U
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	71	J
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-Butylphthalate	22	J
206-44-0	Fluoranthene	140	J
129-00-0	Pyrene	99	J
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3'-Dichlorobenzidine	430	U
56-55-3	Benzo(a)Anthracene	56	J
218-01-9	Chrysene	61	J
117-81-7	bis(2-Ethylhexyl)Phthalate	52	J
117-84-0	Di-n-Octyl Phthalate	430	U
205-99-2	Benzo(b)Fluoranthene	59	J
207-08-9	Benzo(k)Fluoranthene	47	J
50-32-8	Benzo(a)Pyrene	51	J
193-39-5	Indeno(1,2,3-cd)Pyrene	430 ~~55~~	BJ
53-70-3	Dibenz(a,h)Anthracene	430 ~~26~~	BJ
191-24-2	Benzo(g,h,i)Perylene	430 ~~52~~	BJ

(1) - Cannot be separated from Diphenylamine

AV 6-27-95

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EAMS9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GJ999

Level: (low/med) LOW Date Received: 06/10/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 06/12/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 06/20/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.12	130	J
2.	UNKNOWN	6.25	760	BJ U
3. 4436753	3-Hexene-2,5-dione	6.35	87	JN
4.	UNKNOWN	6.72	120	BJ U
5.	UNKNOWN	7.18	230	J
6.	UNKNOWN	7.58	88	J
7.	UNKNOWN	8.98	210	BJ U
8.	UNKNOWN	16.42	170	J
9. 57103	Hexadecanoic acid	16.53	220	JN
10.	UNKNOWN ACID	18.03	99	J
11.	UNKNOWN ALCOHOL	20.53	440	J
12.	UNKNOWN	26.42	120	J
13.	UNKNOWN	26.92	1900	J

AV
6-27-95
Total = 3484

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

GC Column(1): RTX35 ID: 0.53(mm) GC Column(2): RTX5 ID: 0.53(mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK1	76	76	80	82			0
02	EAMS6	74	70	82	78			0
03	EAMS7	71	70	76	76			0
04	EAMS8	73	72	79	80			0
05	EAMS9	77	77	89	82			0
06	EAMS6MS	66	61	78	73			0
07	EAMS6MSD	75	68	84	80			0

QC LIMITS

TCX = Tetrachloro-m-xylene (30-150)
DCB = Decachlorobiphenyl (30-150)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix Spike - EPA Sample No.: EAMS6

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	20.600	0	12.5	61	46-127
Heptachlor	20.600	0	16.2	79	35-130
Aldrin	20.600	0.489	15.8	74	34-132
Dieldrin	41.100	0	33.0	80	31-134
Endrin	41.100	0	32.9	80	42-139
4,4'-DDT	41.100	0	32.5	79	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	20.600	13.7	66	8	50	46-127
Heptachlor	20.600	17.8	86	8	31	35-130
Aldrin	20.600	17.6	83	11	43	34-132
Dieldrin	41.100	36.2	88	10	38	31-134
Endrin	41.100	36.1	88	10	45	42-139
4,4'-DDT	41.100	34.8	85	7	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Lab Sample ID: B5B0026401 Lab File ID:

Matrix:(soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) Y Date Extracted: 06/12/95

Date Analyzed (1): 06/21/95 Date Analyzed (2): 06/21/95

Time Analyzed (1): 1225 Time Analyzed (2): 1225

Instrument ID (1): GC-31 Instrument ID (2): GC-32

GC Column (1): RTX35 ID: 0.53 (mm) GC Column (2): RTX5 ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EAMS6	B5015001	06/21/95	06/21/95
02	EAMS7	B5015002	06/21/95	06/21/95
03	EAMS8	B5015003	06/21/95	06/21/95
04	EAMS9	B5015004	06/21/95	06/21/95
05	EAMS6MS	B5015001MS	06/21/95	06/21/95
06	EAMS6MSD	B5015001SD	06/21/95	06/21/95

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5B0026401

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Date Received:

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/12/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/21/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	67	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS6

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015001

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 19 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/12/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/21/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	0.49	JP
1024-57-3	Heptachlor epoxide	0.56	J
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4'-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4'-DDD	4.1	U
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4'-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	0.35	JP
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	41	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	41	U
53469-21-9	Aroclor-1242	41	U
12672-29-6	Aroclor-1248	41	U
11097-69-1	Aroclor-1254	41	U
11096-82-5	Aroclor-1260	41	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS7

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015002

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 24 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/12/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/21/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	0.28	JP
1024-57-3	Heptachlor epoxide	0.24	J
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	88	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS8

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

Matrix: (soil/water) SOIL Lab Sample ID: B5015003

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 23 decanted: (Y/N) N Date Received: 06/10/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 06/12/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 06/21/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.6 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EAMS9

Name: RECRA ENVIRON Contract: 68D50010

Code: RECMD Case No.: 23650 SAS No.: SDG No.: EAMS6

:ix: (soil/water) SOIL Lab Sample ID: B5015004

ɔle wt/vol: 30.0 (g/mL) G Lab File ID:

ɔisture: 23 decanted: (Y/N) N Date Received: 06/10/95

:raction: (SepF/Cont/Sonc) SONC Date Extracted: 06/12/95

ɔentrated Extract Volume: 5000 (uL) Date Analyzed: 06/21/95

ɜction Volume: 1.00 (uL) Dilution Factor: 1.0

Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	0.51	JP
1024-57-3	Heptachlor epoxide	1.2	J
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.3	U
72-55-9	4,4'-DDE	4.3	U
72-20-8	Endrin	4.3	U
33213-65-9	Endosulfan II	4.3	U
72-54-8	4,4'-DDD	4.3	U
1031-07-8	Endosulfan sulfate	4.3	U
50-29-3	4,4'-DDT	4.3	U
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.3	U
7421-93-4	Endrin aldehyde	4.3	U
5103-71-9	alpha-Chlordane	1.4	JP
5103-74-2	gamma-Chlordane	0.62	J
8001-35-2	Toxaphene	220	U
12674-11-2	Aroclor-1016	43	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	43	U
53469-21-9	Aroclor-1242	43	U
12672-29-6	Aroclor-1248	43	U
11097-69-1	Aroclor-1254	43	U
11096-82-5	Aroclor-1260	43	U

JUL 11 1995

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ENTERED

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on June 26, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: PRC

Patricia J Scott for D Wesolowski 07/05/95

We have reviewed the data for the following case:

SITE NAME: Jackson County LF (OH)

CASE NUMBER: 23650 SDG NUMBER: EAMS6

Number and Type of Samples: 4 (Soil)

Sample Numbers: EAMS6-9

Laboratory: RECRA (MD) Hrs. for Review: 7

Following are our findings:

The data are acceptable and usable with the qualifications described in the attached narrative

Patricia J Scott

Ref
EPA 1995b

cc: Regional TPO

CADRE REVIEW 2.1

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

The samples (EAMS6-EAMS9) were collected on 06/09/95. The laboratory received four (4) soil samples on 06/10/95 in good condition for the full list of organic analysis following the SOW OLM03.0.

Sample EAMS6 was used as the low level matrix spike/spike duplicates for the VOA, SVOA and Pest/PCB fractions.

Sample EAMS8 was identified as the field duplicate of EAMS7. None of the samples in this case were identified as the field duplicates.

The VOA samples were analyzed within the holding time of fourteen (14) days for the soil samples. The SVOA and Pest/PCB samples were extracted within the holding time of fourteen (14) days for the soil samples. The extracts were analyzed within forty (40) days following the extraction.

The reviewer's narrative and data qualifiers from CADRE 2.1 are noted in the following pages.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

Below is a summary of the out-of-control audits and the possible effect on the data for this case.

1.HOLDING TIME

DC-5: The following volatile soil samples have aromatic analytes outside primary holding time criteria. Hits are qualified "J" and non-detects are qualified "UJ".

EAMS6
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

EAMS6MS
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

EAMS6MSD
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

EAMS7
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

EAMS8
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

EAMS9
Benzene, Toluene, Chlorobenzene, Ethylbenzene, Styrene, Xylene (total)

The "J" and "UJ" flags for the above samples were changed to the final flag by the reviewer since the fourteen (14) day holding time for the VOA aromatic compounds is used for Region V.

2.GC/MS TUNING PERFORMANCE

No problems found for this qualification.

3.CALIBRATION

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has

percent relative standard deviation (%RSD) outside primary criteria. Hits are qualified "J" and non-detects are flagged "VS".

Methylene Chloride
EAMS6, EAMS6MS, EAMS6MSD, EAMS7, EAMS8, EAMS9, VBLK1, VBLK2

Acetone
EAMS6, EAMS6MS, EAMS6MSD, EAMS7, EAMS8, EAMS9, VBLK1, VBLK2

The "VS" flag for the above samples was changed to the final flag by the reviewer.

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Chloromethane
VBLK70

Methylene Chloride
EAMS6, VBLK2

Acetone
EAMS6, VBLK2, VBLK70

Carbon Tetrachloride
VBLK70

1,2-Dichloropropane
VBLK70

4-Methyl-2-Pentanone
VBLK70

2-Hexanone
VBLK70

4.METHOD BLANK

DC-31: The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Hits are qualified "U" and non-detects are not flagged.

EAMS6
Acetone

EAMS9
Acetone

DC-200: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are qualified "U" and non-detects are not flagged.

EAMS6
Methylene Chloride

EAMS6MS
Methylene Chloride, Acetone

EAMS6MSD
Methylene Chloride, Acetone

EAMS7
Methylene Chloride

EAMS8
Methylene Chloride

EAMS9
Methylene Chloride, 2-Butanone

DC-205: The following semivolatile samples have analyte concentrations reported below the CRQL and less than or equal to five times (5X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL. Hits are flagged "U" and non-detects are not flagged.

EAMS9
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

5.SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

No problems found for this qualification.

6.MATRIX SPIKE/SPIKE DUPLICATES

No problems found for this qualification.

7.FIELD BLANK AND FIELD DUPLICATE

NA

8.INTERNAL STANDARDS

No problems found for this qualification.

9.COMPOUND IDENTIFICATION

NA

10.COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

DC-45: The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EAMS6
Methylene Chloride, 2-Butanone

EAMS6MS
Methylene Chloride, Acetone

EAMS6MSD
Methylene Chloride

EAMS7
Methylene Chloride

EAMS8
Methylene Chloride

EAMS9
Methylene Chloride, 2-Butanone

VBLK1
Methylene Chloride, 2-Butanone

VBLK2
Methylene Chloride, Acetone

VBLK70
Methylene Chloride

DC-66: The quantitation limits of the following volatile samples could not be calculated, due to missing information. Hits are flagged "M" and non-detects are not flagged.

VBLK1, VBLK2

DC-110: The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EAMS6
Phenanthrene, Fluoranthene, bis(2-Ethylhexyl)phthalate

EAMS6MS
Phenanthrene, bis(2-Ethylhexyl)phthalate

EAMS6MSD
Phenanthrene, bis(2-Ethylhexyl)phthalate

EAMS7
bis(2-Ethylhexyl)phthalate

EAMS8
bis(2-Ethylhexyl)phthalate

EAMS9
Phenanthrene, Di-n-butylphthalate, Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

SBLK1
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

DC-111: The quantitation limits of the following semivolatile samples could not be calculated due to missing information. Hits are flagged "M" and non-detects are not flagged.

SBLK1

DC-158: The following pesticide samples have analyte

concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EAMS6
Aldrin, Heptachlor epoxide, gamma-Chlordane

EAMS6MS
Heptachlor epoxide, 4,4'-DDE, gamma-Chlordane

EAMS6MSD
Heptachlor epoxide, 4,4'-DDE

EAMS7
Aldrin, Heptachlor epoxide

EAMS9
Aldrin, Heptachlor epoxide, alpha-Chlordane, gamma-Chlordane

DC-159: The quantitation limits of the following pesticide samples could not be calculated due to missing information. Hits are qualified "M" and non-detects are not flagged.

PBLK1

The "M" flag for PBLK1 was changed to the final flag by the reviewer.

For the VOA, SVOA and Pest/PCB results of this section, if the compounds were the laboratory contaminants which were also detected in the associated blanks and the sample results are less than the associated blank results by 10X (for common laboratory contaminants) or 5X (for none common laboratory contaminants). The flag for these results will remain as non-detected "U" as mention in section 4 (method blank).

11. SYSTEM PERFORMANCE

No problems found for this qualification.

12. ADDITIONAL INFORMATION

None

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

13.CADRE SUMMARY OF THE RESULTS

Below is the final flag for the sample results of this data package:

FILENAME: EAMS6 DATE: 06/29/95 TIME: 11:00			
CRITERIA FILE: FGDRO91			
DATA			
	Original	X	Qualified
QUALIFICATIONS PERFORMED			
X	Quantitation Limit		Sample Cleanup
	Percent Moisture		ICS
X	Holding Time		LCS
X	Calibration		Duplicates
X	Matrix Spike		Furnace AA QC
X	IPC		Serial Dilutions
X	Internal Standards		Sample Result Verif.
X	SMC/Surrogate		Laboratory Blanks
X	System Performance	X	Field QC
PRINT NON-DETECTS			
X	Yes		No
PRINT REJECTED RESULTS			
X	Yes		No

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6

SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS6		EAMS6MS		EAMS6MSD		EAMS7		EAMS8	
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Matrix Spike		Matrix Spike Du		Routine Sample		Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW	
DILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	19		19		19		24		23	
VOA										
Chloromethane	12	U	12	U	12	U	13	U	13	U
Bromomethane	12	U	12	U	12	U	13	U	13	U
Vinyl Chloride	12	U	12	U	12	U	13	U	13	U
Chloroethane	12	U	12	U	12	U	13	U	13	U
Methylene Chloride	12	UJ	12	UJ	12	UJ	13	UJ	13	UJ
Acetone	22	UJ	12	UJ	12	UJ	13	UJ	13	UJ
Carbon Disulfide	12	U	12	U	12	U	13	U	13	U
1,1-Dichloroethene	12	U	53		57		13	U	13	U
1,1-Dichloroethane	12	U	12	U	12	U	13	U	13	U
1,2-Dichloroethene (total)	12	U	12	U	12	U	13	U	13	U
Chloroform	12	U	12	U	12	U	13	U	13	U
1,2-Dichloroethane	12	U	12	U	12	U	13	U	13	U
2-Butanone	5	J	12	U	12	U	13	U	13	U
1,1,1-Trichloroethane	12	U	12	U	12	U	13	U	13	U
Carbon Tetrachloride	12	U	12	U	12	U	13	U	13	U
Bromodichloromethane	12	U	12	U	12	U	13	U	13	U
1,2-Dichloropropane	12	U	12	U	12	U	13	U	13	U
cis-1,3-Dichloropropene	12	U	12	U	12	U	13	U	13	U
Trichloroethene	12	U	43		47		13	U	13	U
Dibromochloromethane	12	U	12	U	12	U	13	U	13	U
1,1,2-Trichloroethane	12	U	12	U	12	U	13	U	13	U
Benzene	12	U	49		53		13	U	13	U
trans-1,3-Dichloropropene	12	U	12	U	12	U	13	U	13	U
Bromoform	12	U	12	U	12	U	13	U	13	U
4-Methyl-2-Pentanone	12	U	12	U	12	U	13	U	13	U
2-Hexanone	12	U	12	U	12	U	13	U	13	U
Tetrachloroethene	12	U	12	U	12	U	13	U	13	U
1,1,2,2-Tetrachloroethane	12	U	12	U	12	U	13	U	13	U
Toluene	12	U	42		45		13	U	13	U
Chlorobenzene	12	U	38		41		13	U	13	U
Ethylbenzene	12	U	12	U	12	U	13	U	13	U
Styrene	12	U	12	U	12	U	13	U	13	U
Xylene (total)	12	U	12	U	12	U	13	U	13	U

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6
SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS9		VBLK1		VBLK2		VBLK70	
REGIONAL SAMPLE NUMBER:								
SAMPLE LOCATION:								
SAMPLE TYPE:	Routine Sample		Method Blank		Method Blank		Method Blank	
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW		SOIL/LOW		WATER/LOW	
DILUTION FACTOR:	1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	23							
VOA								
Chloromethane	13	U	10	U	10	U	10	U
Bromomethane	13	U	10	U	10	U	10	U
Vinyl Chloride	13	U	10	U	10	U	10	U
Chloroethane	13	U	10	U	10	U	10	U
Methylene Chloride	13	UJ	5	J	6	J	2	J
Acetone	32	UJ	18	UJ	9	J	10	U
Carbon Disulfide	13	U	10	U	10	U	10	U
1,1-Dichloroethene	13	U	10	U	10	U	10	U
1,1-Dichloroethane	13	U	10	U	10	U	10	U
1,2-Dichloroethene (total)	13	U	10	U	10	U	10	U
Chloroform	13	U	10	U	10	U	10	U
1,2-Dichloroethane	13	U	10	U	10	U	10	U
2-Butanone	13	U	5	J	10	U	10	U
1,1,1-Trichloroethane	13	U	10	U	10	U	10	U
Carbon Tetrachloride	13	U	10	U	10	U	10	U
Bromodichloromethane	13	U	10	U	10	U	10	U
1,2-Dichloropropane	13	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	13	U	10	U	10	U	10	U
Trichloroethene	13	U	10	U	10	U	10	U
Dibromochloromethane	13	U	10	U	10	U	10	U
1,1,2-Trichloroethane	13	U	10	U	10	U	10	U
Benzene	13	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	13	U	10	U	10	U	10	U
Bromoform	13	U	10	U	10	U	10	U
4-Methyl-2-Pentanone	13	U	10	U	10	U	10	U
2-Hexanone	13	U	10	U	10	U	10	U
Tetrachloroethene	13	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	13	U	10	U	10	U	10	U
Toluene	13	U	10	U	10	U	10	U
Chlorobenzene	13	U	10	U	10	U	10	U
Ethylbenzene	13	U	10	U	10	U	10	U
Styrene	13	U	10	U	10	U	10	U
Xylene (total)	13	U	10	U	10	U	10	U

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date: __June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6

SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS6		EAMS6MS		EAMS6MSD		EAMS7		EAMS8	
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Matrix Spike		Matrix Spike Du		Routine Sample		Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW	
DILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	19		19		19		24		23	
BNA										
Phenol	410	U	1900		2000		430	U	430	U
bis(2-Chloroethyl) ether	410	U	410	U	410	U	430	U	430	U
2-Chlorophenol	410	U	1800		1800		430	U	430	U
1,3-Dichlorobenzene	410	U	410	U	410	U	430	U	430	U
1,4-Dichlorobenzene	410	U	1700		1700		430	U	430	U
1,2-Dichlorobenzene	410	U	410	U	410	U	430	U	430	U
2-Methylphenol	410	U	410	U	410	U	430	U	430	U
2,2'-oxybis(1-Chloropropane	410	U	410	U	410	U	430	U	430	U
4-Methylphenol	410	U	410	U	410	U	430	U	430	U
N-Nitroso-di-n-propylamine	410	U	1300		1300		430	U	430	U
Hexachloroethane	410	U	410	U	410	U	430	U	430	U
Nitrobenzene	410	U	410	U	410	U	430	U	430	U
Isophorone	410	U	410	U	410	U	430	U	430	U
2-Nitrophenol	410	U	410	U	410	U	430	U	430	U
2,4-Dimethylphenol	410	U	410	U	410	U	430	U	430	U
bis(2-Chloroethoxy) methane	410	U	410	U	410	U	430	U	430	U
2,4-Dichlorophenol	410	U	410	U	410	U	430	U	430	U
1,2,4-Trichlorobenzene	410	U	1400		1500		430	U	430	U
Naphthalene	410	U	410	U	410	U	430	U	430	U
4-Chloroaniline	410	U	410	U	410	U	430	U	430	U
Hexachlorobutadiene	410	U	410	U	410	U	430	U	430	U
4-Chloro-3-methylphenol	410	U	2100		2200		430	U	430	U
2-Methylnaphthalene	410	U	410	U	410	U	430	U	430	U
Hexachlorocyclopentadiene	410	U	410	U	410	U	430	U	430	U
2,4,6-Trichlorophenol	410	U	410	U	410	U	430	U	430	U
2,4,5-Trichlorophenol	990	U	990	U	990	U	1000	U	1000	U
2-Chloronaphthalene	410	U	410	U	410	U	430	U	430	U
2-Nitroaniline	990	U	990	U	990	U	1000	U	1000	U
Dimethylphthalate	410	U	410	U	410	U	430	U	430	U
Acenaphthylene	410	U	410	U	410	U	430	U	430	U
2,6-Dinitrotoluene	410	U	410	U	410	U	430	U	430	U
3-Nitroaniline	990	U	990	U	990	U	1000	U	1000	U
Acenaphthene	410	U	1500		1600		430	U	430	U
2,4-Dinitrophenol	990	U	990	U	990	U	1000	U	1000	U
4-Nitrophenol	990	U	2300		2500		1000	U	1000	U
Dibenzofuran	410	U	410	U	410	U	430	U	430	U
2,4-Dinitrotoluene	410	U	1700		1800		430	U	430	U

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650 SITE:
SDG NO: EAMS6 LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS6		EAMS6MS		EAMS6MSD		EAMS7		EAMS8	
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Matrix Spike		Matrix Spike Du		Routine Sample		Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW		SOIL/LOW	
DILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	19		19		19		24		23	
BNA										
Diethylphthalate	410	U	410	U	410	U	430	U	430	U
4-Chlorophenyl-phenyl ether	410	U	410	U	410	U	430	U	430	U
Fluorene	410	U	410	U	410	U	430	U	430	U
4-Nitroaniline	990	U	990	U	990	U	1000	U	1000	U
4,6-Dinitro-2-methylphenol	990	U	990	U	990	U	1000	U	1000	U
N-nitrosodiphenylamine	410	U	410	U	410	U	430	U	430	U
4-Bromophenyl-phenylether	410	U	410	U	410	U	430	U	430	U
Hexachlorobenzene	410	U	410	U	410	U	430	U	430	U
Pentachlorophenol	990	U	2300		2200		1000	U	1000	U
Phenanthrene	27	J	33	J	31	J	430	U	430	U
Anthracene	410	U	410	U	410	U	430	U	430	U
Carbazole	410	U	410	U	410	U	430	U	430	U
Di-n-butylphthalate	410	U	410	U	410	U	430	U	430	U
Fluoranthene	23	J	410	U	410	U	430	U	430	U
Pyrene	410	U	1500		1600		430	U	430	U
Butylbenzylphthalate	410	U	410	U	410	U	430	U	430	U
3,3'-Dichlorobenzidine	410	U	410	U	410	U	430	U	430	U
Benzo(a)anthracene	410	U	410	U	410	U	430	U	430	U
Chrysene	410	U	410	U	410	U	430	U	430	U
bis(2-Ethylhexyl)phthalate	80	J	64	J	53	J	38	J	22	J
Di-n-octylphthalate	410	U	410	U	410	U	430	U	430	U
Benzo(b)fluoranthene	410	U	410	U	410	U	430	U	430	U
Benzo(k)fluoranthene	410	U	410	U	410	U	430	U	430	U
Benzo(a)pyrene	410	U	410	U	410	U	430	U	430	U
Indeno(1,2,3-cd)pyrene	410	U	410	U	410	U	430	U	430	U
Dibenz(a,h)anthracene	410	U	410	U	410	U	430	U	430	U
Benzo(g,h,i)perylene	410	U	410	U	410	U	430	U	430	U

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6

SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS9		SBLK1							
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Method Blank							
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW							
DILUTION FACTOR:	1.0		1.0							
PERCENT MOISTURE:	23									
BNA										
Phenol	430	U	330	U						
bis(2-Chloroethyl) ether	430	U	330	U						
2-Chlorophenol	430	U	330	U						
1,3-Dichlorobenzene	430	U	330	U						
1,4-Dichlorobenzene	430	U	330	U						
1,2-Dichlorobenzene	430	U	330	U						
2-Methylphenol	430	U	330	U						
2,2'-oxybis(1-Chloropropane	430	U	330	U						
4-Methylphenol	430	U	330	U						
N-Nitroso-di-n-propylamine	430	U	330	U						
Hexachloroethane	430	U	330	U						
Nitrobenzene	430	U	330	U						
Isophorone	430	U	330	U						
2-Nitrophenol	430	U	330	U						
2,4-Dimethylphenol	430	U	330	U						
bis(2-Chloroethoxy) methane	430	U	330	U						
2,4-Dichlorophenol	430	U	330	U						
1,2,4-Trichlorobenzene	430	U	330	U						
Naphthalene	430	U	330	U						
4-Chloroaniline	430	U	330	U						
Hexachlorobutadiene	430	U	330	U						
4-Chloro-3-methylphenol	430	U	330	U						
2-Methylnaphthalene	430	U	330	U						
Hexachlorocyclopentadiene	430	U	330	U						
2,4,6-Trichlorophenol	430	U	330	U						
2,4,5-Trichlorophenol	1000	U	800	U						
2-Chloronaphthalene	430	U	330	U						
2-Nitroaniline	1000	U	800	U						
Dimethylphthalate	430	U	330	U						
Acenaphthylene	430	U	330	U						
2,6-Dinitrotoluene	430	U	330	U						
3-Nitroaniline	1000	U	800	U						
Acenaphthene	430	U	330	U						
2,4-Dinitrophenol	1000	U	800	U						
4-Nitrophenol	1000	U	800	U						
Dibenzofuran	430	U	330	U						
2,4-Dinitrotoluene	430	U	330	U						

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6

SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS9		SBLK1							
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Method Blank							
MATRIX/ANALYSIS:	SOIL/LOW		SOIL/LOW							
DILUTION FACTOR:	1.0		1.0							
PERCENT MOISTURE:	23									
BNA										
Diethylphthalate	430	U	330	U						
4-Chlorophenyl-phenyl ether	430	U	330	U						
Fluorene	430	U	330	U						
4-Nitroaniline	1000	U	800	U						
4,6-Dinitro-2-methylphenol	1000	U	800	U						
N-nitrosodiphenylamine	430	U	330	U						
4-Bromophenyl-phenylether	430	U	330	U						
Hexachlorobenzene	430	U	330	U						
Pentachlorophenol	1000	U	800	U						
Phenanthrene	71	J	330	U						
Anthracene	430	U	330	U						
Carbazole	430	U	330	U						
Di-n-butylphthalate	22	J	330	U						
Fluoranthene	140	J	330	U						
Pyrene	99	J	330	U						
Butylbenzylphthalate	430	U	330	U						
3,3'-Dichlorobenzidine	430	U	330	U						
Benzo(a)anthracene	56	J	330	U						
Chrysene	61	J	330	U						
bis(2-Ethylhexyl)phthalate	52	J	330	U						
Di-n-octylphthalate	430	U	330	U						
Benzo(b)fluoranthene	59	J	330	U						
Benzo(k)fluoranthene	47	J	330	U						
Benzo(a)pyrene	51	J	330	U						
Indeno(1,2,3-cd)pyrene	430	U	42	U						
Dibenz(a,h)anthracene	430	U	47	U						
Benzo(g,h,i)perylene	430	U	41	U						

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6
SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS6		EAMS6MS		EAMS6MSD		EAMS7		EAMS8	
REGIONAL SAMPLE NUMBER:										
SAMPLE LOCATION:										
SAMPLE TYPE:	Routine Sample		Matrix Spike		Matrix Spike Du		Routine Sample		Routine Sample	
MATRIX/ANALYSIS:	SOIL/		SOIL/		SOIL/		SOIL/		SOIL/	
DILUTION FACTOR:	1.0		1.0		1.0		1.0		1.0	
PERCENT MOISTURE:	19		19		19		24		23	
PES										
alpha-BHC	2.1	U	2.1	U	2.1	U	2.2	U	2.2	U
beta-BHC	2.1	U	2.1	U	2.1	U	2.2	U	2.2	U
delta-BHC	2.1	U	2.1	U	2.1	U	2.2	U	2.2	U
gamma-BHC (Lindane)	2.1	U	12		14		2.2	U	2.2	U
Heptachlor	2.1	U	16		18		2.2	U	2.2	U
Aldrin	0.49	J	16		18		0.28	J	2.2	U
Heptachlor epoxide	0.56	J	0.44	J	0.46	J	0.24	J	2.2	U
Endosulfan I	2.1	U	2.1	U	2.1	U	2.2	U	2.2	U
Dieldrin	4.1	U	33		36		4.3	U	4.3	U
4,4'-DDE	4.1	U	1.1	J	1.4	J	4.3	U	4.3	U
Endrin	4.1	U	33		36		4.3	U	4.3	U
Endosulfan II	4.1	U	4.1	U	4.1	U	4.3	U	4.3	U
4,4'-DDD	4.1	U	4.1	U	4.1	U	4.3	U	4.3	U
Endosulfan sulfate	4.1	U	4.1	U	4.1	U	4.3	U	4.3	U
4,4'-DDT	4.1	U	32		35		4.3	U	4.3	U
Methoxychlor	21	U	21	U	21	U	22	U	22	U
Endrin ketone	4.1	U	4.1	U	4.1	U	4.3	U	4.3	U
Endrin aldehyde	4.1	U	4.1	U	4.1	U	4.3	U	4.3	U
alpha-Chlordane	2.1	U	2.1	U	2.1	U	2.2	U	2.2	U
gamma-Chlordane	0.35	J	0.31	J	2.1	U	2.2	U	2.2	U
Toxaphene	210	U	210	U	210	U	220	U	220	U
Aroclor-1016	41	U	41	U	41	U	43	U	43	U
Aroclor-1221	83	U	83	U	83	U	88	U	87	U
Aroclor-1232	41	U	41	U	41	U	43	U	43	U
Aroclor-1242	41	U	41	U	41	U	43	U	43	U
Aroclor-1248	41	U	41	U	41	U	43	U	43	U
Aroclor-1254	41	U	41	U	41	U	43	U	43	U
Aroclor-1260	41	U	41	U	41	U	43	U	43	U

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

LABORATORY: RECRA (MD)
CASE: 23650
SDG: EAMS6
SITE: Jackson County LF (OH)

TCL QUALIFIED SPREADSHEET

CASE NO: 23650
SDG NO: EAMS6

SITE:
LABORATORY: RECRA ENVIRON

EPA SAMPLE NUMBER:	EAMS9		PBLK1				
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:							
SAMPLE TYPE:	Routine Sample		Method Blank				
MATRIX/ANALYSIS:	SOIL/		SOIL/				
DILUTION FACTOR:	1.0		1.0				
PERCENT MOISTURE:	23						
PES							
alpha-BHC	2.2	U	1.7	U			
beta-BHC	2.2	U	1.7	U			
delta-BHC	2.2	U	1.7	U			
gamma-BHC (Lindane)	2.2	U	1.7	U			
Heptachlor	2.2	U	1.7	U			
Aldrin	0.51	J	1.7	U			
Heptachlor epoxide	1.2	J	1.7	U			
Endosulfan I	2.2	U	1.7	U			
Dieldrin	4.3	U	3.3	U			
4,4'-DDE	4.3	U	3.3	U			
Endrin	4.3	U	3.3	U			
Endosulfan II	4.3	U	3.3	U			
4,4'-DDD	4.3	U	3.3	U			
Endosulfan sulfate	4.3	U	3.3	U			
4,4'-DDT	4.3	U	3.3	U			
Methoxychlor	22	U	17	U			
Endrin ketone	4.3	U	3.3	U			
Endrin aldehyde	4.3	U	3.3	U			
alpha-Chlordane	1.4	J	1.7	U			
gamma-Chlordane	0.62	J	1.7	U			
Toxaphene	220	U	170	U			
Aroclor-1016	43	U	33	U			
Aroclor-1221	87	U	67	U			
Aroclor-1232	43	U	33	U			
Aroclor-1242	43	U	33	U			
Aroclor-1248	43	U	33	U			
Aroclor-1254	43	U	33	U			
Aroclor-1260	43	U	33	U			

FILENAME: EAMS6.SDG DATE: 06/29/95 TIME: 11:00 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Steffanie N. Tobin__Lockheed/ESAT
Date:__June 29th, 1995__

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: OHD980993554

Case No: 23650 Site Name Location: Jackson County LF

Contractor or EPA Lab: RECRA Data User: PRC

No. of Samples: 4 Date Sampled or Data Received: 6-26-95

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No _____
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No _____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No _____
No of samples claimed: 4 No. of samples received: 4

Received by: Lynette Burnett Date: 6-26-95

Received by LSSS: Allison C Harvey Date: 6-27-95

Review started: 27 June 1995 Reviewer Signature: Al Venuto/STOL

Total time spent on review: 7 hrs. Date review completed: 6-29 95

Copied by: Patricia J Scott Date: 07/05/95

Mailed to user by: _____ Date: _____

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: Mildred Jackson JUL 11 1995 Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

ENTERED

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

JUL 11 1995

DATE: 06-30-95

SUBJECT: Review of Region V CLP Data
Received for Review on June 23, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section
L. Finkelberg for D. Wesolowski

TO: Data User: PRC

We have reviewed the data for the following case:

SITE NAME: Jackson County LF (OH)

CASE NUMBER: 23650 SDG NUMBER: MEABH6

Number and Type of Samples: 4 (Soil)

Sample Numbers: MEABH6-9

Laboratory: Chemtech Hrs. for Review: ~~5.5~~ 3.0 + 0.5 S.M.

Following are our findings:

The ICP serial dilution for Na is out of control.
The CCB contain contamination.

All data are usable with the qualifications described in the attached review.

L. Finkelberg
06-30-95

cc: Regional TPO

NARRATIVE

SITE : JACKSON COUNTY LF (OH) CASE: 23650
CONTRACTOR: CHEMTECH SDG : MEABH6

The laboratory's portion of this case contains four low level soil samples analyzed for total metals and cyanide. Below is a summary of the out of control audits and their possible effects on the data for this case.

EVIDENTIAL AUDIT: All raw data, forms, airbill, the traffic reports/chain of custody forms, DC-1 form (log-in sheet) and DC-2 form (inventory sheet) are originals and present in the order indicated on the DC-2 form. All original sample tags are included in the case and their numbers match the numbers on the DC-1 form.

ICP ANALYSES: The ICP serial dilution for Na (19.7% difference) is out of control. All Na results are estimated (J) due to interference.

The CCB was found to contain Be (1.0 ug/L). All Be results are estimated (J) due to contamination.

OTHER QUALIFIERS: All Hg and CN results are acceptable.

Samples MEABH7 and MEABH8 are field duplicates. The %RPDs for Cr (78.6), Fe (79.2), Pb (107.0), Mn (84.2) and Zn (51.0) are out of control. All Cr, Fe, Pb, Mn and Zn results are estimated (J) due to poor precision.

Reviewed by: Bai Yuen, Lockheed/ESAT
Date: 6-27-95

DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utinized in this document, the following code letters and associated definitions are provide:

U Indicates the material was analyzed, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J Indicates the associated value is an estimated quantity.

R Indicates the data are unusable. (Note: The analyte may or may not be present.)

UJ Indicates the material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

E Indicates the reported value is estimated because of the presence of interferences. An explanatory note shall be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-IN (if it is an isolated problem).

M Indicates duplicate injection precision is not met.

N Indictaes the spike sample recovery is not within control limits.

S Indicates the reported value was determined by the Method of Standard Addition (MSA).

W Indicates the post-digestion spike for furnace AA analysis is out of control limits (85%-115%), while sample absorbance is less than 50% of the spike absorbance.

+ Indicates the correlation coefficient for the MSA is less than 0.995.

* Indicates the duplicate analysis is not within control limits.

Note: Entering "S", "W" or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

SOW No.: ILM03.0

EPA SAMPLE NO.	Lab Sample ID.
MEABH6	43349S
MEABH6D	43350S2
MEABH6S	43351DS
MEABH7	43352S
MEABH8	43353S
MEABH9	43354S

RECEIVED
JUN 23 1995
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied?	Yes/No	YES
If yes-were raw data generated before application of background corrections?	Yes/No	NO

Comments:
The "E" qualifier on Form I and Form IX for the Sodium indicates an interference was suspected during the Sodium analysis.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: PARVEEN HASAN

Date: 6/21/95 Title: QA/QC COORDINATOR

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MEABH6

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Lab Sample ID: 43349S

Level (low/med): LOW Date Received: 06/10/95

% Solids: 75.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4280			P
7440-36-0	Antimony	1.1	B		P
7440-38-2	Arsenic	2.1	U		P
7440-39-3	Barium	30.1	B		P
7440-41-7	Beryllium	0.91	B		P
7440-43-9	Cadmium	0.53	U		P
7440-70-2	Calcium	676	B		P
7440-47-3	Chromium	17.0			P
7440-48-4	Cobalt	11.5	B		P
7440-50-8	Copper	16.4			P
7439-89-6	Iron	38000			P
7439-92-1	Lead	14.9			P
7439-95-4	Magnesium	1100	B		P
7439-96-5	Manganese	619			P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	21.4			P
7440-09-7	Potassium	766	B		P
7782-49-2	Selenium	1.3	U		P
7440-22-4	Silver	0.80	U		P
7440-23-5	Sodium	343	B	E	P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	14.3			P
7440-66-6	Zinc	49.2			P
	Cyanide	1.3	U		C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEABH7

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Lab Sample ID: 43352S

Level (low/med): LOW Date Received: 06/10/95

% Solids: 77.4

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1640			P
7440-36-0	Antimony	0.78	U		P
7440-38-2	Arsenic	2.1	U		P
7440-39-3	Barium	16.1	B		P
7440-41-7	Beryllium	0.47	B		P
7440-43-9	Cadmium	0.52	U		P
7440-70-2	Calcium	644	B		P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	5.2	B		P
7440-50-8	Copper	6.1	B		P
7439-89-6	Iron	15700			P
7439-92-1	Lead	19.8			P
7439-95-4	Magnesium	493	B		P
7439-96-5	Manganese	356			P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	7.6	B		P
7440-09-7	Potassium	181	B		P
7782-49-2	Selenium	1.3	U		P
7440-22-4	Silver	0.78	U		P
7440-23-5	Sodium	126	B	E	P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	7.9	B		P
7440-66-6	Zinc	29.3			P
	Cyanide	1.3	U		C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MEABH8

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Lab Sample ID: 43353S

Level (low/med): LOW Date Received: 06/10/95

% Solids: 77.2

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1190			P
7440-36-0	Antimony	0.78	U		P
7440-38-2	Arsenic	2.1	U		P
7440-39-3	Barium	11.7	B		P
7440-41-7	Beryllium	0.33	B		P
7440-43-9	Cadmium	0.52	U		P
7440-70-2	Calcium	382	B		P
7440-47-3	Chromium	4.4			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	6790			P
7439-92-1	Lead	6.0			P
7439-95-4	Magnesium	297	B		P
7439-96-5	Manganese	145			P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	4.8	B		P
7440-09-7	Potassium	163	B		P
7782-49-2	Selenium	1.3	U		P
7440-22-4	Silver	0.78	U		P
7440-23-5	Sodium	111	B	E	P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	4.0	B		P
7440-66-6	Zinc	17.4			P
	Cyanide	1.3	U		C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEABH9

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Lab Sample ID: 43354S

Level (low/med): LOW Date Received: 06/10/95

% Solids: 76.5

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1200			P
7440-36-0	Antimony	0.78	U		P
7440-38-2	Arsenic	2.1	U		P
7440-39-3	Barium	23.1	B		P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium	0.52	U		P
7440-70-2	Calcium	327	B		P
7440-47-3	Chromium	4.2			P
7440-48-4	Cobalt	0.95	B		P
7440-50-8	Copper	16.8			P
7439-89-6	Iron	3020			P
7439-92-1	Lead	10.4			P
7439-95-4	Magnesium	201	B		P
7439-96-5	Manganese	48.2			P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	123	B		P
7782-49-2	Selenium	1.3	U		P
7440-22-4	Silver	0.78	U		P
7440-23-5	Sodium	124	B	E	P
7440-28-0	Thallium	2.1	U		P
7440-62-2	Vanadium	2.9	B		P
7440-66-6	Zinc	23.6			P
	Cyanide	1.3	U		C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

3

BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	25.0	U	25.0	U	25.0	U	25.0	U	5.000	U	P
Antimony	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Arsenic	8.0	U	8.0	U	8.0	U	8.0	U	1.600	U	P
Barium	1.0	U	-1.1	B	1.0	U	1.0	U	0.200	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Calcium	10.0	U	-29.3	B	-25.4	B	-30.4	B	-6.334	B	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Copper	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Iron	30.0	U	30.0	U	30.0	U	30.0	U	6.000	U	P
Lead	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Magnesium	15.0	U	-17.6	B	15.0	U	15.0	U	3.000	U	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Potassium	200.0	U	200.0	U	200.0	U	200.0	U	40.000	U	P
Selenium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Silver	3.0	U	-9.4	B	-9.1	B	-9.2	B	0.600	U	P
Sodium	-33.0	B	-854.6	B	-862.3	B	-868.8	B	-3.128	B	P
Thallium	8.0	U	8.0	U	8.0	U	8.0	U	1.600	U	P
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Zinc	4.0	U	-4.8	B	-4.9	B	-4.2	B	-0.926	B	P
Cyanide	20.0	U	20.0	U	20.0	U	20.0	U	1.000	U	C

3

BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			25.0	U	25.0	U	25.0	U			P
Antimony			3.0	U	3.0	U	3.0	U			P
Arsenic			8.0	U	8.0	U	8.0	U			P
Barium			1.0	U	1.0	U	1.0	U			P
Beryllium			1.0	U	1.0	U	1.0	U			P
Cadmium			2.0	U	2.0	U	2.0	U			P
Calcium			-26.8	B	-31.3	B	-29.5	B			P
Chromium			5.0	U	5.0	U	5.0	U			P
Cobalt			2.0	U	2.0	U	2.0	U			P
Copper			3.0	U	3.0	U	3.0	U			P
Iron			30.0	U	30.0	U	30.0	U			P
Lead			3.0	U	3.0	U	3.0	U			P
Magnesium			15.0	U	15.0	U	15.0	U			P
Manganese			1.0	U	1.0	U	1.0	U			P
Mercury			0.2	U	0.2	U					CV
Nickel			10.0	U	10.0	U	10.0	U			P
Potassium			200.0	U	200.0	U	200.0	U			P
Selenium			5.0	U	5.0	U	5.0	U			P
Silver			-9.0	B	-9.1	B	-9.4	B			P
Sodium			-874.1	B	-876.4	B	-888.6	B			P
Thallium			8.0	U	8.0	U	8.0	U			P
Vanadium			2.0	U	2.0	U	2.0	U			P
Zinc			-4.9	B	-4.9	B	4.0	U			P
Cyanide			20.0	U							C

3

BLANKS

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			25.0	U	25.0	U	25.0	U			P
Antimony			3.0	U	3.0	U	3.0	U			P
Arsenic			-9.2	B	8.0	U	8.0	U			P
Barium			1.0	U	1.0	U	1.0	U			P
Beryllium			1.0	B	1.0	U	1.0	U			P
Cadmium			2.0	U	2.0	U	2.0	U			P
Calcium			-37.4	B	10.0	U	10.0	U			P
Chromium			5.0	U	5.0	U	5.0	U			P
Cobalt			2.0	U	2.0	U	2.0	U			P
Copper			3.0	U	3.0	U	3.0	U			P
Iron			30.0	U	30.0	U	30.0	U			P
Lead			3.0	U	3.0	U	3.0	U			P
Magnesium			15.0	U	15.0	U	15.0	U			P
Manganese			1.0	U	1.0	U	1.0	U			P
Mercury											NR
Nickel			10.0	U	10.0	U	10.0	U			P
Potassium			200.0	U	200.0	U	200.0	U			P
Selenium			5.0	U	5.0	U	5.0	U			P
Silver			3.0	U	3.0	U	3.0	U			P
Sodium			-11.9	B	10.0	U	-92.0	B			P
Thallium			8.0	U	8.0	U	8.0	U			P
Vanadium			2.0	U	2.0	U	2.0	U			P
Zinc			-4.4	B	4.0	U	4.0	U			P
Cyanide											NR

U.S. EPA - CLP

5A

SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEABH6S

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 75.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	132.6154		1.0584	B	132.63	99.2		P
Arsenic	75-125	485.8090		2.1220	U	530.50	91.6		P
Barium	75-125	587.5066		30.1379	B	530.50	105.1		P
Beryllium	75-125	13.9019		0.9125	B	13.26	98.0		P
Cadmium	75-125	10.4509		0.5305	U	13.26	78.8		P
Calcium									NR
Chromium	75-125	69.7639		17.0106		53.05	99.4		P
Cobalt	75-125	144.5570		11.4721	B	132.63	100.3		P
Copper	75-125	87.1114		16.3873		66.31	106.7		P
Iron									NR
Lead	75-125	146.4509		14.9310		132.63	99.2		P
Magnesium									NR
Manganese		719.2308		619.2573		132.63	75.4		P
Mercury	75-125	0.6897		0.1326	U	0.66	104.5		CV
Nickel	75-125	155.6207		21.4456		132.63	101.2		P
Potassium									NR
Selenium	75-125	450.6366		1.3263	U	530.50	84.9		P
Silver	75-125	12.9655		0.7958	U	13.26	97.8		P
Sodium									NR
Thallium	75-125	473.5809		2.1220	U	530.50	89.3		P
Vanadium	75-125	152.2865		14.3422		132.63	104.0		P
Zinc	75-125	186.3448		49.2387		132.63	103.4		P
Cyanide	75-125	12.8647		1.3263	U	13.26	97.0		C

Comments:

U.S. EPA - CLP

6

DUPLICATES

EPA SAMPLE NO.

MEABH6D

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 75.4 % Solids for Duplicate: 76.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4283.0239		4272.6790		0.2		P
Antimony		1.0584	B	1.2308	B	15.1		P
Arsenic		2.1220	U	2.1220	U			P
Barium		30.1379	B	30.0822	B	0.2		P
Beryllium		0.9125	B	0.9125	B	0.0		P
Cadmium		0.5305	U	0.5305	U			P
Calcium		675.9151	B	673.7931	B	0.3		P
Chromium		17.0106		17.0239		0.1		P
Cobalt		11.4721	B	11.2493	B	2.0		P
Copper	6.6	16.3873		16.3740		0.1		P
Iron		37970.8223		37925.7294		0.1		P
Lead		14.9310		15.3103		2.5		P
Magnesium		1097.0822	B	1093.7931	B	0.3		P
Manganese		619.2573		617.7719		0.2		P
Mercury		0.1326	U	0.1326	U			CV
Nickel	10.6	21.4456		21.3263		0.6		P
Potassium		766.3395	B	766.0212	B	0.0		P
Selenium		1.3263	U	1.3263	U			P
Silver		0.7958	U	0.7958	U			P
Sodium		342.9443	B	343.1300	B	0.1		P
Thallium		2.1220	U	2.1220	U			P
Vanadium	13.3	14.3422		14.4244		0.6		P
Zinc		49.2387		49.1220		0.2		P
Cyanide		1.3263	U	1.3263	U			C

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

ICP ID Number: Date: 04/15/95

Flame AA ID Number: CV

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

CV: SPECTRO-PRODUCTS MERCURY ANALYZER

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

ICP ID Number: P0 Date: 04/15/95

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200	25.0	P
Antimony	206.80		60	3.0	P
Arsenic	189.00		10	8.0	P
Barium	493.40		200	1.0	P
Beryllium	313.00		5	1.0	P
Cadmium	226.50		5	2.0	P
Calcium	317.90		5000	10.0	P
Chromium	267.70		10	5.0	P
Cobalt	228.60		50	2.0	P
Copper	324.70		25	3.0	P
Iron	271.40		100	30.0	P
Lead	220.40		3	3.0	P
Magnesium	279.00		5000	15.0	P
Manganese	257.60		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	10.0	P
Potassium	766.50		5000	200.0	P
Selenium	196.00		5	5.0	P
Silver	328.00		10	3.0	P
Sodium	588.90		5000	10.0	P
Thallium	190.90		10	8.0	P
Vanadium	292.40		50	2.0	P
Zinc	213.80		20	4.0	P

Comments:
P0: ICP 61E TRACE ANALYZER

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: CN Method: C

Start date: 06/14/95 End date: 06/14/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1515																									X
S20.0	1.00	1517																									X
S200.0	1.00	1519																									X
S1000.0	1.00	1521																									X
S1800.0	1.00	1523																									X
ICV	1.00	1525																									X
ICB	1.00	1527																									X
CCV	1.00	1529																									X
CCB	1.00	1531																									X
ZZZZZZ	1.00	1533																									
PBS	1.00	1535																									X
LCSS	1.00	1537																									X
ZZZZZZ	1.00	1539																									
ZZZZZZ	1.00	1541																									
ZZZZZZ	1.00	1543																									
ZZZZZZ	1.00	1545																									
ZZZZZZ	1.00	1555																									
ZZZZZZ	1.00	1557																									
ZZZZZZ	1.00	1559																									
CCV	1.00	1601																									X
CCB	1.00	1603																									X
ZZZZZZ	1.00	1605																									
ZZZZZZ	1.00	1607																									
ZZZZZZ	1.00	1609																									
ZZZZZZ	1.00	1611																									
ZZZZZZ	1.00	1613																									
MEABH6	1.00	1615																									X
MEABH6D	1.00	1617																									X
MEABH6S	1.00	1619																									X
MEABH7	1.00	1621																									X
MEABH8	1.00	1623																									X
CCV	1.00	1625																									X

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: CN Method: C

Start date: 06/14/95 End date: 06/14/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1627																									X
MEABH9	1.00	1629																									X
CCV	1.00	1631																									X
CCB	1.00	1633																									X

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: CV Method: CV

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1430																X									
S0.5	1.00	1432																X									
S1.0	1.00	1434																X									
S5.0	1.00	1436																X									
S10.0	1.00	1438																X									
ICV	1.00	1440																X									
ICB	1.00	1442																X									
CCV	1.00	1444																X									
CCB	1.00	1446																X									
CRA	1.00	1448																X									
PBS	1.00	1450																X									
LCSS	10.00	1452																X									
MEABH6	1.00	1454																X									
MEABH6D	1.00	1456																X									
MEABH6S	1.00	1458																X									
MEABH7	1.00	1500																X									
MEABH8	1.00	1502																X									
MEABH9	1.00	1504																X									
ZZZZZZ	1.00	1506																									
CCV	1.00	1508																X									
CCB	1.00	1510																X									
ZZZZZZ	10.00	1512																									
ZZZZZZ	1.00	1514																									
ZZZZZZ	1.00	1516																									
ZZZZZZ	1.00	1518																									
ZZZZZZ	1.00	1520																									
ZZZZZZ	1.00	1522																									
ZZZZZZ	1.00	1524																									
ZZZZZZ	1.00	1526																									
ZZZZZZ	1.00	1528																									
ZZZZZZ	1.00	1530																									
CCV	1.00	1532																X									

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: CV Method: CV

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB	1.00	1534																X									
ZZZZZZ	1.00	1536																									
ZZZZZZ	1.00	1538																									
ZZZZZZ	1.00	1540																									
ZZZZZZ	1.00	1542																									
ZZZZZZ	1.00	1544																									
ZZZZZZ	1.00	1546																									
ZZZZZZ	1.00	1548																									
ZZZZZZ	1.00	1550																									
ZZZZZZ	1.00	1552																									
ZZZZZZ	1.00	1554																									
CCV	1.00	1556																X									
CCB	1.00	1558																X									
ZZZZZZ	1.00	1600																									
ZZZZZZ	1.00	1602																									
ZZZZZZ	1.00	1604																									
ZZZZZZ	1.00	1606																									
ZZZZZZ	1.00	1608																									
ZZZZZZ	1.00	1610																									
ZZZZZZ	1.00	1612																									
ZZZZZZ	1.00	1614																									
ZZZZZZ	1.00	1616																									
CCV	1.00	1618																X									
CCB	1.00	1620																X									

FORM XIV - IN ILM03.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: P0 Method: P

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0926		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
S	1.00	0930			X	X	X	X	X		X	X	X		X		X		X						X	X	
S	1.00	0932																			X			X			
S	1.00	0934		X						X				X		X				X			X				
S	1.00	0935																				X					
ICV	1.00	0942		X			X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X	
ICV	1.00	0946				X															X						
ICV	1.00	0951			X																						
ICV	1.00	0954																						X			
ICB	1.00	0957		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1004			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1.00	1009		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1014		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1017		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1020		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1023																									
ZZZZZZ	1.00	1027																									
ZZZZZZ	1.00	1030																									
ZZZZZZ	1.00	1033																									
ZZZZZZ	1.00	1038																									
ZZZZZZ	1.00	1043																									
ZZZZZZ	1.00	1050																									
ZZZZZZ	1.00	1053																									
ZZZZZZ	1.00	1056																									
ZZZZZZ	1.00	1100																									
CCV	1.00	1103		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1106		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1109																									
ZZZZZZ	1.00	1112																									
ZZZZZZ	1.00	1115																									
ZZZZZZ	1.00	1118																									
ZZZZZZ	1.00	1121																									

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: P0 Method: P

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1124																									
ZZZZZZ	1.00	1127																									
ZZZZZZ	1.00	1130																									
ZZZZZZ	1.00	1133																									
ZZZZZZ	1.00	1136																									
CCV	1.00	1139		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1142		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1149																									
ZZZZZZ	1.00	1152																									
ZZZZZZ	1.00	1155																									
ZZZZZZ	1.00	1158																									
ZZZZZZ	1.00	1201																									
ZZZZZZ	1.00	1204																									
ZZZZZZ	1.00	1207																									
ZZZZZZ	1.00	1210																									
ZZZZZZ	1.00	1213																									
ZZZZZZ	1.00	1216																									
CCV	1.00	1219		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1222		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1228																									
ZZZZZZ	1.00	1231																									
ZZZZZZ	1.00	1234																									
ZZZZZZ	5.00	1237																									
ZZZZZZ	1.00	1242																									
ZZZZZZ	1.00	1245																									
ZZZZZZ	1.00	1251																									
ZZZZZZ	5.00	1254																									
ZZZZZZ	1.00	1258																									
ZZZZZZ	1.00	1306																									
CCV	1.00	1309		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1312		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1315																									

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: P0 Method: P

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1318																									
ZZZZZZ	1.00	1321																									
ZZZZZZ	5.00	1325																									
ZZZZZZ	1.00	1328																									
ZZZZZZ	1.00	1331																									
ZZZZZZ	1.00	1334																									
ZZZZZZ	1.00	1337																									
ZZZZZZ	1.00	1340																									
ZZZZZZ	1.00	1351																									
CCV	1.00	1354		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1357		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH6	1.00	1404		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH6D	1.00	1407		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH6S	1.00	1412			X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X	
MEABH6L	5.00	1416		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH7	1.00	1419		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH8	1.00	1422		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
MEABH9	1.00	1425		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSS	1.00	1444		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBS	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1459		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1502		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ZZZZZZ	10.00	1506																									
ZZZZZZ	10.00	1509																									
ZZZZZZ	10.00	1513																									
ZZZZZZ	50.00	1517																									
ZZZZZZ	10.00	1522																									
ZZZZZZ	10.00	1526																									
ZZZZZZ	10.00	1529																									
ZZZZZZ	50.00	1542																									
ZZZZZZ	10.00	1549																									
ZZZZZZ	10.00	1552																									

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: CHEMTECH CONSULTING GROUP Contract: 68D30037

Lab Code: CHEM Case No.: 23650 SAS No.: SDG No.: MEABH6

Instrument ID Number: P0 Method: P

Start date: 06/15/95 End date: 06/15/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1555		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1558		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CRI	1.00	1608			X	X		X	X		X	X	X		X		X		X		X	X		X	X	X	
ICSA	1.00	1616		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1620		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV	1.00	1623		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCB	1.00	1626		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

FORM XIV - IN ILM03.0

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 23650

DATA SET:

LAB QC #: MEABH6

DATE: 6-27-95

SITE: Jackson County LF (OH)

LAB: Chentech

REVIEWED BY: Bri Yu

MATRIX: Soil

CONC: Low

WATER SAMPLE SPK:

WATER SAMPLE DUP:

SOIL SAMPLE SPK:

SOIL SAMPLE DUP:

FORM #		FORM 1	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD	COMMENTS
ELEMENT	HOLD TIME	INITIAL CALIB	CONTIN CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS SR	SOIL SPIKE SR	SOIL DUP RPD	ICS AQ	ICS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP SR	AQ SPIKE SR	BLANK	DUP RPD	BLANK	DUP RPD	
ALUMINUM																				
ANTIMONY																				
ARSENIC																				
BARIUM																				
BERYLLIUM				1.0																
CADMIUM																				
CALCIUM																				
CHROMIUM																	78.6			
COBALT																				
COPPER																				
IRON																	79.2			
LEAD																	107.0			
MAGNESIUM																				
MANGANESE																	84.2			
MERCURY																				
NICKEL																				
POTASSIUM																				
SELENIUM																				
SILVER																				
SODIUM													19.7							
THALLIUM																				
TIN																				
VANADIUM																				
ZINC																	51.0			
CYANIDE																				

EPA United States Environmental Protection Agency
Contract Laboratory Program

Inorganic Traffic Report & Chain of Custody Record
(For Inorganic CLP Analysis)

SAS No. (if applicable):
Case No.: 23650

1. Matrix (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Field QC
5. Soil/Sediment
6. Oil (High only)
7. Waste (High only)
8. Other (specify in Column A)

2. Preservative (Enter in Column D)
1. HCl
2. HNO3
3. NaOH
4. H_2SO_4
5. $K_2CR_2O_7$
6. Ice only
7. Other (specify in Column D)
N. Not preserved

2. Region No.: 5
Sampling Co.: PRC
Sampler (Name): Seth Brockway
Sampler Signature:
3. Purpose*
Lead: [X] SF [ ] PRP [ ] ST [ ] FED
Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [ ] SI [X] ESI
Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

4. Date Shipped: 6/9/95
Carrier: FedEx
Airbill Number: 1403534366
5. Ship To: ChemTech Consulting, 110 Route 4, Englewood, NJ 07631, ATTN: Divya Mehta

6. Date Received -- Received by: 6/10/95 B. Moronati
Laboratory Contract Number: D3-0037
Unit Price:
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1) / Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) / Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
MEABH 6	5	L	G	6		X	X					5-092829	SD-1	6/9/95 1100	EAMS6			—	
MEABH 7	↓	↓	↓	↓		X	X					5-092833	SD-2	↓ 1000	EAMS7			—	
MEABH 8						X	X					5-092837	SD-2D	1001	EAMS8			D(HE.2117)	
MEABH 9						X	X					5-092841	SD-3	↓ 1245	EAMS9			—	

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC: MEABH6
Additional Sampler Signatures: [signatures]
Chain of Custody Seal Number(s): 45799, 45800

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/10/95 1900				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? (Y)/N/none	
		B. Moronati	6/10/95 10:15		

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-6 REV. 3/93

000161

359036

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: OHD980993554

Case No: 23650 Site Name Location: Jackson County LF

Contractor or EPA Lab: Chemtech Data User: PRC

No. of Samples: 4 Date Sampled or Data Received: 6-23-95

Have Chain-of-Custody records been received? Yes ✓ No ✓
Have traffic reports or packing lists been received? Yes ✓ No _____
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No _____
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No _____
No of samples claimed: 4 No. of samples received: 4

Received by: Lynette Burnett Date: 6-23-95

Received by LSSS: Allison C Harvey Date: 6-26-95

Review started: 6-26-95 Reviewer Signature: B. Yu

Total time spent on review: 5.5 +0.5 JR Date review completed: 6-07-95

Copied by: L. Finkelberg Date: 06-30-95

Mailed to user by: _____ Date: _____

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: Mildred Jurbaugh Date: JUL 11 1995

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____