399 pages

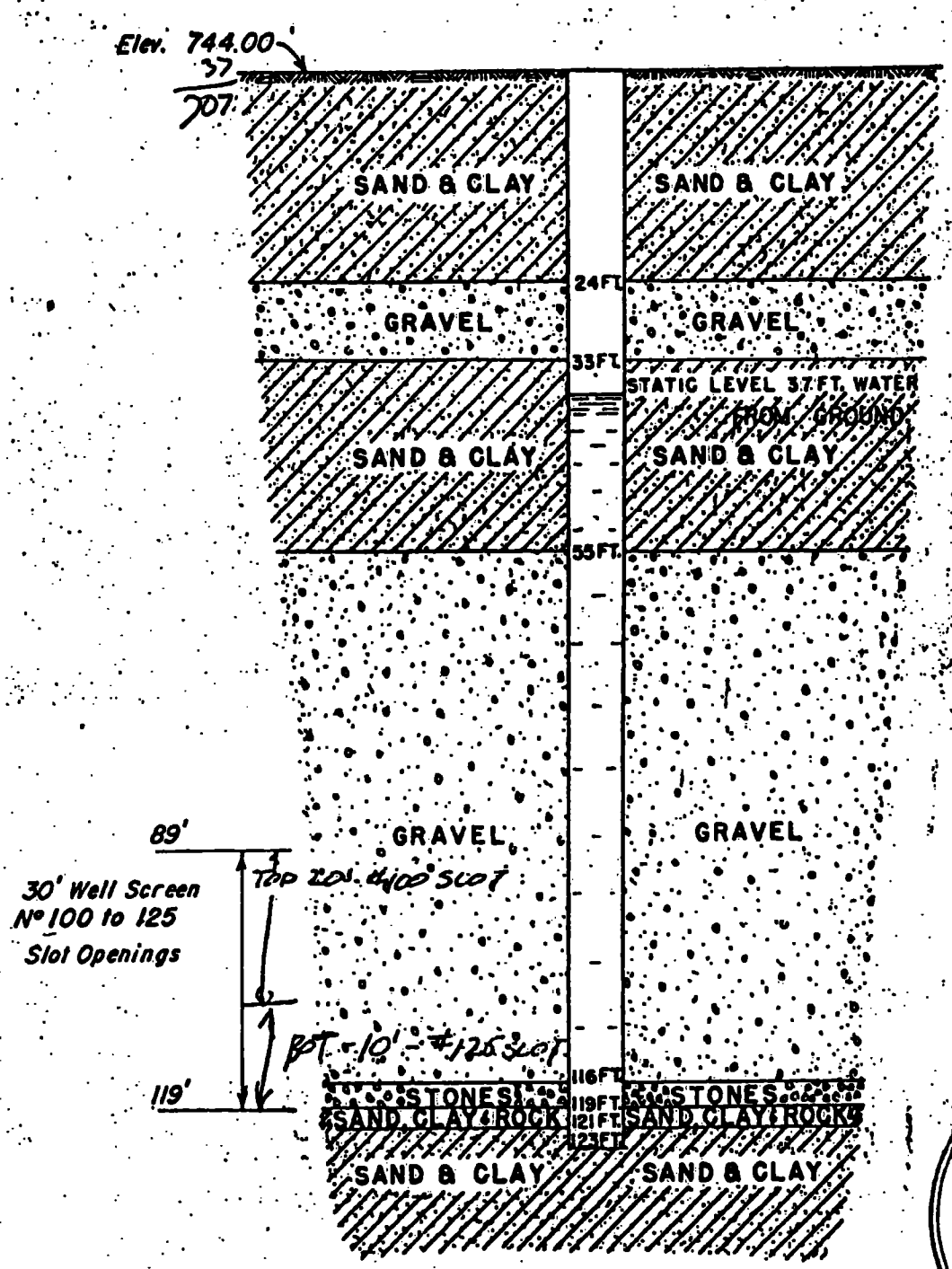
SAMPLING DATA

US EPA RECORDS CENTER REGION 5

489915

FILED

N. Int. Cor of Well Pit El. 747.65

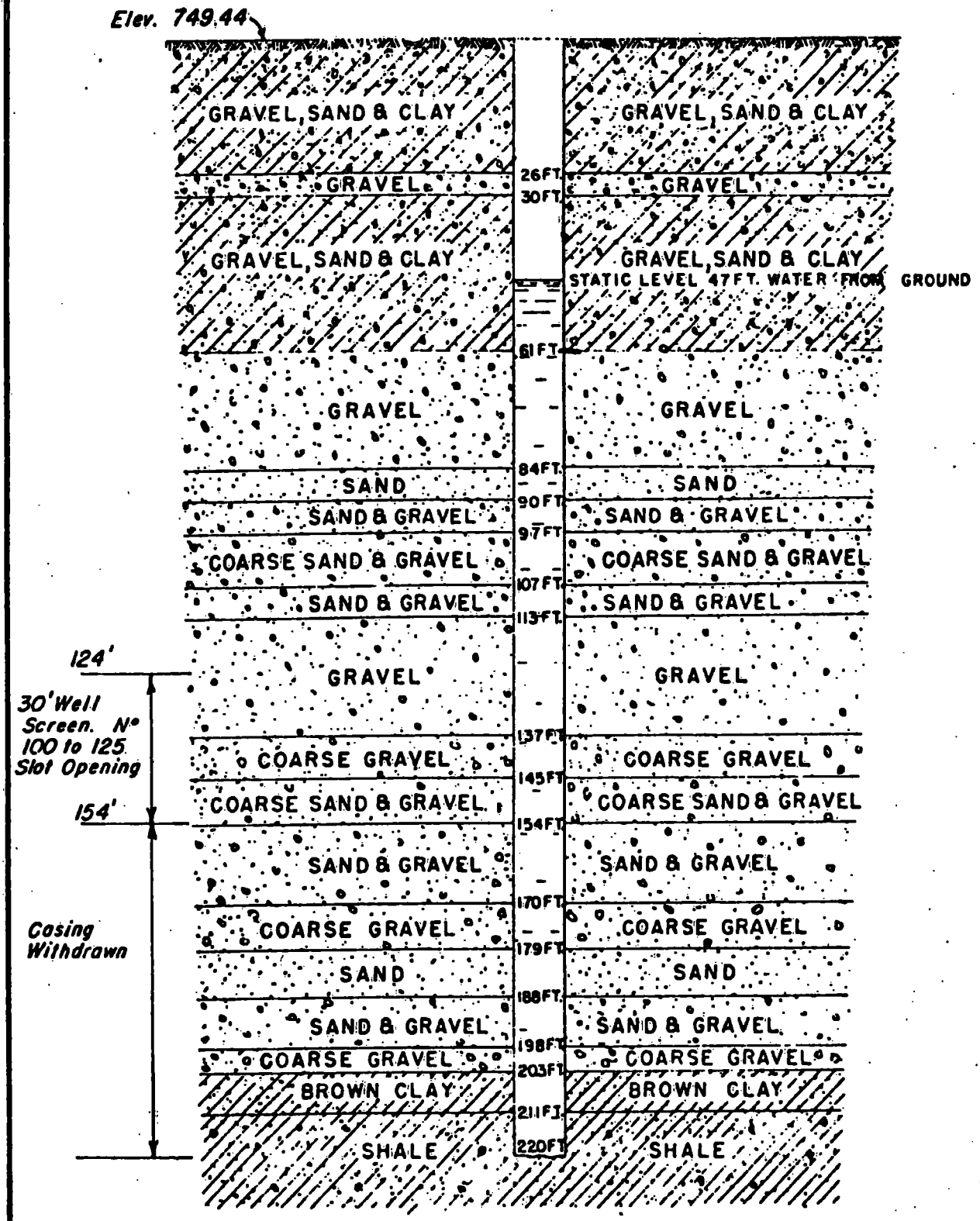


ISSUED
NOV 5 1952
RALPH L. WOOLPERT CO.

RALPH L. WOOLPERT CO.
CONSULTING ENGINEERS
360 W. FIRST ST DAYTON 2, OHIO

WELL LOG OF TEST WELL #1
FOR West
MONTGOMERY COUNTY COMMISSIONERS

Scale - 1" = 20'	Drawn	Checked	
Date -	Aug. 1949		



Dup. in well file

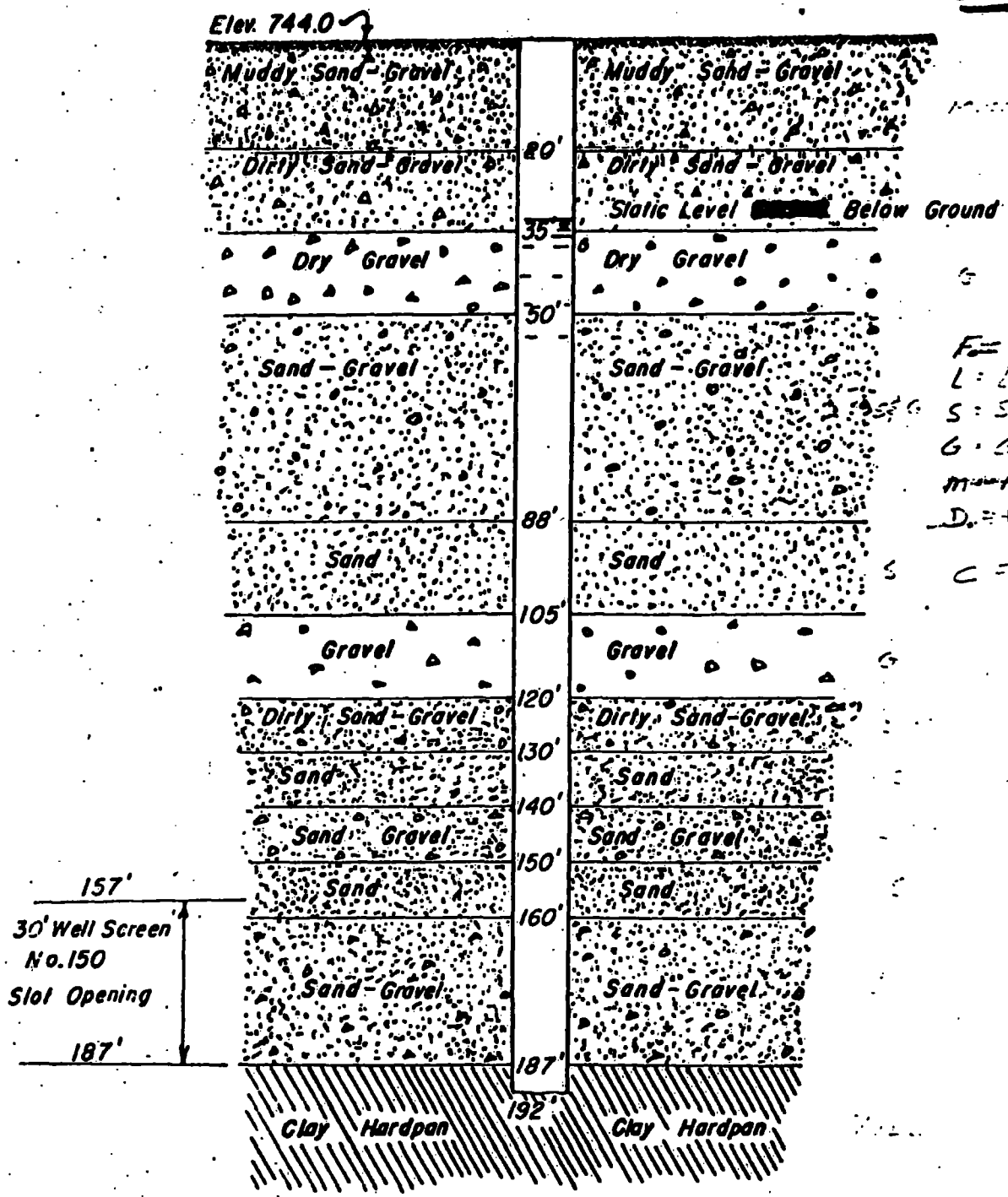
RALPH L. WOOLPERT CO.
CONSULTING ENGINEERS
360 W. FIRST ST. DAYTON 2, OHIO.

WELL LOG OF TEST WELL #2
FOR
MONTGOMERY COUNTY COMMISSIONERS

Scale - 1"=30'	Drawn	Checked
Date -	Aug. 1943	

N. W. Cor of
Well Pit
El. 750.76

#3



F = Fine
L = Large
S = Sand
G = Gravel
D = [illegible]
C = Clay

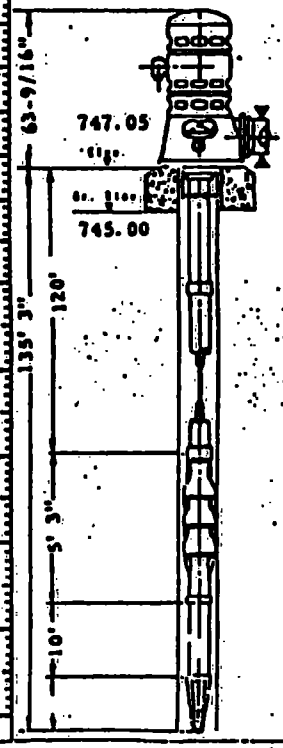
ISSUED
AUG 6 · 1954
RALPH L. WOOLPERT CO.

RALPH L. WOOLPERT CO.
CONSULTING ENGINEERS
360 W. FIRST ST. DAYTON 2, OHIO

WELL LOG OF WELL #3
FOR
MONTGOMERY COUNTY COMMISSIONERS

Scale: 1" = 30'	Drawn: J.A.T.	Checked:	
Date:	May, 1950		

Depth (ft.)	Well Diagram	Description of Material	Log
0–10		Muddy clay gravel	
10–40		Dry sand and gravel	
40–60		Sandy clay	
60–80		Clay and gravel mixed	
80–100		Sand and gravel	
100–110		Rusty sand and gravel	
110–120		Sand and gravel	
120–130		Fine sand	
130–140		Sand, gravel & dirty clay	
140–170		Sand, coarse gravel	
170–220		Hard pan	



GREATER MORAINE WATER SYSTEM — WATER WELL DATA

Well No. 4 Location Lamme Road
Driller Layne-Ohio Company Equipment Drilling Rig
Date Started _____ Completed Sept. 12, 1950
(1958 developed)

CONSTRUCTION DETAILS

Type of Well Tubular Method Drilled
Outside Casing:
I. D. 16 in. Length: 138.0 ft. Thickness - in.
Material Steel Connections Welded
Inside Casing: N/A
I. D. ____ in. Length: ____ ft. Thickness ____ in.
Material ____ Connections ____
Screen:
Type Johnson I. D. ____ in. Length: 28 ft.
Openings 187-1/2 slot Material Bronze
Bottom Fitting ____ Top Fitting Lead Packer
Gravel: Size N/A Quantity N/A
Well Development:
Method Surging Equipment Drill

PUMPING TEST

Date Feb. 6, 1968 Static W. L. 74 ft. Time 11:00 A. M.
Flow 1200 gpm Length of Test 0.5 hours
Min. pumping level 91 ft. Max. drawdown 16.8 ft.
Specific capacity 71.5 gpm/ft. Stabilized Yes
Transmissibility - gpd/ft. Storage Coefficient -
Well efficiency 86 % Wire-to-Water eff. 72 %

WATER ANALYSIS

Date of Sample Feb. 6, 1968 Date of Analysis Feb. 6, 1968
Pumping 2 hrs. @ 1200 gpm Appearance Clear
Water Temperature 13°C Air Temperature 7°C
Specific Conductance 725 micromhos-cm @ 25° C.

Total Diss. Solids	471	mg/l	Calcium*	290	mg/l
Total Hardness*	462	mg/l	Iron, Fe	0.04	mg/l
Alkalinity*	304	mg/l	Manganese, Mn	0.07	mg/l
Non-Carb. Hard.*	158	mg/l	Chloride, Cl	45	mg/l
CO_2	24	mg/l	Sulfate, SO_4	142	mg/l
Dissolved Oxygen	-	mg/l	H_2S	-	mg/l

pH 7.4 pHs 7.0 pH - pHs + 0.4
*As $CaCO_3$

PERMANENT PUMPING EQUIPMENT

Layne
Pump Vertical Hollow shaft Capacity 1500 gpm TDH 251 ft.
Motor U.S. 125 HP @ 1750 RPM
Material: Impellers Bronze Bowls 13-1/8 CD
Impeller No. Standard Number of Stages 4

Column: Length 135 ft. ID 10 in.
OD 14-1/2 in. Material Steel
Threaded or flange Flange

Shaft: Lubrication Oil
Material Stainless Diam. 1-11/16 in.
OD Oil Tube 2-1/2 in.
Material Steel

Suction Pipe Yes ID 10 in.
OD ____ in. Length 10 ft.
Material Steel

Length of Air Line 114 ft.

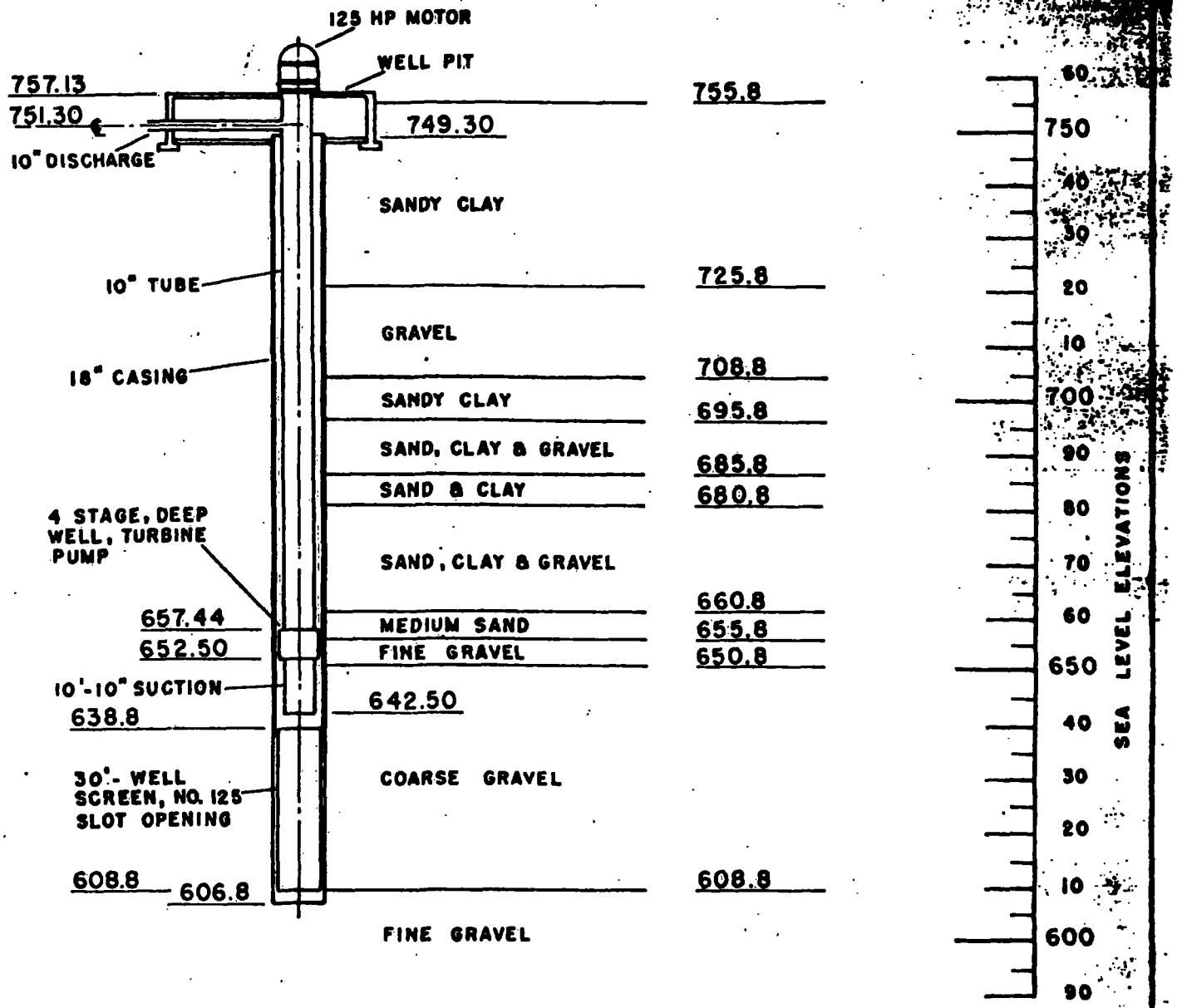
REMARKS

Emergency repair 1/67

Full size impeller added May 27, 1954

Compiled by BC&E
Date July, 1968

719
608
141



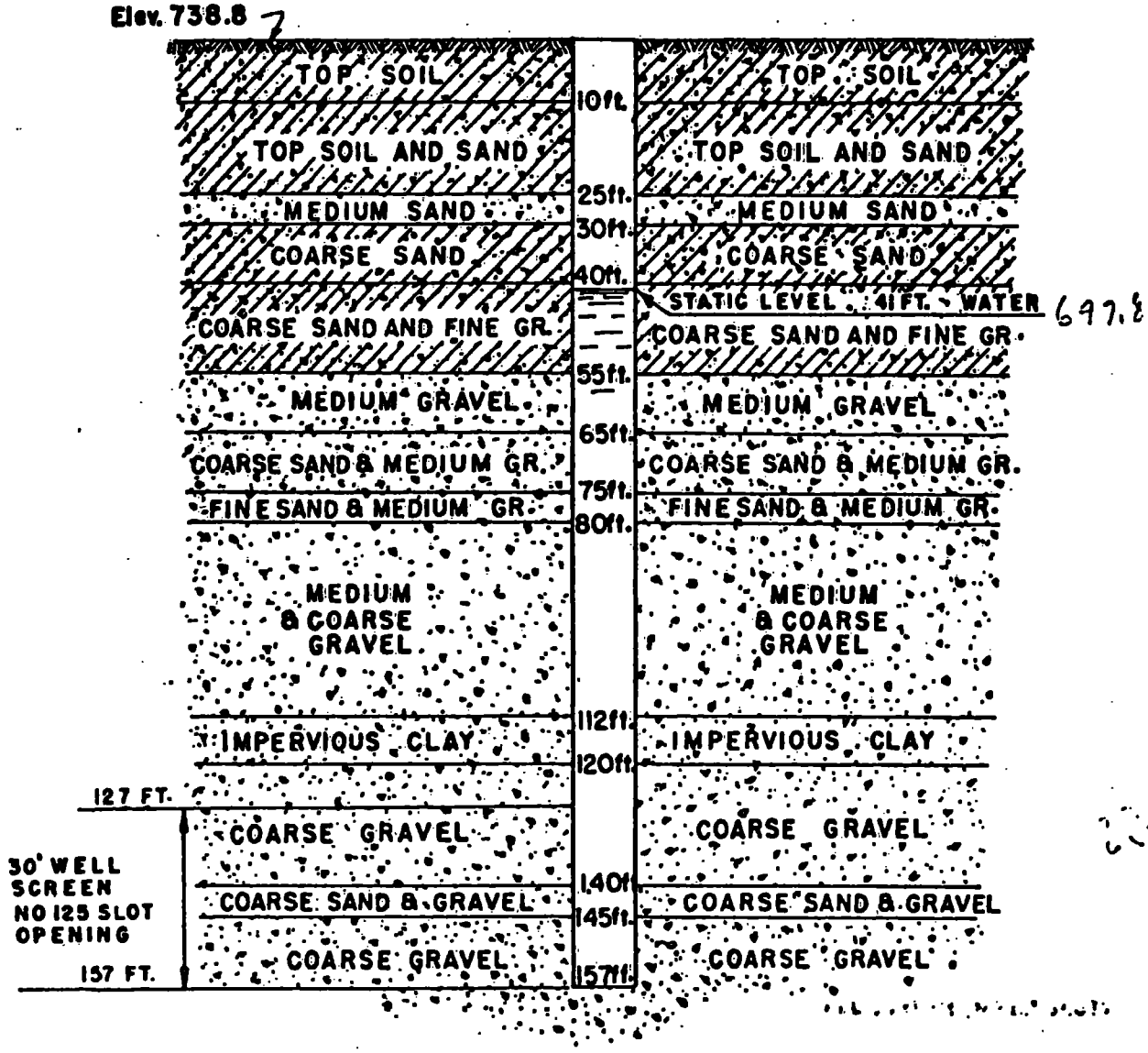
Water level June 7, 1966

Elev 676.30 not running

max 1100 GPM

Well was cleaned on July 27
Depth of well was found to be
135 ft deep from bottom inside
of Pit

GREATER MORAINE WATER SYSTEM MONTGOMERY COUNTY, OHIO		
WELL LOG & PUMP SETTING WELL Nº 5		
1" = 30'	RALPH L. WOOLPERT COMPANY CONSULTING ENGINEERS	P.N.S.
FEB. '54	360 W. FIRST ST., DAYTON 2, OHIO	2502



RALPH L. WOOLPERT CO.
CONSULTING ENGINEERS
360 W. FIRST ST. DAYTON 2, OHIO.

WELL LOG OF WELL #6
FOR
MONTGOMERY COUNTY COMMISSIONERS

Scale - 1"=30'	Drawn	Checked	
Date:	Mar. 1953		

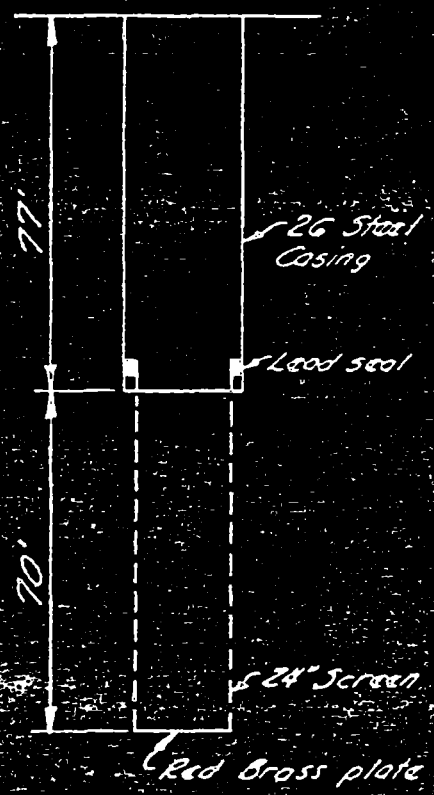
77' of 26" Steel Casing (½" wall)

70' of 24" Red Brass Cook Screen

Red Brass plate

Customer's

Fill	
10	Clay Sand & Gravel
38	Sand & Gravel
80	Sand & Heavey Gravel
110	Sand & Gravel
124	Coarse Sand & Gravel
146	Br. Med. Sand
150	Sand & Gravel
160	Sand & Gravel Lenses Clay
180	Clay & Gravel
195	



Type			
Started	None		32'
Started	6-1-65		
Finished	8-1-65	Pumped	
Accepted	8-1-65	Depth	147'
			ground level

REMARKS:

Driller: Sterlie Rogers

Installer:

THE LAYNE C

WATER SUPPLY ON

COLUMBUS

MONTGOMERY COUNTY

DAYTON, OHIO

RF1-OLM

137

1565

MATERIAL

90' of 26" Steel Casing (½" Wall)

70' of 24" Red Brass Cook

Red Brass Bottom

CUSTOMERS

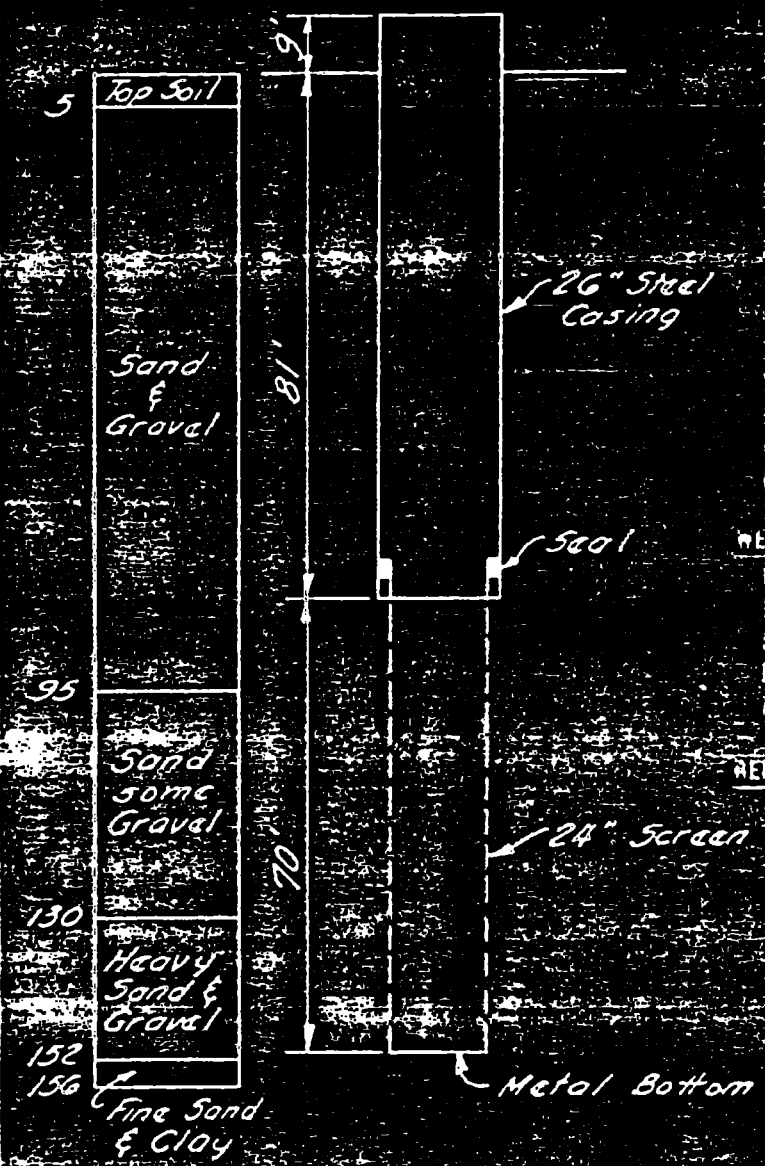
No.		Shop No.	
Type		Size	
[illegible]		[illegible]	
Sucking		[illegible]	
Discharge		[illegible]	
Tubing		Press	
Shafting			

[illegible]		Type	
Volts		[illegible]	
Phase		Amp.	
H. P.		R. P.	
Frame		Serial	

WELL

Capacity	2000 GPM	Static	37'-2"
Guarantee	None	P. Lo.	42'-2"
Started	8-5-65	Press	
Finished	9-22-65	Pumped	2000 GPM
Accepted	9-22-65	Depth	151' ground level

REMARKS



Driller: Sterlie Rogers

Installer:

THE LAYNE O[illegible]

WATER SUPPLY CONTRACTORS

MONTGOMERY COUNTY
DAYTON, OHIO

July 16, 1971

Ralph Woolperts & Associates
3732 Stanley Avenue
Dayton, Ohio 45404

TOP GROUND 714.6

ATTN: Jim Herman

Subject: Montgomery County
Well #

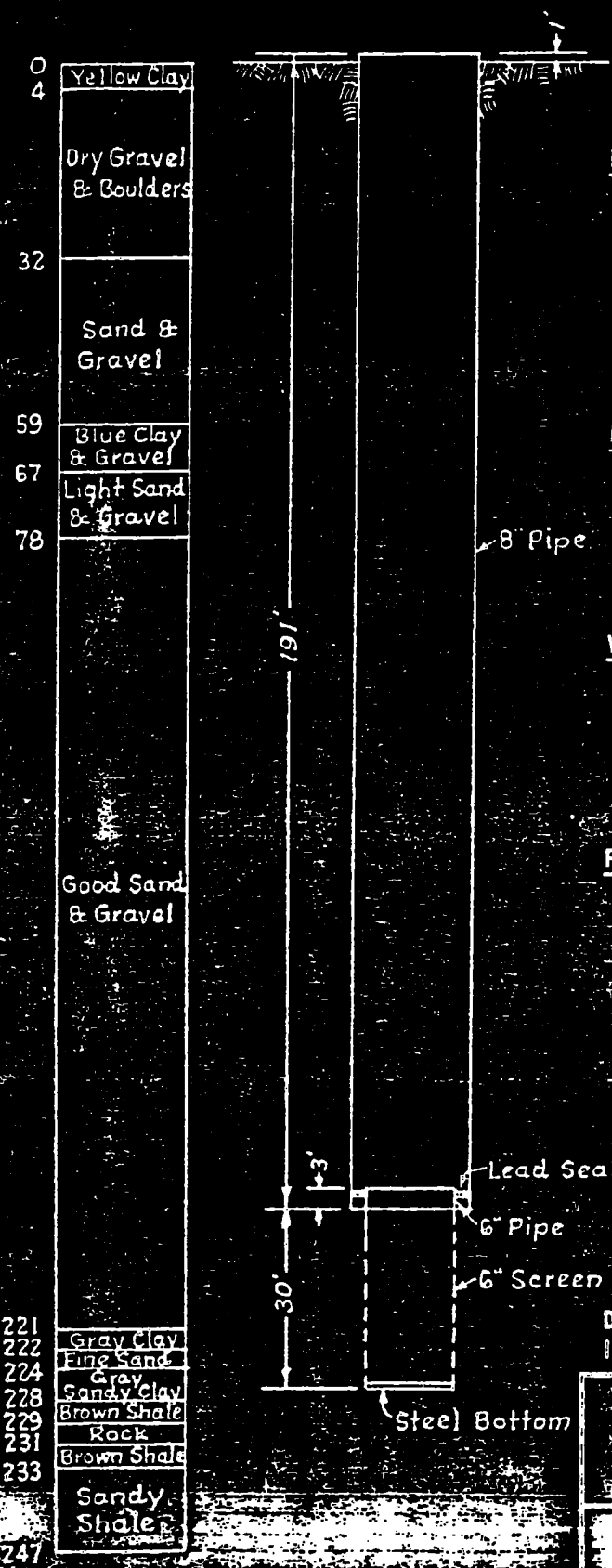
Gentlemen:

The subject well has been drilled to bedrock and the driller's log is as follows:

By Everett Wheeler & O'Dell Burgess

Approximate Static 60'

0' - 1'	Top soil
1' - 14'	Clay with sand and gravel
14' - 40'	Sand and gravel, medium to large boulders
40' - 55'	Sand and gravel, medium to large boulders
55' - 60'	Small gravel and coarse sand
60' - 72'	Large pea gravel and fine sand
72' - 75'	Large pea gravel and fine sand
75' - 85'	Large pea gravel and fine sand
85' - 100'	Large pea gravel and fine sand
100' - 112'	Large pea gravel and fine sand
112' - 120'	Coarse and fine sand
120' - 125'	Large to medium gravel and coarse sand
125' - 130'	Large to medium gravel and coarse sand
130' - 135'	Large to medium gravel and coarse sand
135' - 140'	Large to medium gravel and coarse sand
140' - 148'	Large to medium gravel and coarse sand
148' - 159'	Yellow clay
159' - 163'	Boulders and coarse gravel
163' - 176'	Clay - yellow, brown, blue
176' - 188'	Dirty sand and gravel
188' - 191'	Blue shale



MATERIAL:

Pit: 191' of 8" Steel Pipe

Screen: 30' of 6" Nominal Cook Screen with 3' of 6" Blank Pipe on Top.

Cone: Steel Bottom.

PUMP:

No.	Shop No.
Type	Size
Setting	Stages
Suction	Impellers
Discharge	Head
Tubing	Press. B. P.
Shafting	

MOTOR:

Make	Type
Volts	Cycle
Phase	Amp.
H. P.	R. P. M.
Frame	Serial

WELL:

Capacity		Static Level	29'
Guarantee		P. Level	
Started	6-21-51	Pressure	
Finished	7-9-54	Pumped	
Accepted	7-9-54	Depth	220'

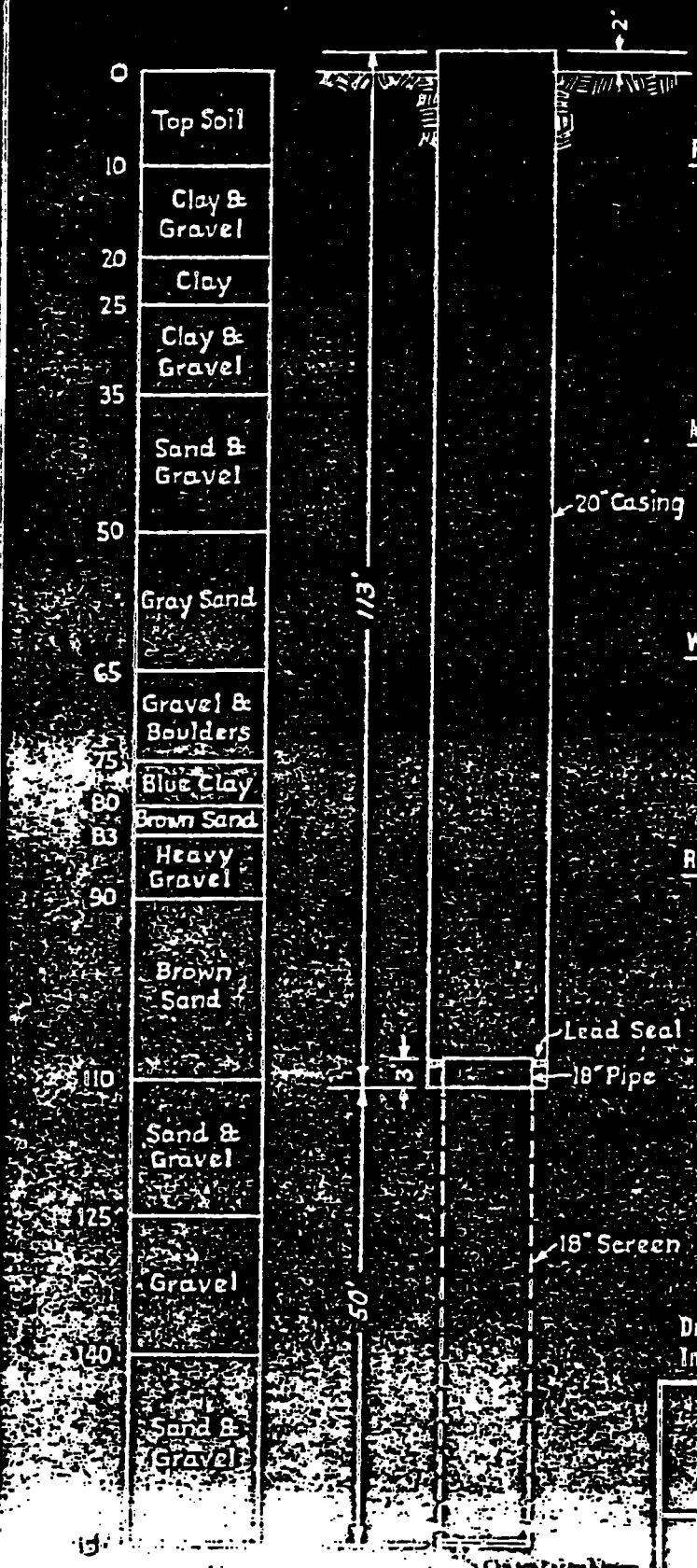
REMARKS:

Driller: Robert Hamm

Installer:

THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

MONTGOMERY CO.
DAYTON, OHIO



MATERIAL:

Pit: 113' of 20" × 3/8" Steel Casing.

Screen: 50' of 18" O.D. Red Brass Cook Screen with 3' of 18" Blank Pipe on Top.

Cone: Metal Bottom

PUMP:

No.	Shop No.
Type	Size
Setting	Stages
Suction	Impellers
Discharge	Head
Tubing	Press. B. P.
Shafting	

MOTOR:

Make	Type
Volts	Cycle
Phase	Amp.
H. P.	R. P. M.
Frame	Serial

WELL:

Capacity	2200 G.P.M.	Static Level	31'-5"
Guarantee	None	P. Level	44'-8"
Started	1-3-56	Pressure	
Finished	1-22-56	Pumped	2200 G.P.M.
Accepted	1-22-56	Depth	161'

REMARKS:

Driller: Toledo Rogers

Installer:

THE LAYNE-OHIO CO.
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

MONTGOMERY CO.
DAYTON, OHIO

1304

JET AND TURBINE PUMPS
SALES AND SERVICE
CAPACITY TESTS

ROTARY DRILLING
CORE DRILLING
WATER WELLS

DONALD J. ROE

GROUND WATER CONSULTANT
150 N. DIXIE DRIVE — P.O. BOX 211
VANDALIA, OHIO
PHONE ~~MO 4-4514~~ TW-8-1514

July 25, 1958

Board of County Commissioners
County Sanitary Department
127 North Perry Street
Dayton 2, Ohio

Gentlemen:

The following is the log of the 16 inch well at your Dryden Road Well Fields

Well #5 Dryden Road

0-15 Top soil sandy till with stones drilled
15-54 very coarse clean gravel bailed large stones
54-79 till dense drilled no stones
79-103 medium gravel very clean bailed easy
103-128 Fine gravel and coarse sand bailed some silt
128-161 coarse sand with beds of very large stones
161-175 fine uniform gravel bailed easy drank water
175-180 till very dense drilled.

Static level 9 feet 8 inch July 2, 1958

The above measurements were taken from ground level.

Over all length of screen 43 feet
top of screen 113 feet
bottom of screen 156 feet

The well was back filled with pea gravel from 156 feet to 180 feet.

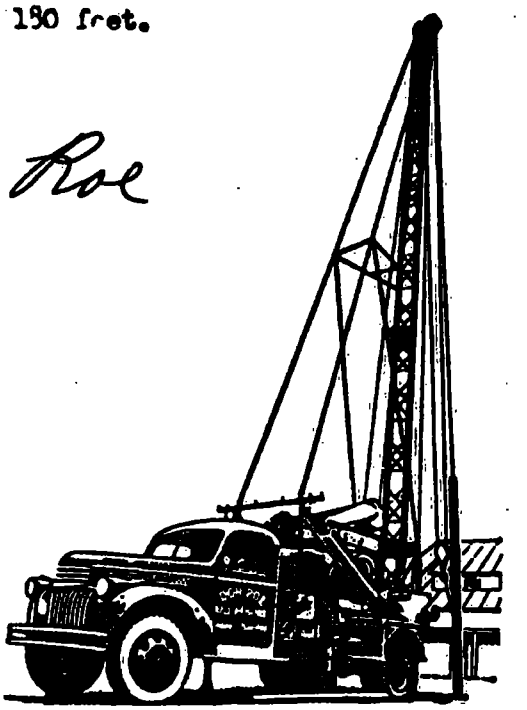
Yours very truly,

Donald J. Roe

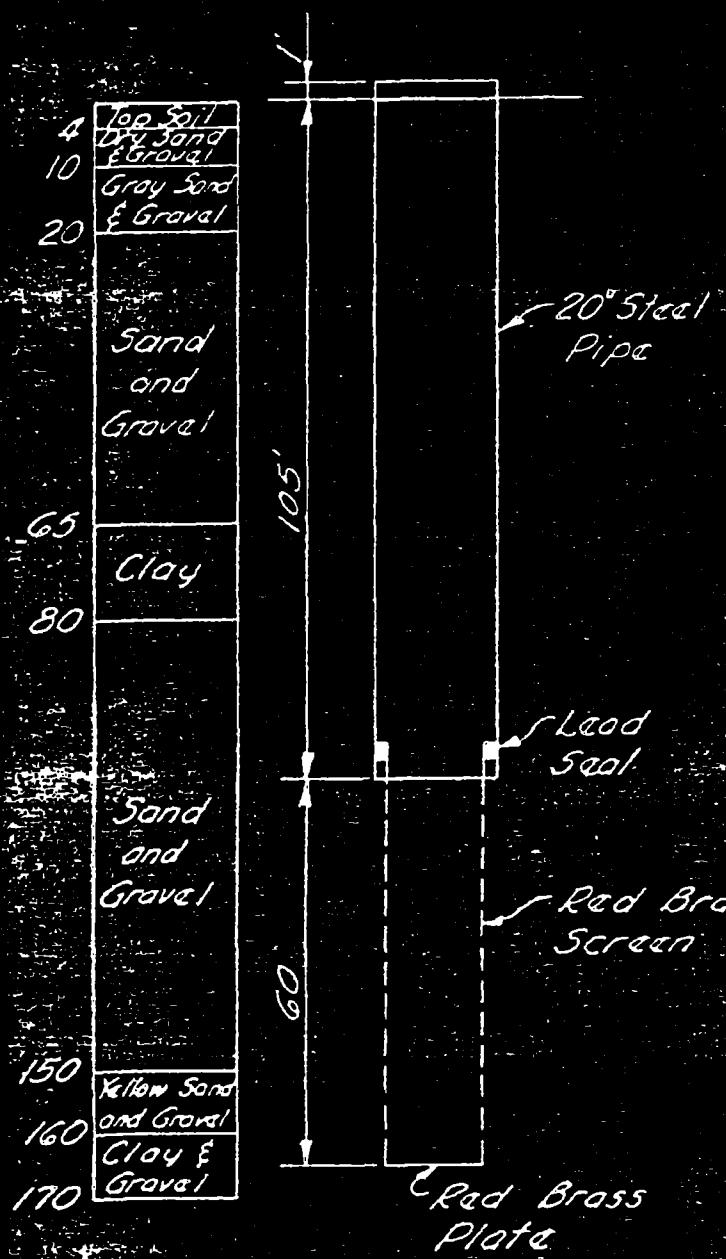
Donald J. Roe

Director
CC: Ralph L. Woolpert Co.

P.S. Electric log is attached.



ELECTRIC LOGGING OF WELLS
WELL FIELD CAPACITIES SCIENTIFICALLY DETERMINED
WATER SUPPLIES GUARANTEED



CASING: 106' of 20" Steel Pipe

SCREEN: 60' of 20" Nominal Cook Red Brass Screen

BASE: Red Brass Plate

PUMP: Customers

No.	Stage No
Type	Size
Setting	Stages
Suction	Impeller
Discharge	Bearing
Tubing	Bearing
Shafting	

MOTOR:

Make	Type
Volts	Cycle
Phase	Amps
H. P.	R. P. M.
Frame	Serial

WELL:

Capacity	2005 G.P.M.	Static L.	43'
Guarantee	None	P. Level	52'-8"
Started	8-17-64	Pressure	
Finished	9-25-64	Pumped	2005 G.P.M.
Accepted	9-25-64	Depth	165'

REMARKS:

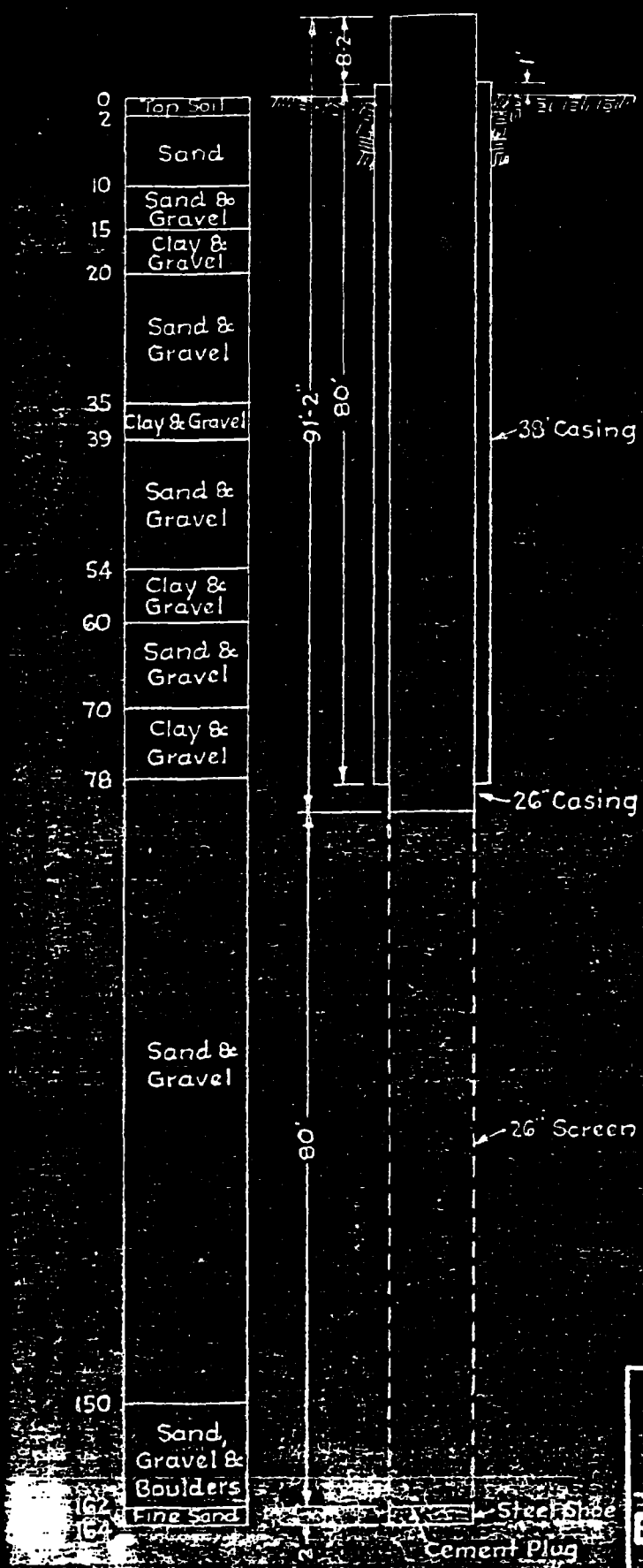
Driller: Toledo Rodgers
Installer:

THE LAYNE OHIO
WATER SUPPLY CONTRACTORS
COLUMBUS

MONTGOMERY COUNTY
DAYTON, OHIO

13

1551



MATERIAL:

Pit 80' of 38" Steel Casing & 91'-2" of 26" Steel Casing

Screen 80' of 26" Steel Shutter Screen.

Cone: 26" x 2' Steel Shoe.

PUMP:

No.	40729	Shop No.	40729
Type	T.L.C.	Size	14"
Setting	110'	Stages	4
Suction	10" x 10' Long	Impellers	
Discharge	12"	Head	
Tubing	3"	Press. B. P.	
Shafting	1 15/16"		

MOTOR:

Make	U.S.	Type	C.P.U.
Volts	440	Cycle	60
Phase	3	Amp.	
H. P.	200	R. P. M.	1800
Frame	587 P.Y.	Serial	

WELL:

Capacity	2700 G.P.M.	Static Level	19'
Guarantee	None	P. Level	28'-8"
Started	9-4-59	Pressure	
Finished	9-24-59	Pumped	2700 G.P.M.
Accepted	9-24-59	Depth	164'

REMARKS:

80 Tons of Pea Gravel Used.

Driller: Toledo Rogers
Installer: Elmer Hurles, Jr.

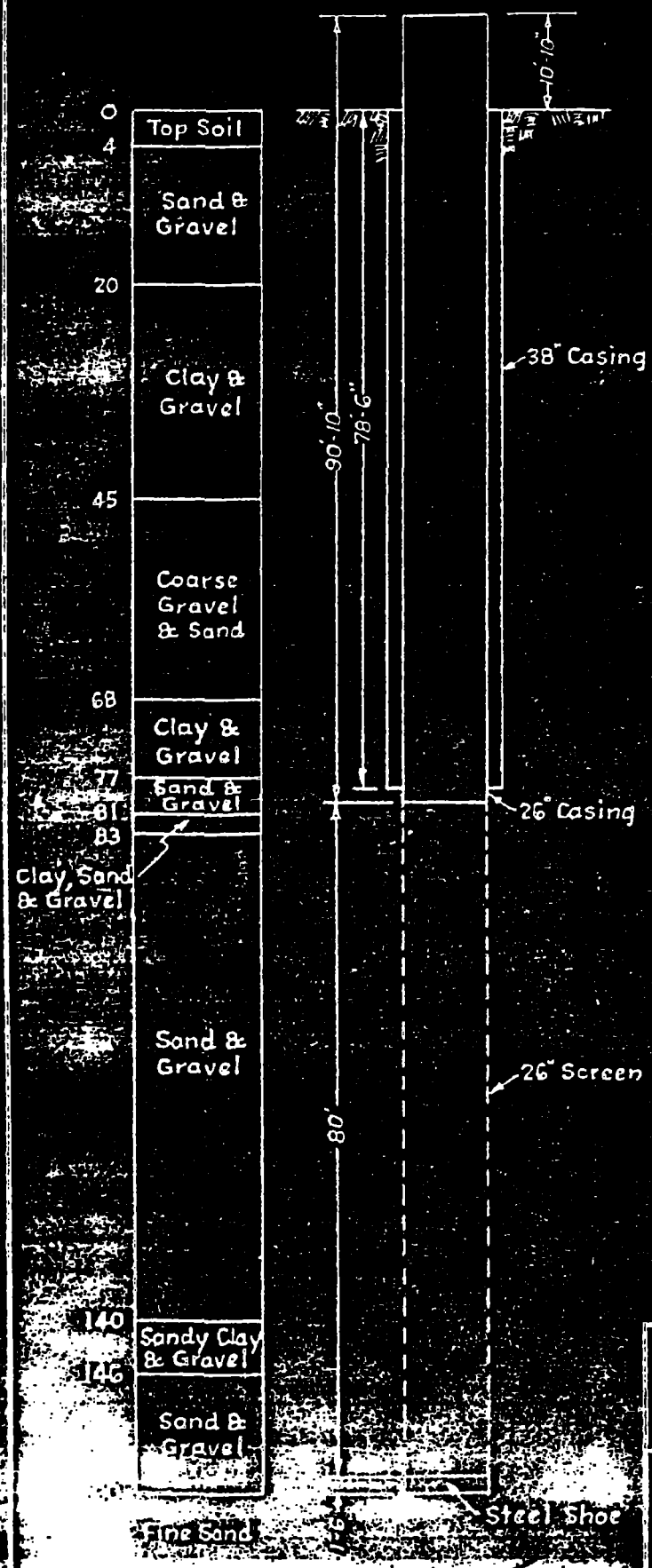
THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

BOARD OF COMMISSIONERS
MONTGOMERY, COUNTY
DAYTON, OHIO

O.L.M. APPROVED BY

1416

#11



MATERIAL:

Pit: 78'-6" of 38" × 5/16" Casing & 90'-10" of 26" × 5/16" Casing.

Screen: 80' of 26" Ingot Iron Shutter Screen.

Cone: 1'-6" of Steel Shoe.

PUMP:

No.	Shop No.
Type	Size
Setting	Stages
Suction	Impellers
Discharge	Head
Tubing	Press. B. P.
Shafting	

MOTOR:

Make	Type
Volts	Cycle
Phase	Amp.
H. P.	R. P. M.
Frame	Serial

WELL:

Capacity	3200 G.P.M.	Static Level	8'-9"
Guarantee		P. Level	23'
Started	4-24-59	Pressure	
Finished	5-22-59	Pumped	3200 G.P.M.
Accepted	5-22-59	Depth	160'-1"

REMARKS:

60 Tons of Pea Gravel Used.

Driller: S. Rogers
Installer:

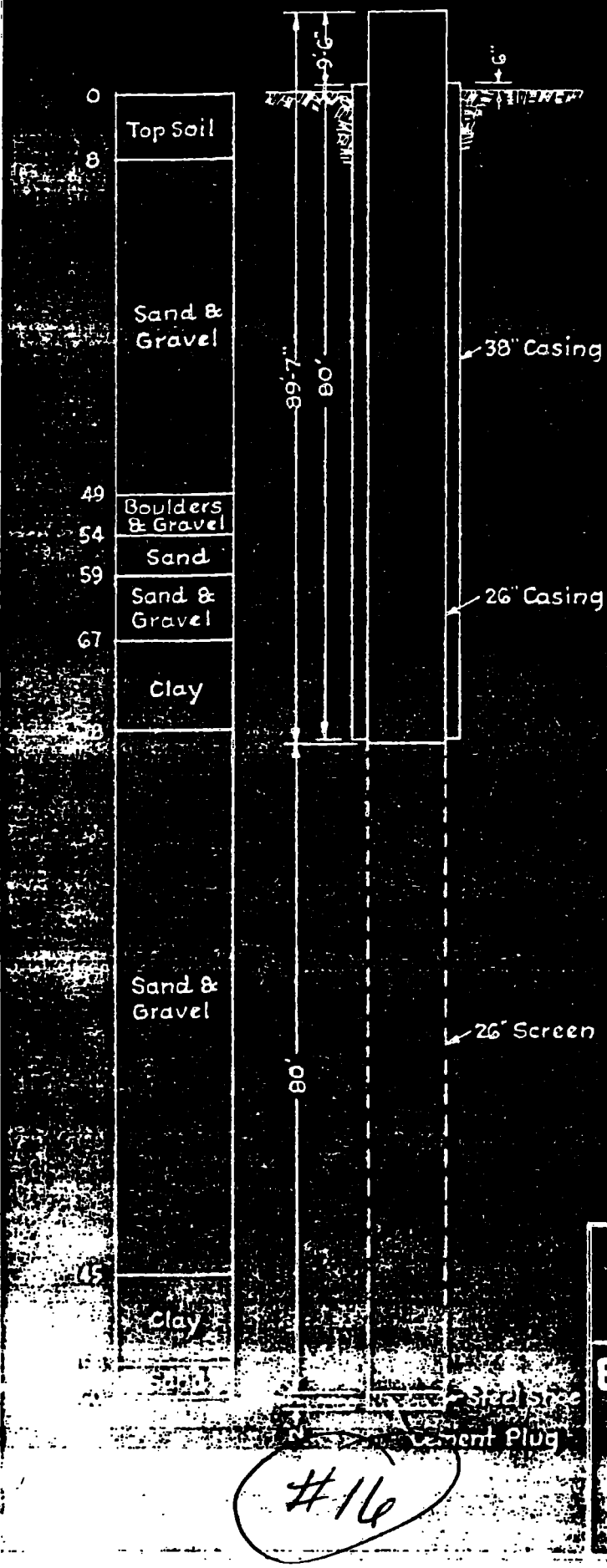
THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

MONTGOMERY COUNTY WATER SYSTEM

MIAMI SHORE FIELD

D. L. McC. APPROVED BY [illegible] 1383

#15



MATERIAL:

Pit: 80' of 38" Steel Casing & 89'-7 of 26" Steel Casing.

Screen: 80' of 26" Steel Shutter Screen.

Cone: 26" x 2' Steel Shoe.

PUMP:

No.	40728	Shop No.	40728
Type	T.L.C.	Size	14"
Setting	110'	Stages	4
Suction	10" x 10'	Impellers	
Discharge	12"	Head	
Tubing	3"	Press. B. P.	
Shafting	1 15/16"		

MOTOR:

Make	U.S.	Type	C.P.U.
Volts	440	Cycle	60
Phase	3	Amp.	
H. P.	200	R. P. M.	1800
Frame	587 P.Y.	Serial	

WELL:

Capacity		Static Level	30'
Guarantee		P. Level	
Started	9-29-59	Pressure	
Finished	10-15-59	Pumped	
Accepted	10-15-59	Depth	161'-7"

REMARKS:

Driller: Toledo Rogers
Installer: Elmer Hurles, Jr.

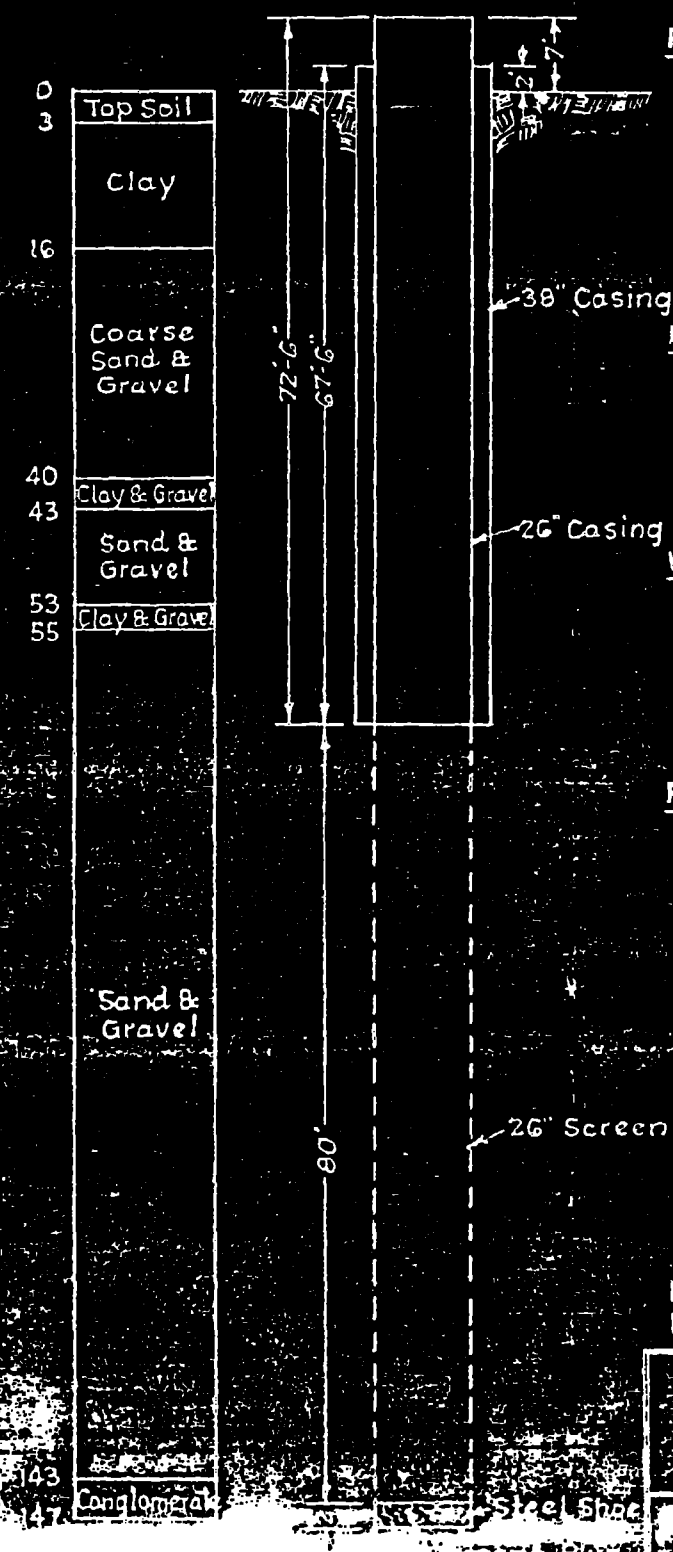
THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

BOARD OF COMMISSIONERS
MONTGOMERY COUNTY
DAYTON, OHIO

APPROVED BY

1417

#16



MATERIAL:

Pit: 67'-6" of 38" Steel Casing & 72'-6" of 26" Steel Casing.

Screen: 80' of 26" Steel Shutter Screen.

Cone: 26" × 2' Steel Shoe.

PUMP:

No.	43449	Shop No.	43449
Type	T.L.C.	Size	14"
Setting	100'	Stages	4
Suction	10" × 10' Long	Impellers	
Discharge	10"	Head	
Tubing	3"	Press. B. P.	
Shafting	1 15/16"		

MOTOR:

Make	U.S.	Type	C.F.U.
Volts	440	Cycle	60
Phase	3	Amp.	
H. P.	200	R. P. M.	1800
Frame	587 P.Y.	Serial	

WELL:

Capacity	3000 G.P.M.	Static Level	11'
Guarantee	None	P. Level	24'-10"
Started	5-19-61	Pressure	
Finished	6-13-61	Pumped	3000 G.P.M.
Accepted	6-13-61	Depth	145'-6" Ground Level

REMARKS:

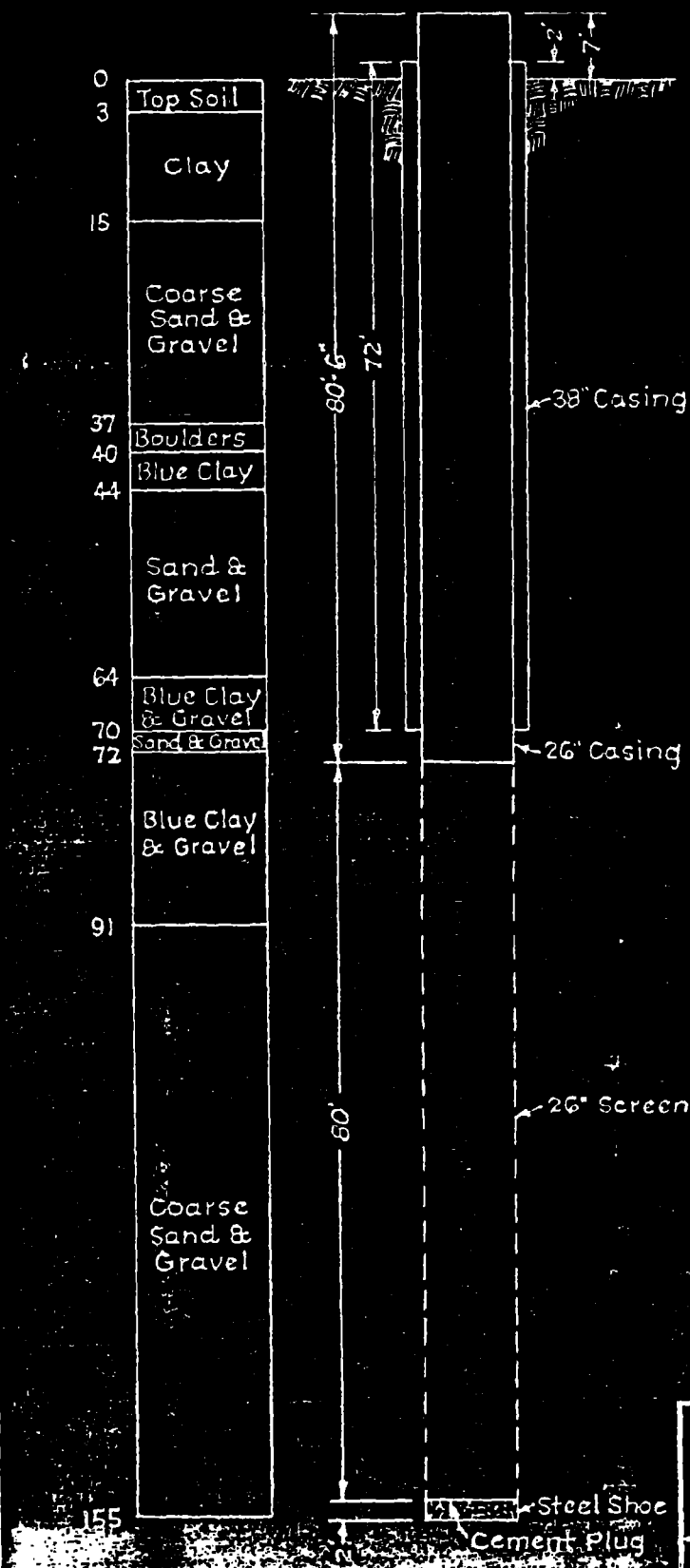
90 Tons of Pea Gravel Used.

Driller: Neil Morris
Installer: Elmer Hurles, Jr.

THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

MONTGOMERY COUNTY
DAYTON, OHIO

#17



MATERIAL:

Pit: 72' of 38" Steel Casing & 80'-6" of 26" Steel Casing.

Screen: 80' of 26" Steel Shutter Screen.

Cone: 26" × 2' Steel Shoe.

PUMP:

No.	43448	Shop No.	43448
Type	T. L. C.	Size	14"
Setting	100'	Stages	4
Suction	10" × 10' Long	Impellers	
Discharge	10"	Head	
Tubing	3"	Press. B. P.	
Shafting	1 15/16"		

MOTOR:

Make	U.S.	Type	C. F. U.
Volts	440	Cycle	60
Phase	3	Amp.	
H. P.	200	R. P. M.	1800
Frame	587 P.Y.	Serial	

WELL:

Capacity	2000 G.P.M.	Static Level	11'
Guarantee		P. Level	16'-10"
Started	6-22-61	Pressure	
Finished	8-4-61	Pumped	2000 G.P.M.
Accepted	8-4-61	Depth	153'-6" Ground Level

REMARKS:

146 Tons of Pea Gravel Used.

Driller: Neil Morris
Installer: Elmer Hurles, Jr.

THE LAYNE-OHIO CO.,
WATER SUPPLY CONTRACTORS
COLUMBUS OHIO

MONTGOMERY COUNTY
DAYTON, OHIO

#18

file

July 16, 1971

Ralph Woolperts & Associates
2324 Stanley Ave.
Dayton, Ohio 45404

ATTN: Jim Herman

Subject: Montgomery County
Well ~~#2~~ 19

Gentlemen:

The drillers' log on the subject well is as follows:

By Everett Wheeler

0' - 1'	Top soil
1' - 84'	Sand and gravel; medium to large small boulders
84' - 116'	Sand- fine to coarse, medium gravel
116' - 149'	Sand- coarse, gravel- large
149' - 166'	Sand- coarse, gravel- large 50% boulders
166' - 172'	Sand- red, fine to coarse, gravel- small
172' - 202'	Sand- red, coarse, gravel- large
202' - 223'	Sand red, coarse, gravel- large, many boulders
223' - 224'	Clay, yellow
224' - 225'	Shale, blue

Per our recent meeting with Rick Bethard from the Cook Well Strainer Company, we have ordered the following screen for the subject well. Cook 12" nominal strainer, red brass material with .1875 bar and .1467 wire complete with lead packer and bail plug. Slot openings will be comprised as follows:

138' - 165'	- 27'	-	100 Slot
165' - 173'	- 8'	-	40 Slot
173' - 175'	- 2'	-	70 Slot
175' - 190'	- 15'	-	100 Slot
190' - 212'	- 22'	-	90 Slot
212' - 223'	- 11'	-	125 Slot

85

Well #20

July 21, 1971

Ralph Woolperts & Associates
2224 Stanley Avenue
Dayton, Ohio 45404

ATTN: Jim Norman

Subject: Montgomery County
Well [redacted] #20

Gentlemen:

The drillers' log on the subject well is as follows:

By Everett Wheeler
Approximate Static 60'

0' - 3'	-	Top Soil
3' - 28'	-	Sand and gravel (dry)
28' - 60'	-	Coarse sand and coarse gravel (dry)
60' - 86'	-	Gray clay
86' - 131'	-	Coarse sand and coarse gravel
131' - 145'	-	Coarse sand and coarse gravel (few boulders)
145' - 156'	-	Coarse sand and coarse gravel (red color)
156' - 163'	-	Medium sand and medium gravel
163' - 200'	-	Medium sand and medium gravel (red color)
200' - 216'	-	Coarse sand and coarse gravel (red color)
216' - 227'	-	Coarse sand and coarse gravel (red color)
227' - 232'	-	Blue shale (bedrock)

We are enclosing two (2) copies of the sand sample analysis from 185' thru 227'. One (1) copy of all data is being forwarded to Cook Well Strainer Co., ATTN: Rick Bethard. We will be in touch with you concerning recommendations for length of strainer, slot openings, and bar and wire sizes. If you have any questions, or need more information, please advise.

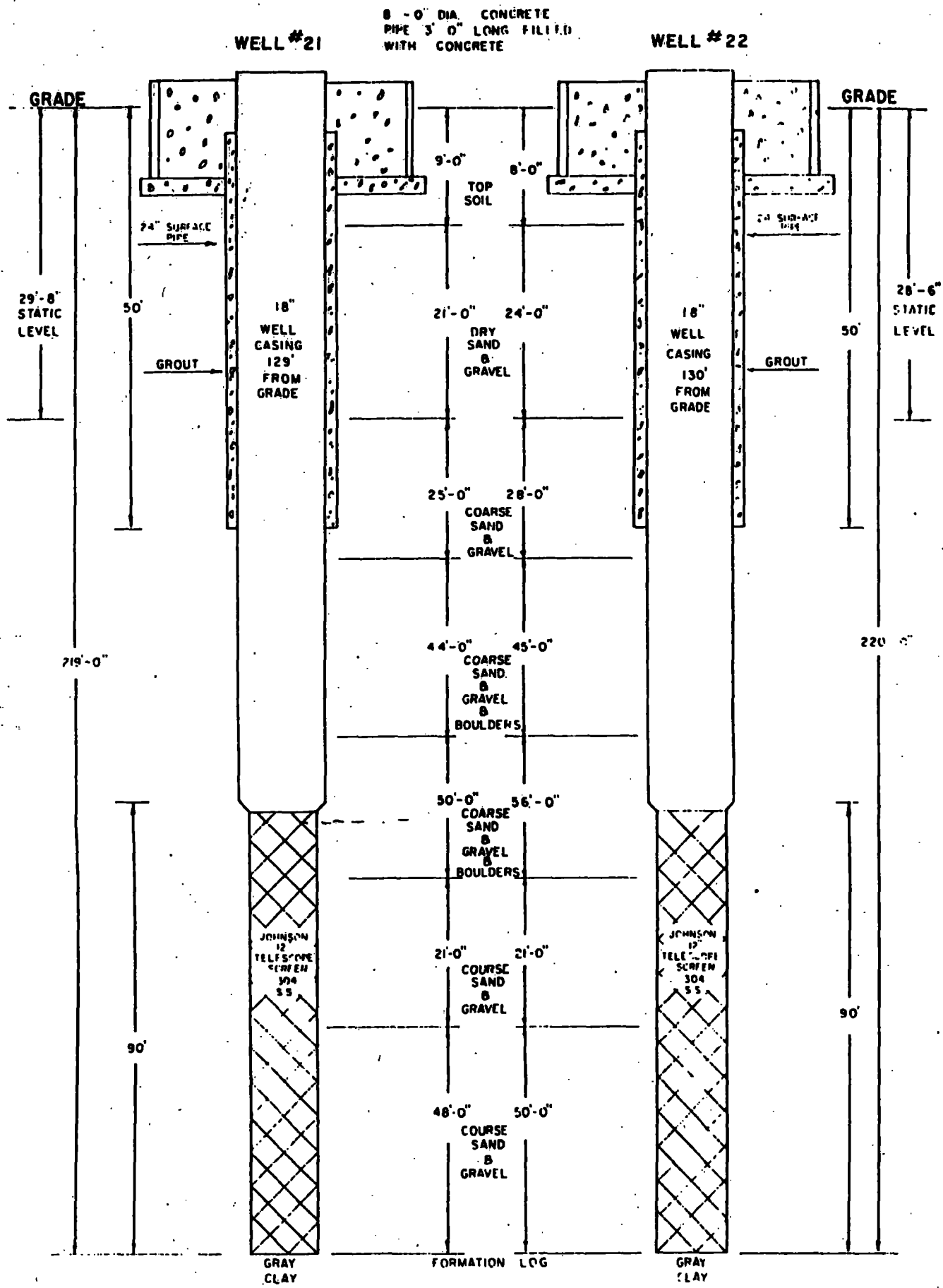
Very truly yours,

MOODY'S OF DAYTON, INC.

Edward E. Wagner
President

EEW/[illegible]

cc Cookwell Strainer Co
ATTN: Rick Bethard



NOTE

WELLS WERE DRILLED BY REVERSE CIRCULATION ANNULAR SPACE BETWEEN 24" NOMINAL BORE HOLE AND SCREEN IS PACKED WITH #4 SILICA GRAVEL

WELLS 21 AND 22
MONTGOMERY COUNTY
MIAMI SHORES WELL FIELD DRILLED BY REYNOLDS SUPPLY
MIDDLETOWN, OHIO
APRIL, 1978

FROST ASSOCIATES

FILED

P.O.Box 495, Essex, Connecticut 06426
(203) 767-7644 FAX (203) 767-1971

Dec 2, 1994

To: PRC Environmental Management Inc.
233 North Michigan Ave. Suite 1621
Chicago, IL 60601

Attn: Jack Brunner

Fr: Frost Associates
P.O. Box 495
Essex, Conn 06426

Tel: (203) 767-1254
Fax: (203) 767-7069

Sub: 1976 Springboro Road
Moraime, OH

Job: 030-0035-39B

Site Longitude: 84-13-17 84.221390
Site Latitude : 39-43-34 39.726109

The CENTRACTS report below identifies the population, households, and private water wells of each Block Group that lies within, or partially within, the 4, 3, 2, 1, .5, and .25, mile "rings" of the latitude and longitude coordinates above. CENTRACTS may have up to ten radii of any length. 1000 block groups, and 15000 block group sides.

CENTRACTS uses the 1990 Block Group population and Block Group house count data found in the Census Bureau's 1990 STF-1A files. The sources of water supply data are from the Bureau's 1990 STF-3A files. The boundary line coordinates of the Block Groups were extracted from the Census Bureau's 1990 TIGER/Line Files.

CENTRACTS reports are created with programs written by Frost Associates, P.O. Box 495, Essex, Conn. The code was written using Microsoft's Quick-Basic Ver. 4.5.

Latitude and Longitude coordinates identifying a site are entered in degrees and decimal degrees. One or more county files holding Block Group boundary lines are selected for use by CENTRACTS by determining whether the site coordinates fall within the minimum and maximum Lat\Lon coordinates of each county in the state.

Each Block Group line segment has Lat\Lon coordinates representing the "From" and "To" ends of that line. All coordinates from the selected county files are read and converted from degrees, decimal degrees to X\Y miles from the site location. Each line segment is then examined whether it lies within or partially within the maximum ring from the site.

The unique Block Group ID numbers of each line segment that lie within the maximum ring are retained. All Block Group boundary lines matching the Block Group numbers are then extracted from the respective county files to obtain all sides of the included Block Groups. Boundary records are then sorted in adjacent side order to determine the shape and area of each Block Group polygon.

A method to solve for the area of a polygon is to take one-half the sum of the products obtained by multiplying each X-coordinate by the difference between the adjacent Y-coordinates. For a polygon with coordinates at adjacent angles A, B, C, D, and E. The formula can be expressed:

Area = 1/2{Xa(Ye-Yb)+ Xb(Ya-Yb)+ Xc(Yb-Yd)+ Xd(Yc-Ye)+ Xe(Yd-Ya)}

For each ring, the selected Block Groups will be inside, outside, or intersected by the ring. When a polygon is intersected, the partial Block Group area within that ring is calculated using the method described below.

When a ring intersects a Block Group, the intersect points are solved and plotted at the points where the ring enters and exits the shape. The chord line, a line within the circle connecting the intersect points is determined. This chord line is used to calculate the segment area, the half moon shape between the chord line and the ring, and the sub-polygon created by the chord line and the Block Group boundaries that lie outside the ring.

The segment area is subtracted from the sub-polygon area to determine the area of the sub-polygon outside the ring. The area outside the ring is then subtracted from the area of the entire polygon to arrive at the inside area. This inside area is then divided by the tract's total area to determine the percentage of area within the ring. This process is repeated for each block group that is intersected by one of the rings. The total area, partial area, and percentage of partial area of those block groups within, or partially within a ring, are held in memory for the report.

On occasion, the algorithm described above is unable to determine the area of the partial area. Within the report program is a "Paint" routine which allows an enclosed shape to be highlighted. Another routine calculates the percentage of highlighted screen pixels to the pixels within the polygon. A manual entry is allowed. Both the "paint" method and manual entry method over ride the calculated method.

CENTRACTS lists, starting on page 4, all Block Groups in State, County, Census Tract, and Block Group ID order that lie within, or partially within, the maximum ring. Each Block Group is identified by a City or Town name and by the Block Group's State, County, Tract and Block Group ID number. Following is the Block Group's 1990 populu tion and house count extracted from the Census Bureau's 1990 STF-1A files.

The next four columns display water source data from the 1990 STF-3A files. The first column is "Units with Public system or private company source of water", followed by "Units with individual well, Drilled, source of water"; "Units with individual well, Dug, source of water" and "Units with Other source of water".

For each ring, CENTRACTS then shows the Block Groups that are within that ring, the Block Group's total area in square miles, the partial area of the Block Group within that ring, and the partial percentage within the ring. The areas of the included Block Group and the partial areas are then totaled.

The last section tallies the demographic data within each ring. The percentage of area for each Block Group is multiplied times the census data for that Block Group and totaled for all Block Group's within the ring. Ring totals are then determined by subtracting the three mile data from the four mile, the two mile from the three mile, one from the two, etc... Population on private wells is calculated using the formula: ((Drilled + Dug Wells) / Households) * Population

1976 Springboro Road
Moraime, OH

No.	City	Block Group ID	Blk Grp People	House Holds	Public Water	Drilled Wells	Dug Wells	Other
1	Dayton	39113 0002 3	1482	561	589	0	0	0
2	Dayton	39113 0003 4	2701	1458	1530	0	0	0
3	Dayton	39113 0004 1	749	306	327	0	0	0
4	Dayton	39113 0004 2	546	277	284	0	0	0
5	Dayton	39113 0004 3	495	182	159	0	0	0
6	Dayton	39113 0004 4	363	129	114	0	0	0
7	Dayton	39113 0004 5	598	174	157	0	0	0
8	Dayton	39113 0004 6	1048	385	372	0	0	0
9	Dayton	39113 0004 7	1522	549	526	0	0	0
10	Dayton	39113 0005 4	837	348	384	0	0	0
11	Dayton	39113 0005 5	613	230	215	0	0	0
12	Dayton	39113 0005 6	634	264	274	0	0	0
13	Dayton	39113 0005 7	672	238	201	0	0	0
14	Dayton	39113 0005 8	593	253	243	0	0	0
15	Dayton	39113 0006 1	456	174	156	0	0	0
16	Dayton	39113 0006 2	464	171	166	0	0	0
17	Dayton	39113 0006 3	749	277	275	0	0	0
18	Dayton	39113 0006 4	552	212	226	0	0	0
19	Dayton	39113 0007 1	941	314	299	0	0	0
20	Dayton	39113 0007 2	757	323	351	0	0	0
21	Dayton	39113 0007 3	56	18	17	0	0	0
22	Dayton	39113 0007 4	1354	483	451	0	0	0
23	Dayton	39113 0007 5	1223	438	394	0	0	15
24	Dayton	39113 0007 6	1100	402	423	0	0	14
25	Dayton	39113 0007 7	437	223	237	0	0	0
26	Dayton	39113 0008 2	2560	1275	1248	0	0	0
27	Dayton	39113 0008 3	907	434	448	0	0	0
28	Dayton	39113 0008 4	1000	487	520	0	0	0
29	Dayton	39113 0008 5	1192	532	508	0	0	0
30	Dayton	39113 0008 6	1888	897	928	0	0	0
31	Dayton	39113 0009 1	898	338	289	0	0	0
32	Dayton	39113 0009 2	1229	573	525	0	0	0
33	Dayton	39113 0009 3	719	255	294	0	0	0
34	Dayton	39113 0009 4	1123	395	381	0	0	0
35	Dayton	39113 0009 5	962	653	705	0	0	0
36	Dayton	39113 0010 1	449	227	244	0	0	0
37	Dayton	39113 0010 2	570	252	250	0	0	0
38	Dayton	39113 0010 3	573	306	307	0	0	0
39	Dayton	39113 0010 4	757	421	425	0	0	0
40	Dayton	39113 0011 6	995	472	462	0	0	0
41	Dayton	39113 0012 1	903	399	404	0	0	0
42	Dayton	39113 0012 2	507	258	245	0	0	0
43	Dayton	39113 0012 3	1039	610	601	0	0	0
44	Dayton	39113 0013 1	1027	935	948	0	0	0
45	Dayton	39113 0013 2	487	359	369	0	0	0
46	Dayton	39113 0014 1	379	325	324	0	0	0
47	Dayton	39113 0014 2	133	100	95	0	0	0
48	Dayton	39113 0015 1	498	75	64	0	0	0
49	Dayton	39113 0015 2	496	413	418	0	0	0
50	Dayton	39113 0015 3	261	260	265	0	0	0
51	Dayton	39113 0015 4	102	92	103	0	0	0
52	Dayton	39113 0015 5	113	54	47	0	0	0
53	Dayton	39113 0016 2	1444	640	635	0	7	0
54	Dayton	39113 0017 2	159	60	66	0	0	0

1976 Springboro Road
Moraime, OH

55	Dayton	39113	0017	3	476	204	170	0	0	0
56	Dayton	39113	0017	4	306	127	136	0	0	0
57	Dayton	39113	0017	5	1283	610	658	0	0	0
58	Dayton	39113	0017	6	170	91	90	0	0	0
59	Dayton	39113	0018	4	3471	1427	1415	0	0	0
60	Dayton	39113	0018	5	556	262	240	0	0	0
61	Dayton	39113	0019	1	7	4	0	0	0	0
62	Dayton	39113	0019	2	44	21	32	0	0	0
63	Dayton	39113	0019	3	916	380	359	0	0	0
64	Dayton	39113	0019	4	61	21	24	0	0	0
65	Dayton	39113	0019	5	1208	566	546	0	0	0
66	Dayton	39113	0019	6	939	371	362	0	0	0
67	Dayton	39113	0019	7	748	359	378	0	0	0
68	Dayton	39113	0019	8	664	280	287	0	0	0
69	Dayton	39113	0019	9	1464	620	634	0	0	0
70	Dayton	39113	0021	1	39	26	22	0	0	0
71	Dayton	39113	0021	2	86	9	0	0	0	0
72	Dayton	39113	0021	3	1045	478	455	0	0	0
73	Dayton	39113	0021	4	1415	658	673	0	0	0
74	Dayton	39113	0021	5	205	129	125	0	0	0
75	Dayton	39113	0021	6	640	484	503	0	0	0
76	Dayton	39113	0021	7	0	0	0	0	0	0
77	Dayton	39113	0021	8	439	404	413	0	0	0
78	Dayton	39113	0021	9	894	434	431	0	0	0
79	Dayton	39113	0022	1	406	154	172	0	0	0
80	Dayton	39113	0022	2	1056	458	469	0	0	0
81	Dayton	39113	0022	3	408	173	169	0	0	0
82	Dayton	39113	0022	4	1310	561	517	0	0	0
83	Dayton	39113	0022	5	703	286	305	0	0	0
84	Dayton	39113	0023	5	890	336	339	0	0	0
85	Dayton	39113	0026	1	560	216	258	0	0	0
86	Dayton	39113	0026	2	1071	377	393	0	0	0
87	Dayton	39113	0026	3	1025	383	402	0	0	0
88	Dayton	39113	0026	5	867	413	406	0	0	0
89	Dayton	39113	0026	7	940	447	431	0	0	0
90	Dayton	39113	0030	3	959	459	442	0	0	0
91	Dayton	39113	0030	5	871	465	493	0	0	0
92	Dayton	39113	0030	6	947	467	480	0	0	0
93	Dayton	39113	0031	1	1139	850	862	0	0	0
94	Dayton	39113	0031	2	957	447	457	0	0	0
95	Dayton	39113	0031	3	931	468	441	0	5	0
96	Dayton	39113	0032	1	706	403	373	0	0	0
97	Dayton	39113	0032	2	1428	1032	1096	0	0	0
98	Dayton	39113	0032	3	174	101	96	0	0	0
99	Dayton	39113	0032	4	871	389	368	0	0	0
100	Dayton	39113	0032	5	473	269	264	0	0	0
101	Dayton	39113	0033	1	844	328	328	0	0	0
102	Dayton	39113	0033	2	784	346	371	0	0	0
103	Dayton	39113	0033	3	638	290	295	0	0	0
104	Dayton	39113	0033	4	379	160	165	0	0	0
105	Dayton	39113	0033	5	1109	442	423	0	0	0
106	Dayton	39113	0033	6	611	267	269	0	0	0
107	Dayton	39113	0033	7	935	371	363	0	0	0
108	Dayton	39113	0033	8	924	371	361	0	0	0
109	Dayton	39113	0034	1	6	1	0	0	0	0
110	Dayton	39113	0034	2	763	422	419	0	0	0
111	Dayton	39113	0034	3	263	149	144	0	0	0
112	Dayton	39113	0034	4	1796	434	448	0	0	0
113	Dayton	39113	0034	5	3248	275	269	0	0	0
114	Dayton	39113	0034	6	817	267	268	0	0	0

115	Dayton	39113	0035	1	45	20	19	0	0	0
116	Dayton	39113	0035	2	134	68	56	0	0	0
117	Dayton	39113	0035	3	591	128	131	0	0	0
118	Dayton	39113	0035	4	35	19	17	0	0	0
119	Dayton	39113	0035	5	599	234	228	0	0	0
120	Dayton	39113	0035	6	399	156	158	0	0	0
121	Dayton	39113	0035	7	1065	434	440	0	0	0
122	Dayton	39113	0036	1	157	89	67	0	0	0
123	Dayton	39113	0036	2	189	107	114	0	0	0
124	Dayton	39113	0036	3	161	79	81	0	0	0
125	Dayton	39113	0036	4	602	327	331	0	0	0
126	Dayton	39113	0036	5	247	178	189	0	0	0
127	Dayton	39113	0036	6	73	41	43	0	0	0
128	Dayton	39113	0036	7	229	141	140	0	0	0
129	Dayton	39113	0036	8	280	137	142	0	0	0
130	Dayton	39113	0036	9	122	64	66	0	0	0
131	Dayton	39113	0037	1	333	143	160	0	0	0
132	Dayton	39113	0037	2	754	285	262	0	0	0
133	Dayton	39113	0037	3	393	246	255	0	0	0
134	Dayton	39113	0037	4	348	182	206	0	0	0
135	Dayton	39113	0037	5	310	159	150	0	0	0
136	Dayton	39113	0037	6	476	228	215	0	0	0
137	Dayton	39113	0037	7	65	40	39	0	0	0
138	Dayton	39113	0037	8	577	280	276	0	0	0
139	Dayton	39113	0038	1	975	425	431	0	0	0
140	Dayton	39113	0038	2	670	270	270	0	0	0
141	Dayton	39113	0038	3	885	362	365	0	0	0
142	Dayton	39113	0038	4	864	392	402	0	0	0
143	Dayton	39113	0038	5	944	405	417	0	0	0
144	Dayton	39113	0038	6	758	294	263	0	0	0
145	Dayton	39113	0039	1	732	362	352	0	0	0
146	Dayton	39113	0039	2	1535	676	656	0	0	0
147	Dayton	39113	0039	3	504	232	232	0	0	0
148	Dayton	39113	0039	4	1196	456	454	0	0	0
149	Dayton	39113	0040	1	954	434	448	0	0	0
150	Dayton	39113	0040	2	451	231	236	0	0	0
151	Dayton	39113	0040	3	234	107	111	0	0	0
152	Dayton	39113	0040	4	337	126	135	0	0	0
153	Dayton	39113	0041	1	525	218	194	0	0	0
154	Dayton	39113	0041	2	419	167	171	0	0	0
155	Dayton	39113	0041	3	1915	764	802	0	0	0
156	Dayton	39113	0041	4	508	198	196	0	0	0
157	Dayton	39113	0041	5	490	326	309	0	0	0
158	Dayton	39113	0041	6	383	165	166	0	0	0
159	Dayton	39113	0042	1	878	387	352	0	0	0
160	Dayton	39113	0042	2	1704	674	715	0	0	0
161	Dayton	39113	0042	3	1099	564	562	0	0	0
162	Dayton	39113	0043	1	1949	720	722	0	7	0
163	Dayton	39113	0043	2	496	243	237	0	0	0
164	Dayton	39113	0043	3	169	77	70	0	0	0
165	Dayton	39113	0044	1	691	268	268	0	0	0
166	Dayton	39113	0044	2	653	269	260	0	0	0
167	Dayton	39113	0044	3	732	309	292	0	0	0
168	Dayton	39113	0044	4	687	291	300	0	0	0
169	Dayton	39113	0044	5	360	157	161	0	0	0
170	Dayton	39113	0045	1	460	44	39	0	0	0
171	Dayton	39113	0045	2	1273	192	212	0	0	0
172	Dayton	39113	0047	4	27	13	12	0	0	0
173	Dayton	39113	0049	1	10	4	3	0	0	0
174	Oakwood	39113	0101	1	1264	533	543	0	0	0

175	Oakwood	39113	0101	2	808	308	300	0	0	0
176	Oakwood	39113	0102	1	679	275	282	0	0	0
177	Oakwood	39113	0102	2	633	254	251	0	0	0
178	Oakwood	39113	0102	3	998	391	382	0	0	0
179	Oakwood	39113	0102	4	681	270	273	0	0	0
180	Oakwood	39113	0102	5	841	353	365	0	0	0
181	Oakwood	39113	0102	6	1044	469	478	0	0	0
182	Oakwood	39113	0102	7	1092	493	481	0	0	0
183	Oakwood	39113	0102	8	891	460	449	0	0	0
184	Kettering	39113	0201	1	914	406	400	0	0	0
185	Kettering	39113	0201	2	1101	535	551	0	0	0
186	Kettering	39113	0201	3	956	513	503	0	0	0
187	Kettering	39113	0202	1	894	313	297	0	0	0
188	Kettering	39113	0202	2	846	425	425	0	0	0
189	Kettering	39113	0202	3	1337	596	612	0	0	0
190	Oakwood	39113	0203	1	920	456	445	0	0	0
191	Oakwood	39113	0203	2	1050	455	441	0	0	0
192	Oakwood	39113	0203	3	841	330	322	0	0	0
193	Miami	39113	0204	2	909	408	414	0	0	0
194	Miami	39113	0204	3	719	297	271	0	0	0
195	Miami	39113	0204	4	3878	1695	1758	0	0	0
196	Kettering	39113	0205	1	675	485	486	0	0	0
197	Kettering	39113	0205	2	979	458	483	0	0	0
198	Kettering	39113	0207	1	547	247	243	0	0	0
199	Kettering	39113	0207	2	931	409	403	0	0	0
200	Kettering	39113	0207	5	529	398	428	0	0	0
201	Kettering	39113	0208	1	945	461	464	0	0	0
202	Kettering	39113	0208	2	991	430	426	0	0	0
203	Kettering	39113	0208	3	579	344	356	0	0	0
204	Kettering	39113	0209	1	1024	445	448	0	0	0
205	Kettering	39113	0209	2	798	337	310	0	0	0
206	Kettering	39113	0209	3	748	374	370	0	7	0
207	Kettering	39113	0209	4	588	478	511	0	0	0
208	Kettering	39113	0210	1	1044	427	426	0	0	0
209	Kettering	39113	0210	2	620	258	247	0	0	0
210	Miami	39113	0301	1	3059	1381	1351	0	0	0
211	Miami	39113	0301	2	1012	416	392	0	0	0
212	Miami	39113	0301	9	327	188	167	0	26	0
213	Moraine	39113	0302	1	2746	937	928	23	7	0
214	Jefferson	39113	0601	9	3199	1284	660	98	530	5
215	Jefferson	39113	0602	1	678	240	226	0	0	0
216	Jefferson	39113	0602	2	1451	503	497	21	6	0
217	Jefferson	39113	0603	1	973	402	450	0	0	0
218	Jefferson	39113	0603	2	2057	780	738	4	0	0
219	Jefferson	39113	0603	3	1292	232	196	0	17	0
220	Dayton	39113	0703	1	924	333	287	7	0	0
221	Dayton	39113	0703	2	1651	585	596	0	0	0
222	Dayton	39113	0703	3	1309	461	342	11	85	4
223	Washington	39113	0401	023	2274	838	830	0	9	0
224	Miami	39113	0501	013	4250	1929	1916	0	0	0
225	Miami	39113	0501	021	6970	2999	2992	13	7	0
226	West Carrollton	39113	0503	011	1848	844	846	0	0	0
227	West Carrollton	39113	0503	012	1866	893	827	4	64	0
228	Miami	39113	0503	022	2459	877	902	0	7	0
229	Miami	39113	0503	023	3531	1278	1282	0	0	0
230	Madison	39113	0702	013	292	116	102	0	0	0
231	Madison	39113	0702	014	300	130	118	0	0	0
232	Madison	39113	0702	015	336	107	111	0	0	0
233	Madison	39113	0702	019	1100	392	364	0	40	0
234	Madison	39113	0702	021	1194	455	465	0	19	0

235	Madison	39113	0702022	345	140	144	0	0	0
236	Madison	39113	0702023	1058	440	440	0	0	0
	Totals:			210643	91301	90410	181	843	38

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City	Census Tract ID		Tract People	House Count	Public Water	Drilled Wells	Dug Wells	Other Wells
Dayton	39113 0002	3	1482	561	589	0	0	0
Dayton	39113 0003	4	2701	1458	1530	0	0	0
Dayton	39113 0004	1	749	306	327	0	0	0
Dayton	39113 0004	2	546	277	284	0	0	0
Dayton	39113 0004	3	495	182	159	0	0	0
Dayton	39113 0004	4	363	129	114	0	0	0
Dayton	39113 0004	5	598	174	157	0	0	0
Dayton	39113 0004	6	1048	385	372	0	0	0
Dayton	39113 0004	7	1522	549	526	0	0	0
Dayton	39113 0005	4	837	348	384	0	0	0
Dayton	39113 0005	5	613	230	215	0	0	0
Dayton	39113 0005	6	634	264	274	0	0	0
Dayton	39113 0005	7	672	238	201	0	0	0
Dayton	39113 0005	8	593	253	243	0	0	0
Dayton	39113 0006	1	456	174	156	0	0	0
Dayton	39113 0006	2	464	171	166	0	0	0
Dayton	39113 0006	3	749	277	275	0	0	0
Dayton	39113 0006	4	552	212	226	0	0	0
Dayton	39113 0007	1	941	314	299	0	0	0
Dayton	39113 0007	2	757	323	351	0	0	0
Dayton	39113 0007	3	56	18	17	0	0	0
Dayton	39113 0007	4	1354	483	451	0	0	0
Dayton	39113 0007	5	1223	438	394	0	0	15
Dayton	39113 0007	6	1100	402	423	0	0	14
Dayton	39113 0007	7	437	223	237	0	0	0
Dayton	39113 0008	2	2560	1275	1248	0	0	0
Dayton	39113 0008	3	907	434	448	0	0	0
Dayton	39113 0008	4	1000	487	520	0	0	0
Dayton	39113 0008	5	1192	532	508	0	0	0
Dayton	39113 0008	6	1888	897	928	0	0	0
Dayton	39113 0009	1	898	338	289	0	0	0
Dayton	39113 0009	2	1229	573	525	0	0	0
Dayton	39113 0009	3	719	255	294	0	0	0
Dayton	39113 0009	4	1123	395	381	0	0	0
Dayton	39113 0009	5	962	653	705	0	0	0
Dayton	39113 0010	1	449	227	244	0	0	0
Dayton	39113 0010	2	570	252	250	0	0	0
Dayton	39113 0010	3	573	306	307	0	0	0
Dayton	39113 0010	4	757	421	425	0	0	0
Dayton	39113 0011	6	995	472	462	0	0	0
Dayton	39113 0012	1	903	399	404	0	0	0
Dayton	39113 0012	2	507	258	245	0	0	0
Dayton	39113 0012	3	1039	610	601	0	0	0
Dayton	39113 0013	1	1027	935	948	0	0	0
Dayton	39113 0013	2	487	359	369	0	0	0
Dayton	39113 0014	1	379	325	324	0	0	0
Dayton	39113 0014	2	133	100	95	0	0	0
Dayton	39113 0015	1	498	75	64	0	0	0
Dayton	39113 0015	2	496	413	418	0	0	0
Dayton	39113 0015	3	261	260	265	0	0	0
Dayton	39113 0015	4	102	92	103	0	0	0
Dayton	39113 0015	5	113	54	47	0	0	0
Dayton	39113 0016	2	1444	640	635	0	7	0
Dayton	39113 0017	2	159	60	66	0	0	0
Dayton	39113 0017	3	476	204	170	0	0	0

Dayton	39113	0017	4	306	127	136	0	0	0
Dayton	39113	0017	5	1283	610	658	0	0	0
Dayton	39113	0017	6	170	91	90	0	0	0
Dayton	39113	0018	4	3471	1427	1415	0	0	0
Dayton	39113	0018	5	556	262	240	0	0	0
Dayton	39113	0019	1	7	4	0	0	0	0
Dayton	39113	0019	2	44	21	32	0	0	0
Dayton	39113	0019	3	916	380	359	0	0	0
Dayton	39113	0019	4	61	21	24	0	0	0
Dayton	39113	0019	5	1208	566	546	0	0	0
Dayton	39113	0019	6	939	371	362	0	0	0
Dayton	39113	0019	7	748	359	378	0	0	0
Dayton	39113	0019	8	664	280	287	0	0	0
Dayton	39113	0019	9	1464	620	634	0	0	0
Dayton	39113	0021	1	39	26	22	0	0	0
Dayton	39113	0021	2	86	9	0	0	0	0
Dayton	39113	0021	3	1045	478	455	0	0	0
Dayton	39113	0021	4	1415	658	673	0	0	0
Dayton	39113	0021	5	205	129	125	0	0	0
Dayton	39113	0021	6	640	484	503	0	0	0
Dayton	39113	0021	7	0	0	0	0	0	0
Dayton	39113	0021	8	439	404	413	0	0	0
Dayton	39113	0021	9	894	434	431	0	0	0
Dayton	39113	0022	1	406	154	172	0	0	0
Dayton	39113	0022	2	1056	458	469	0	0	0
Dayton	39113	0022	3	408	173	169	0	0	0
Dayton	39113	0022	4	1310	561	517	0	0	0
Dayton	39113	0022	5	703	286	305	0	0	0
Dayton	39113	0023	5	890	336	339	0	0	0
Dayton	39113	0026	1	560	216	258	0	0	0
Dayton	39113	0026	2	1071	377	393	0	0	0
Dayton	39113	0026	3	1025	383	402	0	0	0
Dayton	39113	0026	5	867	413	406	0	0	0
Dayton	39113	0026	7	940	447	431	0	0	0
Dayton	39113	0030	3	959	459	442	0	0	0
Dayton	39113	0030	5	871	465	493	0	0	0
Dayton	39113	0030	6	947	467	480	0	0	0
Dayton	39113	0031	1	1139	850	862	0	0	0
Dayton	39113	0031	2	957	447	457	0	0	0
Dayton	39113	0031	3	931	468	441	0	5	0
Dayton	39113	0032	1	706	403	373	0	0	0
Dayton	39113	0032	2	1428	1032	1096	0	0	0
Dayton	39113	0032	3	174	101	96	0	0	0
Dayton	39113	0032	4	871	389	368	0	0	0
Dayton	39113	0032	5	473	269	264	0	0	0
Dayton	39113	0033	1	844	328	328	0	0	0
Dayton	39113	0033	2	784	346	371	0	0	0
Dayton	39113	0033	3	638	290	295	0	0	0
Dayton	39113	0033	4	379	160	165	0	0	0
Dayton	39113	0033	5	1109	442	423	0	0	0
Dayton	39113	0033	6	611	267	269	0	0	0
Dayton	39113	0033	7	935	371	363	0	0	0
Dayton	39113	0033	8	924	371	361	0	0	0
Dayton	39113	0034	1	6	1	0	0	0	0
Dayton	39113	0034	2	763	422	419	0	0	0
Dayton	39113	0034	3	263	149	144	0	0	0
Dayton	39113	0034	4	1796	434	448	0	0	0
Dayton	39113	0034	5	3248	275	269	0	0	0
Dayton	39113	0034	6	817	267	268	0	0	0
Dayton	39113	0035	1	45	20	19	0	0	0

Dayton	39113	0035	2	134	68	56	0	0	0
Dayton	39113	0035	3	591	128	131	0	0	0
Dayton	39113	0035	4	35	19	17	0	0	0
Dayton	39113	0035	5	599	234	228	0	0	0
Dayton	39113	0035	6	399	156	158	0	0	0
Dayton	39113	0035	7	1065	434	440	0	0	0
Dayton	39113	0036	1	157	89	67	0	0	0
Dayton	39113	0036	2	189	107	114	0	0	0
Dayton	39113	0036	3	161	79	81	0	0	0
Dayton	39113	0036	4	602	327	331	0	0	0
Dayton	39113	0036	5	247	178	189	0	0	0
Dayton	39113	0036	6	73	41	43	0	0	0
Dayton	39113	0036	7	229	141	140	0	0	0
Dayton	39113	0036	8	280	137	142	0	0	0
Dayton	39113	0036	9	122	64	66	0	0	0
Dayton	39113	0037	1	333	143	160	0	0	0
Dayton	39113	0037	2	754	285	262	0	0	0
Dayton	39113	0037	3	393	246	255	0	0	0
Dayton	39113	0037	4	348	182	206	0	0	0
Dayton	39113	0037	5	310	159	150	0	0	0
Dayton	39113	0037	6	476	228	215	0	0	0
Dayton	39113	0037	7	65	40	39	0	0	0
Dayton	39113	0037	8	577	280	276	0	0	0
Dayton	39113	0038	1	975	425	431	0	0	0
Dayton	39113	0038	2	670	270	270	0	0	0
Dayton	39113	0038	3	885	362	365	0	0	0
Dayton	39113	0038	4	864	392	402	0	0	0
Dayton	39113	0038	5	944	405	417	0	0	0
Dayton	39113	0038	6	758	294	263	0	0	0
Dayton	39113	0039	1	732	362	352	0	0	0
Dayton	39113	0039	2	1535	676	656	0	0	0
Dayton	39113	0039	3	504	232	232	0	0	0
Dayton	39113	0039	4	1196	456	454	0	0	0
Dayton	39113	0040	1	954	434	448	0	0	0
Dayton	39113	0040	2	451	231	236	0	0	0
Dayton	39113	0040	3	234	107	111	0	0	0
Dayton	39113	0040	4	337	126	135	0	0	0
Dayton	39113	0041	1	525	218	194	0	0	0
Dayton	39113	0041	2	419	167	171	0	0	0
Dayton	39113	0041	3	1915	764	802	0	0	0
Dayton	39113	0041	4	508	198	196	0	0	0
Dayton	39113	0041	5	490	326	309	0	0	0
Dayton	39113	0041	6	383	165	166	0	0	0
Dayton	39113	0042	1	878	387	352	0	0	0
Dayton	39113	0042	2	1704	674	715	0	0	0
Dayton	39113	0042	3	1099	564	562	0	0	0
Dayton	39113	0043	1	1949	720	722	0	7	0
Dayton	39113	0043	2	496	243	237	0	0	0
Dayton	39113	0043	3	169	77	70	0	0	0
Dayton	39113	0044	1	691	268	268	0	0	0
Dayton	39113	0044	2	653	269	260	0	0	0
Dayton	39113	0044	3	732	309	292	0	0	0
Dayton	39113	0044	4	687	291	300	0	0	0
Dayton	39113	0044	5	360	157	161	0	0	0
Dayton	39113	0045	1	460	44	39	0	0	0
Dayton	39113	0045	2	1273	192	212	0	0	0
Dayton	39113	0047	4	27	13	12	0	0	0
Dayton	39113	0049	1	10	4	3	0	0	0
Dayton	39113	0703	1	924	333	287	7	0	0
Dayton	39113	0703	2	1651	585	596	0	0	0

Dayton	39113 0703	3	1309	461	342	11	85	4
	Sub Totals:		131732	57714	57622	18	104	33
Jefferson	39113 0603	1	973	402	450	0	0	0
Jefferson	39113 0603	2	2057	780	738	4	0	0
Jefferson	39113 0603	3	1292	232	196	0	17	0
Jefferson	39113 0602	2	1451	503	497	21	6	0
Jefferson	39113 0601	9	3199	1284	660	98	530	5
Jefferson	39113 0602	1	678	240	226	0	0	0
	Sub Totals:		9650	3441	2767	123	553	5
Kettering	39113 0208	3	579	344	356	0	0	0
Kettering	39113 0201	1	914	406	400	0	0	0
Kettering	39113 0205	1	675	485	486	0	0	0
Kettering	39113 0205	2	979	458	483	0	0	0
Kettering	39113 0210	2	620	258	247	0	0	0
Kettering	39113 0208	2	991	430	426	0	0	0
Kettering	39113 0209	1	1024	445	448	0	0	0
Kettering	39113 0209	2	798	337	310	0	0	0
Kettering	39113 0209	3	748	374	370	0	7	0
Kettering	39113 0209	4	588	478	511	0	0	0
Kettering	39113 0210	1	1044	427	426	0	0	0
Kettering	39113 0208	1	945	461	464	0	0	0
Kettering	39113 0202	1	894	313	297	0	0	0
Kettering	39113 0202	2	846	425	425	0	0	0
Kettering	39113 0202	3	1337	596	612	0	0	0
Kettering	39113 0207	1	547	247	243	0	0	0
Kettering	39113 0207	2	931	409	403	0	0	0
Kettering	39113 0207	5	529	398	428	0	0	0
Kettering	39113 0201	3	956	513	503	0	0	0
Kettering	39113 0201	2	1101	535	551	0	0	0
	Sub Totals:		17046	8339	8389	0	7	0
Madison	39113 0702013		292	116	102	0	0	0
Madison	39113 0702019		1100	392	364	0	40	0
Madison	39113 0702022		345	140	144	0	0	0
Madison	39113 0702023		1058	440	440	0	0	0
Madison	39113 0702021		1194	455	465	0	19	0
Madison	39113 0702015		336	107	111	0	0	0
Madison	39113 0702014		300	130	118	0	0	0
	Sub Totals:		4625	1780	1744	0	59	0
Miami	39113 0301	1	3059	1381	1351	0	0	0
Miami	39113 0204	3	719	297	271	0	0	0
Miami	39113 0204	2	909	408	414	0	0	0
Miami	39113 0204	4	3878	1695	1758	0	0	0
Miami	39113 0503022		2459	877	902	0	7	0
Miami	39113 0301	9	327	188	167	0	26	0
Miami	39113 0503023		3531	1278	1282	0	0	0
Miami	39113 0301	2	1012	416	392	0	0	0
Miami	39113 0501013		4250	1929	1916	0	0	0
Miami	39113 0501021		6970	2999	2992	13	7	0
	Sub Totals:		27114	11468	11445	13	40	0
Moraine	39113 0302	1	2746	937	928	23	7	0

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	Sub Totals:		2746	937	928	23	7	0
Oakwood	39113 0203	2	1050	455	441	0	0	0
Oakwood	39113 0102	8	891	460	449	0	0	0
Oakwood	39113 0102	5	841	353	365	0	0	0
Oakwood	39113 0102	3	998	391	382	0	0	0
Oakwood	39113 0203	1	920	456	445	0	0	0
Oakwood	39113 0101	1	1264	533	543	0	0	0
Oakwood	39113 0101	2	808	308	300	0	0	0
Oakwood	39113 0203	3	841	330	322	0	0	0
Oakwood	39113 0102	4	681	270	273	0	0	0
Oakwood	39113 0102	2	633	254	251	0	0	0
Oakwood	39113 0102	6	1044	469	478	0	0	0
Oakwood	39113 0102	7	1092	493	481	0	0	0
Oakwood	39113 0102	1	679	275	282	0	0	0
	Sub Totals:		11742	5047	5012	0	0	0
Washington	39113 0401023		2274	838	830	0	9	0
	Sub Totals:		2274	838	830	0	9	0
West Carrollton	39113 0503012		1866	893	827	4	64	0
West Carrollton	39113 0503011		1848	844	846	0	0	0
	Sub Totals:		3714	1737	1673	4	64	0

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For Radius of 4 Mi., Circle Area = 50.265482

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
1	Dayton	39113 23	0.298792	0.026450	8.85
2	Dayton	39113 34	0.249706	0.164058	65.70
3	Dayton	39113 41	0.104473	0.000811	0.78
4	Dayton	39113 42	0.081776	0.009595	11.73
5	Dayton	39113 43	0.066816	0.059612	89.22
6	Dayton	39113 44	0.049709	0.049709	100.00
7	Dayton	39113 45	0.099588	0.099588	100.00
8	Dayton	39113 46	0.119104	0.119104	100.00
9	Dayton	39113 47	0.277479	0.277479	100.00
10	Dayton	39113 54	0.068364	0.016544	24.20
11	Dayton	39113 55	0.086076	0.053901	62.62
12	Dayton	39113 56	0.050183	0.049509	98.66
13	Dayton	39113 57	0.147202	0.147202	100.00
14	Dayton	39113 58	0.082815	0.082815	100.00
15	Dayton	39113 61	0.061345	0.061345	100.00
16	Dayton	39113 62	0.089268	0.089268	100.00
17	Dayton	39113 63	0.118794	0.118794	100.00
18	Dayton	39113 64	0.105561	0.105561	100.00
19	Dayton	39113 71	0.084662	0.084662	100.00
20	Dayton	39113 72	0.082434	0.082434	100.00
21	Dayton	39113 73	0.084695	0.084695	100.00
22	Dayton	39113 74	0.103873	0.103873	100.00
23	Dayton	39113 75	0.101830	0.101830	100.00
24	Dayton	39113 76	0.112844	0.112844	100.00
25	Dayton	39113 77	0.103249	0.103249	100.00
26	Dayton	39113 82	0.260260	0.002197	0.84
27	Dayton	39113 83	0.077011	0.047530	61.72
28	Dayton	39113 84	0.132964	0.132964	100.00
29	Dayton	39113 85	0.095578	0.088000	92.07
30	Dayton	39113 86	0.128515	0.128515	100.00
31	Dayton	39113 91	0.078918	0.078918	100.00
32	Dayton	39113 92	0.107348	0.107348	100.00
33	Dayton	39113 93	0.042417	0.042417	100.00
34	Dayton	39113 94	0.108332	0.108332	100.00
35	Dayton	39113 95	0.080334	0.080334	100.00
36	Dayton	39113 101	0.038359	0.038359	100.00
37	Dayton	39113 102	0.065377	0.065377	100.00
38	Dayton	39113 103	0.077962	0.077962	100.00
39	Dayton	39113 104	0.115747	0.115747	100.00
40	Dayton	39113 116	0.165432	0.053945	32.61
41	Dayton	39113 121	0.104963	0.104963	100.00
42	Dayton	39113 122	0.110021	0.110021	100.00
43	Dayton	39113 123	0.112280	0.112280	100.00
44	Dayton	39113 131	0.080073	0.080073	100.00
45	Dayton	39113 132	0.084455	0.084455	100.00
46	Dayton	39113 141	0.090251	0.090251	100.00
47	Dayton	39113 142	0.123778	0.123778	100.00
48	Dayton	39113 151	0.224858	0.224858	100.00
49	Dayton	39113 152	0.149989	0.149989	100.00
50	Dayton	39113 153	0.208213	0.208213	100.00
51	Dayton	39113 154	0.152931	0.152931	100.00
52	Dayton	39113 155	0.127088	0.127088	100.00

53	Dayton	39113	162	0.759692	0.053021	6.98
54	Dayton	39113	172	0.121225	0.015929	13.14
55	Dayton	39113	173	0.116687	0.116657	99.97
56	Dayton	39113	174	0.144444	0.142758	98.83
57	Dayton	39113	175	0.233604	0.217039	92.91
58	Dayton	39113	176	0.402692	0.058267	14.47
59	Dayton	39113	184	0.359939	0.026466	7.35
60	Dayton	39113	185	0.273288	0.055064	20.15
61	Dayton	39113	191	0.392155	0.158342	40.38
62	Dayton	39113	192	0.106982	0.106982	100.00
63	Dayton	39113	193	0.102353	0.029786	29.10
64	Dayton	39113	194	0.067807	0.067807	100.00
65	Dayton	39113	195	0.128008	0.125872	98.33
66	Dayton	39113	196	0.072963	0.007749	10.62
67	Dayton	39113	197	0.109975	0.109975	100.00
68	Dayton	39113	198	0.099365	0.071297	71.75
69	Dayton	39113	199	0.179728	0.179259	99.74
70	Dayton	39113	211	0.154335	0.154335	100.00
71	Dayton	39113	212	0.211394	0.211394	100.00
72	Dayton	39113	213	0.114255	0.114255	100.00
73	Dayton	39113	214	0.151796	0.151796	100.00
74	Dayton	39113	215	0.063633	0.063633	100.00
75	Dayton	39113	216	0.095223	0.095223	100.00
76	Dayton	39113	217	0.089347	0.089347	100.00
77	Dayton	39113	218	0.046421	0.046421	100.00
78	Dayton	39113	219	0.081549	0.081549	100.00
79	Dayton	39113	221	0.058805	0.058805	100.00
80	Dayton	39113	222	0.082911	0.082911	100.00
81	Dayton	39113	223	0.053848	0.053848	100.00
82	Dayton	39113	224	0.120752	0.120752	100.00
83	Dayton	39113	225	0.119474	0.119474	100.00
84	Dayton	39113	235	0.142425	0.000746	0.52
85	Dayton	39113	261	0.087318	0.087318	100.00
86	Dayton	39113	262	0.082524	0.036166	43.82
87	Dayton	39113	263	0.077108	0.062859	81.52
88	Dayton	39113	265	0.121583	0.009553	7.86
89	Dayton	39113	267	0.098679	0.050603	51.28
90	Dayton	39113	303	0.109249	0.083172	76.13
91	Dayton	39113	305	0.119697	0.053265	44.50
92	Dayton	39113	306	0.324615	0.324615	100.00
93	Dayton	39113	311	0.083888	0.083888	100.00
94	Dayton	39113	312	0.147056	0.098464	66.96
95	Dayton	39113	313	0.172688	0.107100	62.02
96	Dayton	39113	321	0.133307	0.133307	100.00
97	Dayton	39113	322	0.132350	0.132350	100.00
98	Dayton	39113	323	0.056968	0.056968	100.00
99	Dayton	39113	324	0.120254	0.120254	100.00
100	Dayton	39113	325	0.088586	0.088586	100.00
101	Dayton	39113	331	0.059639	0.059639	100.00
102	Dayton	39113	332	0.071454	0.071454	100.00
103	Dayton	39113	333	0.063216	0.063216	100.00
104	Dayton	39113	334	0.054029	0.054029	100.00
105	Dayton	39113	335	0.095925	0.095925	100.00
106	Dayton	39113	336	0.061995	0.061995	100.00
107	Dayton	39113	337	0.083079	0.083079	100.00
108	Dayton	39113	338	0.082688	0.082688	100.00
109	Dayton	39113	341	0.076402	0.076402	100.00
110	Dayton	39113	342	0.100583	0.100583	100.00
111	Dayton	39113	343	0.660868	0.660868	100.00
112	Dayton	39113	344	0.077105	0.077105	100.00

113	Dayton	39113	345	0.350653	0.350653	100.00
114	Dayton	39113	346	0.242225	0.242225	100.00
115	Dayton	39113	351	0.072157	0.072157	100.00
116	Dayton	39113	352	0.101567	0.101567	100.00
117	Dayton	39113	353	0.185853	0.185853	100.00
118	Dayton	39113	354	0.087343	0.087343	100.00
119	Dayton	39113	355	0.239178	0.239178	100.00
120	Dayton	39113	356	0.260522	0.260522	100.00
121	Dayton	39113	357	0.285658	0.285658	100.00
122	Dayton	39113	361	0.073816	0.073816	100.00
123	Dayton	39113	362	0.042375	0.042375	100.00
124	Dayton	39113	363	0.053061	0.053061	100.00
125	Dayton	39113	364	0.107962	0.107962	100.00
126	Dayton	39113	365	0.079821	0.079821	100.00
127	Dayton	39113	366	0.072001	0.072001	100.00
128	Dayton	39113	367	0.141379	0.141379	100.00
129	Dayton	39113	368	0.191442	0.191442	100.00
130	Dayton	39113	369	0.073591	0.073591	100.00
131	Dayton	39113	371	0.066239	0.066239	100.00
132	Dayton	39113	372	0.118723	0.118723	100.00
133	Dayton	39113	373	0.140750	0.140750	100.00
134	Dayton	39113	374	0.104438	0.104438	100.00
135	Dayton	39113	375	0.079446	0.079446	100.00
136	Dayton	39113	376	0.098617	0.098617	100.00
137	Dayton	39113	377	0.098808	0.098808	100.00
138	Dayton	39113	378	0.104369	0.104369	100.00
139	Dayton	39113	381	0.318891	0.318891	100.00
140	Dayton	39113	382	0.144034	0.144034	100.00
141	Dayton	39113	383	0.115408	0.115408	100.00
142	Dayton	39113	384	0.097536	0.097536	100.00
143	Dayton	39113	385	0.097286	0.097286	100.00
144	Dayton	39113	386	0.093221	0.093221	100.00
145	Dayton	39113	391	0.148531	0.148531	100.00
146	Dayton	39113	392	0.174304	0.174304	100.00
147	Dayton	39113	393	0.092458	0.092458	100.00
148	Dayton	39113	394	0.110539	0.110539	100.00
149	Dayton	39113	401	0.107106	0.107106	100.00
150	Dayton	39113	402	0.074592	0.074592	100.00
151	Dayton	39113	403	0.106873	0.106873	100.00
152	Dayton	39113	404	0.129523	0.129523	100.00
153	Dayton	39113	411	0.113549	0.113549	100.00
154	Dayton	39113	412	0.082551	0.082551	100.00
155	Dayton	39113	413	0.148094	0.148094	100.00
156	Dayton	39113	414	0.248580	0.248580	100.00
157	Dayton	39113	415	0.071967	0.071967	100.00
158	Dayton	39113	416	0.106977	0.106977	100.00
159	Dayton	39113	421	0.182233	0.182233	100.00
160	Dayton	39113	422	0.217099	0.217099	100.00
161	Dayton	39113	423	0.182578	0.182578	100.00
162	Dayton	39113	431	0.300744	0.300744	100.00
163	Dayton	39113	432	0.358934	0.358934	100.00
164	Dayton	39113	433	2.091724	2.091724	100.00
165	Dayton	39113	441	0.087852	0.087852	100.00
166	Dayton	39113	442	0.094788	0.094788	100.00
167	Dayton	39113	443	0.106396	0.106396	100.00
168	Dayton	39113	444	0.140201	0.140201	100.00
169	Dayton	39113	445	0.082792	0.082792	100.00
170	Dayton	39113	451	0.375090	0.375090	100.00
171	Dayton	39113	452	0.478895	0.478895	100.00
172	Dayton	39113	474	0.004322	0.004322	100.00

173	Dayton	39113	491	0.008971	0.003086	34.40
174	Oakwood	39113	1011	0.643194	0.643194	100.00
175	Oakwood	39113	1012	0.318320	0.318320	100.00
176	Oakwood	39113	1021	0.134013	0.134013	100.00
177	Oakwood	39113	1022	0.212789	0.212789	100.00
178	Oakwood	39113	1023	0.188162	0.188162	100.00
179	Oakwood	39113	1024	0.134823	0.134823	100.00
180	Oakwood	39113	1025	0.111669	0.111669	100.00
181	Oakwood	39113	1026	0.142873	0.142873	100.00
182	Oakwood	39113	1027	0.127166	0.127166	100.00
183	Oakwood	39113	1028	0.132820	0.132820	100.00
184	Kettering	39113	2011	0.594769	0.594769	100.00
185	Kettering	39113	2012	0.247160	0.247160	100.00
186	Kettering	39113	2013	0.498253	0.498253	100.00
187	Kettering	39113	2021	0.155231	0.155231	100.00
188	Kettering	39113	2022	0.467883	0.467883	100.00
189	Kettering	39113	2023	0.294489	0.294489	100.00
190	Oakwood	39113	2031	0.179095	0.179095	100.00
191	Oakwood	39113	2032	0.389199	0.389199	100.00
192	Oakwood	39113	2033	0.574900	0.574900	100.00
193	Miami	39113	2042	0.320287	0.288716	90.14
194	Miami	39113	2043	0.360687	0.360687	100.00
195	Miami	39113	2044	1.911958	1.754700	91.78
196	Kettering	39113	2051	0.113906	0.057291	50.30
197	Kettering	39113	2052	0.182111	0.003372	1.85
198	Kettering	39113	2071	0.140742	0.140742	100.00
199	Kettering	39113	2072	0.181597	0.084663	46.62
200	Kettering	39113	2075	0.061148	0.042095	68.84
201	Kettering	39113	2081	0.229314	0.229314	100.00
202	Kettering	39113	2082	0.236861	0.121616	51.34
203	Kettering	39113	2083	0.128625	0.122217	95.02
204	Kettering	39113	2091	0.181944	0.161251	88.63
205	Kettering	39113	2092	0.116445	0.116445	100.00
206	Kettering	39113	2093	0.116279	0.114947	98.85
207	Kettering	39113	2094	0.072295	0.072295	100.00
208	Kettering	39113	2101	0.188217	0.016463	8.75
209	Kettering	39113	2102	0.350397	0.239793	68.43
210	Miami	39113	3011	0.699045	0.699045	100.00
211	Miami	39113	3012	0.404527	0.404527	100.00
212	Madison	39113	702023	0.205477	0.205477	100.00
213	Moraine	39113	3021	2.908008	2.907137	99.97
214	Jefferson	39113	6019	23.650543	2.759874	11.67
215	Jefferson	39113	6021	0.833918	0.813890	97.60
216	Jefferson	39113	6022	1.666887	0.548528	32.91
217	Jefferson	39113	6031	0.563912	0.563912	100.00
218	Jefferson	39113	6032	0.663168	0.663168	100.00
219	Jefferson	39113	6033	0.776746	0.776746	100.00
220	Dayton	39113	7031	0.694581	0.666907	96.02
221	Dayton	39113	7032	0.265672	0.220000	82.81
222	Dayton	39113	7033	2.744752	0.158862	5.79
223	Washington	39113	401023	1.797707	0.269897	15.01
224	Miami	39113	501013	1.309195	0.268040	20.47
225	Miami	39113	501021	2.487537	0.284541	11.44
226	West Carrollton	39113	503011	1.037287	1.021876	98.51
227	West Carrollton	39113	503012	2.469236	1.024591	41.49
228	Miami	39113	503022	1.072209	0.072568	6.77
229	Miami	39113	503023	1.102806	0.145548	13.20
230	Madison	39113	702013	0.072442	0.072442	100.00
231	Madison	39113	702014	0.073210	0.067625	92.37
232	Madison	39113	702015	0.045381	0.003117	6.87

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233	Madison	39113 702019	1.232248	0.184612	14.98
234	Madison	39113 702021	0.697889	0.697889	100.00
235	Madison	39113 702022	0.061254	0.061254	100.00
236	Miami	39113 3019	3.899536	3.899536	100.00
	Totals:		89.315445	50.639755	

For Radius of 3 Mi., Circle Area = 28.274334

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
9	Dayton	39113 47	0.277479	0.024692	8.90
17	Dayton	39113 63	0.118794	0.006152	5.18
19	Dayton	39113 71	0.084662	0.043876	51.82
20	Dayton	39113 72	0.082434	0.082267	99.80
21	Dayton	39113 73	0.084695	0.084695	100.00
22	Dayton	39113 74	0.103873	0.097488	93.85
23	Dayton	39113 75	0.101830	0.101830	100.00
24	Dayton	39113 76	0.112844	0.112844	100.00
25	Dayton	39113 77	0.103249	0.103249	100.00
35	Dayton	39113 95	0.080334	0.014566	18.13
36	Dayton	39113 101	0.038359	0.023266	60.65
37	Dayton	39113 102	0.065377	0.065377	100.00
38	Dayton	39113 103	0.077962	0.077962	100.00
39	Dayton	39113 104	0.115747	0.115747	100.00
43	Dayton	39113 123	0.112280	0.007576	6.75
44	Dayton	39113 131	0.080073	0.079821	99.69
45	Dayton	39113 132	0.084455	0.065416	77.46
46	Dayton	39113 141	0.090251	0.020247	22.43
48	Dayton	39113 151	0.224858	0.224432	99.81
49	Dayton	39113 152	0.149989	0.149989	100.00
50	Dayton	39113 153	0.208213	0.022611	10.86
51	Dayton	39113 154	0.152931	0.067386	44.06
52	Dayton	39113 155	0.127088	0.115172	90.62
70	Dayton	39113 211	0.154335	0.154335	100.00
71	Dayton	39113 212	0.211394	0.211394	100.00
72	Dayton	39113 213	0.114255	0.114255	100.00
73	Dayton	39113 214	0.151796	0.151796	100.00
74	Dayton	39113 215	0.063633	0.063633	100.00
75	Dayton	39113 216	0.095223	0.093744	98.45
76	Dayton	39113 217	0.089347	0.013011	14.56
77	Dayton	39113 218	0.046421	0.010945	23.58
78	Dayton	39113 219	0.081549	0.081225	99.60
79	Dayton	39113 221	0.058805	0.011154	18.97
80	Dayton	39113 222	0.082911	0.005555	6.70
96	Dayton	39113 321	0.133307	0.006062	4.55
102	Dayton	39113 332	0.071454	0.002024	2.83
103	Dayton	39113 333	0.063216	0.028111	44.47
104	Dayton	39113 334	0.054029	0.017968	33.26
109	Dayton	39113 341	0.076402	0.076402	100.00
110	Dayton	39113 342	0.100583	0.100583	100.00
111	Dayton	39113 343	0.660868	0.660868	100.00
112	Dayton	39113 344	0.077105	0.077105	100.00
113	Dayton	39113 345	0.350653	0.292326	83.37
114	Dayton	39113 346	0.242225	0.242225	100.00
115	Dayton	39113 351	0.072157	0.072157	100.00
116	Dayton	39113 352	0.101567	0.101567	100.00

117	Dayton	39113	353	0.185853	0.185853	100.00
118	Dayton	39113	354	0.087343	0.087343	100.00
119	Dayton	39113	355	0.239178	0.239178	100.00
120	Dayton	39113	356	0.260522	0.260522	100.00
121	Dayton	39113	357	0.285658	0.285658	100.00
122	Dayton	39113	361	0.073816	0.073816	100.00
123	Dayton	39113	362	0.042375	0.042375	100.00
124	Dayton	39113	363	0.053061	0.053061	100.00
125	Dayton	39113	364	0.107962	0.107962	100.00
126	Dayton	39113	365	0.079821	0.079821	100.00
127	Dayton	39113	366	0.072001	0.072001	100.00
128	Dayton	39113	367	0.141379	0.141379	100.00
129	Dayton	39113	368	0.191442	0.191442	100.00
130	Dayton	39113	369	0.073591	0.073591	100.00
131	Dayton	39113	371	0.066239	0.066239	100.00
132	Dayton	39113	372	0.118723	0.118723	100.00
133	Dayton	39113	373	0.140750	0.140750	100.00
134	Dayton	39113	374	0.104438	0.104438	100.00
135	Dayton	39113	375	0.079446	0.079446	100.00
136	Dayton	39113	376	0.098617	0.098617	100.00
137	Dayton	39113	377	0.098808	0.098808	100.00
138	Dayton	39113	378	0.104369	0.104369	100.00
139	Dayton	39113	381	0.318891	0.051161	16.04
140	Dayton	39113	382	0.144034	0.115033	79.87
141	Dayton	39113	383	0.115408	0.114577	99.28
142	Dayton	39113	384	0.097536	0.097536	100.00
143	Dayton	39113	385	0.097286	0.097286	100.00
144	Dayton	39113	386	0.093221	0.093221	100.00
145	Dayton	39113	391	0.148531	0.148531	100.00
146	Dayton	39113	392	0.174304	0.174304	100.00
147	Dayton	39113	393	0.092458	0.092458	100.00
148	Dayton	39113	394	0.110539	0.110539	100.00
149	Dayton	39113	401	0.107106	0.107106	100.00
150	Dayton	39113	402	0.074592	0.074592	100.00
151	Dayton	39113	403	0.106873	0.106873	100.00
152	Dayton	39113	404	0.129523	0.129523	100.00
153	Dayton	39113	411	0.113549	0.113549	100.00
154	Dayton	39113	412	0.082551	0.082551	100.00
155	Dayton	39113	413	0.148094	0.148094	100.00
156	Dayton	39113	414	0.248580	0.248580	100.00
157	Dayton	39113	415	0.071967	0.071967	100.00
158	Dayton	39113	416	0.106977	0.106977	100.00
159	Dayton	39113	421	0.182233	0.182233	100.00
160	Dayton	39113	422	0.217099	0.217099	100.00
161	Dayton	39113	423	0.182578	0.182578	100.00
162	Dayton	39113	431	0.300744	0.300744	100.00
163	Dayton	39113	432	0.358934	0.358934	100.00
164	Dayton	39113	433	2.091724	2.091724	100.00
165	Dayton	39113	441	0.087852	0.061063	69.51
166	Dayton	39113	442	0.094788	0.094788	100.00
167	Dayton	39113	443	0.106396	0.106396	100.00
168	Dayton	39113	444	0.140201	0.140201	100.00
169	Dayton	39113	445	0.082792	0.081320	98.22
170	Dayton	39113	451	0.375090	0.375090	100.00
171	Dayton	39113	452	0.478895	0.478895	100.00
174	Oakwood	39113	1011	0.643194	0.643194	100.00
175	Oakwood	39113	1012	0.318320	0.318039	99.91
176	Oakwood	39113	1021	0.134013	0.134013	100.00
177	Oakwood	39113	1022	0.212789	0.212773	99.99
178	Oakwood	39113	1023	0.188162	0.170734	90.74

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179	Oakwood	39113 1024	0.134823	0.110398	81.88
180	Oakwood	39113 1025	0.111669	0.070603	63.23
181	Oakwood	39113 1026	0.142873	0.076621	53.63
182	Oakwood	39113 1027	0.127166	0.049121	38.63
183	Oakwood	39113 1028	0.132820	0.016786	12.64
184	Kettering	39113 2011	0.594769	0.594769	100.00
185	Kettering	39113 2012	0.247160	0.247160	100.00
186	Kettering	39113 2013	0.498253	0.498253	100.00
187	Kettering	39113 2021	0.155231	0.155231	100.00
188	Kettering	39113 2022	0.467883	0.467883	100.00
189	Kettering	39113 2023	0.294489	0.294489	100.00
190	Oakwood	39113 2031	0.179095	0.100578	56.16
191	Oakwood	39113 2032	0.389199	0.007012	1.80
192	Oakwood	39113 2033	0.574900	0.527123	91.69
194	Miami	39113 2043	0.360687	0.046929	13.01
195	Miami	39113 2044	1.911958	0.543373	28.42
210	Miami	39113 3011	0.699045	0.386148	55.24
211	Miami	39113 3012	0.404527	0.404527	100.00
212	Madison	39113 702023	0.205477	0.075173	36.58
213	Moraine	39113 3021	2.908008	1.867210	64.21
214	Jefferson	39113 6019	23.650543	1.109044	4.69
217	Jefferson	39113 6031	0.563912	0.318496	56.48
218	Jefferson	39113 6032	0.663168	0.561645	84.69
219	Jefferson	39113 6033	0.776746	0.776746	100.00
220	Dayton	39113 7031	0.694581	0.006182	0.89
226	West Carrollton	39113 503011	1.037287	0.077862	7.51
227	West Carrollton	39113 503012	2.469236	0.022766	0.92
234	Madison	39113 702021	0.697889	0.012655	1.81
236	Miami	39113 3019	3.899536	3.414776	87.57
	Totals:		62.307152	28.274334	

For Radius of 2 Mi., Circle Area = 12.566371

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
71	Dayton	39113 212	0.211394	0.071716	33.93
109	Dayton	39113 341	0.076402	0.024599	32.20
111	Dayton	39113 343	0.660868	0.532768	80.62
115	Dayton	39113 351	0.072157	0.072157	100.00
116	Dayton	39113 352	0.101567	0.101567	100.00
117	Dayton	39113 353	0.185853	0.183640	98.81
118	Dayton	39113 354	0.087343	0.064582	73.94
119	Dayton	39113 355	0.239178	0.239178	100.00
120	Dayton	39113 356	0.260522	0.260522	100.00
121	Dayton	39113 357	0.285658	0.285658	100.00
122	Dayton	39113 361	0.073816	0.000506	0.69
125	Dayton	39113 364	0.107962	0.102933	95.34
126	Dayton	39113 365	0.079821	0.022444	28.12
127	Dayton	39113 366	0.072001	0.000505	0.70
128	Dayton	39113 367	0.141379	0.137143	97.00
129	Dayton	39113 368	0.191442	0.191442	100.00
130	Dayton	39113 369	0.073591	0.073591	100.00
132	Dayton	39113 372	0.118723	0.039172	32.99
133	Dayton	39113 373	0.140750	0.017999	12.79
134	Dayton	39113 374	0.104438	0.104438	100.00
135	Dayton	39113 375	0.079446	0.079446	100.00

1976 Springboro Road
Moraime, OH

136	Dayton	39113 376	0.098617	0.098617	100.00
137	Dayton	39113 377	0.098808	0.098808	100.00
138	Dayton	39113 378	0.104369	0.104369	100.00
147	Dayton	39113 393	0.092458	0.005126	5.54
148	Dayton	39113 394	0.110539	0.024758	22.40
149	Dayton	39113 401	0.107106	0.081718	76.30
150	Dayton	39113 402	0.074592	0.007541	10.11
151	Dayton	39113 403	0.106873	0.087368	81.75
152	Dayton	39113 404	0.129523	0.129523	100.00
153	Dayton	39113 411	0.113549	0.113549	100.00
154	Dayton	39113 412	0.082551	0.082551	100.00
155	Dayton	39113 413	0.148094	0.148094	100.00
156	Dayton	39113 414	0.248580	0.248580	100.00
157	Dayton	39113 415	0.071967	0.071967	100.00
158	Dayton	39113 416	0.106977	0.106977	100.00
159	Dayton	39113 421	0.182233	0.182233	100.00
160	Dayton	39113 422	0.217099	0.216723	99.83
161	Dayton	39113 423	0.182578	0.182578	100.00
162	Dayton	39113 431	0.300744	0.300744	100.00
163	Dayton	39113 432	0.358934	0.358934	100.00
164	Dayton	39113 433	2.091724	2.022873	96.71
170	Dayton	39113 451	0.375090	0.106905	28.50
171	Dayton	39113 452	0.478895	0.006127	1.28
174	Oakwood	39113 1011	0.643194	0.157400	24.47
184	Kettering	39113 2011	0.594769	0.302086	50.79
185	Kettering	39113 2012	0.247160	0.247160	100.00
186	Kettering	39113 2013	0.498253	0.438970	88.10
187	Kettering	39113 2021	0.155231	0.043938	28.30
188	Kettering	39113 2022	0.467883	0.107506	22.98
189	Kettering	39113 2023	0.294489	0.060371	20.50
211	Miami	39113 3012	0.404527	0.280020	69.22
213	Moraine	39113 3021	2.908008	0.092847	3.19
214	Jefferson	39113 6019	23.650543	0.089116	0.38
218	Jefferson	39113 6032	0.663168	0.000399	0.06
219	Jefferson	39113 6033	0.776746	0.375506	48.34
236	Miami	39113 3019	3.899536	2.978386	76.38
	Totals:		44.449722	12.566371	

For Radius of 1 Mi., Circle Area = 3.141593

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
111	Dayton	39113 343	0.660868	0.020679	3.13
119	Dayton	39113 355	0.239178	0.009632	4.03
120	Dayton	39113 356	0.260522	0.172928	66.38
121	Dayton	39113 357	0.285658	0.229301	80.27
129	Dayton	39113 368	0.191442	0.005213	2.72
153	Dayton	39113 411	0.113549	0.018739	16.50
154	Dayton	39113 412	0.082551	0.040212	48.71
155	Dayton	39113 413	0.148094	0.032438	21.90
156	Dayton	39113 414	0.248580	0.247059	99.39
158	Dayton	39113 416	0.106977	0.090214	84.33
162	Dayton	39113 431	0.300744	0.000599	0.20
163	Dayton	39113 432	0.358934	0.015289	4.26
164	Dayton	39113 433	2.091724	0.927712	44.35
211	Miami	39113 3012	0.404527	0.051366	12.70

236	Miami	39113 3019	3.899536	1.280212	32.83
	Totals:		9.392885	3.141593	

For Radius of .5 Mi., Circle Area = 0.785398

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
121	Dayton	39113 357	0.285658	0.016685	5.84
156	Dayton	39113 414	0.248580	0.003896	1.57
158	Dayton	39113 416	0.106977	0.003675	3.44
164	Dayton	39113 433	2.091724	0.507895	24.28
236	Miami	39113 3019	3.899536	0.253247	6.49
	Totals:		6.632475	0.785398	

For Radius of .25 Mi., Circle Area = 0.196350

No.	City	Block Group ID	Total Area	Partial Area	% Within Radius
164	Dayton	39113 433	2.091724	0.061989	2.96
236	Miami	39113 3019	3.899536	0.134360	3.45
	Totals:		5.991260	0.196350	

1976 Springboro Road
Moraime, OH

========== Site Data ==========

Population:	162402.72
Households:	70874.41
Drilled Wells:	55.84
Dug Wells:	190.42
Other Water Sources:	29.81

========== Partial (RING) data ==========

---- Within Ring: 4 Mile(s) and 3 Mile(s) ----

Population:	82930.72
Households:	37546.00
Drilled Wells:	32.99
Dug Wells:	113.37
Other Wells:	0.58

** Population On Private Wells: 323.29

---- Within Ring: 3 Mile(s) and 2 Mile(s) ----

Population:	55647.24
Households:	23029.20
Drilled Wells:	21.74
Dug Wells:	39.75
Other Wells:	29.22

** Population On Private Wells: 148.60

---- Within Ring: 2 Mile(s) and 1 Mile(s) ----

Population:	20791.15
Households:	9048.39
Drilled Wells:	1.11
Dug Wells:	28.75
Other Wells:	0.02

** Population On Private Wells: 68.60

---- Within Ring: 1 Mile(s) and .5 Mile(s) ----

Population:	2888.00
Households:	1185.80
Drilled Wells:	0.00
Dug Wells:	6.86
Other Wells:	0.00

** Population On Private Wells: 16.71

1976 Springboro Road
Moraime, OH

---- Within Ring: .5 Mile(s) and .25 Mile(s) ----

Population:	129.32
Households:	56.27
Drilled Wells:	0.00
Dug Wells:	0.79
Other Wells:	0.00

** Population On Private Wells: 1.82

---- Within Ring: .25 Mile(s) and 0 Mile(s) ----

Population:	16.28
Households:	8.76
Drilled Wells:	0.00
Dug Wells:	0.90
Other Wells:	0.00

** Population On Private Wells: 1.66

** Total Population On Private Wells: 560.69

APPENDIX A:

PSARA TECHNOLOGIES, INC.

INSTALLATION OF GROUNDWATER MONITORING WELLS AT THE SOUTH DAYTON DUMP, MORAINE, OHIO

Montgomery County
SOUTH DAYTON DUMP

RADIUS (MILES)	TOTAL PEOPLE	WHITE	BLACK	INDIAN	ASIAN	OTHER	HOUSING (UNITS)
3.00-4.00	80,864	58,736	21,133	131	467	226	36,539
2.00-3.00	52,475	26,656	25,261	56	262	135	21,576
1.00-2.00	20,107	4,806	15,107	16	100	33	8,764
0.50-1.00	2,679	264	2,372	0	28	2	1,093
0.25-0.50	117	43	71	0	0	0	51
0.00-0.25	17	17	0	0	0	0	9
	======	======	======	======	=====	=====	=======
	156259	90,522	63,944	203	857	396	68,032

RECEIVED
OHIO
SEP 24 1996
SOUTHWEST DISTRICT

Dayton Showcase Company

Facsimile Transmission

For Immediate Delivery:

To: DEBORAH BARRETT

From: HOWARD ESHBAUGH

Transmission Date 8/15/91

Number of Pages To Follow 1

2601 West Dorothy Lane Dayton, Ohio 45439
(513) 294-0321 Direct from Cincinnati 626-0043
FAX (513) 299-9740

14-Aug-91 Location Address Index Display 11:53 AM

House# St Name St Dir St Desc

Ln#	Parcel Number	Location Address	Owner Name
1	J44- -041-04 -0051	W	
2	N64- -001-11 -0055		
3	N64- -034-02 -0003		
4	N64- -001-11 -0056		
5	N64- -001-10 -0056		
6	N64- -001-10 -0057		
7	N64- -034-02 -0068		
8	N64- -001-10 -0058		
9	N64- -001-10 -0059		
10	N64- -001-10 -0060		
11	N64- -001-10 -0061		
12	N64- -001-10 -0062		
13	N64- -034-02 -0069		
14	N64- -015-10 -0012		
15	J44- -232-12 -0003		
16	N64- -001-10 -0066		
17	N64- -016-06 -0001		
18	N64- -016-06 -0002		

Example: House# 100 St Name MAIN St Dir NW St Desc ST

14-Aug-91 Location Address Index Display 11:58 AM

House# St Name St Dir St Desc

Lot	Parcel Number	Location Address	Owner Name
37	N64 -018-05 -0007		
38	N64 -001-11 -0049		
39	N64 -018-05 -0006		
40	N64 -001-11 -0050		
41	N64 -018-05 -0005		
42	N64 -001-11 -0051		
43	N64 -018-05 -0004		
44	N64 -001-11 -0052		
45	N64 -018-05 -0003		
46	N64 -001-11 -0053		
47	N64 -018-05 -0002		
48	N64 -001-11 -0054		
49	N64 -018-05 -0001		
50	J44 -041-04 -0001		
51	N64 -001-11 -0055		
52	N64 -034-02 -0003		
53	N64 -001-11 -0056		
54	N64 -001-10 -0056		

Example: House# 100 St Name MAIN St Dir NW St Desc ST

A. J. Wagner
Montgomery County Auditor
451 West Third Street
Dayton, OH 45422
(513) 225-4333

FAX COVER SHEET

DATE: 9-14-91

TO: Debra Barrett

ORGANIZATION: Ecology and Environment

FAX NUMBER: (312) 663-~~4475~~ 0791

FROM: Real Estate Dept.

PHONE NUMBER: (513) 225-4326

FAX NUMBER: (513) 225-5011

NUMBER OF PAGES: (INCLUDING COVER SHEET) 11

COMMENTS:

SORRY IT TOOK SO LONG IF THIS IS THE WRONG INFO. Please call BACK

ATTN:
Bryant Bentley

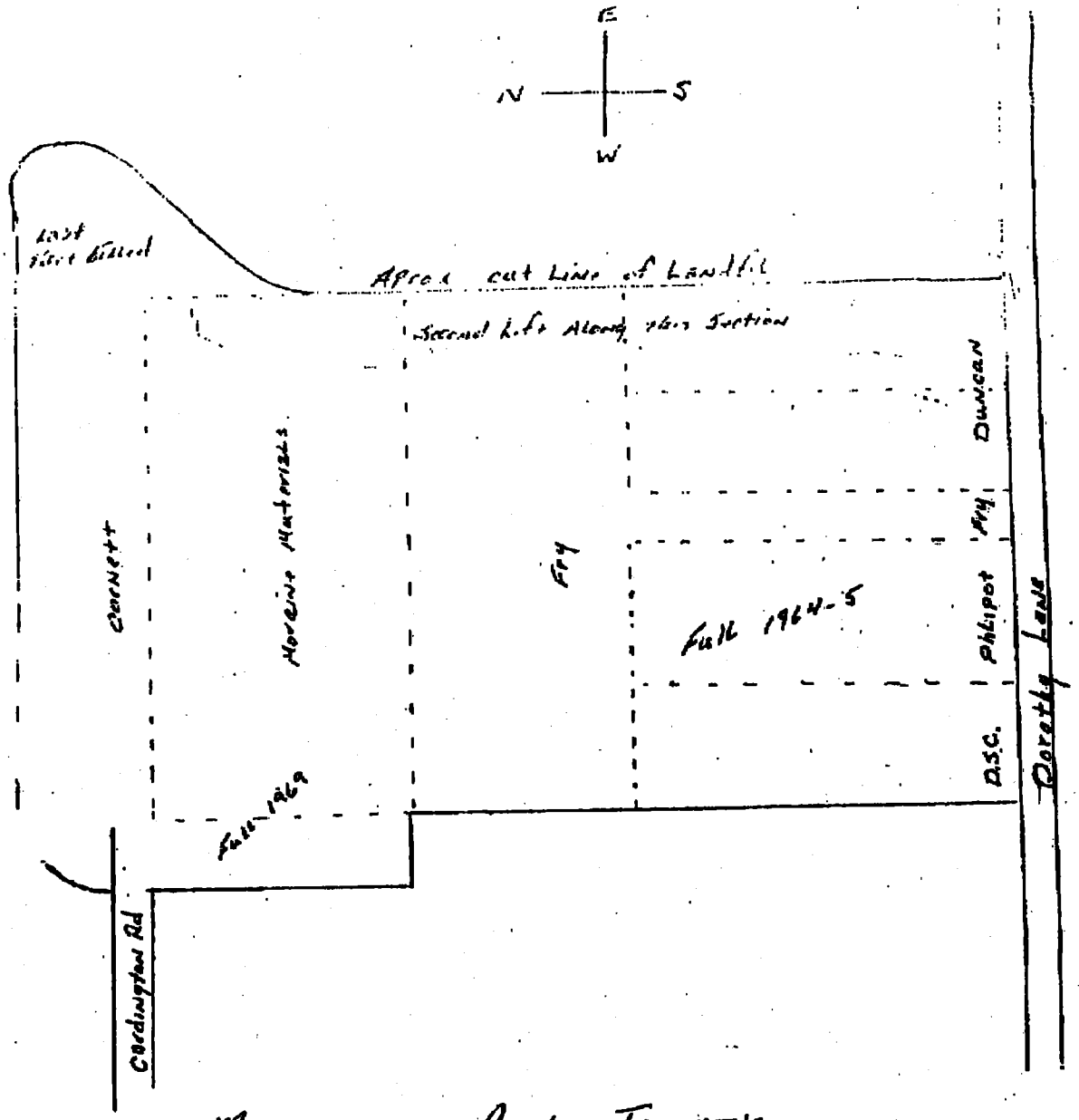
AUG 15 '91 10:06 513 299 9740 PAGE.02

Louis Baylock
Res. Trash

Dayton Showcase Co.
2601 W. Dorothy Lane

Piqua, Ohio 45356

Dayton, Ohio



Moraine Materials
513/297-3110

Cornett Trucking
Herb Cornett
2700 Cardington Dr.
513/299-8301

SAMPLER CHECKLIST

ALL LOW CONCENTRATION SAMPLES

Site Name South Dayton Dump

All the below procedures have been followed and all coolers properly packaged for shipment.

Kelly Malay

Sampler Signature

Team Leader Signature

X 1. Is date shipped filled in on the OTR/ITR?

X 2. Is date and time of sample collection (Letter "F) filled in on the OTR/ITR?

X 3. Has either Shipment Complete or Shipment Not Complete been marked on the OTR/ITR?

X 4. On the C.O.C. form, is PAN in project no.; TDD/Case/SAS (if applicable) in project name for CLP and site name/case for CRL?

X 5. Are all dates and times on the C.O.C. form?

X 6. Has either grab or composite sample been marked on the C.O.C.?

X 7. Is the matrix filled out on each line of the C.O.C. form? (i.e., Soil, Water, Drinking Water) DO NOT USE ARROWS.

✓ 8. Is the Cooler # written on top of the C.O.C. form?

N/A 9. Is it referenced on the C.O.C.s which cooler # the OTR/ITR or the CRL tracking forms are in?

X 10. Are relinquish date, time, and signature on the bottom of the C.O.C.?

X 11. Is there one C.O.C. per cooler?

X 12. Has the proper paperwork been put in a plastic bag and taped to the inside of the cooler lid?

- o C.O.C. - Send white copy, bring back pink and yellow.
- o OTR/ITR - Send white and yellow copies and bring back blue/green and pink.
- o CRL tracking forms - send all of them.

SA002(04/18/90)

X 13. Is sample number, date, and time of collection permanently labeled on each sample bottle?

X 14. Are samples packaged in such a way to prevent breakage?

N/A 15. Have photographs been taken of each cooler showing ice, custody seals, and paperwork?

X 16. Are the coolers acceptable at Fed Ex?

- o Condition
- o Drain plug taped
- o Correctly labeled with address stickers

X 17. Are you sending the coolers to the correct lab? Are you using the correct lab acronym?

X 18. Did you call the SMC <u>before 10:00 a.m.</u> on the day after the sample shipment?

M E M O R A N D U M

DATE: November 12, 1990

TO: File and Sample Management

FROM: Kelly Maley KM

SUBJECT: South Dayton Dump, Moraine, Ohio
F05-8611-174/FOHO521SB
Case #15152

This memo serves as documentation that an error was made in the separation and shipment of the sample papervork for the above mentioned site. The pink copies of the OTR and ITR were sent vith the samples to the laboratories. These should have been brought back to the Region V Fit office and submitted to sample management. It should be noted that this error did not jeopardize the integrity of the samples.

5920:10

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U.S. EPA ID NO: OHD980611388

PROJ. ACCT. NO.: FOH05215B

TDD: FOS-8611-001

SPLIT SAMPLES: ACCEPTED ( ) DECLINED (X)

FACILITY/OCCUPANT NAME: South Dayton Dump

FACILITY/OCCUPANT ADDRESS: 1976 Springboro Road Moraine, OH. 45439

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR#	ITR#	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	10/23/90	1130		EKS19	MEHN82	Soil 1	X	X	X	X	X			Soil
S2	10/23/90	1140		EKS20	MEHN83	Soil 2	X	X	X	X	X			Soil
S3	10/23/90	1140		EKS21	MEHN84	Soil 3	X	X	X	X	X			Soil
S4	10/23/90	1150		EKS22	MEHN85	Soil 4	X	X	X	X	X			Soil
S5	10/23/90	1230		EKS23	MEHN86	Soil 5	X	X	X	X	X			Soil
S6	10/23/90	1245		EKS24	MEHN87	Soil 6	X	X	X	X	X			Soil
S7	10/23/90	1225		EKS25	MEHN88	Soil 7	X	X	X	X	X			Soil
S8	10/23/90	1235		EKS26	MEHN89	Soil 8	X	X	X	X	X			Soil
S9	10/23/90	1330		EKS27	MEHN90	Soil 9	X	X	X	X	X			Soil
S10	10/23/90	1345		EKS28	MEHN91	Soil 10	X	X	X	X	X			Soil
S11	10/23/90	1335		EKS29	MEHN92	Soil 11	X	X	X	X	X			Soil
~~S12~~	~~10/23/90~~			~~EKS30~~	~~MEHN93~~	KM								
~~S13~~	~~10/23/90~~			~~EKS31~~	~~MEHN94~~	KM								

TRANSFERRED BY: Kelly Maley (Signature) 10/23/90 (Date) (Time)

RECEIVED BY: Alcine [illegible] (Signature) (Date) [illegible] (Time)

DISTRIBUTION:
- WHITE: FIT SITE FILE
- YELLOW: FACILITY/OCCUPANT
- GREEN: FIT SAMPLE MANAGEMENT
- PINK: U.S. EPA

TITLE: [illegible]

TELEPHONE: 244 [illegible]

FIT SAMPLE PROPOSAL FORM REGION V

DATE FORM COMPLETED 9/7/90 PAN# FOH05215B TDD# F05-8611-171 EPA I.D.# OHD980611388

SITE NAME (PRINT) SOUTH DAYTON DUMP CITY MORAINE STATE OH

TEAM LEADER MICHELLE JASTER SAMPLER KELLY MALEY DATE SENT TO RSCC

CASE # 15152 DRINKING WATER SAS # ORGANIC INORGANIC

ROUTINE ANALYTICAL SERVICES (RAS)

LOW WATERS FRACTION	MONITORING WELLS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

LOW WATERS FRACTION	SURFACE WATERS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

LOW SOILS/SEDIMENTS/SLUDGES FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB	13 + 0 + 0 = 13	10/22/90	ENCOT	1	1	9074784331	10/23
METALS			SILVER	1		9074784342	
CN							

RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER SAMPLES)

LOW DETECTION LIMITS/FAST TURN AROUND FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

I _____ SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

SAS # _____

Complete
Confirmed

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 10/23/90 SAMPLING TIME 1130

ORGANIC TRAFFIC NUMBER EKS 19

INORGANIC TRAFFIC NUMBER MEHN 82

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131302	0157043
120 ml.	VOA	131303-04	W0172013
8 oz.	Metals/CN-	131301	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil — gray/black pebbly fill material

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 10/23/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER EKS20

INORGANIC TRAFFIC NUMBER MEHN83

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131306	01570143
120 ml.	VOA	131307-08	W0172013
8 oz.	Metals/CN-	131305	01570143

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - dark brown saturated sandy silt.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 10/23/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER EKS21
INORGANIC TRAFFIC NUMBER MEHN84

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131310	0157043
120 ml.	VOA	131311-12	W0172013
8 oz.	Metals/CN-	131309	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - dark brown loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 10/23/90 SAMPLING TIME 1150

ORGANIC TRAFFIC NUMBER EKS22

INORGANIC TRAFFIC NUMBER MEHN85

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131314	0157043
120 ml.	VOA	131315-16	W0172013
8 oz.	Metals/CN-	131313	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black sandy ash.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S5

SAMPLING DATE 10/23/90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER EKS23

INORGANIC TRAFFIC NUMBER MEHN 86

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131318	0157043
120 ml.	VOA	131319-20	W017 2013
8 oz.	Metals/CN-	131317	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black sandy loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S6

SAMPLING DATE 10/23/90 SAMPLING TIME 1245

ORGANIC TRAFFIC NUMBER EKS 24

INORGANIC TRAFFIC NUMBER MEHN 87

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131322	0157043
120 ml.	VOA	131323-24	W0172013
8 oz.	Metals/CN-	131321	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - black sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S7

SAMPLING DATE 10/23/90 SAMPLING TIME 1225

ORGANIC TRAFFIC NUMBER EKS25

INORGANIC TRAFFIC NUMBER MEHN88

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131326	0157043
120 ml.	VOA	131327-28	W0172013
8 oz.	Metals/CN-	131325	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black sandy ash.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S8

SAMPLING DATE 10/23/90 SAMPLING TIME 1235

ORGANIC TRAFFIC NUMBER EKS26
INORGANIC TRAFFIC NUMBER MEHN89

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131330	0157043
120 ml.	VOA	131331-32	W0172013
8 oz.	Metals/CN-	131329	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black/brown sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 10/23/90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER EKS 27

INORGANIC TRAFFIC NUMBER MEHN 90

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131334	0157043
120 ml.	VOA	131335-36	W0172013
8 oz.	Metals/CN-	131333	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - black sandy silt.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S10

SAMPLING DATE 10/23/90 SAMPLING TIME 1345

ORGANIC TRAFFIC NUMBER EKS28

INORGANIC TRAFFIC NUMBER MEHN91

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131338	0157043
120 ml.	VOA	131339-40	W017-2013
8 oz.	Metals/CN-	131337	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - dark brown loam - Background.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S11

SAMPLING DATE 10/23/90 SAMPLING TIME 1335

ORGANIC TRAFFIC NUMBER EKS29

INORGANIC TRAFFIC NUMBER MEHN92

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131342	0157043
120 ml.	VOA	131343-44	W0172013
8 oz.	Metals/CN-	131341	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - dark gray clay loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

CRL Receipt Date 11/26/90 FIT Receipt Date 1/29/91 Review Completed 2/1/91

TO: D. Garrett
FROM: C. Kouris
SUBJECT: South Sanitary Ldfl
PAN: OH0584SA (1 hour charged for review) Case # 15112

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# _____	Low Soil	# 7	Low Soil
_____	Low Water	_____	Low Water
_____	Drinking Water	_____	Drinking Water
_____	Other	_____	Other

Project Data Status _____ Completed!!

X Incomplete, awaiting Org Soil

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 10/18/90

0759:2

recycled paper

12/13

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1-22-91

SUBJECT: Review of Region V CLP Data
Received for Review on NOVEMBER 26, 1990

1/29

FROM: Curtis Ross, Director (ESCRL)
Central Regional Laboratory
Jay Thompson

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: SOUTH SANITARY LDFL (OH) SMO Case No. 15112

EPA Data Set No. _____ No. of Samples: 7 D.U./Activity Numbers TFA/TFA102

CRL No. 91FB30578 - S84

SMO Traffic No. MEBH31 - 34, MEDH77, MEY396 - 397

CLP Laboratory: WEYER Hrs. Required for Review: 4.5hrs. + 0.5 hr B.J. 1-10-91

Following are our findings.

The laboratory's portion of case 15112 contains 7 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 data.

((SEE NEXT PAGE))

Jim Sugrue

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

LABORATORY: WEYERHAEUSER **CASE: 15112**

ICAP ANALYSIS: The matrix spike recovery for Sb (56.8%) is out of control. All Sb results are estimated (UJ) due to a possible elevated detection limit.

The serial dilutions for Ba (10.2%), Mn (51.6%), and Zn (860.1%) are out of control. All Ba, Mn, and Zn results are estimated (J) due to interference.

The duplicate audit for Cu (CRDL) was flagged by the lab, however its duplicate difference is less than 2X CRDL. Cu results are not qualified on this basis but are qualified below.

A CCB was found to contain Cu (12.4 ug/L) and the preparation blank was found to contain Na (83.0 mg/Kg). Cu in MEBH34 and MEY396 and Na in MEBH31-34, MEDH77, and MEY396-397 are affected and estimated (J) due to contamination.

GFAA ANALYSIS: The matrix spike recovery for Pb (72.8%) is out of control. The lab flagged sample MEBH34 with a (+) flag since its MSA correlation coefficient was <0.995. The reviewer corrected the Pb result for sample MEBH34 on Form I. Sample MEBH34 is estimated (J) due to low bias and interference. All remaining Pb results are estimated (J) due to low bias.

The duplicate audit for Se (200% RPD) was not flagged by the lab since its duplicate difference is less than 2X CRDL. Se results are not qualified on this basis. The matrix spike recovery for Se (47.3%) is out of control. The lab flagged MEBH31-34 and MEY396-397 with (W) flags. Sample MEDH77 is estimated (UJ) due to a possible elevated detection limit. Sample MEY397 is estimated (J) due to low bias and interference. All remaining Se results are estimated (UJ) due to a possible elevated detection limit and interference.

OTHER QUALIFIERS: The reviewer corrected the Hg LCS result on Form VII. The LCS for Hg (148.4%) exceeds the control limit. The reviewer corrected the Hg results on Forms III and V and on Form I for samples MEBH31-34, MEDH77, and MEY396. All Hg results are <IDL and therefore acceptable.

The reviewer corrected the CN result on Form III. All CN results are acceptable.

Reviewed by: Jill Siegrist

Date: 01-09-91

Jill Siegrist

QC EXCEPTION SUMMARY REPORT

CASE # 15112
DATA SET #
LAB Q.C. #
DATE: 1-8-91

SITE South Sanitary LDFI (OH)
LAB Weyerhaeuser
REVIEWED BY Jill Siegrist

MATRIX: Soil
CONC. : low
MATRIX:
CONC. :

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK.
SOIL SAMPLE DUP.

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER COMMENTS
	Holding Time	Cal Blanks	Int Calvert	Contin Calvert	Prep Blk AQ	Prep Blk SOL	ICS %R	ICS % AQ	ICS % SOL	Sol Dup RPD	Sol Spk %R	AQ Dup RPD	AQ Spk %R	Ser Dim AQ	Ser Dim SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Spk Sample RPD	
Aluminum						15.074																		
Antimony											56.8													
Arsenic																								
Barium															10.2									
Beryllium																								
Cadmium																								
Calcium						16.251																		
Chromium																								
Cobalt																								
Copper						-4.072																		
Iron																								
Lead											72.8													
Magnesium																								
Manganese															51.6									
Mercury																								
Nickel																								
Potassium						-127.9																		
Selenium											47.3													
Silver																								
Sodium						83.009																		
Thallium																								
Tin																								
Vanadium						-0.794																		
Zinc															860.1									
Cyanide																								

U.S. EPA - CLP

RECEIVED
NOV 26 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

SOW No.: 7/88

EPA Sample No.	Lab Sample ID.
MEBH31	59137
MEBH32	59138
MEBH33	59139
MEBH34	59140
MEDH77	59141
MEY396	59142
MEY397	59143
MEY397D	59143D
MEY397S	59143S

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:
FORM 14: NEGATIVE % RECOVERY TOO LARGE FOR THE FIELD WERE CHANGED TO -99.9% FOR REPORT PURPOSES, PER MEMO OF JOAN FISK (MARCH 1990).

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: Mary Beth Lanza Name: Mary Beth Lanza

Date: Nov. 21, 1990 Title: Scientist

U.S. EPA - CLP

1A

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEBH31

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59137

Level (low/med): LOW Date Received: 10/19/90

% Solids: 84.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2920			P
7440-36-0	Antimony	4.7	U	N	P
7440-38-2	Arsenic	6.2			F
7440-39-3	Barium	43.1		E	P
7440-41-7	Beryllium	0.18	B		P
7440-43-9	Cadmium	0.52	U		P
7440-70-2	Calcium	106000			P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	3.1	B		P
7440-50-8	Copper	11.8		*	P
7439-89-6	Iron	8100			P
7439-92-1	Lead	19.3		N	F
7439-95-4	Magnesium	41100			P
7439-96-5	Manganese	241		E	P
7439-97-6	Mercury	0.09 ~~0.17~~	U		CV
7440-02-0	Nickel	7.0			P
7440-09-7	Potassium	164	B		P
7782-49-2	Selenium	0.33	U	NW	F
7440-22-4	Silver	1.1	B		P
7440-23-5	Sodium	195	B		P
7440-28-0	Thallium	0.20	B		F
7440-62-2	Vanadium	9.7			P
7440-66-6	Zinc	37.7		E	P
	Cyanide	0.58	U		AC

JS 1-9-91

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

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1 p

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEBH32

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59138

Level (low/med): LOW Date Received: 10/19/90

% Solids: 78.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3300			P
7440-36-0	Antimony	4.7	U	N	P
7440-38-2	Arsenic	8.1			F
7440-39-3	Barium	44.3		E	P
7440-41-7	Beryllium	0.21	B		P
7440-43-9	Cadmium	0.53	U		P
7440-70-2	Calcium	95700			P
7440-47-3	Chromium	6.1			P
7440-48-4	Cobalt	3.9	B		P
7440-50-8	Copper	17.6		*	P
7439-89-6	Iron	9630			P
7439-92-1	Lead	19.9		N	F
7439-95-4	Magnesium	38700			P
7439-96-5	Manganese	243		E	P
7439-97-6	Mercury	0.11 ~~0.21~~	U		CV JS 1-9-91
7440-02-0	Nickel	9.6			P
7440-09-7	Potassium	216	B		P
7782-49-2	Selenium	0.35	U	NW	F
7440-22-4	Silver	1.3	B		P
7440-23-5	Sodium	255	B		P
7440-28-0	Thallium	0.21	B		F
7440-62-2	Vanadium	10.5			P
7440-66-6	Zinc	59.8		E	P
	Cyanide	0.63	U		AC

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

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1C

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEBH33

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59139

Level (low/med): LOW Date Received: 10/19/90

% Solids: 84.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1860			P
7440-36-0	Antimony	4.7	U	N	P
7440-38-2	Arsenic	5.0			F
7440-39-3	Barium	29.9	B	E	P
7440-41-7	Beryllium	0.18	U		P
7440-43-9	Cadmium	0.53	U		P
7440-70-2	Calcium	111000			P
7440-47-3	Chromium	4.2			P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	28.5		*	P
7439-89-6	Iron	6090			P
7439-92-1	Lead	17.2		N	F
7439-95-4	Magnesium	40500			P
7439-96-5	Manganese	192		E	P
7439-97-6	Mercury	0.09 ~~0.18~~	U		CV JS 1-9-91
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	85.8	U		P
7782-49-2	Selenium	0.36	U	NW	F
7440-22-4	Silver	1.0	B		P
7440-23-5	Sodium	205	B		P
7440-28-0	Thallium	0.18	U		F
7440-62-2	Vanadium	6.9	B		P
7440-66-6	Zinc	52.2		E	P
	Cyanide	0.60	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1 D

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEBH34

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59140

Level (low/med): LOW Date Received: 1[illegible]/19/90

% Solids: 94.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	2120			P	
7440-36-0	Antimony	3.9	U	N	P	
7440-38-2	Arsenic	4.7			F	
7440-39-3	Barium	39.5		E	P	
7440-41-7	Beryllium	0.14	U		P	
7440-43-9	Cadmium	0.43	U		P	
7440-70-2	Calcium	113000			P	
7440-47-3	Chromium	4.5			P	
7440-48-4	Cobalt	2.6	B		P	
7440-50-8	Copper	7.0		*	P	
7439-89-6	Iron	7350			P	
7439-92-1	Lead	Ins ~~8.2~~		N+	F	JS 1-9-91
7439-95-4	Magnesium	42400			P	
7439-96-5	Manganese	189		E	P	
7439-97-6	Mercury	0.09 ~~0.19~~	U		CV	JS 1-9-91
7440-02-0	Nickel	6.7			P	
7440-09-7	Potassium	236	B		P	
7782-49-2	Selenium	0.30	U	NW	F	
7440-22-4	Silver	0.75	B		P	
7440-23-5	Sodium	201	B		P	
7440-28-0	Thallium	0.15	U		F	
7440-62-2	Vanadium	7.7			P	
7440-66-6	Zinc	27.4		E	P	
	Cyanide	0.53	U		AC	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1E

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEDH77

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59141

Level (low/med): LOW Date Received: 10/19/90

% Solids: 88.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6910			P
7440-36-0	Antimony	4.6	U	N	P
7440-38-2	Arsenic	6.4			F
7440-39-3	Barium	51.7		E	P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.51	U		P
7440-70-2	Calcium	54500			P
7440-47-3	Chromium	9.0			P
7440-48-4	Cobalt	5.5	B		P
7440-50-8	Copper	11.6		*	P
7439-89-6	Iron	12900			P
7439-92-1	Lead	12.0		N	F
7439-95-4	Magnesium	22800			P
7439-96-5	Manganese	462		E	P
7439-97-6	Mercury	0.10 ~~0.20~~	U		CV
7440-02-0	Nickel	10.2			P
7440-09-7	Potassium	421	B		P
7782-49-2	Selenium	0.32	U	N	F
7440-22-4	Silver	1.5	B		P
7440-23-5	Sodium	152	B		P
7440-28-0	Thallium	0.21	B		F
7440-62-2	Vanadium	16.1			P
7440-66-6	Zinc	39.9		E	P
	Cyanide	0.56	U		AC

JS 1-9-91

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1 F

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MEY396

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59142

Level (low/med): LOW Date Received: 10/19/90

% Solids: 80.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1810			P
7440-36-0	Antimony	4.5	U	N	P
7440-38-2	Arsenic	3.7			F
7440-39-3	Barium	19.8	B	E	P
7440-41-7	Beryllium	0.17	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	103000			P
7440-47-3	Chromium	3.5			P
7440-48-4	Cobalt	2.1	B		P
7440-50-8	Copper	5.5		*	P
7439-89-6	Iron	6220			P
7439-92-1	Lead	5.1		NS	F
7439-95-4	Magnesium	40300			P
7439-96-5	Manganese	155		E	P
7439-97-6	Mercury	0.10 ~~0.19~~	U		CV
7440-02-0	Nickel	6.5	B		P
7440-09-7	Potassium	81.5	U		P
7782-49-2	Selenium	0.34	U	NW	F
7440-22-4	Silver	0.68	B		P
7440-23-5	Sodium	206	B		P
7440-28-0	Thallium	0.19	B		F
7440-62-2	Vanadium	7.0	B		P
7440-66-6	Zinc	25.9		E	P
	Cyanide	0.62	U		AC

JS 1-9-91

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

16

INORGANIC ANALYSIS DATA SHEET

MEY397

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Lab Sample ID: 59143

Level (low/med): LOW Date Received: 10/19/90

% Solids: 91.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	4.1	U	N	P
7440-38-2	Arsenic	3.9			F
7440-39-3	Barium	16.3	B	E	P
7440-41-7	Beryllium	0.15	U		P
7440-43-9	Cadmium	0.46	U		P
7440-70-2	Calcium	104000			P
7440-47-3	Chromium	3.0			P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	15.6		*	P
7439-89-6	Iron	5100			P
7439-92-1	Lead	4.6		NS	F
7439-95-4	Magnesium	35900			P
7439-96-5	Manganese	155		E	P
7439-97-6	Mercury	0.09	U		CV
7440-02-0	Nickel	7.4			P
7440-09-7	Potassium	75.3	U		P
7782-49-2	Selenium	0.32	B	NW	F
7440-22-4	Silver	0.85	B		P
7440-23-5	Sodium	177	B		P
7440-28-0	Thallium	0.15	U		F
7440-62-2	Vanadium	5.3	B		P
7440-66-6	Zinc	21.5		E	P
	Cyanide	0.55	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: BROWN Clarity After: Artifacts:

Comments:

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3-A
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

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	49.0	U	49.0	U	49.0	U	49.0	U	15.074	B	P
Antimony	27.0	U	27.0	U	27.0	U	27.0	U	5.400	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Barium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Calcium	12.0	U	12.0	U	12.0	U	12.0	U	6.251	B	P
Chromium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Copper									-4.072	B	P
Iron	13.0	U	13.0	U	13.0	U	13.0	U	2.600	U	P
Lead	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	F
Magnesium	236.0	U	236.0	U	236.0	U	236.0	U	47.200	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			0.1 ~~0.200~~	U	CV
Nickel	21.0	U	21.0	U	21.0	U	21.0	U	4.200	U	P
Potassium	490.0	U	490.0	U	490.0	U	490.0	U	-127.900	B	P
Selenium	2.0	U	2.0	U	2.0	U	-2.7	B	0.400	U	F
Silver	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Sodium	214.0	U	214.0	U	214.0	U	214.0	U	83.009	B	P
Thallium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	F
Vanadium	3.0	U	3.0	U	3.0	U	3.0	U	-0.794	B	P
Zinc	2.0	U	7.3	B	3.7	B	2.0	U	0.400	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.5 ~~10.000~~	U	AC

All corrections
JS 1-8-91

U.S. EPA - CLP

3-B
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

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											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide			10.0	U							AC

U.S. EPA - CLP

3-C
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

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											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper	-15.9	B	12.4	B	-15.9	B	-21.2	B			P
Iron											
Lead	3.0	U	3.0	U	3.0	U	3.0	U			F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	2.0	U	2.0	U							F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEY397S

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Level (low/med): LOW
% Solids for Sample: 91.7

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	43.6313		4.1470	U	76.80	56.8	N	P
Arsenic	75-125	9.6934		3.9108		6.06	95.4		F
Barium	75-125	306.0436		16.3054	B	307.19	94.3		P
Beryllium	75-125	6.7424		0.1536	U	7.68	87.8		P
Cadmium	75-125	6.6132		0.4608	U	7.68	86.1		P
Calcium									NR
Chromium	75-125	30.1135		3.0311		30.72	88.2		P
Cobalt	75-125	68.1690		1.8415	B	76.80	86.4		P
Copper	75-125	48.1059		15.6164		38.40	84.6		P
Iron									NR
Lead	75-125	6.7703		4.5638		3.03	72.8	N	F
Magnesium									NR
Manganese	75-125	220.2286		154.7441		76.80	85.3		P
Mercury	75-125	0.5547 ~~0.5086~~		0.0948	U	0.47	80 ~~108.2~~		CV
Nickel	75-125	75.7027		7.4039		76.80	88.9		P
Potassium									NR
Selenium	75-125	1.0299		0.3159	B	1.5 I	47.3	N	F
Silver	75-125	7.5410		0.8487	B	7.68	87.1		P
Sodium									NR
Thallium	75-125	6.4976		0.1504	U	7.57	85.8		F
Vanadium	75-125	75.0806		5.3124	B	76.80	90.8		P
Zinc	75-125	86.7742		21.4813		76.80	85.0		P
Cyanide	75-125	5.8844		0.5453	U	5.40	109.0		AC

Comments:

All corrections
JS 1-8-91

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEY397A

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

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	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		129.08		27.00	U	120.0	107.6		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.

MEY397D

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 91.7 % Solids for Duplicate: 91.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1526.0435		1683.3972		9.8		P
Antimony		4.1470	U	4.3621	U			P
Arsenic	1.5	3.9108		3.5163		10.6		F
Barium		16.3054	B	17.3375	B	6.1		P
Beryllium		0.1536	U	0.1616	U			P
Cadmium		0.4608	U	0.4847	U			P
Calcium		103857.2000		102731.5400		1.1		P
Chromium	1.5	3.0311		3.6011		17.2		P
Cobalt		1.8415	B	1.9011	B	3.2		P
Copper	3.8	15.6164		9.4395		49.3	*	P
Iron		5101.3242		5684.5124		10.8		P
Lead		4.5638		4.9249		7.6		F
Magnesium		35892.6720		36531.5390		1.8		P
Manganese		154.7441		152.4906		1.5		P
Mercury		0.0948	U	0.0991	U			CV
Nickel	6.1	7.4039		5.5127	B	29.3		P
Potassium		75.2607	U	79.1631	U			P
Selenium		0.3159	B	0.2967	U	200.0		F
Silver		0.8487	B	0.7372	B	14.1		P
Sodium		177.2997	B	167.6342	B	5.6		P
Thallium		0.1504	U	0.1484	U			F
Vanadium		5.3124	B	5.8087	B	8.9		P
Zinc		21.4813		22.2953		3.7		P
Cyanide	0.5	0.5453	U	0.5453	U			AC

U.S. EPA - CLP

10 A

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

ICP ID Number: ICAP61 Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.15		200.0	49.0	P
Antimony	217.58		60.0	27.0	P
Arsenic			10.0		
Barium	493.41		200.0	2.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	228.80		5.0	3.0	P
Calcium	317.93		5000.0	12.0	P
Chromium	267.72		10.0	4.0	P
Cobalt	228.62		50.0	2.0	P
Copper	324.75		25.0	3.0	P
Iron	259.94		100.0	13.0	P
Lead			3.0		
Magnesium	383.20		5000.0	236.0	P
Manganese	257.61		15.0	1.0	P
Mercury			0.2		
Nickel	231.60		40.0	21.0	P
Potassium	766.49		5000.0	490.0	P
Selenium			5.0		
Silver	328.07		10.0	4.0	P
Sodium	589.00		5000.0	214.0	P
Thallium			10.0		
Vanadium	292.40		50.0	3.0	P
Zinc	213.86		20.0	2.0	P

Comments:

U.S. EPA - CLP

10 D

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

ICP ID Number: Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: PE_Z/3030

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.76	BZ	10.0	3.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.31	BZ	3.0	2.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.09	BZ	5.0	2.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.79	BZ	10.0	1.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

ICP ID Number: Date: 10/15/90

Flame AA ID Number: PE5000

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			3.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury	253.70		0.2	0.2	CV
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10 D

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 15112 SAS No.: SDG No.: MEBH31

ICP ID Number: Date: 10/17/90

Flame AA ID Number:

Furnace AA ID Number: PE5100-B

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.31	BZ	3.0	3.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:
ARSENIC, LEAD AND THALLIUM DETERMINED 10/15/90
SELENIUM DETERMINED 10/17/90

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

CRL Receipt Date 11/27/90 FIT Receipt Date 1/31/91 Review Completed 2/1/91

TO: D. Barrett
FROM: C. Kouris
SUBJECT: South Sanitary Ldfl
PAN: OH0534SA (1 hour charged for review) Case # 15112

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# 7	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status X Completed!!

_____ Incomplete, awaiting _____

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 10/18/90

0759:2

recycled paper

12/13

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/29/91

1/31

SUBJECT: Review of Region V CLP Data
Received for Review on Nov 27, 1990

FROM: Curtis Ross, Director (5SCRL) Patrick J. Chirilla for
Central Regional Laboratory

TO: Data User: Dit

We have reviewed the data for the following case(s).

SITE NAME: South Sanitary (dFL(ovl)) SMO Case No. 15112

EPA Data Set No. _____ No. of Samples: 7 D.U./Activity Numbers TFA 1 TFA102

CRL No. 91FB30S78-84

SMO Traffic No. EBL13-15, EDL17, ELF74-76

CLP Laboratory: PEI Hrs. Required for Review: 12+2=14 W/W

Following are our findings.

The laboratory received seven (7) soil samples on the 19th October 1990 for full organic analysis in good condition.

Sample ELF74 was used as the soil spike for VOA. Sample EDL17 was used as the soil spike for SVOA and Pesticide.

Samples EBL15 and ELF75 DL were analyzed past their hold time, data for these samples are qualified as estimated "J" for positive hits and "U" for non-detects.

Caprice Sims Bearden
Jan 17, 1991
Weston/ESAT
(312) 886-2924.

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

CONTRACTOR: PEI **CASE 15112**

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

1. HOLDING TIMES:

Soil was sampled on 18th of October 1990. The laboratory received seven (7) soil samples on 19th of October 1990 in good condition for VOA, SVOA and Pesticide/PCBs.

VOA samples EBL15 and ELF75DL were not analyzed within the 7 days holding time criteria for soil, the holding time was exceeded by one and two days respectively. Data for sample EBL15 and ELF75 DL are qualified as estimated "J" for positive hits and "UJ" for non-detects.

All soil samples were extracted for SVOA and Pesticide/PCBs within the fourteen (14) days holding time criteria for soil.

All SVOA and Pesticide/PCBs were analyzed within the forty (40) days from date of extraction required by the holding time protocol.

2. GC/MS TUNING AND GC PERFORMANCE:

GC/MS tuning complied with the mass list and ion abundance criteria for BFB and DFTPP.

DDT and Endrin degradation check using evaluation mix B of the quantitation column were acceptable (<20%).

RT shift of DBC on primary and confirmation columns met QC criteria for capillary columns.

3. CALIBRATION:

Initial and continuing calibration of VOA and SVOA standards were evaluated for the target compound list(TCL) and outliers were recorded on the outlier forms included as part of this narrative.

Linearity check of pesticide standards based on calibration factor (CF) of evaluation mix A,B,C were within 10% RSD on the primary column.

The %D on continuing calibration met 15% criteria for the primary column; the %D between calibration factors met 20% criteria for compounds being confirmed.

4. METHOD BLANK:

VBLKQ9, VBLKR0, VBLKR1, VBLKR2 and VBLKR3 are low level VOA method blanks.

Reviewed by: Caprice Sims Bearden
Phone: (312) 886-2924
Date: Jan 17, 1991

CONTRACTOR: PEI CASE 15112

4. METHOD BLANK:

VBLKR0 and VBLKR2 contained one TIC respectively. VBLKR3 contained methylene chloride and acetone. The presence of acetone and methylene chloride (common lab contaminant) in associated samples were flagged as non-detected (U) when sample result was <10X the blank result. Samples associated with VBLK3 are shown on Form IV VOA.

SBLK08 is the low level SVOA method blank. SBLK08 contained five TICs.

PBLK08 is the low level Pesticide /PCBs method blank. The blank contained no pesticide residue.

5. SURROGATE RECOVERY:

All VOA, SVOA, and Pesticide surrogate recovery met QC criteria.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE AND RPD:

Sample ELF74 was used as the soil spike for low level VOA. Sample EDL17 was used as the soil spike for the low level SVOA and Pesticide.

Soil matrix spike, matrix spike duplicate recovery and %RPDs met QC criteria for VOA, SVOA, and Pesticide.

7. FIELD BLANK AND FIELD DUPLICATE

No field duplicate nor field blank samples were designated in this data case.

Reviewed by Caprice Sims Bender
Phone: (312) 886-2924
Date: Jan 17, 1991

CONTRACTOR: PEI CASE 15112

8. INTERNAL STANDARDS:

All VOA and SVOA internal standard areas and RTs met QC criteria. internal

All Pesticide/PCB standards met QC criteria.

9. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS:

All VOA, SVOA, Pesticide/PCBs quantitative results were properly reported, ~~with the exception of VOA sample EBF75, the dilution factor was corrected to~~ W Wilson 1/17/91

The CRQLs were adjusted to reflect all sample dilutions.

10. COMPOUND IDENTIFICATION ::

Target compounds and TICs were identified by "best fit" library search method.

11. SYSTEM PERFORMANCE:

The GC/MS baseline indicated acceptable performance.

12. OVERALL CASE ASSESSMENT:

VOA soil sample EBL13 contained methylene chloride at 15 ug/kg, acetone at 25 ug/kg and toluene at 2(J) ug/kg.

VOA soil sample EBL14 contained methylene chloride at 55 ug/kg, carbon disulfide at 3(J) ug/kg, 1,1,1-trichloroethane at 3(J) ug/kg and two TICs.

VOA soil sample EBL15 contained methylene chloride at 35 ug/kg and acetone at 22 ug/kg.

VOA soil sample EBL17 contained methylene chloride at 14 ug/kg, chloroform at 9 ug/kg, bromodichloromethane at 4(J) ug/kg

Reviewed by: Caprice Sims Bender
Phone: (312) 886-2924
Date: Jan 17, 1991

DATA QUALIFIERS

CONTRACTOR: PEI **CASE: 15112**

12. OVERALL CASE ASSESSMENT:

and toluene at 9 ug/kg.

VOA soil sample ELF74 contained methylene chloride at 16 ug/kg and one TIC.

VOA soil sample ELF75 contained methylene chloride at 14 ug/kg, acetone at 730(E) ug/kg, 2-butanone at 42 ug/kg, toluene at 22 ug/kg and four TICs.

VOA soil sample ELF76 contained two methylene chloride at 12 ug/kg, acetone at 18 ug/kg and three TICs.

SVOA soil sample EBL13 contained nine TCL compounds and ten TICs.

SVOA soil sample EBL14 contained 12 TCL compounds and eleven TICs.

SVOA soil sample EBL15 contained fourteen TCL compounds and fifteen TICs.

SVOA soil sample EBL17 contained five TCL compounds and ten TICs.

SVOA soil sample ELF74 contained ten TICs.

SVOA soil sample ELF75 contained seven TICs.

SVOA soil sample ELF76 contained nine TICS.

The reviewer noted that acetone exceeded the calibration range in VOA sample ELF75, therefore, the value for acetone in VOA sample ELF75 DL should be used in assessing the data.

Reviewed by: Caprice Denise Bender
Phone: (312) 886-2924
Date: Jan 17, 1991

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 15112 CONTRACTOR PEI

Instrument # H	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/22/90			10/24/90 1956			10/25/90 813			10/25/90 1939			10/26/90 [illegible]		
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	1.173			1.[illegible]	36.5	J	[illegible]			[illegible]	38.1	J	1.344		
Bromomethane	1.642			2.0[illegible]	26.0	J	1.8[illegible]			2.0[illegible]			1.789		
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone															
Carbon Disulfide	3.63[illegible]			[illegible]	34.5	J	3.[illegible]			[illegible]	33.0	J	3.423		
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone	.174			.139			[illegible]			.1[illegible]	31.5	J	.141		
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBLK09	EDL 17	EBL 13	VBLK22
EBL14	~~EDL 14~~	VBLK20	EBL15
	ELF 74		
[illegible]	ELF 74MS		
[illegible]	ELF 74MSD		
	ELF 75		
	ELF 76		
	VBLK20		

Reviewer's Initials/Date: AB 1/17/91

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

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 15112 CONTRACTOR PEI

Instrument # H	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/26/90														
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone															
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

WDW 1/17/91

AFFECTED SAMPLES:

~~EBLIS~~
ELF15 DL
VBLKB3

Reviewer's Initials/Date: CJB 1/17/91

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

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 15112 CONTRACTOR PEI

Instrument # J	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/24/90			11/2/90 1353			11/5/90 945			11/6/90 1310					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol				1.261		w/w	1.279			1.184					
bis(-2-Chloroethyl)Ether	1.446	35.7	J	~~1.446~~			~~1.446~~			~~1.446~~		w/w			
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol								--							
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline									N/w						
Acenaphthene										.090					
2,4-Dinitrophenol	.134			.193	30.9	J	.084	37.7	J	.134	33.0	J			
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

ELF 75	EBL 13	EDL17 MS
	EBL 14	EDL17 MSD
	EBL 15	ELF74
	EDL 17	ELF76
	SBLK09	

Reviewer Initials/Date: CJB 1/11/91

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

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 15112 CONTRACTOR PEI

Instrument # J	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/24/90			11/2/90 1353			11/5/90 945			11/6/90 1310					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene															
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline							.065			.074					
4,6-Dinitro-2-Methylphenol	.102			.082			.102	56.1	J	.102	27.6	J			
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene							.583			.710					
bis(2-Ethylhexyl)Phthalate	.599			.800	33.5	J	.588			.599					
Chrysene															
Di-n-Octyl 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															

SEE PAGE 1 FOR AFFECTED SAMPLES.

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

Reviewer's Initials/Date: CAB 1/11/91

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

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

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

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

NOV 8 1990

CASE NUMBER/SAS No. 15112 SITE NAME South Sanitary Ldfl LABORATORY PEI / WEYER DATE SHIPPED 10/18/90

SUPERFUND DU NUMBER TFA102 EPA RPM or OSC (S.M.S.) (CES) CERCLIS NUMBER OHD980612139 PAGE 1 OF 1

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 TOX17534	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17644	WATER CHLORINATED PESTICIDES UG/L PES17634	TOTAL METALS IN WATER UG/L MET1811	WATER CYANIDE UG/L MIN74918	NITRATE/NITRITE UG/L MIN7294	AMMONIA UG/L MIN2294	RESIDUE, FILTRABLE TSS MG/L MIN2262	RESIDUE, NON-FILT TSS MG/L MIN2272			SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/KG TOX215722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/KG TOX215422	SEDIMENTS POLYCHLORINATED BIPHENYLS UG/KG PES211422	SEDIMENT CHLORINATED PESTICIDES UG/KG 211322	TOTAL METALS UG/KG MET412	CYANIDE UG/KG MIN4920	% TOXICITY METALS UG/KG	AMMONIA UG/KG MIN2925			
91FB30S78	EDL 17	MEDH 77													X	X	X	X	X	X					
79	EBL 13	MEBH 31																							
80	14	32																							
81	15	33																							
82	ELF 74	34																							
83	75	MEY 396																							
84	76	397																							

NOV 8 1990 a. c. Harvey / ESAT

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1 MEDH 77	2 MEBH 31	3 MEBH 32	4 MEBH 33	5 MEBH 34	6 MEY 396	7 MEY 397	8	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	CSC/CMC	aluminum	6910	2920	3300	1860	2120	1810	1530					
Solid	A,D	MES	MM	antimony												
Solid	A,D	MES	MM	arsenic	6.4	6.2	8.1	5	4.7	3.7	3.9					
Solid	A,D	MES	CSC/CMC	barium	51.7EJ	43.1EJ	44.3EJ	29.9BEJ	39.5EJ	19.8BEJ	16.3BEJ					
Solid	A,D	MES	M	beryllium	0.39B	0.18B	0.21B									
Solid	A,D	MES	MM	cadmium												
Solid	D	MES	CSC/CMC	calcium	54500	106000	95700	110000	113000	103000	104000					
Solid	A,D	MES	MM	chromium	9	5.1	6.1	4.2	4.5	3.5	3					
Solid	A,D	MES	MM	cobalt	5.5B	3.1B	3.9B	2.2B	2.6B	2.1B	1.8B					
Solid	A,D	MES	MM	copper	11.6	11.8	17.6	28.5	7J	5.5J	15.6					
Solid	A,D	MES	MM,CSC;CMC	iron	12900	8100	9630	6090	7350	6220	5100					
Solid	A,D	MES	MM	lead	12NJ	19.3NJ	19.9NJ	17.2NJ	6.6N+J	5.1NJ	4.6NJ					
Solid	A,D	MES	CSC/CMC	magnesium	22800	41100	38700	40500	42400	40300	35900					
Solid	A,D	MES	MM	manganese	462EJ	241EJ	243EJ	192EJ	189EJ	155E	155EJ					
Liquid	A,D	MES	MM	mercury												
Solid	A,D	MES	MM	nickel	10.2	7	9.6	6.6B	6.7	6.5B	7.4					
Solid	D	MES	CSC,CMC	potassium	421B	164B	216B		236B							
Solid	A,D	MES	M	selenium							0.32BNWJ					
Solid	A,D	MES	MM	silver	1.5B	1.1B	1.3B	1B	0.75B	0.68B	0.85B					
Solid	D	MES	CSC,CMC	sodium	152BJ	195BJ	255BJ	205BJ	201BJ	206BJ	177BJ					
Solid	A,D	MES	MM	thallium	0.21B	0.2B	0.21B			0.19B						
Solid	A,D	MES	MM	vanadium	16.1	9.7	10.5	6.9B	7.7	7B	5.3B					
Solid	A,D	MES	CMC,CSC,M	zinc	39.9EJ	37.7EJ	59.8EJ	52.2EJ	27.4EJ	25.9EJ	21.5EJ					
Solid	A	IOC	IOC	cyanide												

— Not detected.

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
N	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative..
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	N	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED _____ SAMPLES

CK 2/1/91

Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
Date												
Time												
Cell Depth (feet)												
CRL Log Number												
CLP Organic Traffic Report Number												
CLP Inorganic Traffic Report Number	EDL 17	EBL 13	EBL 14	EBL 15	ELF 74	ELF 75	ELF 76					
Temperature (°C)												
Specific Conductivity (µmhos/cm)												
pH												

Physical State*	Waste Characteristics*	Category***	SI Name	Compound Detected (values in µg/L or µg/kg)	1	2	3	4	5	6	7	8	9	10	11	12
				Volatile Organics												
Gas	A,D,G,I	OCC	NH	chloroethane												
Gas	A,D,G,I	OCC	NH	bromomethane												
Gas	A,D,G,I	OCC	NH	vinyl chloride												
Gas	A,D,G,I	OCC	NH	chloroethane												
Liquid	A,D,H,I	SOL	NH, CLA	methylene chloride	14	15	55	35 J	16	14	12					
Liquid	E,H,I,A	SOL	K, CLA	acetone		25		22 J		4100 DJ	18					
Liquid	A,H,I	SOL	SH	carbon disulfide			3 J									
Liquid	A,D,G,I	SOL	NH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	NH	1,1-dichloroethane												
Liquid	A,D,G	SOL	NH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	NH	chloroform	9											
Liquid	A,D,G	SOL	NH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K, CLA	2-butanone (MEK)												
Liquid	A,D	SOL	NH	1,1,1-trichloroethane						42						
Liquid	A,D	SOL	NH	carbon tetrachloride			3 J									
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	NH	bromodichloromethane												
Liquid	A,D,G	SOL	NH	1,2-dichloropropane	4 J											
Liquid	A,D,G	SOL	NH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	NH	trichloroethene												
Liquid	A,D	OCC	NH	dibromochloromethane												
Liquid	A,D	SOL	NH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	NH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	NH, CLA	bromoform												
Liquid	A,E,G	SOL	K, CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	NH	tetrachloroethene												
Liquid	A,G,E	SOL	A, CLA	toluene	9	2 J				22						
Liquid	A,D,E	SOL	NH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	NA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Name	Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
				Semivolatile Organics												
S, thick L	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HN	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol	110 J											
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene	66 J											
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HN	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	N-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HN	hexachloroethane												
Liquid	A,D	OCC	HA	nitrobenzene												
Liquid	A,D	OCC	N	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HN	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene				180 J								
Solid	A,D	OCC	HN	4-chloroaniline												
Liquid	A,D,B	OCC	HN	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene				100 J								
Liquid	A,D,B	OCC	HN	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	HN	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	HA	2,6-dinitrotoluene												
Solid	A,D	OCC	HN	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene			230 J	300 J								
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran			160 J	230 J								
Solid	A,D	OCC	HA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HN	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene			250 J	340 J								
Solid	A,D,E	OCC	HN	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	HN	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HN	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene		320 J	1900	3500								

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Nomo	Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene			310J	540J								
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene		640J	3200	4000								
Solid	A,D	OCC	PAH	pyrene	170J	580J	3100	3900								
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	NA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene		310J	1600	1800								
Solid	A,D	OCC	PAH	chrysene	130J	380J	1800	2100								
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate		180J										
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene	130J	360J	1400	1500								
Solid	A,D	OCC	PAH	benzo[k]fluoranthene		320J	1500	2000								
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene		350J	1500	1700								
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Marlate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	Analysis by Method of Standard Additions.	Value is quantitative.
E	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
A	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative..
U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
N	Duplicate injection precision not met.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (85-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 15112

SAS No. (if applicable): N/A

1. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

2. Region Number: V

Sampling Co.: EPI

Sampler (Name): J. Swarte

3. Ship To:
PEI
11479 Chester Rd.
Cincinnati, OH 45246
ATTN: Dawn Dabert

4. Date Shipped: 10/18/90

Carrier: Fed Ex

Airbill Number: 9157648264

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Date Received: 10/19/90

Received by: J. Hankins

Laboratory Contract Number: 68-D9-0087

Unit Price: $825.00

6. Transfer to

Received by

Contract Number

Date Received

Price

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Concentration Phase (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
EDL 17	5	L	N	✓	✓			S1	10/18/90 1600	MEDH 77	Sample Seal Broken			
EBL 13	5	L	N	✓	✓			S2	10/18/90 1255	MEBH 3	Seal Broken			
EBL 14	5	L	N	✓	✓			S3	10/18/90 1300	MEBH 32	Good Condition			
EBL 15	5	L	N	✓	✓			S4	10/18/90 1245	MEBH 33	10/19/90			
ELF 74	5	L	N	✓	✓			S5	10/18/90 1400	MEBH 34				
ELF 75	5	L	N	✓	✓			S6	10/18/90 1405	MEY 396	TS 10/19/90			
ELF 76	5	L	N	✓	✓			S7	10/18/90 1506	MEY 397				

SHIPMENT IS COMPLETE

(Samples are logged in by 3:00 p.m. EDST/EDT (Eastern) the following business day. Samples received after 3:00 p.m. EDST/EDT are considered received the next business day.)

EPA Form 9110-2 (11-90) Replaces EPA Form 2075-7 which may be used. Blue - Region Copy, Pink - SMO Copy, White - Lab Copy for Return to SMO, Yellow - Lab Copy

000001

PEI ASSOCIATES, INC.
11499 CHESTER ROAD
CINCINNATI, OHIO 45246
(513) 782-4700
TELECOPIER (513) 782-4807

November 26, 1990
11/26/90

Mr. Emmanuel Nocon
U.S. EPA Contract Lab Program
Sample Management Office (SMO)
209 Madison St., Suite 200
Alexandria, Va. 22314

RECEIVED
NOV 27 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Re: Contract No.: 68-D9-0037
PN 3791
Case Narrative for Case 15112, SDG: EBL13
SOW: 2/88

Dear Emmanuel:

Enclosed is the data package for the above SDG, 7 soil samples were received on October 19, 1990. The SMO sample numbers are EBL13-EBL15, EDL17 and ELF74-ELF76. All samples were analyzed for full TCL.

No problems were encountered with the samples.

The enclosed sheet describing limitation in the Format B and Extrel software is an integral part of this case narrative.

Please call if you have any questions.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sincerely,

11/26/90

Dave Neal
GC/MS Coordinator

2B
SOIL VOLATILE SURROGATE RECOVERY

000008

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
1	VBLKQ9	105	101	89		0
2	EBL14	112	85	88		0
3	VBLKR0	101	99	103		0
4	EDL17	108	82	85		0
5	ELF74	96	100	92		0
6	ELF74MS	108	86	85		0
7	ELF74MSD	107	87	86		0
8	ELF75	110	85	89		0
9	ELF76	110	89	89		0
10	VBLKR1	103	101	109		0
11	EBL13	113	89	92		0
12	VBLKR2	104	107	96		0
13	EBL15	111	94	91		0
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	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-2 1/87 Rev.

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
1	VBLKR3	100	101	97		0
2	ELF75 DL	86	88	84		0
3						
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	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-2 1/87 Rev.

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
1	ELF75	68	79	90	59	58	34		0
2	EBL13	72	83	79	70	66	64		0
3	EBL14	74	82	78	63	63	63		0
4	EBL15	71	83	79	64	65	67		0
5	SBLK08	67	75	73	56	56	57		0
6	EDL17	72	80	82	61	59	61		0
7	EDL17MS	66	68	80	63	61	71		0
8	EDL17MSD	70	72	78	67	63	70		0
9	ELF74	76	76	81	67	66	49		0
10	ELF76	65	67	71	62	60	58		0
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(18-137)
S4 (PHL)	= Phenol-d6	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II SV-2 1/87 Rev.

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI ; Case No.: 15112 SAS No.: SDG No.: ERL13

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
1	PBLK08	83	
2	EDL17	84	
3	EDL17MS	77	
4	EDL17MSD	79	
5	ELF74	88	
6	ELF75	87	
7	ELF76	77	
8	EBL13	89	
9	EBL14	90	
10	EBL15	115	
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S1 (DBC) = DBC

ADVISORY QC LIMITS (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II PEST-2

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix Spike - EPA Sample No.: ELF74 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	54.	0.	51.	95	59-172
Trichloroethene	54.	0.	46.	85	62-137
Benzene	54.	0.	46.	85	66-142
Toluene	54.	0.	46.	86	59-139
Chlorobenzene	54.	0.	45.	85	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	54.	51.	95	0	22	59-172
Trichloroethene	54.	45.	84	1	22	62-137
Benzene	54.	44.	83	3	21	66-142
Toluene	54.	46.	85	1	21	59-139
Chlorobenzene	54.	46.	87	3	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:

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix Spike - EPA Sample No.: EDL17 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
Phenol	15081.	0.	9605.	64	26- 90
2-Chlorophenol	15081.	111.	9150.	60	25-102
1,4-Dichlorobenzene	7541.	66.	4565.	60	28-104
N-Nitroso-di-n-prop. (1)	7541.	0.	5011.	66	41-126
1,2,4-Trichlorobenzene	7541.	0.	4338.	58	38-107
4-Chloro-3-methylphenol	15081.	0.	10189.	68	26-103
Acenaphthene	7541.	0.	5353.	71	31-137
4-Nitrophenol	15081.	0.	11071.	73	11-114
2,4-Dinitrotoluene	7541.	0.	5664.	75	28- 89
Pentachlorophenol	15081.	0.	8413.	56	17-109
Pyrene	7541.	173.	6413.	83	35-142

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	15084.	10241.	68	6	35	26- 90
2-Chlorophenol	15084.	9458.	62	3	50	25-102
1,4-Dichlorobenzene	7542.	4795.	63	5	27	28-104
N-Nitroso-di-n-prop. (1)	7542.	5495.	73	9	38	41-126
1,2,4-Trichlorobenzene	7542.	4551.	60	5	23	38-107
4-Chloro-3-methylphenol	15084.	10527.	70	3	33	26-103
Acenaphthene	7542.	5665.	75	6	19	31-137
4-Nitrophenol	15084.	11467.	76	3	50	11-114
2,4-Dinitrotoluene	7542.	5679.	75	0	47	28- 89
Pentachlorophenol	15084.	7991.	53	5	47	17-109
Pyrene	7542.	6502.	84	1	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:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: FBL13

Matrix Spike - EPA Sample No.: EDL17 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
gamma-BHC	60.33	.00	31.93	53	46-127
Heptachlor	60.33	.00	66.93	111	35-130
Aldrin	60.33	.00	36.22	60	34-132
Dieldrin	150.81	.00	97.31	65	31-134
Endrin	150.81	.00	93.41	62	42-139
4,4'-DDT	150.81	.00	86.87	58	23-134

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC	60.34	34.33	57	7	50	46-127
Heptachlor	60.34	61.83	102	8	31	35-130
Aldrin	60.34	42.22	70	15	43	34-132
Dieldrin	150.84	95.58	63	2	38	31-134
Endrin	150.84	87.02	58	7	45	42-139
4,4'-DDT	150.84	72.71	48	18	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:

4A

VOLATILE METHOD BLANK SUMMARY

000011

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: VBLK09 Lab Sample ID: VBLK09

Date Analyzed: 10/24/90 Time Analyzed: 20:46

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: ____H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EBL14	X0-10-224-02B	EBL14	5:55
2				
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COMMENTS:

FORM IV VOA 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: VBLKR0 Lab Sample ID: VBLKR0

Date Analyzed: 10/25/90 Time Analyzed: 9:01

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: ____H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EDL17	X0-10-224-04B	EDL17	13:52
2	ELF74	X0-10-224-05B	ELF74	14:33
3	ELF74MS	X0-10-224-05B	ELF74MS	15:14
4	ELF74MSD	X0-10-224-05B	ELF74MSD	15:55
5	ELF75	X0-10-224-06B	ELF75	16:36
6	ELF76	X0-10-224-07B	ELF76	17:17
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COMMENTS:

VOLATILE METHOD BLANK SUMMARY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: VBLKR1 Lab Sample ID: VBLKR1

Date Analyzed: 10/25/90 Time Analyzed: 20:28

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: ____H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EBL13	X0-10-224-01B	EBL13RE	22:12
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3				
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COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: VBLKR2 Lab Sample ID: VBLKR2

Date Analyzed: 10/26/90 Time Analyzed: 8:58

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: ____H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EBL15	X0-10-224-01B	EBL15RE	9:52
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: VBLKR3 Lab Sample ID: VBLKR3

Date Analyzed: 10/26/90 Time Analyzed: 22:59

Matrix: (soil/water) SOIL Level: (low/med) MED

Instrument ID: ____H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	ELF75 DL	X0-10-224-06B	ELF75DL2	1:18
2				
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Lab File ID: SBLK08 Lab Sample ID: SBLK08

Date Extracted: 10/28/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 11/ 5/90 Time Analyzed: 18:41

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: ____J

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	ELF75	X0-10-224-06A	ELF75	11/ 2/90
2	EBL13	X0-10-224-01A	EBL13	11/ 5/90
3	EBL14	X0-10-224-02A	EBL14	11/ 5/90
4	EBL15	X0-10-224-03A	EBL15RE	11/ 5/90
5	EDL17	X0-10-224-04A	EBL17RE	11/ 5/90
6	EDL17MS	X0-10-224-04A	EBL17MS	11/ 6/90
7	EDL17MSD	X0-10-224-04A	EBL17MSD	11/ 6/90
8	ELF74	X0-10-224-05A	ELF74	11/ 6/90
9	ELF76	X0-10-224-07A	ELF76	11/ 6/90
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COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: PEI — Contract: 68-D9-0037

Lab Code: PEI — Case No.: 15112 — SAS No.: — SDG No.: FBL13

Lab Sample ID: PBLK08 — Lab File ID: LBPR0008

Matrix: (soil/water) SOIL — Level: (low/med) LOW

Date Extracted: 10/28/90 — Extraction: (SepF/Cont/Sonc) SO

Date Analyzed (1): 11/14/90 — Date Analyzed (2): 11/16/90

Time Analyzed (1): 20:27 — Time Analyzed (2): 23:03

Instrument ID (1): B — Instrument ID (2): A

GC Column ID (1): 2100 — GC Column ID (2): 27502401

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	EDL17	X0-10-224-04A	11/14/90	11/16/90
2	EDL17MS	X0-10-224-04A	11/14/90	11/17/90
3	EDL17MSD	X0-10-224-04A	11/14/90	11/17/90
4	ELF74	X0-10-224-05A	11/14/90	11/17/90
5	ELF75	X0-10-224-06A	11/14/90	11/17/90
6	ELF76	X0-10-224-07A	11/14/90	11/17/90
7	EBL13	X0-10-224-01A	11/15/90	11/17/90
8	EBL14	X0-10-224-02A	11/15/90	11/17/90
9	EBL15	X0-10-224-03A	11/15/90	11/17/90
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Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKQ9

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKQ9

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKQ9

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000201

VBLKQ9

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKQ9

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKQ9

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKR0

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR0

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR0

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. UU0208

VBLKR0

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR0

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR0

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	1.15	30.	J
2.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000215

VBLKR1

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR1

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR1

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000216

VBLKR1

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR1

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR1

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO 000222

VBLKR2

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR2

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR2

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

EPA SAMPLE NO. UU0223

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKR2

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR2

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR2

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.12	20.	J
2.					
3.					
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000230

VBLKR3

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR3

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR3

Level: (low/med) MED Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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	2.	J
67-64-1	Acetone	11.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000231

VBLKR3

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: VBLKR3

Sample wt/vol: 5.000 (g/mL) G Lab File ID: VBLKR3

Level: (low/med) MED Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK08

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: SBLK08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SBLK08

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660.	U
111-44-4	bis(2-Chloroethyl)ether	660.	U
95-57-8	2-Chlorophenol	660.	U
541-73-1	1,3-Dichlorobenzene	660.	U
106-46-7	1,4-Dichlorobenzene	660.	U
100-51-6	Benzyl alcohol	660.	U
95-50-1	1,2-Dichlorobenzene	660.	U
95-48-7	2-Methylphenol	660.	U
108-60-1	bis(2-Chloroisopropyl)ether	660.	U
106-44-5	4-Methylphenol	660.	U
621-64-7	N-Nitroso-di-n-propylamine	660.	U
67-72-1	Hexachloroethane	660.	U
98-95-3	Nitrobenzene	660.	U
78-59-1	Isophorone	660.	U
88-75-5	2-Nitrophenol	660.	U
105-67-9	2,4-Dimethylphenol	660.	U
65-85-0	Benzoic acid	3200.	U
111-91-1	bis(2-Chloroethoxy)methane	660.	U
120-83-2	2,4-Dichlorophenol	660.	U
120-82-1	1,2,4-Trichlorobenzene	660.	U
91-20-3	Naphthalene	660.	U
106-47-8	4-Chloroaniline	660.	U
87-68-3	Hexachlorobutadiene	660.	U
59-50-7	4-Chloro-3-methylphenol	660.	U
91-57-6	2-Methylnaphthalene	660.	U
77-47-4	Hexachlorocyclopentadiene	660.	U
88-06-2	2,4,6-Trichlorophenol	660.	U
95-95-4	2,4,5-Trichlorophenol	3200.	U
91-58-7	2-Chloronaphthalene	660.	U
88-74-4	2-Nitroaniline	3200.	U
131-11-3	Dimethylphthalate	660.	U
208-96-8	Acenaphthylene	660.	U
606-20-2	2,6-Dinitrotoluene	660.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK08

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: SBLK08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SBLK08

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200.	U
83-32-9	Acenaphthene	660.	U
51-28-5	2,4-Dinitrophenol	3200.	U
100-02-7	4-Nitrophenol	3200.	U
132-64-9	Dibenzofuran	660.	U
121-14-2	2,4-Dinitrotoluene	660.	U
84-66-2	Diethylphthalate	660.	U
7005-72-3	4-Chlorophenyl-phenylether	660.	U
86-73-7	Fluorene	660.	U
100-01-6	4-Nitroaniline	3200.	U
534-52-1	4,6-Dinitro-2-methylphenol	3200.	U
86-30-6	N-Nitrosodiphenylamine (1)	660.	U
101-55-3	4-Bromophenyl-phenylether	660.	U
118-74-1	Hexachlorobenzene	660.	U
87-86-5	Pentachlorophenol	3200.	U
85-01-8	Phenanthrene	660.	U
120-12-7	Anthracene	660.	U
84-74-2	Di-n-butylphthalate	660.	U
206-44-0	Fluoranthene	660.	U
129-00-0	Pyrene	660.	U
85-68-7	Butylbenzylphthalate	660.	U
91-94-1	3,3'-Dichlorobenzidine	1300.	U
56-55-3	Benzo(a)anthracene	660.	U
218-01-9	Chrysene	660.	U
117-81-7	bis(2-Ethylhexyl)phthalate	660.	U
117-84-0	Di-n-octylphthalate	660.	U
205-99-2	Benzo(b)fluoranthene	660.	U
207-08-9	Benzo(k)fluoranthene	660.	U
50-32-8	Benzo(a)pyrene	660.	U
193-39-5	Indeno(1,2,3-cd)pyrene	660.	U
53-70-3	Dibenz(a,h)anthracene	660.	U
191-24-2	Benzo(g,h,i)perylene	660.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK08

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: SBLK08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: SBLK08

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	5.00	1000.	J A
2. - -	UNKNOWN HYDROCARBON	5.67	400.	J
3. - -	UNKNOWN	5.92	30000.	J A
4. - -	UNKNOWN	9.93	400.	J
5. - -	UNKNOWN	10.22	400.	J
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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK08

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: ERL13

Matrix: (soil/water) SOIL Lab Sample ID: PBLK08

Sample wt/vol: 30.0 (g/ml) G Lab File ID: LBPR0008

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16.	U
319-85-7	beta-BHC	16.	U
319-86-8	delta-BHC	16.	U
58-89-9	gamma-BHC	16.	U
76-44-8	Heptachlor	16.	U
309-00-2	Aldrin	16.	U
1024-57-3	Heptachlor epoxide	16.	U
959-98-8	Endosulfan I	16.	U
60-57-1	Dieldrin	32.	U
72-55-9	4,4'-DDE	32.	U
72-20-8	Endrin	32.	U
33213-65-9	Endosulfan II	32.	U
72-54-8	4,4'-DDD	32.	U
1031-07-8	Endosulfan sulfate	32.	U
50-29-3	4,4'-DDT	32.	U
72-43-5	Methoxychlor	160.	U
53494-70-5	Endrin ketone	32.	U
5103-71-9	alpha-Chlordane	160.	U
5103-74-2	gamma-Chlordane	160.	U
8001-35-2	Toxaphene	320.	U
12674-11-2	Aroclor-1016	160.	U
11104-28-2	Aroclor-1221	160.	U
11141-16-5	Aroclor-1232	160.	U
53469-21-9	Aroclor-1242	160.	U
12672-29-6	Aroclor-1248	160.	U
11097-69-1	Aroclor-1254	320.	U
11096-82-5	Aroclor-1260	320.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000027

EBL13

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL13RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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	15.	
67-64-1	Acetone	25.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	2.	J
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000028

EBL13

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL13RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000037

EBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-02B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL14

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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	55.	
67-64-1	Acetone	12.	U
75-15-0	Carbon Disulfide	3.	J
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	3.	J
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000038

EBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-02B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL14

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	76-13-1	Ethane, 1,1,2-trichloro-1,2,	9.15	7.	J
2.	- -	UNKNOWN	4.03	9.	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

000049

EBL15

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL15RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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	35.	
67-64-1	Acetone	22.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000050

EBL15

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EBL15RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. Date Analyzed: 10/26/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000058

EDL17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EDL17

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	14.	
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	9.	
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	4.	J
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	9.	
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 00059

EDL17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: EDL17

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

000069

ELF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-05B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF74

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	16.	
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000070

ELF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-05B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF74

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	27.65	6.	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF75

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

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.	
67-64-1	Acetone	730.	E
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	42.	
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	22.	
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000079

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF75

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	5.32	20.	J
2.	- -	UNKNOWN	27.62	7.	J
3.	- -	UNKNOWN	16.02	5.	J
4.	- -	UNKNOWN	19.03	4.	J
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EPA SAMPLE NO.
VOLATILE ORGANICS ANALYSIS DATA SHEET

ELF75 DL 000093

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06B

Sample wt/vol: 4.000 (g/mL) G Lab File ID: ELF75DL2

Level: (low/med) MED Date Received: 10/19/90

% Moisture: not dec. 22. Date Analyzed: 10/27/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1600.	U
74-83-9	Bromomethane	1600.	U
75-01-4	Vinyl Chloride	1600.	U
75-00-3	Chloroethane	1600.	U
75-09-2	Methylene Chloride	1900.	~~U~~ D
67-64-1	Acetone	4100.	~~U~~ D
75-15-0	Carbon Disulfide	800.	U
75-35-4	1,1-Dichloroethene	800.	U
75-34-3	1,1-Dichloroethane	800.	U
540-59-0	1,2-Dichloroethene (total)	800.	U
67-66-3	Chloroform	800.	U
107-06-2	1,2-Dichloroethane	800.	U
78-93-3	2-Butanone	1600.	U
71-55-6	1,1,1-Trichloroethane	800.	U
56-23-5	Carbon Tetrachloride	800.	U
108-05-4	Vinyl Acetate	1600.	U
75-27-4	Bromodichloromethane	800.	U
78-87-5	1,2-Dichloropropane	800.	U
10061-01-5	cis-1,3-Dichloropropene	800.	U
79-01-6	Trichloroethene	800.	U
124-48-1	Dibromochloromethane	800.	U
79-00-5	1,1,2-Trichloroethane	800.	U
71-43-2	Benzene	800.	U
10061-02-6	trans-1,3-Dichloropropene	800.	U
75-25-2	Bromoform	800.	U
108-10-1	4-Methyl-2-Pentanone	1600.	U
591-78-6	2-Hexanone	1600.	U
127-18-4	Tetrachloroethene	800.	U
79-34-5	1,1,2,2-Tetrachloroethane	800.	U
108-88-3	Toluene	800.	U
108-90-7	Chlorobenzene	800.	U
100-41-4	Ethylbenzene	800.	U
100-42-5	Styrene	800.	U
1330-20-7	Xylene (total)	800.	U

W.D. Wilson 1/17/91

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

000094

ELF75 DL

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06B

Sample wt/vol: 4.000 (g/mL) G Lab File ID: ELF75DL2

Level: (low/med) MED Date Received: 10/19/90

% Moisture: not dec. 22. Date Analyzed: 10/27/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	23.18	20000.	J
2. - -	UNKNOWN	24.02	9000.	J
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF76

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	12.	
67-64-1	Acetone	18.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000105

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07B

Sample wt/vol: 5.000 (g/mL) G Lab File ID: ELF76

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. Date Analyzed: 10/25/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	23.32	7.	J
2.	- -	UNKNOWN	23.62	30.	J
3.	- -	UNKNOWN	27.58	6.	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL13

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL13

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	790.	U
111-44-4	bis(2-Chloroethyl)ether	790.	U
95-57-8	2-Chlorophenol	790.	U
541-73-1	1,3-Dichlorobenzene	790.	U
106-46-7	1,4-Dichlorobenzene	790.	U
100-51-6	Benzyl alcohol	790.	U
95-50-1	1,2-Dichlorobenzene	790.	U
95-48-7	2-Methylphenol	790.	U
108-60-1	bis(2-Chloroisopropyl)ether	790.	U
106-44-5	4-Methylphenol	790.	U
621-64-7	N-Nitroso-di-n-propylamine	790.	U
67-72-1	Hexachloroethane	790.	U
98-95-3	Nitrobenzene	790.	U
78-59-1	Isophorone	790.	U
88-75-5	2-Nitrophenol	790.	U
105-67-9	2,4-Dimethylphenol	790.	U
65-85-0	Benzoic acid	3900.	U
111-91-1	bis(2-Chloroethoxy)methane	790.	U
120-83-2	2,4-Dichlorophenol	790.	U
120-82-1	1,2,4-Trichlorobenzene	790.	U
91-20-3	Naphthalene	790.	U
106-47-8	4-Chloroaniline	790.	U
87-68-3	Hexachlorobutadiene	790.	U
59-50-7	4-Chloro-3-methylphenol	790.	U
91-57-6	2-Methylnaphthalene	790.	U
77-47-4	Hexachlorocyclopentadiene	790.	U
88-06-2	2,4,6-Trichlorophenol	790.	U
95-95-4	2,4,5-Trichlorophenol	3900.	U
91-58-7	2-Chloronaphthalene	790.	U
88-74-4	2-Nitroaniline	3900.	U
131-11-3	Dimethylphthalate	790.	U
208-96-8	Acenaphthylene	790.	U
606-20-2	2,6-Dinitrotoluene	790.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL13

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL13

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3900.	U
83-32-9	Acenaphthene	790.	U
51-28-5	2,4-Dinitrophenol	3900.	U
100-02-7	4-Nitrophenol	3900.	U
132-64-9	Dibenzofuran	790.	U
121-14-2	2,4-Dinitrotoluene	790.	U
84-66-2	Diethylphthalate	790.	U
7005-72-3	4-Chlorophenyl-phenylether	790.	U
86-73-7	Fluorene	790.	U
100-01-6	4-Nitroaniline	3900.	U
534-52-1	4,6-Dinitro-2-methylphenol	3900.	U
86-30-6	N-Nitrosodiphenylamine (1)	790.	U
101-55-3	4-Bromophenyl-phenylether	790.	U
118-74-1	Hexachlorobenzene	790.	U
87-86-5	Pentachlorophenol	3900.	U
85-01-8	Phenanthrene	320.	J
120-12-7	Anthracene	790.	U
84-74-2	Di-n-butylphthalate	790.	U
206-44-0	Fluoranthene	640.	J
129-00-0	Pyrene	580.	J
85-68-7	Butylbenzylphthalate	790.	U
91-94-1	3,3'-Dichlorobenzidine	1600.	U
56-55-3	Benzo(a)anthracene	310.	J
218-01-9	Chrysene	380.	J
117-81-7	bis(2-Ethylhexyl)phthalate	180.	J
117-84-0	Di-n-octylphthalate	790.	U
205-99-2	Benzo(b)fluoranthene	360.	J
207-08-9	Benzo(k)fluoranthene	320.	J
50-32-8	Benzo(a)pyrene	350.	J
193-39-5	Indeno(1,2,3-cd)pyrene	790.	U
53-70-3	Dibenz(a,h)anthracene	790.	U
191-24-2	Benzo(g,h,i)perylene	790.	U

(1) - Cannot be separated from diphenylamine

266

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBL13

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL13

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	5.00	1000.	J A
2.	- -	UNKNOWN HYDROCARBON	5.65	400.	J
3.	- -	UNKNOWN	5.92	40000.	J A
4.	- -	UNKNOWN HYDROCARBON	6.30	600.	J
5.	- -	UNKNOWN	8.33	700.	J
6.	- -	UNKNOWN	8.80	400.	J A
7.	- -	UNKNOWN	9.93	2000.	J
8.	- -	UNKNOWN	10.20	700.	J
9.	- -	UNKNOWN	11.23	2000.	J A
10.	- -	UNKNOWN	27.83	1000.	J
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12.					
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-02A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL14

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	820.	U
111-44-4	bis(2-Chloroethyl)ether	820.	U
95-57-8	2-Chlorophenol	820.	U
541-73-1	1,3-Dichlorobenzene	820.	U
106-46-7	1,4-Dichlorobenzene	820.	U
100-51-6	Benzyl alcohol	820.	U
95-50-1	1,2-Dichlorobenzene	820.	U
95-48-7	2-Methylphenol	820.	U
108-60-1	bis(2-Chloroisopropyl)ether	820.	U
106-44-5	4-Methylphenol	820.	U
621-64-7	N-Nitroso-di-n-propylamine	820.	U
67-72-1	Hexachloroethane	820.	U
98-95-3	Nitrobenzene	820.	U
78-59-1	Isophorone	820.	U
88-75-5	2-Nitrophenol	820.	U
105-67-9	2,4-Dimethylphenol	820.	U
65-85-0	Benzoic acid	4000.	U
111-91-1	bis(2-Chloroethoxy)methane	820.	U
120-83-2	2,4-Dichlorophenol	820.	U
120-82-1	1,2,4-Trichlorobenzene	820.	U
91-20-3	Naphthalene	820.	U
106-47-8	4-Chloroaniline	820.	U
87-68-3	Hexachlorobutadiene	820.	U
59-50-7	4-Chloro-3-methylphenol	820.	U
91-57-6	2-Methylnaphthalene	820.	U
77-47-4	Hexachlorocyclopentadiene	820.	U
88-06-2	2,4,6-Trichlorophenol	820.	U
95-95-4	2,4,5-Trichlorophenol	4000.	U
91-58-7	2-Chloronaphthalene	820.	U
88-74-4	2-Nitroaniline	4000.	U
131-11-3	Dimethylphthalate	820.	U
208-96-8	Acenaphthylene	820.	U
606-20-2	2,6-Dinitrotoluene	820.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-02A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL14

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000.	U
83-32-9	Acenaphthene	230.	J
51-28-5	2,4-Dinitrophenol	4000.	U
100-02-7	4-Nitrophenol	4000.	U
132-64-9	Dibenzofuran	160.	J
121-14-2	2,4-Dinitrotoluene	820.	U
84-66-2	Diethylphthalate	820.	U
7005-72-3	4-Chlorophenyl-phenylether	820.	U
86-73-7	Fluorene	250.	J
100-01-6	4-Nitroaniline	4000.	U
534-52-1	4,6-Dinitro-2-methylphenol	4000.	U
86-30-6	N-Nitrosodiphenylamine (1)	820.	U
101-55-3	4-Bromophenyl-phenylether	820.	U
118-74-1	Hexachlorobenzene	820.	U
87-86-5	Pentachlorophenol	4000.	U
85-01-8	Phenanthrene	1900.	
120-12-7	Anthracene	310.	J
84-74-2	Di-n-butylphthalate	820.	U
206-44-0	Fluoranthene	3200.	
129-00-0	Pyrene	3100.	
85-68-7	Butylbenzylphthalate	820.	U
91-94-1	3,3'-Dichlorobenzidine	1600.	U
56-55-3	Benzo(a)anthracene	1600.	
218-01-9	Chrysene	1800.	
117-81-7	bis(2-Ethylhexyl)phthalate	820.	U
117-84-0	Di-n-octylphthalate	820.	U
205-99-2	Benzo(b)fluoranthene	1400.	
207-08-9	Benzo(k)fluoranthene	1500.	
50-32-8	Benzo(a)pyrene	1500.	
193-39-5	Indeno(1,2,3-cd)pyrene	820.	U
53-70-3	Dibenz(a,h)anthracene	820.	U
191-24-2	Benzo(g,h,i)perylene	820.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-02A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL14

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 11

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN	5.03	1000.	J	A
2.	- -	UNKNOWN HYDROCARBON	5.70	40000.	J	
3.	- -	UNKNOWN	8.33	2000.	J	A
4.	- -	UNKNOWN	9.95	1000.	J	A
5.	- -	UNKNOWN	10.22	700.	J	
6.	- -	UNKNOWN	11.23	1000.	J	A
7.	- -	UNKNOWN	26.20	500.	J	
8.	- -	UNKNOWN	27.83	400.	J	
9.	- -	UNKNOWN	35.97	1000.	J	
10.	- -	UNKNOWN AROMATIC	36.78	1000.	J	
11.	- -	UNKNOWN	41.85	400.	J	
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL15

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL15RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	830.	U
111-44-4	bis(2-Chloroethyl)ether	830.	U
95-57-8	2-Chlorophenol	830.	U
541-73-1	1,3-Dichlorobenzene	830.	U
106-46-7	1,4-Dichlorobenzene	830.	U
100-51-6	Benzyl alcohol	830.	U
95-50-1	1,2-Dichlorobenzene	830.	U
95-48-7	2-Methylphenol	830.	U
108-60-1	bis(2-Chloroisopropyl)ether	830.	U
106-44-5	4-Methylphenol	830.	U
621-64-7	N-Nitroso-di-n-propylamine	830.	U
67-72-1	Hexachloroethane	830.	U
98-95-3	Nitrobenzene	830.	U
78-59-1	Isophorone	830.	U
88-75-5	2-Nitrophenol	830.	U
105-67-9	2,4-Dimethylphenol	830.	U
65-85-0	Benzoic acid	4000.	U
111-91-1	bis(2-Chloroethoxy)methane	830.	U
120-83-2	2,4-Dichlorophenol	830.	U
120-82-1	1,2,4-Trichlorobenzene	830.	U
91-20-3	Naphthalene	180.	J
106-47-8	4-Chloroaniline	830.	U
87-68-3	Hexachlorobutadiene	830.	U
59-50-7	4-Chloro-3-methylphenol	830.	U
91-57-6	2-Methylnaphthalene	100.	J
77-47-4	Hexachlorocyclopentadiene	830.	U
88-06-2	2,4,6-Trichlorophenol	830.	U
95-95-4	2,4,5-Trichlorophenol	4000.	U
91-58-7	2-Chloronaphthalene	830.	U
88-74-4	2-Nitroaniline	4000.	U
131-11-3	Dimethylphthalate	830.	U
208-96-8	Acenaphthylene	830.	U
606-20-2	2,6-Dinitrotoluene	830.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBL15

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL15RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000.	U
83-32-9	Acenaphthene	300.	J
51-28-5	2,4-Dinitrophenol	4000.	U
100-02-7	4-Nitrophenol	4000.	U
132-64-9	Dibenzofuran	230.	J
121-14-2	2,4-Dinitrotoluene	830.	U
84-66-2	Diethylphthalate	830.	U
7005-72-3	4-Chlorophenyl-phenylether	830.	U
86-73-7	Fluorene	340.	J
100-01-6	4-Nitroaniline	4000.	U
534-52-1	4,6-Dinitro-2-methylphenol	4000.	U
86-30-6	N-Nitrosodiphenylamine (1)	830.	U
101-55-3	4-Bromophenyl-phenylether	830.	U
118-74-1	Hexachlorobenzene	830.	U
87-86-5	Pentachlorophenol	4000.	U
85-01-8	Phenanthrene	3500.	
120-12-7	Anthracene	540.	J
84-74-2	Di-n-butylphthalate	830.	U
206-44-0	Fluoranthene	4000.	
129-00-0	Pyrene	3900.	
85-68-7	Butylbenzylphthalate	830.	U
91-94-1	3,3'-Dichlorobenzidine	1700.	U
56-55-3	Benzo(a)anthracene	1800.	
218-01-9	Chrysene	2100.	
117-81-7	bis(2-Ethylhexyl)phthalate	830.	U
117-84-0	Di-n-octylphthalate	830.	U
205-99-2	Benzo(b)fluoranthene	1500.	
207-08-9	Benzo(k)fluoranthene	2000.	
50-32-8	Benzo(a)pyrene	1700.	
193-39-5	Indeno(1,2,3-cd)pyrene	830.	U
53-70-3	Dibenz(a,h)anthracene	830.	U
191-24-2	Benzo(g,h,i)perylene	830.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBL15

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL15RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 15 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	5.00	2000.	J A
2. - -	UNKNOWN HYDROCARBON	5.67	500.	J
3. - -	UNKNOWN	5.92	40000.	J A
4. - -	UNKNOWN HYDROCARBON	6.55	500.	J
5. - -	UNKNOWN	8.32	1000.	J A
6. - -	UNKNOWN	8.80	400.	J A
7. - -	UNKNOWN	9.93	1000.	J A
8. - -	UNKNOWN	10.20	600.	J A
9. - -	UNKNOWN	11.23	2000.	J A
10. - -	UNKNOWN	19.98	1000.	J
11. - -	UNKNOWN	26.20	700.	J
12. - -	UNKNOWN	27.87	7000.	J
13. - -	UNKNOWN	36.23	400.	J
14. - -	UNKNOWN AROMATIC	36.78	1000.	J
15. - -	UNKNOWN AROMATIC	41.87	400.	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDL17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL17RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	750.	U
111-44-4	bis(2-Chloroethyl)ether	750.	U
95-57-8	2-Chlorophenol	110.	J
541-73-1	1,3-Dichlorobenzene	750.	U
106-46-7	1,4-Dichlorobenzene	66.	J
100-51-6	Benzyl alcohol	750.	U
95-50-1	1,2-Dichlorobenzene	750.	U
95-48-7	2-Methylphenol	750.	U
108-60-1	bis(2-Chloroisopropyl)ether	750.	U
106-44-5	4-Methylphenol	750.	U
621-64-7	N-Nitroso-di-n-propylamine	750.	U
67-72-1	Hexachloroethane	750.	U
98-95-3	Nitrobenzene	750.	U
78-59-1	Isophorone	750.	U
88-75-5	2-Nitrophenol	750.	U
105-67-9	2,4-Dimethylphenol	750.	U
65-85-0	Benzoic acid	3600.	U
111-91-1	bis(2-Chloroethoxy)methane	750.	U
120-83-2	2,4-Dichlorophenol	750.	U
120-82-1	1,2,4-Trichlorobenzene	750.	U
91-20-3	Naphthalene	750.	U
106-47-8	4-Chloroaniline	750.	U
87-68-3	Hexachlorobutadiene	750.	U
59-50-7	4-Chloro-3-methylphenol	750.	U
91-57-6	2-Methylnaphthalene	750.	U
77-47-4	Hexachlorocyclopentadiene	750.	U
88-06-2	2,4,6-Trichlorophenol	750.	U
95-95-4	2,4,5-Trichlorophenol	3600.	U
91-58-7	2-Chloronaphthalene	750.	U
88-74-4	2-Nitroaniline	3600.	U
131-11-3	Dimethylphthalate	750.	U
208-96-8	Acenaphthylene	750.	U
606-20-2	2,6-Dinitrotoluene	750.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EDL17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL17RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3600.	U
83-32-9	Acenaphthene	750.	U
51-28-5	2,4-Dinitrophenol	3600.	U
100-02-7	4-Nitrophenol	3600.	U
132-64-9	Dibenzofuran	750.	U
121-14-2	2,4-Dinitrotoluene	750.	U
84-66-2	Diethylphthalate	750.	U
7005-72-3	4-Chlorophenyl-phenylether	750.	U
86-73-7	Fluorene	750.	U
100-01-6	4-Nitroaniline	3600.	U
534-52-1	4,6-Dinitro-2-methylphenol	3600.	U
86-30-6	N-Nitrosodiphenylamine (1)	750.	U
101-55-3	4-Bromophenyl-phenylether	750.	U
118-74-1	Hexachlorobenzene	750.	U
87-86-5	Pentachlorophenol	3600.	U
85-01-8	Phenanthrene	750.	U
120-12-7	Anthracene	750.	U
84-74-2	Di-n-butylphthalate	750.	U
206-44-0	Fluoranthene	750.	U
129-00-0	Pyrene	170.	J
85-68-7	Butylbenzylphthalate	750.	U
91-94-1	3,3'-Dichlorobenzidine	1500.	U
56-55-3	Benzo(a)anthracene	750.	U
218-01-9	Chrysene	130.	J
117-81-7	bis(2-Ethylhexyl)phthalate	750.	U
117-84-0	Di-n-octylphthalate	750.	U
205-99-2	Benzo(b)fluoranthene	130.	J
207-08-9	Benzo(k)fluoranthene	750.	U
50-32-8	Benzo(a)pyrene	750.	U
193-39-5	Indeno(1,2,3-cd)pyrene	750.	U
53-70-3	Dibenz(a,h)anthracene	750.	U
191-24-2	Benzo(g,h,i)perylene	750.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EDL17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EBL17RE

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 5/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	4.98	1000.	J A
2.	- -	UNKNOWN HYDROCARBON	5.63	300.	J
3.	- -	UNKNOWN	5.88	30000.	J A
4.	- -	UNKNOWN HYDROCARBON	6.28	500.	J
5.	- -	UNKNOWN	9.92	800.	J
6.	- -	UNKNOWN	10.20	400.	J A
7.	- -	UNKNOWN	11.22	2000.	J
8.	- -	UNKNOWN	35.18	400.	J
9.	- -	UNKNOWN	35.38	3000.	J
10.	- -	UNKNOWN	35.97	800.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF74

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	710.	U
111-44-4	bis(2-Chloroethyl)ether	710.	U
95-57-8	2-Chlorophenol	710.	U
541-73-1	1,3-Dichlorobenzene	710.	U
106-46-7	1,4-Dichlorobenzene	710.	U
100-51-6	Benzyl alcohol	710.	U
95-50-1	1,2-Dichlorobenzene	710.	U
95-48-7	2-Methylphenol	710.	U
108-60-1	bis(2-Chloroisopropyl)ether	710.	U
106-44-5	4-Methylphenol	710.	U
621-64-7	N-Nitroso-di-n-propylamine	710.	U
67-72-1	Hexachloroethane	710.	U
98-95-3	Nitrobenzene	710.	U
78-59-1	Isophorone	710.	U
88-75-5	2-Nitrophenol	710.	U
105-67-9	2,4-Dimethylphenol	710.	U
65-85-0	Benzoic acid	3400.	U
111-91-1	bis(2-Chloroethoxy)methane	710.	U
120-83-2	2,4-Dichlorophenol	710.	U
120-82-1	1,2,4-Trichlorobenzene	710.	U
91-20-3	Naphthalene	710.	U
106-47-8	4-Chloroaniline	710.	U
87-68-3	Hexachlorobutadiene	710.	U
59-50-7	4-Chloro-3-methylphenol	710.	U
91-57-6	2-Methylnaphthalene	710.	U
77-47-4	Hexachlorocyclopentadiene	710.	U
88-06-2	2,4,6-Trichlorophenol	710.	U
95-95-4	2,4,5-Trichlorophenol	3400.	U
91-58-7	2-Chloronaphthalene	710.	U
88-74-4	2-Nitroaniline	3400.	U
131-11-3	Dimethylphthalate	710.	U
208-96-8	Acenaphthylene	710.	U
606-20-2	2,6-Dinitrotoluene	710.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF74

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3400.	U
83-32-9	Acenaphthene	710.	U
51-28-5	2,4-Dinitrophenol	3400.	U
100-02-7	4-Nitrophenol	3400.	U
132-64-9	Dibenzofuran	710.	U
121-14-2	2,4-Dinitrotoluene	710.	U
84-66-2	Diethylphthalate	710.	U
7005-72-3	4-Chlorophenyl-phenylether	710.	U
86-73-7	Fluorene	710.	U
100-01-6	4-Nitroaniline	3400.	U
534-52-1	4,6-Dinitro-2-methylphenol	3400.	U
86-30-6	N-Nitrosodiphenylamine (1)	710.	U
101-55-3	4-Bromophenyl-phenylether	710.	U
118-74-1	Hexachlorobenzene	710.	U
87-86-5	Pentachlorophenol	3400.	U
85-01-8	Phenanthrene	710.	U
120-12-7	Anthracene	710.	U
84-74-2	Di-n-butylphthalate	710.	U
206-44-0	Fluoranthene	710.	U
129-00-0	Pyrene	710.	U
85-68-7	Butylbenzylphthalate	710.	U
91-94-1	3,3'-Dichlorobenzidine	1400.	U
56-55-3	Benzo(a)anthracene	710.	U
218-01-9	Chrysene	710.	U
117-81-7	bis(2-Ethylhexyl)phthalate	710.	U
117-84-0	Di-n-octylphthalate	710.	U
205-99-2	Benzo(b)fluoranthene	710.	U
207-08-9	Benzo(k)fluoranthene	710.	U
50-32-8	Benzo(a)pyrene	710.	U
193-39-5	Indeno(1,2,3-cd)pyrene	710.	U
53-70-3	Dibenz(a,h)anthracene	710.	U
191-24-2	Benzo(g,h,i)perylene	710.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF74

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	4.70	1000.	J A
2.	- -	UNKNOWN HYDROCARBON	5.38	500.	J
3.	- -	UNKNOWN	5.65	40000.	J A
4.	- -	UNKNOWN HYDROCARBON	6.02	500.	J
5.	- -	UNKNOWN HYDROCARBON	6.28	300.	J
6.	- -	UNKNOWN	8.55	600.	J A
7.	- -	UNKNOWN	9.67	700.	J
8.	- -	UNKNOWN HYDROCARBON	9.95	400.	J
9.	- -	UNKNOWN HYDROCARBON	10.72	400.	J
10.	- -	UNKNOWN	10.97	2000.	J A
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF75

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 2/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	840.	U
111-44-4	bis(2-Chloroethyl)ether	840.	U
95-57-8	2-Chlorophenol	840.	U
541-73-1	1,3-Dichlorobenzene	840.	U
106-46-7	1,4-Dichlorobenzene	840.	U
100-51-6	Benzyl alcohol	840.	U
95-50-1	1,2-Dichlorobenzene	840.	U
95-48-7	2-Methylphenol	840.	U
108-60-1	bis(2-Chloroisopropyl)ether	840.	U
106-44-5	4-Methylphenol	840.	U
621-64-7	N-Nitroso-di-n-propylamine	840.	U
67-72-1	Hexachloroethane	840.	U
98-95-3	Nitrobenzene	840.	U
78-59-1	Isophorone	840.	U
88-75-5	2-Nitrophenol	840.	U
105-67-9	2,4-Dimethylphenol	840.	U
65-85-0	Benzoic acid	4100.	U
111-91-1	bis(2-Chloroethoxy)methane	840.	U
120-83-2	2,4-Dichlorophenol	840.	U
120-82-1	1,2,4-Trichlorobenzene	840.	U
91-20-3	Naphthalene	840.	U
106-47-8	4-Chloroaniline	840.	U
87-68-3	Hexachlorobutadiene	840.	U
59-50-7	4-Chloro-3-methylphenol	840.	U
91-57-6	2-Methylnaphthalene	840.	U
77-47-4	Hexachlorocyclopentadiene	840.	U
88-06-2	2,4,6-Trichlorophenol	840.	U
95-95-4	2,4,5-Trichlorophenol	4100.	U
91-58-7	2-Chloronaphthalene	840.	U
88-74-4	2-Nitroaniline	4100.	U
131-11-3	Dimethylphthalate	840.	U
208-96-8	Acenaphthylene	840.	U
606-20-2	2,6-Dinitrotoluene	840.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF75

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 2/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4100.	U
83-32-9	Acenaphthene	840.	U
51-28-5	2,4-Dinitrophenol	4100.	U
100-02-7	4-Nitrophenol	4100.	U
132-64-9	Dibenzofuran	840.	U
121-14-2	2,4-Dinitrotoluene	840.	U
84-66-2	Diethylphthalate	840.	U
7005-72-3	4-Chlorophenyl-phenylether	840.	U
86-73-7	Fluorene	840.	U
100-01-6	4-Nitroaniline	4100.	U
534-52-1	4,6-Dinitro-2-methylphenol	4100.	U
86-30-6	N-Nitrosodiphenylamine (1)	840.	U
101-55-3	4-Bromophenyl-phenylether	840.	U
118-74-1	Hexachlorobenzene	840.	U
87-86-5	Pentachlorophenol	4100.	U
85-01-8	Phenanthrene	840.	U
120-12-7	Anthracene	840.	U
84-74-2	Di-n-butylphthalate	840.	U
206-44-0	Fluoranthene	840.	U
129-00-0	Pyrene	840.	U
85-68-7	Butylbenzylphthalate	840.	U
91-94-1	3,3'-Dichlorobenzidine	1700.	U
56-55-3	Benzo(a)anthracene	840.	U
218-01-9	Chrysene	840.	U
117-81-7	bis(2-Ethylhexyl)phthalate	840.	U
117-84-0	Di-n-octylphthalate	840.	U
205-99-2	Benzo(b)fluoranthene	840.	U
207-08-9	Benzo(k)fluoranthene	840.	U
50-32-8	Benzo(a)pyrene	840.	U
193-39-5	Indeno(1,2,3-cd)pyrene	840.	U
53-70-3	Dibenz(a,h)anthracene	840.	U
191-24-2	Benzo(g,h,i)perylene	840.	U

(1) - Cannot be separated from diphenylamine

1F

EPA SAMPLE NO. 000419

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: ELF75

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 2/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	- -	UNKNOWN	5.13	1000.	J	A
2.	- -	UNKNOWN HYDROCARBON	5.77	500.	J	
3.	- -	UNKNOWN	6.00	40000.	J	A
4.	- -	UNKNOWN HYDROCARBON	8.35	1000.	J	
5.	- -	UNKNOWN	9.95	900.	J	
6.	- -	UNKNOWN	10.22	400.	J	A
7.	- -	UNKNOWN	11.22	2000.	J	
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ELF76

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730.	U
111-44-4	bis(2-Chloroethyl)ether	730.	U
95-57-8	2-Chlorophenol	730.	U
541-73-1	1,3-Dichlorobenzene	730.	U
106-46-7	1,4-Dichlorobenzene	730.	U
100-51-6	Benzyl alcohol	730.	U
95-50-1	1,2-Dichlorobenzene	730.	U
95-48-7	2-Methylphenol	730.	U
108-60-1	bis(2-Chloroisopropyl)ether	730.	U
106-44-5	4-Methylphenol	730.	U
621-64-7	N-Nitroso-di-n-propylamine	730.	U
67-72-1	Hexachloroethane	730.	U
98-95-3	Nitrobenzene	730.	U
78-59-1	Isophorone	730.	U
88-75-5	2-Nitrophenol	730.	U
105-67-9	2,4-Dimethylphenol	730.	U
65-85-0	Benzoic acid	3500.	U
111-91-1	bis(2-Chloroethoxy)methane	730.	U
120-83-2	2,4-Dichlorophenol	730.	U
120-82-1	1,2,4-Trichlorobenzene	730.	U
91-20-3	Naphthalene	730.	U
106-47-8	4-Chloroaniline	730.	U
87-68-3	Hexachlorobutadiene	730.	U
59-50-7	4-Chloro-3-methylphenol	730.	U
91-57-6	2-Methylnaphthalene	730.	U
77-47-4	Hexachlorocyclopentadiene	730.	U
88-06-2	2,4,6-Trichlorophenol	730.	U
95-95-4	2,4,5-Trichlorophenol	3500.	U
91-58-7	2-Chloronaphthalene	730.	U
88-74-4	2-Nitroaniline	3500.	U
131-11-3	Dimethylphthalate	730.	U
208-96-8	Acenaphthylene	730.	U
606-20-2	2,6-Dinitrotoluene	730.	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ELF76

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3500.	U
83-32-9	Acenaphthene	730.	U
51-28-5	2,4-Dinitrophenol	3500.	U
100-02-7	4-Nitrophenol	3500.	U
132-64-9	Dibenzofuran	730.	U
121-14-2	2,4-Dinitrotoluene	730.	U
84-66-2	Diethylphthalate	730.	U
7005-72-3	4-Chlorophenyl-phenylether	730.	U
86-73-7	Fluorene	730.	U
100-01-6	4-Nitroaniline	3500.	U
534-52-1	4,6-Dinitro-2-methylphenol	3500.	U
86-30-6	N-Nitrosodiphenylamine (1)	730.	U
101-55-3	4-Bromophenyl-phenylether	730.	U
118-74-1	Hexachlorobenzene	730.	U
87-86-5	Pentachlorophenol	3500.	U
85-01-8	Phenanthrene	730.	U
120-12-7	Anthracene	730.	U
84-74-2	Di-n-butylphthalate	730.	U
206-44-0	Fluoranthene	730.	U
129-00-0	Pyrene	730.	U
85-68-7	Butylbenzylphthalate	730.	U
91-94-1	3,3'-Dichlorobenzidine	1500.	U
56-55-3	Benzo(a)anthracene	730.	U
218-01-9	Chrysene	730.	U
117-81-7	bis(2-Ethylhexyl)phthalate	730.	U
117-84-0	Di-n-octylphthalate	730.	U
205-99-2	Benzo(b)fluoranthene	730.	U
207-08-9	Benzo(k)fluoranthene	730.	U
50-32-8	Benzo(a)pyrene	730.	U
193-39-5	Indeno(1,2,3-cd)pyrene	730.	U
53-70-3	Dibenz(a,h)anthracene	730.	U
191-24-2	Benzo(g,h,i)perylene	730.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: ELF76

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. dec.____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/ 6/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

Number TICs found: 9

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	4.72	1000.	J A
2.	- -	UNKNOWN HYDROCARBON	5.38	400.	J
3.	- -	UNKNOWN	5.63	30000.	J A
4.	- -	UNKNOWN HYDROCARBON	6.03	500.	J
5.	- -	UNKNOWN	8.07	1000.	J
6.	- -	UNKNOWN	9.68	500.	J
7.	- -	UNKNOWN HYDROCARBON	9.95	400.	J
8.	- -	UNKNOWN	10.95	1000.	J
9.	- -	UNKNOWN	31.37	5000.	J
10.					
11.					
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000574

EPA SAMPLE NO.

EBL13

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: XO-10-224-01A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LBP013

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 17. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/15/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	19.	U
319-85-7	beta-BHC	19.	U
319-86-8	delta-BHC	19.	U
58-89-9	gamma-BHC	19.	U
76-44-8	Heptachlor	19.	U
309-00-2	Aldrin	19.	U
1024-57-3	Heptachlor epoxide	19.	U
959-98-8	Endosulfan I	19.	U
60-57-1	Dieldrin	39.	U
72-55-9	4,4'-DDE	39.	U
72-20-8	Endrin	39.	U
33213-65-9	Endosulfan II	39.	U
72-54-8	4,4'-DDD	39.	U
1031-07-8	Endosulfan sulfate	39.	U
50-29-3	4,4'-DDT	39.	U
72-43-5	Methoxychlor	190.	U
53494-70-5	Endrin ketone	39.	U
5103-71-9	alpha-Chlordane	190.	U
5103-74-2	gamma-Chlordane	190.	U
8001-35-2	Toxaphene	390.	U
12674-11-2	Aroclor-1016	190.	U
11104-28-2	Aroclor-1221	190.	U
11141-16-5	Aroclor-1232	190.	U
53469-21-9	Aroclor-1242	190.	U
12672-29-6	Aroclor-1248	190.	U
11097-69-1	Aroclor-1254	390.	U
11096-82-5	Aroclor-1260	390.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FBL14

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LBP014

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 20. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/15/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20.	U
319-85-7	beta-BHC	20.	U
319-86-8	delta-BHC	20.	U
58-89-9	gamma-BHC	20.	U
76-44-8	Heptachlor	20.	U
309-00-2	Aldrin	20.	U
1024-57-3	Heptachlor epoxide	20.	U
959-98-8	Endosulfan I	20.	U
60-57-1	Dieldrin	40.	U
72-55-9	4,4'-DDE	40.	U
72-20-8	Endrin	40.	U
33213-65-9	Endosulfan II	40.	U
72-54-8	4,4'-DDD	40.	U
1031-07-8	Endosulfan sulfate	40.	U
50-29-3	4,4'-DDT	40.	U
72-43-5	Methoxychlor	200.	U
53494-70-5	Endrin ketone	40.	U
5103-71-9	alpha-Chlordane	200.	U
5103-74-2	gamma-Chlordane	200.	U
8001-35-2	Toxaphene	400.	U
12674-11-2	Aroclor-1016	200.	U
11104-28-2	Aroclor-1221	200.	U
11141-16-5	Aroclor-1232	200.	U
53469-21-9	Aroclor-1242	200.	U
12672-29-6	Aroclor-1248	200.	U
11097-69-1	Aroclor-1254	400.	U
11096-82-5	Aroclor-1260	400.	U

000592

EPA SAMPLE NO.

EBL15

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: EBL13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LBP015

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 21. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/15/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	200.	U
319-85-7	beta-BHC	200.	U
319-86-8	delta-BHC	200.	U
58-89-9	gamma-BHC	200.	U
76-44-8	Heptachlor	200.	U
309-00-2	Aldrin	200.	U
1024-57-3	Heptachlor epoxide	200.	U
959-98-8	Endosulfan I	200.	U
60-57-1	Dieldrin	400.	U
72-55-9	4,4'-DDE	400.	U
72-20-8	Endrin	400.	U
33213-65-9	Endosulfan II	400.	U
72-54-8	4,4'-DDD	400.	U
1031-07-8	Endosulfan sulfate	400.	U
50-29-3	4,4'-DDT	400.	U
72-43-5	Methoxychlor	2000.	U
53494-70-5	Endrin ketone	400.	U
5103-71-9	alpha-Chlordane	2000.	U
5103-74-2	gamma-Chlordane	2000.	U
8001-35-2	Toxaphene	4000.	U
12674-11-2	Aroclor-1016	2000.	U
11104-28-2	Aroclor-1221	2000.	U
11141-16-5	Aroclor-1232	2000.	U
53469-21-9	Aroclor-1242	2000.	U
12672-29-6	Aroclor-1248	2000.	U
11097-69-1	Aroclor-1254	4000.	U
11096-82-5	Aroclor-1260	4000.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FDI 17

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: ERI 13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LBP017

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 12. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	36.	U
72-55-9	4,4'-DDE	36.	U
72-20-8	Endrin	36.	U
33213-65-9	Endosulfan II	36.	U
72-54-8	4,4'-DDD	36.	U
1031-07-8	Endosulfan sulfate	36.	U
50-29-3	4,4'-DDT	36.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	36.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	360.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	360.	U
11096-82-5	Aroclor-1260	360.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FLF74

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: ERI 13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-274-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: LBP074

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 7. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	U
319-85-7	beta-BHC	17.	U
319-86-8	delta-BHC	17.	U
58-89-9	gamma-BHC	17.	U
76-44-8	Heptachlor	17.	U
309-00-2	Aldrin	17.	U
1024-57-3	Heptachlor epoxide	17.	U
959-98-8	Endosulfan I	17.	U
60-57-1	Dieldrin	34.	U
72-55-9	4,4'-DDE	34.	U
72-20-8	Endrin	34.	U
33213-65-9	Endosulfan II	34.	U
72-54-8	4,4'-DDD	34.	U
1031-07-8	Endosulfan sulfate	34.	U
50-29-3	4,4'-DDT	34.	U
72-43-5	Methoxychlor	170.	U
53494-70-5	Endrin ketone	34.	U
5103-71-9	alpha-Chlordane	170.	U
5103-74-2	gamma-Chlordane	170.	U
8001-35-2	Toxaphene	340.	U
12674-11-2	Aroclor-1016	170.	U
11104-28-2	Aroclor-1221	170.	U
11141-16-5	Aroclor-1232	170.	U
53469-21-9	Aroclor-1242	170.	U
12672-29-6	Aroclor-1248	170.	U
11097-69-1	Aroclor-1254	340.	U
11096-82-5	Aroclor-1260	340.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF75

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: ERI 13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-224-06A

Sample wt/vol: 30.1 (g/ml.) G Lab File ID: LRP075

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 22. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20.	U
319-85-7	beta-BHC	20.	U
319-86-8	delta-BHC	20.	U
58-89-9	gamma-BHC	20.	U
76-44-8	Heptachlor	20.	U
309-00-2	Aldrin	20.	U
1024-57-3	Heptachlor epoxide	20.	U
959-98-8	Endosulfan I	20.	U
60-57-1	Dieldrin	41.	U
72-55-9	4,4'-DDE	41.	U
72-20-8	Endrin	41.	U
33213-65-9	Endosulfan II	41.	U
72-54-8	4,4'-DDD	41.	U
1031-07-8	Endosulfan sulfate	41.	U
50-29-3	4,4'-DDT	41.	U
72-43-5	Methoxychlor	200.	U
53494-70-5	Endrin ketone	41.	U
5103-71-9	alpha-Chlordane	200.	U
5103-74-2	gamma-Chlordane	200.	U
8001-35-2	Toxaphene	410.	U
12674-11-2	Aroclor-1016	200.	U
11104-28-2	Aroclor-1221	200.	U
11141-16-5	Aroclor-1232	200.	U
53469-21-9	Aroclor-1242	200.	U
12672-29-6	Aroclor-1248	200.	U
11097-69-1	Aroclor-1254	410.	U
11096-82-5	Aroclor-1260	410.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELF76

Lab Name: PEI Contract: 68-D9-0037

Lab Code: PEI Case No.: 15112 SAS No.: SDG No.: ERI 13

Matrix: (soil/water) SOIL Lab Sample ID: X0-10-274-07A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LBP076

Level: (low/med) LOW Date Received: 10/19/90

% Moisture: not dec. 10. dec._____ Date Extracted: 10/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	18.	U
319-85-7	beta-BHC	18.	U
319-86-8	delta-BHC	18.	U
58-89-9	gamma-BHC	18.	U
76-44-8	Heptachlor	18.	U
309-00-2	Aldrin	18.	U
1024-57-3	Heptachlor epoxide	18.	U
959-98-8	Endosulfan I	18.	U
60-57-1	Dieldrin	35.	U
72-55-9	4,4'-DDE	35.	U
72-20-8	Endrin	35.	U
33213-65-9	Endosulfan II	35.	U
72-54-8	4,4'-DDD	35.	U
1031-07-8	Endosulfan sulfate	35.	U
50-29-3	4,4'-DDT	35.	U
72-43-5	Methoxychlor	180.	U
53494-70-5	Endrin ketone	35.	U
5103-71-9	alpha-Chlordane	180.	U
5103-74-2	gamma-Chlordane	180.	U
8001-35-2	Toxaphene	350.	U
12674-11-2	Aroclor-1016	180.	U
11104-28-2	Aroclor-1221	180.	U
11141-16-5	Aroclor-1232	180.	U
53469-21-9	Aroclor-1242	180.	U
12672-29-6	Aroclor-1248	180.	U
11097-69-1	Aroclor-1254	350.	U
11096-82-5	Aroclor-1260	350.	U

WL2

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

№ 147466

County Montgomery Township (Moraine) Section of Township ~~or Lot Number~~ (Southwest) 14

Owner the Dayton Power & Light Address 25 North Main St. Dayton

Location of property 500 Yds South of Miami River on S. Broadway St.

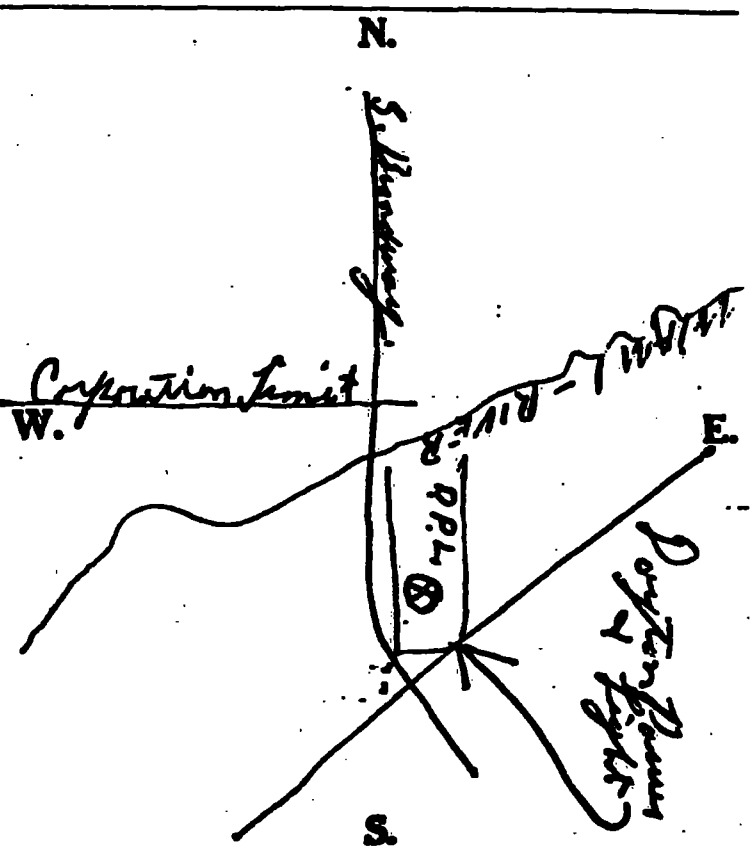
CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter 6" Length of casing 70'	Pumping rate 20 G.P.M. Duration of test 8 hrs.
Type of screen ____ Length of screen ____	Drawdown 50 ft. Date May 27-55
Type of pump 5 H.P. Turbine	Developed capacity ____
Capacity of pump 4000 gal per hr.	Static level—depth to water 35 ft.
Depth of pump setting 62'	Pump installed by R.B. Pillman & Co

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill	0 Feet	27 Ft.
Dry Gravel	27	41
Hard pan	41	47
Clay & Gravel	47	56
Water sand & Gravel	56	70

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm W. U. Scott

Address 5859 Brownford Rd Dayton O.

Date May 27-55

Signed W. U. Scott

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

WL3

No. 179361

County Montgomery Township ~~Perry~~ Moraine Section of Township

Owner Dayton Power & Light Address Tait Station Dayton, Ohio

Location of property Tait Station Dayton, Ohio Corner of East River & Dayton Rd.

CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 20" Length of casing 101	Pumping rate 3000 G.P.M. Duration of test 8 hrs.
Type of screen Pipe Brass Length of screen 50'	Drawdown 23 ft. Date 3/5/56
Type of pump —	Developed capacity 3000 G.p.m
Capacity of pump —	Static level—depth to water 23 ft.
Depth of pump setting —	Pump installed by —
Date of completion —	

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Topsoil	0 Feet	10 Ft.
Gravel	10	30
Till	30	40
Gravel	40	63
Sand	63	70
Gravel	70	83
Gravel	83	92
Gravel	92	155

SKETCH SHOWING LOCATION

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

N.

W. E.

S.

See reverse side for instructions

Drilling Firm Donald J. Roe Date 3/5/56

Address Vandalia, Ohio Signed Don Roe

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

WL4

No. 179363

Moraine

County Montgomery Township ~~[illegible]~~ Section of Township ——

Owner Dayton Power & Light Address Ned Sunnyvale, Dayton Ohio

Location of property Intersection of East River Rd & Springboro Pike North East Corner

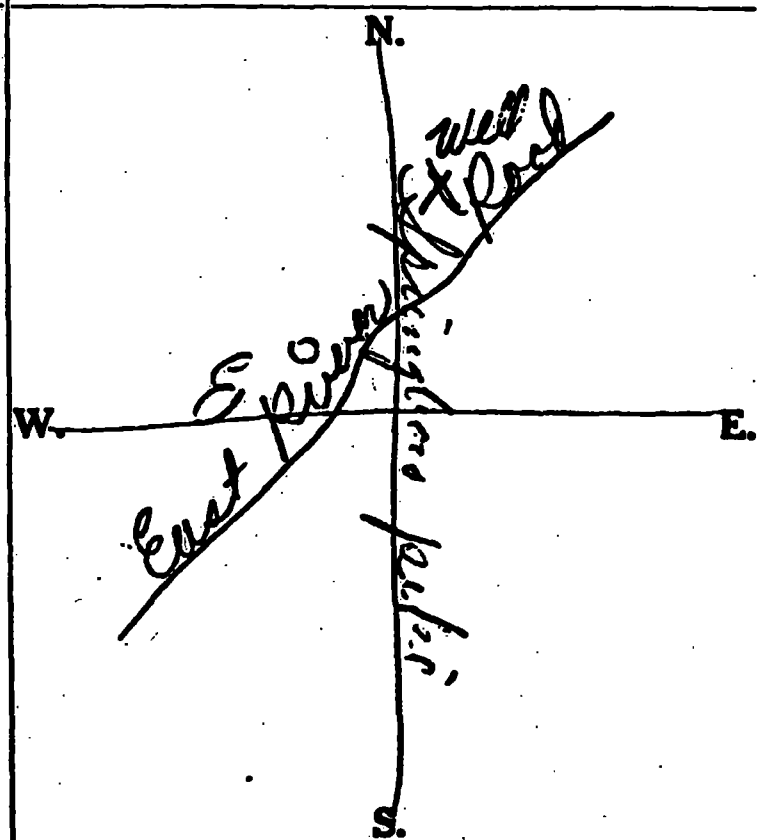
CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 14" Length of casing 108'	Pumping rate 1000 G.P.M. Duration of test 8 hrs.
Type of screen Red Brass Length of screen 30'	Drawdown 10 ft. Date July 20, 1956
Type of pump —	Developed capacity 1000 gpm
Capacity of pump —	Static level—depth to water 30' ft.
Depth of pump setting —	Pump installed by
Date of completion —	

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill	0 Feet	18 Ft.
Gravel	18	33
Gravel	33	57
Gravel	57	62
Gravel	62	78
Till	78	104
Gravel	104	140
Till	140	143

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Donald J Roe Date July 20/1956

Address Vandalia, Ohio Signed Don Roe

PLEASE USE PENCIL OR TYPEWRITER

DO NOT USE INK

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

№ 342961

WL5

County Montgomery Township [illegible] Section of Township

Owner The Dayton Power & Light Co. Address 25 N. Main St. Dayton

Location of property Pit Station - Between Plant & Railroad off Carillon Blvd. S of Dayton

CONSTRUCTION DETAILS

Casing diameter 20" O.D. Length of casing 168 ft.

Type of screen Pipe Brass Length of screen 65 ft.

Type of pump

Capacity of pump

Depth of pump setting

Date of completion

BAILING OR PUMPING TEST

Pumping Rate 3010 G.P.M. Duration of test 8 hrs.

Drawdown 17 ft. Date 4-1-66

Static level-depth to water 47 ft.

Quality (clear, cloudy, taste, odor) clear

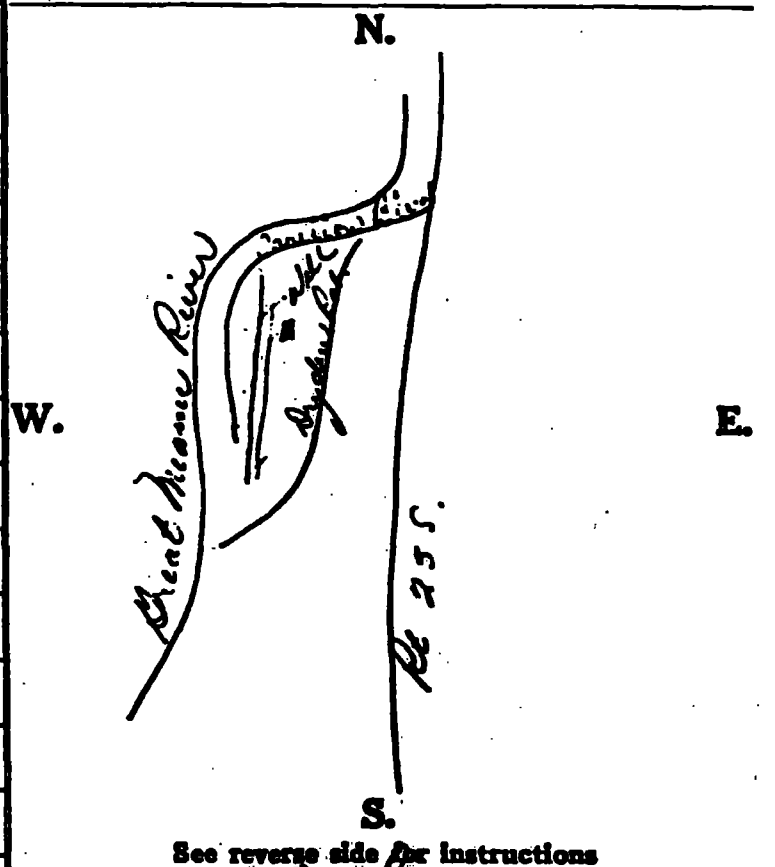
Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill	0 Feet	3 Ft.
Dry gravel	3	40
Large wet gravel	40	60
Coarse gravel	60	65
Coarse sand & coarse gravel	65	70
Dirty sand & gravel	70	75
Dirty large gravel	75	80
Cemented gravel - water bearing	80	126
Coarse sand & coarse gravel	126	140
Cemented gravel	140	165
Medium sand	165	168
Clay	168	170

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Moody's of Dayton Inc. Date April 7th 1966

Address P.O. Box 158, Vandalia, Ohio Signed E. B. Wagner - President

*If additional space is needed to complete well log, use next consecutive numbered form.

Page 1 of 2

PLEASE USE PENCIL OR TYPEWRITER

DO NOT USE INK

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

№ 342985

WL6

County Montgomery Township ~~Miami~~ Miami Section of Township

Owner Dayton Power & Light Co. Address Dayton, Ohio

Location of property Tait Station - Well #4

CONSTRUCTION DETAILS

Casing diameter 20" Length of casing 148'

Type of screen Red Brass Length of screen 50'

Type of pump Turbine

Capacity of pump 1000 G.P.M.

Depth of pump setting 147'

Date of completion June 7, 1967

BAILING OR PUMPING TEST

Pumping Rate 1000 G.P.M. Duration of test 8 hrs.

Drawdown 8 ft. Date 7/8/67

Static level-depth to water 50 ft.

Quality (clear, cloudy, taste, odor) Clear

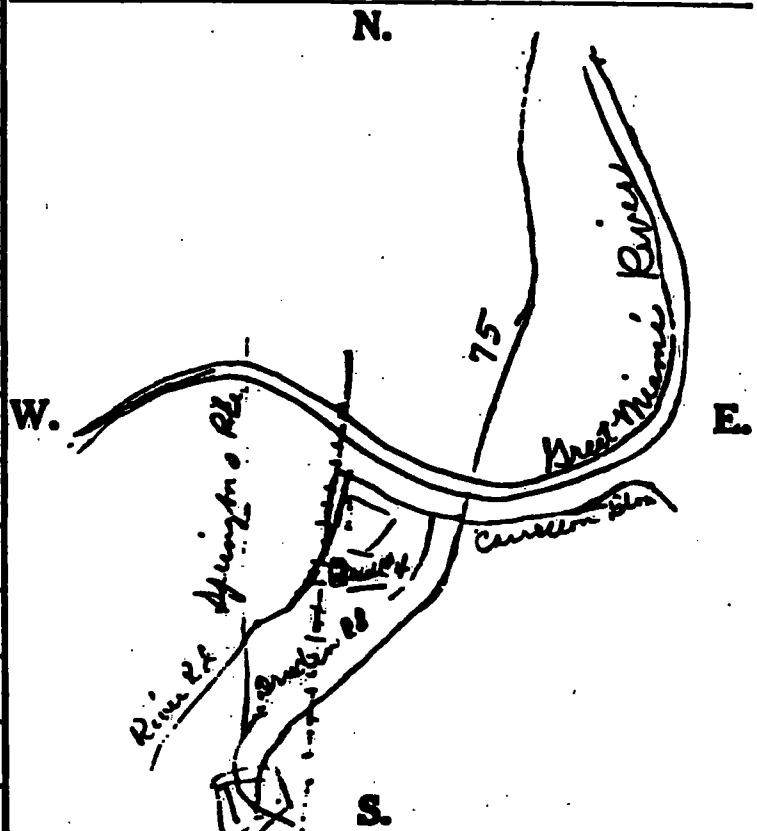
Pump installed by C. O. Burgess

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
Road Bed & Fill	0 Feet	2 Ft.
Till	2	8
Dry Sand & Gravel	8	15
Coarse Sand & Gravel	15	25
Sand, Gravel & Boulders	25	35
Coarse sand & Coarse gravel	35	57
Till	57	66
Dty Coarse sand, gravel & Bldrs	66	79
Grey Coarse sand & gravel	79	100
" " " " "	100	115
Med. sand & Med. Gravel	115	126
" " & fine "	126	130
Fine sand & Med "	130	140

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Moody's of Dayton, Inc. Date November 13, 1967

Address P.O. Box 155, Vandalia, Ohio 45377 Signed V. C. Caspel

*If additional space is needed to complete well log, use next consecutive numbered form.

Continued

1

Page 2

PLEASE USE PENCIL OR TYPEWRITER

DO NOT USE INK

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

№ 342986

WL7

County Montgomery Township ~~[illegible]~~ Moraine Section of Township

Owner Dayton Power & Light Co. Address Dayton, Ohio

Location of property Tait Station - Well #4

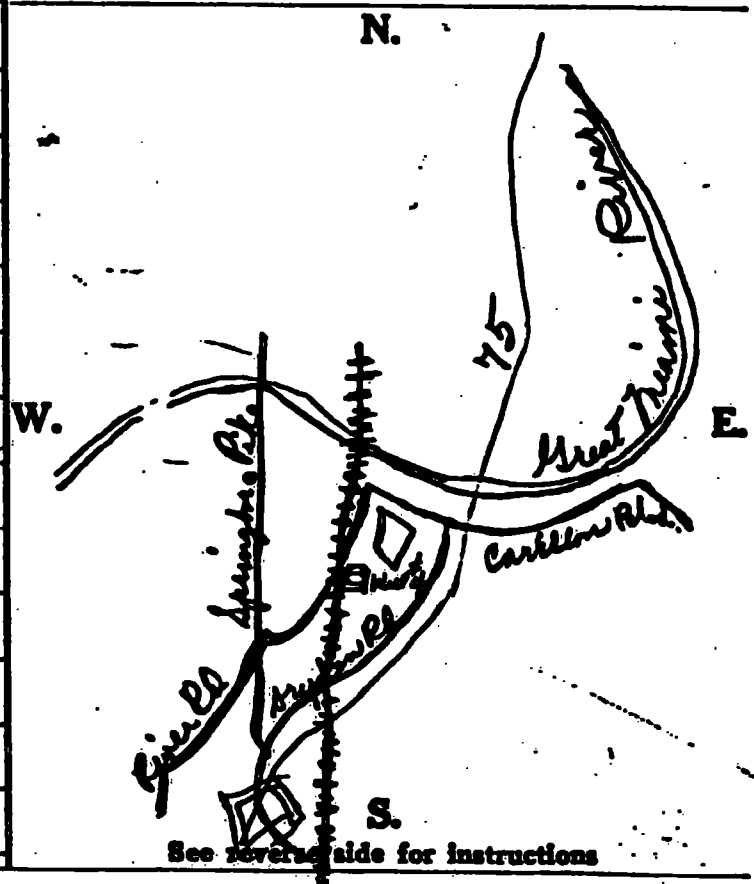
CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 20" Length of casing 148'	Pumping Rate 1000 G.P.M. Duration of test 8 hrs.
Type of screen Lee Brass Length of screen 50'	Drawdown 8 ft. Date 7/8/67
Type of pump Turbine	Static level-depth to water 50 ft.
Capacity of pump 1000 G.P.M.	Quality (clear, cloudy, taste, odor) clear
Depth of pump setting 147'	
Date of completion June, 1967	Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
(Continued)	0 Feet	Ft.
Fine sand & Coarse gravel	140	144
Blue Clay	144	146
Good Med. sand & Coarse gravel	146	156
" " " " " "	156	165
Yellow Clay	165	167
Med sand & Coarse gravel (slightly dirty)	167	178
Fine sand & Coarse gravel	178	198
Clay	198	200

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Moody's of Dayton
Address P.O. Box 155, Vandalia, Ohio 45377

Date November 13, 1967
Signed T. C. Casper

*If additional space is needed to complete well log, use next consecutive numbered form.

County Permit No.

NO CARBON PAPER NECESSARY-SELF-TRANSCRIBING

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

557903 Mc

WL8

COUNTY Montgomery TOWNSHIP City of Moraine SECTION OF TOWNSHIP 13

OWNER Mid States Development ADDRESS Dayton, Ohio

LOCATION OF PROPERTY Parking Lot of E. F. MacDonald Co. between I-75 and Arbor Blvd.

CONSTRUCTION DETAILS

Casing diameter 12" Length of casing 68'

Type of screen s.s. Cook Length of screen 32'

Type of pump Pioneer Z-1000

Capacity of pump 1000 gpm @ 60'

Depth of pump setting 40'

Date of completion 11/7/80

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 1200 gpm Duration of test 4 hrs

Drawdown 35.19 ft Date 11-18-80

Static level (depth to water) 19.51 ft

Quality (clear, cloudy, taste, odor) Clear

Pump installed by Moody's of Dayton, Inc.

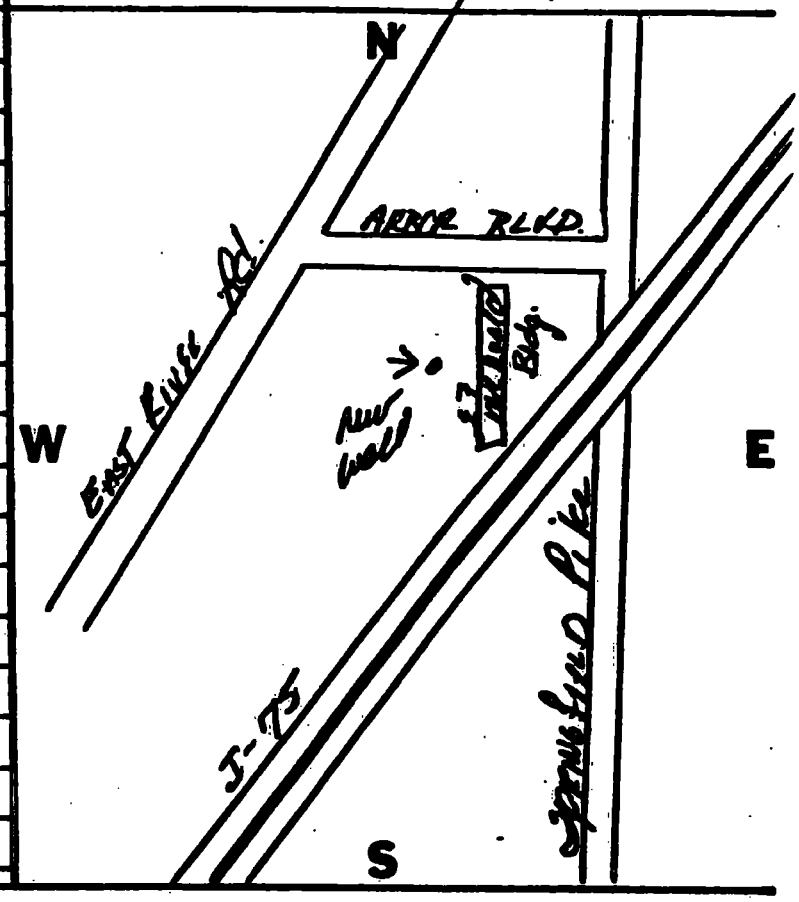
WELL LOG*

Well #2

Formations: sandstone, shale, limestone, gravel, clay	From	To
Fill	0 ft	4 ft
ly ash	4	15
Clay w/gravelly hard pan	15	38
and and gravel	38	48
Clay	48	57
and, med to fine and coarse gravel	57	100

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM Moody's of Dayton, Inc. DATE November 26, 1980

ADDRESS 4359 Infirmary Rd., P.O. Box 123
Miamisburg, Ohio 45342

SIGNED [signature]

*If additional space is needed to complete well log, use next consecutive numbered form.

4

NO CARBON PAPER NECESSARY- SELF-TRANSCRIBING

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
Fountain Square
Columbus, Ohio 43224

557902
WL9

COUNTY Montgomery TOWNSHIP City of Moraine SECTION OF TOWNSHIP 13

OWNER Mid-States Development ADDRESS Dayton, Ohio

LOCATION OF PROPERTY Corner of East river and Arbor, Delco Air Parking Lot

CONSTRUCTION DETAILS

Casing diameter 12" Length of casing 70'

Type of screen S.S. Length of screen 30'

Type of pump Pioneer Z-1000

Capacity of pump 1250 gpm @ 40'

Depth of pump setting

Date of completion 10/7/80

BAILING OR PUMPING TEST
(specify one by circling)

Test rate 1100 gpm Duration of test 24 hrs

Drawdown 7.08 ft Date 10/14/80

Static level (depth to water) 23.13 ft

Quality (clear, cloudy, taste, odor) Clear

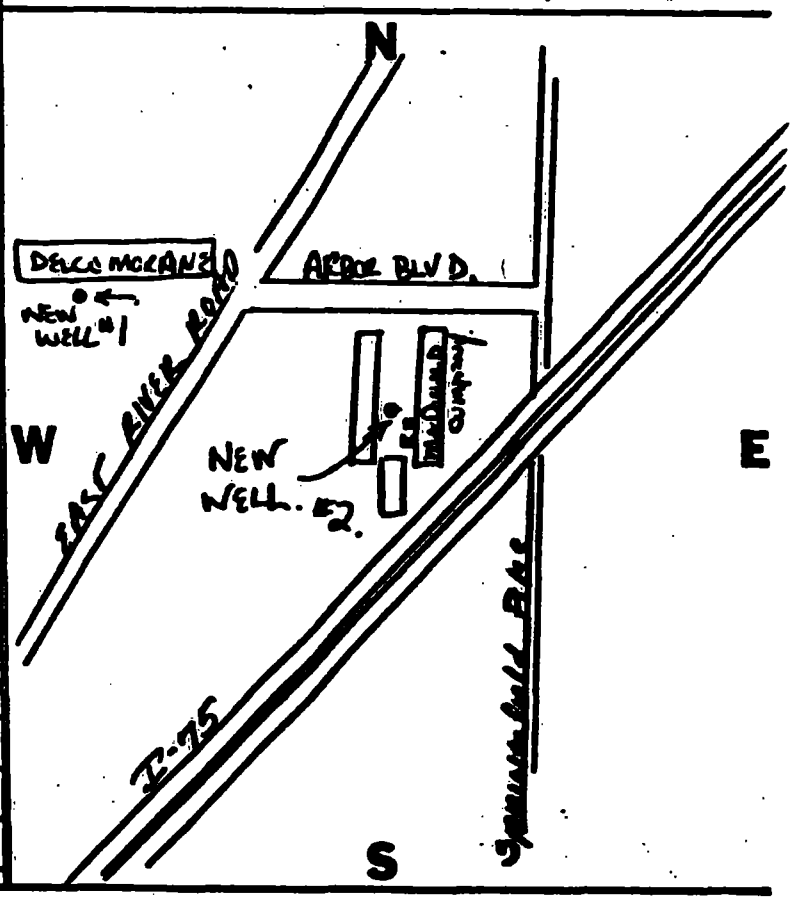
Pump installed by Moody's of Dayton, Inc.

Well #1 WELL LOG*

Formations: sandstone, shale, limestone, gravel, clay	From	To
Overlay	0 ft	4 ft
Fly ash	4	22
local till (hardpan)	22	44
Till (hard pan)	44	64
Coarse to fine sand & gravel	64	84
Coarse to fine sand & gravel	84	100

SKETCH SHOWING LOCATION

Locate in reference to numbered state highways, street intersections, county roads, etc.



DRILLING FIRM Moody's of Dayton, Inc. DATE November 28, 1980

ADDRESS 4359 Infirmary Rd., P.O. Box 123
Miamisburg, Ohio 45342

SIGNED Jerrett Cramer

*If additional space is needed to complete well log, use next consecutive numbered form.

(5000 x 5000)

4 - 618,000 - S

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

WL10

№ 136256

County Montgomery Township ~~Perry~~ Moraine Section of Township or Lot Number

Owner Elmer Flynn Address 2601 Holman Street Dayton 9, Ohio

Location of property West Miami Park

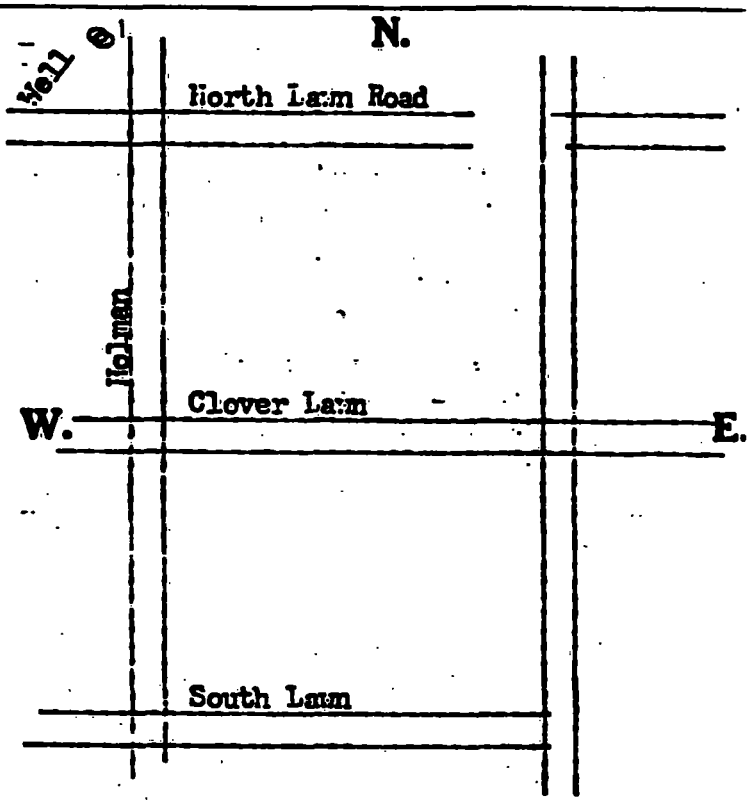
CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter 1½ in. Length of casing 75 ft.	Pumping rate G.P.M. Duration of test hrs
Type of screen Length of screen	Drawdown ft. Date
Type of pump	Developed capacity
Capacity of pump	Static level—depth to water 29 ft.
Depth of pump setting	Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Top Soil	0 Feet	2 Ft.
Dry Gravel	2	29
Sand & Gravel	29	60
Clay & Gravel	60	71
Sand & Gravel	71	75
Dip Test Approx. 80.P.M.		

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Earl Hollandsworth, Inc. Well Drilling
Address 2538 One Avenue Dayton 4, Ohio

Date July 15, 1954

Signed Millie A. Hollandsworth, Secy

A

WL11

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

Nº 131433

County ~~Green~~ Montgomery Township ~~Miami~~ Moraine Section of Township or Lot Number West Marine Plat

Owner Robert Milton Address 2718 Gladstone

Location of property 100 Yards West of Dryden RD

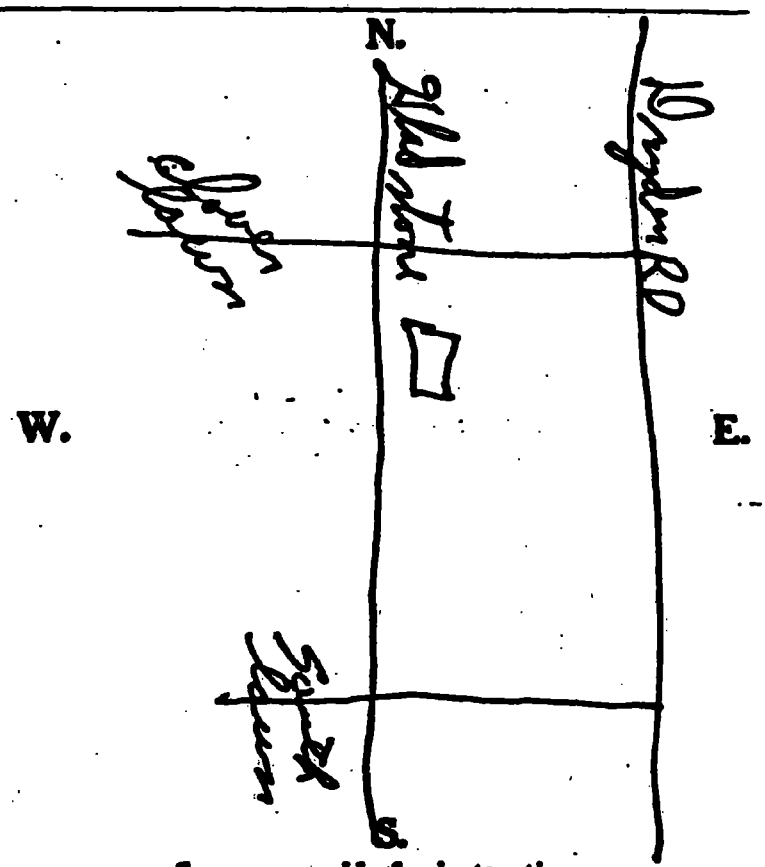
CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter 6" OD Length of casing 46	Pumping rate 15 G.P.M. Duration of test 4 hrs.
Type of screen ____ Length of screen ____	Drawdown 0 ft. Date 9-12-54
Type of pump ____	Developed capacity 1000 GAL-H
Capacity of pump ____	Static level—depth to water 21 ft.
Depth of pump setting ____	Pump installed by ____

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
	0 Feet	____ Ft.
Sand & gravel	0	46
Water at 36 ft		

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Louis S. Kennedy Date 9-12-54

Address 1649 Cincinnati St Dayton, 8, Ohio Signed Louis S. Kennedy

A

WELL LOG AND DRILLING REPORT

ORIGINAL

WL12

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

Nº 131434

County Montgomery Township ~~Miami~~ Section of Township or Lot Number Moraine West Marine Flat 274

Owner Willie May Address 2744 Cadillac

Location of property 100 yards West of ~~Marine Flat~~ Dryden Rd

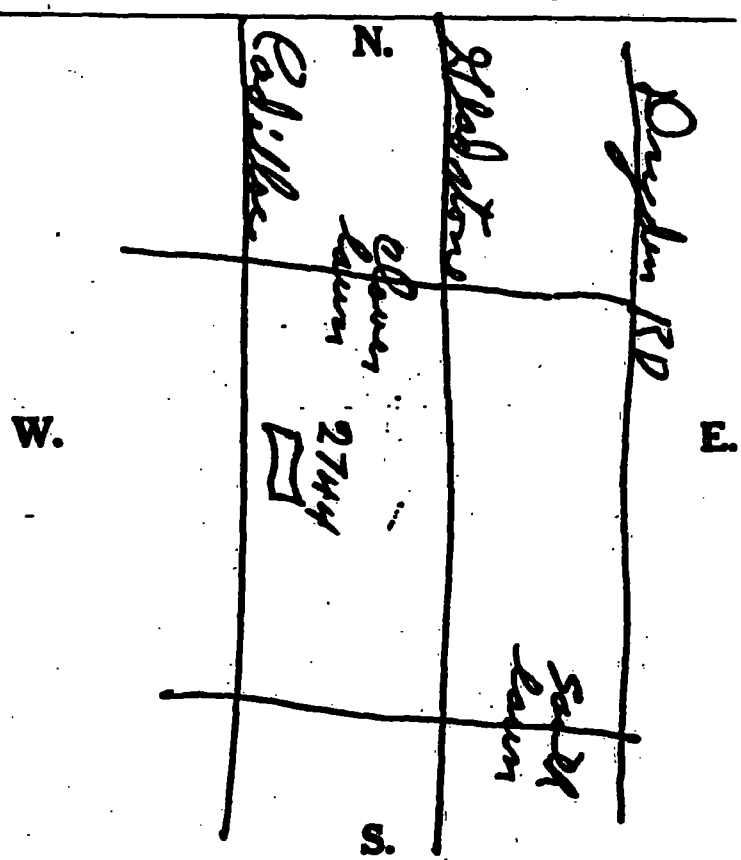
CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter 6" OD Length of casing 45 ft	Pumping rate 15 G.P.M. Duration of test 4 hrs.
Type of screen ____ Length of screen ____	Drawdown 0 ft. Date 9-14-54
Type of pump ____	Developed capacity 1000 GAL. P.H
Capacity of pump ____	Static level—depth to water 21 ft.
Depth of pump setting ____	Pump installed by ____

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Top	0 Feet	7 Ft.
Sand & gravel	7	45
Water at 38		

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Louis S. Kennedy Date 9-14-54

Address 462 Cincinnati St Dayton 8, Ohio Signed Louis S. Kennedy

A

Office of Enforcement

CHAIN OF CUSTODY RECORD

Chicago, Illinois 60604

PROJ. NO.	PROJECT NAME	
FOH0584	F058911008	CASE#: 15112

SAMPLERS: (Signature) Swano

COOLER#: 100

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	8oz (ABN/Pest/PCB)	120 ml. (VOA)					REMARKS TAG#	Low Concent. Matrix
EDL 17	10/18/90	1600		✓	S1	3	1	2					5-167176-178	soil
EBL 13	10/18/90	1250		✓	S2	3	1	2					5-167180-182	sediment/soil
EBL 14	10/18/90	1300		✓	S3	3	1	2					5-167184-186	sediment/soil
EBL 15	10/18/90	1245		✓	S4	3	1	2					5-167188-190	sediment/soil
ELF 74	10/18/90	1400		✓	S5	3	1	2					5-167192-194	soil
ELF 75	10/18/90	1405		✓	S6	3	1	2					5-167196-198	soil
ELF 76	10/18/90	1500		✓	S7	3	1	2					5-080293-295	soil
					~~S~~ JS 10/10/90									
													LOT #s: W0172013, 0137013,	
													0144013	
													OTR in Cooler # 100	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Swano	10/18/90 1730				
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 Shipped Fed Ex to: PEI Air bill #: 9157648204 Custody Seals: 128833, 128834	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 10350

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FOH0584
PROJECT NAME: F0589 11008 CASE #: 15112
SAMPLERS (Signature): [signature]

Cooler # 123

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	8 oz (Metals/CN)						TAG #s	REMARKS: Low Concen Matrix
MEDH77	10/18/90	1600		X	S1	1	1						5-167175	soil
MEBH31	10/18/90	1250		X	S2	1	1						5-167179	sediment/soil
MEBH32	10/18/90	1300		X	S3	1	1						5-167183	sediment/soil
MEBH33	10/18/90	1245		X	S4	1	1						5-167187	sediment/soil
MEBH34	10/18/90	1400		X	S5	1	1						5-167191	soil
MEY396	10/18/90	1405		X	S6	1	1						5-167195	soil
MEY397	10/18/90	1500		X	S7	1	1						5-080292	soil
													Lot #: 0137013, 0144013	
													TIR in Cooler # 123	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	10/18/90 1730				
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: Shipped FedEx to: WEYER Airbill #: 9157648253 Custody Seals: 128771, 128772	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 112

PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

(For CLP Use Only) 15112 | N/A

1. Type of Activity (Check one)
☐ ENF ☐ NPLD ☐ RA ☒ SI ☐ STSI
☐ ER ☐ O&M ☐ RD ☐ ST ☐ Other (Specify)
☐ ESI ☐ PA ☐ RIFS ☐ STPA

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): J. Swano

4. Date Shipped: 10/18/90
Carrier: F
Airbill Number: 9157648253

Non-Superfund Program

Site Name: South Sanitary Landfill

City, State: Moraine, OH
Site Spill ID: N/A

3. Ship To: WEYER
38901 Weyerhaeuser Way
WTC 2F25
Federal Way, WA 98003
Attn: Bonnie Chappel

Double volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

CLP Sample Number (From labels)	(A) Sample Description (From box 5)	(B) Concentration L=low M=med H=high	(C) List Preservative Used/Vol	(D) RAS Analysis: Total or Dissolved Metals	(D) Cyanide	(D) Low Conc. Sow: Nitrate/Nitrite	(D) Low Conc. Sow: Fluoride	(E) Special Handling	(F) Station Location	(G) Date/Time of Sample Collection	(H) Corresponding Organic Sample Number
MEDHT7	5	L		✓	✓				S1	10/18/90 1600	EDL 17
MEBH 31	5	L		✓	✓				S2	10/18/90 1250	EBL 13
MEBH 32	5	L		✓	✓				S3	10/18/90 1300	EBL 14
MEBH 33	5	L		✓	✓				S4	10/18/90 1245	EBL 15
MEBH 34	5	L		✓	✓				S5	10/18/90 1400	ELF 74
MEY 396	5	L		✓	✓				S6	10/18/90 1405	ELF 75
MEY 397	5	L		✓	✓				S7	10/18/90 1500	ELF 76

SHIPMENT IS COMPLETE

EPA Form 9110-1 (11-89) Replaces EPA Form 2075-6, which may be used. Green - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 15112
SAS No. (if applicable): N/A

1. Type of Activity (Check one): ☐ ENF ☐ NPLD ☐ RA ☒ SI ☐ STSI ☐ ER ☐ O&M ☐ RD ☐ ST ☐ Other (Specify) ☐ ESI ☐ PA ☐ RIFS ☐ STPA

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): J. Swano

4. Date Shipped: 10/18/90
Carrier: F
Airbill Number: 9157648264

Non-Superfund Program

Site Name: South Sanitary Landfill

City, State: Moraine, OH
Site Spill ID: N/A

3. Ship To: PEI
11499 Chester Rd.
Cincinnati, OH 45246
Attn: Dawn Weber

Triple volume required for matrix spike/duplicate aqueous sample.
Ship medium and high concentration samples in paint cans.
See reverse for additional instructions.

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

CLP Sample Number (From labels)	(A) Sample Description (From box 5)	(B) Concentration L=low M=med H=high	(C) RAS Analysis: VOA	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number
EDL 17	5	L	N	✓	✓			S1	10/18/90 1600	MEDH 77
EBL 13	5	L	N	✓	✓			S2	10/18/90 ~~1245~~ 1250	MEBH 31
EBL 14	5	L	N	✓	✓			S3	10/18/90 1300	MEBH 32
EBL 15	5	L	N	✓	✓			S4	10/18/90 1245	MEBH 33
ELF 74	5	L	N	✓	✓			S5	10/18/90 1400	MEBH 34
ELF 75	5	L	N	✓	✓			S6	10/18/90 1405	MEY 396 JS 10/24/90
ELF 76	5	L	N	✓	✓			S7	10/18/90 1500	MEY 397

SHIPMENT IS COMPLETE

EPA Form 9110-2 (11-89) Replaces EPA Form 2075-7, which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U.S. EPA ID NO OHD980612139

PROJ. ACCT. NO. F0H05845A

TDD F05 8911008

SPLIT SAMPLES ACCEPTED( ) DECLINED( )

FACILITY/OCCUPANT NAME

FACILITY/OCCUPANT ADDRESS

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX

TRANSFERRED BY

(Signature) (Date) (Time)

RECEIVED BY:

(Signature) (Date) (Time)

TITLE TELEPHONE

DISTRIBUTION
WHITE: FIT SITE FILE
YELLOW: FACILITY/OCCUPANT
GREEN: FIT SAMPLE MANAGEMENT
PINK: U.S. EPA

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U.S. EPA ID NO OHD980612139

PROJ. ACCT. NO. F0H0584SA

TDD F058911008

SPLIT SAMPLES ACCEPTED( ) DECLINED( )

FACILITY/OCCUPANT NAME: South Sanitary

FACILITY/OCCUPANT ADDRESS:

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES (✓)	PESTICIDES/PCBS (✓)	VOLATILES (✓)	METALS (✓)	CYANIDE (✓)			MATRIX
S1	10/18/90			EDL 17	MEDH77	Soil 1	X	X	X	X	X			Soil
S2	10/18/90	1250		EBL 13	MEBH31	Soil 2	X	X	X	X	X			Soil
S3	10/18/90	1300		EBL 14	MEBH32	Soil 3	X	X	X	X	X			Soil
S4	10/18/90	1245		EBL 15	MEBH33	Soil 4	X	X	X	X	X			Soil
S5	10/18/90	1400		ELF 74	MEBH34	Soil 5	X	X	X	X	X			Soil
S6	10/18/90	1405		ELF 75	MEY396	Soil 6	X	X	X	X	X			Soil
S7	10/18/90			ELF 76	MEY397	Soil 7	X	X	X	X	X			Soil
MW1	10/ /90					Monitoring well 1	X	X	X	X	X			groundwater
MW2	10/ /90					Monitoring well 2	X	X	X	X	X			groundwater
MW3	10/ /90													
JS ~~MW4~~	~~10/ /90~~													

TRANSFERRED BY

(Signature) (Date) (Time)

RECEIVED BY:

(Signature) (Date) (Time)

DISTRIBUTION
WHITE: FIT SITE FILE
YELLOW: FACILITY/OCCUPANT
GREEN: FIT SAMPLE MANAGEMENT
PINK: U.S. EPA

TITLE TELEPHONE

NARRATIVE

Case 15152

A total of eleven (11) samples were received by ENCOTEC on October 25, 1990 and were scheduled for Organics Analysis under Contract #68-D9-0033, first bid lot. Please refer to the following table for vital information that pertains to this case.

Table 1.0

SDG #: EKS19

	SAMPLE ANALYZED			
	Actual Samples	QC Samples	Re-Run Samples	Total Billable Analyses
Volatile Analyses	11	2	3	16
Semivolatile Analyses	11	2	0	13
Pesticide/PCB Analyses	11	2	0	13

Total Cumulate Billable Full Analyses: 13 + 3 Volatiles

This Deliverables Package is assembled in accordance with instructions in Section B, 2/88 revision of the Contract Laboratory Program - Statement of Work. A copy of this deliverable has been distributed to Region V, the Sample Management Office (SMO) and EMSL-LV. In addition a sample Summary Data Package and Diskette Deliverable has been sent to SMO.

The following is a detailed description of quality control sample, shipment and/or analytical problems that were encountered in the processing of these samples.

US EPA
CHICAGO, ILLINOIS

Sample Control/Sample Custody

We recieved case 15152 from Federal Express on October 24, 24, 1990. All samples were received in good condition. All paperwork and sample tags were present. The case was scheduled for analysis.

Extraction/Sample Preparation

Soil samples EKS 19 - EKS 29 were extracted for pesticide/pcb and semivolatile analyses on 10/26/90. All soil extracts were screened on GC (ECD and FID) and were determined to be all low level. Pesticide/pcb and semivolatile QC was extracted on 10/30/90. All extracts were processed according to clp protocol and were sent to GC and GC/MS groups on 11/05/90.

Volatile Analyses

The volatile fraction for case 15152 was analyzed without many difficulties. Three samples had to be reanalyzed due to matrix inference problems with surrogate recoveries and EICP standard areas. Method blank contamination was minimal and QA/QC was very good overall.

Method blank contaminants for this case were Methylene Chloride (CAS# 75-09-2), 2-Butanone (Cas #78-93-3) and Toluene (CAS# 108-88-3). Methylene Chloride and 2-Butanone are common laboratory contaminants. Toluene contamination has been traced to the recent construction done to our facility. The laboratory contaminant were detected at levels less than their CRQL's. The Toluene contamination showed levels of less than the CRQL. Please see Volatile Raw QC Data Package for the particulars. Sample analysis revealed multiple positive hits for both Target and Tentatively Identified Compounds. Some of the samples contained a few Tentatively Identified Compounds. Most of the Target Compounds (excluding the laboratory contaminants) were at levels near to or less than their CRQL's.See Volatile Sample Data package for complete details.

QA/QC was very good for these samples. Most QA/QC such as surrogate recoveries, EICP standard area's & retention times, matrix spike recoveries, matrix spike %RSD's, tunes, SPCC's and CCC's were within either contract required or suggested limits. Those that were not within criteria, were so because of matrix interference problems. Please see Volatile QC Summary package for complete information.

Semivolatile Analysis

Semivolatile analysis proceeded without much difficulty. Method blanks were nearly contaminant free. Overall QA/QC was excellent.

Method blank analysis were relatively clean. No Target or Tentatively Identified Compounds were found to be present in the blanks. Please see Semivolatile Raw QC Data package for a complete run-down.

Sample analysis revealed positive hits for both Target and Tentatively Identified Compounds. Most of these compounds were at relatively low concentrations excluding Phenanthrene (CAS #85-01-8) found in samples EKS21 and EKS24. Both of these samples had to be reanalyzed at a secondary dilution to quantitate this compound within its linear range. The Semivolatile Sample Data package contains all the particulars.

QA\QC was excellent in general. All contract required criteria including surrogate recoveries, EICP Standard Area's, Standard Retention Times, Tune Criteria, SPCC's & CCC's and holding times were met. All other criteria were within contract suggested limits. Please see Semivolatile QC Summary Data package for complete details.

Calculations of the water semivolatile samples appeared to differ by a factor of two in the audit. this arose from the fact

that the final volume of extract was split in half and combined to produce 1 ml at analysis. During analysis, the laboratory injected 2 ul of the sample to achieve proper CRQL's. The original split was performed to save sample for a possible reanalysis since our current autosampler requires large volumes of sample extract during operation.

Pesticide/PCB Analysis

The pesticide portion of case 15152,SDG# EKS19 was completed with little difficulty. Some problems were encountered with the surrogate recoveries. These problems can be attributed to the presence of high levels of hydrocarbons in the samples interfering with the recoveries. The MS/MSD recoveries were good with some minor problems attributable to the matrix. Please see forms 2E and 3E respectively. All blanks were determined to be free of HSL pesticides/PCBs above CRQL.

Some special notes should be mentioned concerning SDG# EKS19. The dilutions chosen were based on information obtained from screening the samples prior to the actual analysis. The ZZZZZ's on both sets of forms 8E indicate samples run which were labeled as bad.

The following special flags are used by ENCOTEC in the pesticide/PCB analysis.

X-flag : The X flag denotes manually entered data. This always occurs on multi-component quantitations and sometimes occurs on individual pesticides when the analyst had to correct the integration of a peak.

Z-flag : The Z flag indicates a poor agreement between values obtained on a quantitation using both columns. When the quantitation on both columns gives a ratio from 0.7 to 1.4, a confirmation is assumed. If the ratio ranges

above 1.4 but below 1.7 or below 0.7 but above 0.5, then there is some degree of uncertainty as to the validity of the confirmation. A Z flag is then added to indicate the suspect data. Ratios above 1.7 or below 0.5 are considered false postivies and are not reported. GC/MS confirmation is performed on all quantitations if the concentration is great enough. If GC/MS confirms a compound, it is reported without regard to the ratio.

J-flag : The J flag is used to indicate the presence of HSL pesticides and/or PCBs below the CRDL. In order to use this flag, the ratio MUST be between 0.7 and 1.4 A J flag is not given to any compound quantitatied lower than five times below the CRQL.

Y-flag : The Y flag is used to indicate that quantitation was performed on the secondary dilution of a sample.

Sample Summary

The following samples within SDG EKS19 were determined to be free of all HSL pesticides/PCBs above CRQLs: EKS22, EKS24, EKS26, and EKS27.

The following samples were determined to be positive for these analytes:

EKS19 was positive for Aroclor 1248 (CAS# 12672-29-6), and positive but less than CRQL's for Aroclor 1260 (CAS# 11096-82-5); it was flagged with a J.

EKS20 was positive for Aroclor 1248 (CAS# 12672-29-6), and Aroclor 1260 (CAS# 11096-82-5).

EKS21 was positive but less than CRQL's for Aroclor 1260 (CAS#11096-82-5); it was flagged with a J.

EKS23 was positive for Aroclor 1248 (CAS# 12672-29-6), and positive but less than CRQL's for Aroclor 1260 (CAS# 11096-82-5); it was flagged with a J.
EKS25 was positive for Aroclor 1260 (CAS# 11096-82-5).
EKS28 was positive for Aroclor 1248 (CAS# 12672-29-6), and Aroclor 1260 (CAS# 11096-82-5).
EKS29 was positive but less than CRQL's for Aroclor 1260 (CAS# 11096-82-5).

A special note concerning sample EKS26 should be mentioned. It was analyzed at a 1:4 dilution due to the high levels of hydrocarbon contaminants present in the sample.

Any technical questions regarding the data present in this deliverable should be addressed to the individual whose name appears at the end of this case narrative.

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 implied or detailed above. Release of the information contained in this hardcopy data package and in the computer - readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature:

C. Michael O'Quinn (crn) 11/20/90

C. Michael O'Quinn
Assistant Laboratory Manager
CLP Project Manager

CMO/crn
75100

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1026F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1026F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/26/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	(Total)-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	9	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-02-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-01-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	EKS19	109	102	102		0
02	EKS20	106	94	102		0
03	EKS21	104	102	96		0
04	EKS22	164 *	59 *	96		2
05	EKS22RE	130 *	71 *	112		2
06	EKS23	103	92	96		0
07	EKS24	137 *	69 *	94		2
08	EKS24RE	134 *	72 *	119		2
09	EKS25	100	92	93		0
10	EKS26	102	88	92		0
11	EKS27	129 *	70 *	91		2
12	EKS27RE	120 *	79	113		1
13	EKS28	101	93	91		0
14	EKS29	115	92	89		0
15	EKS27MS	129 *	71 *	96		2
16	EKS27MSD	135 *	64 *	110		2
17	VBLK1	100	103	95		0
18	VBLK2	94	103	105		0
19	VBLK3	104	96	106		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	EKS19	59	61	78	65	64	66		0
02	EKS20	56	59	75	63	64	65		0
03	EKS21	63	66	101	74	69	88		0
04	EKS21DL	71	71	48	71	66	67		0
05	EKS22	58	64	60	58	58	48		0
06	EKS23	54	60	74	61	60	72		0
07	EKS24	54	65	83	57	54	75		0
08	EKS24DL	58	67	90	57	54	59		0
09	EKS25	59	65	67	59	60	77		0
10	EKS26	59	67	62	60	65	69		0
11	EKS27	64	66	78	59	55	53		0
12	EKS28	73	70	124	71	71	58		0
13	EKS29	73	71	71	70	67	57		0
14	EKS28MS	82	78	79	86	74	79		0
15	EKS28MSD	80	80	41	81	75	77		0
16	SBLK1	51	53	69	53	55	49		0
17	SBLK2	54	62	77	61	62	58		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

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

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)	#	OTHER
01	PBLKL1	109		0
02	PBLKL2	124		0
03	EKS19	151	*	0
04	EKS20	558	*	0
05	EKS21	282	*	0
06	EKS22	125		0
07	EKS23	171	*	0
08	EKS24	242	*	0
09	EKS25	205	*	0
10	EKS26	175	*	0
11	EKS26DL	149		0
12	EKS27	176	*	0
13	EKS28	224	*	0
14	EKS29	147		0
15	EKS28MS	225	*	0
16	EKS28MSD	288	*	0

ADVISORY QC LIMITS

S1 (DBC) = Dibutlychlorendate (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix Spike - EPA Sample No.: EKS27 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	50.0	0	54.6	109	59-172
Trichloroethene	50.0	0	61.1	122	62-137
Benzene	50.0	0	60.4	121	66-142
Toluene	50.0	0	70.0	140 *	59-139
Chlorobenzene	50.0	0	55.2	110	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	44.0	88	21	22	59-172
Trichloroethene	50.0	56.7	113	8	24	62-137
Benzene	50.0	61.3	123	-2	21	66-142
Toluene	50.0	68.9	138	1	21	59-139
Chlorobenzene	50.0	53.3	107	3	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: 1 out of 10 outside limits

COMMENTS:

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix Spike - EPA Sample No.: EKS28 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	16300	0	9210	57	26- 90
2-Chlorophenol	16300	0	12600	77	25-102
1,4-Dichlorobenzene	8150	0	3870	47	28 104
N-Nitroso-di-n-prop.(1)	8150	0	6630	81	41 126
1,2,4-Trichlorobenzene	8150	0	5740	70	38 107
4-Chloro-3-methylphenol	16300	0	13200	81	26 103
Acenaphthene	8150	108	4890	59	31-137
4-Nitrophenol	16300	0	18000	110	11-114
2,4-Dinitrotoluene	8150	0	4750	58	28- 89
Pentachlorophenol	16300	0	9290	57	17-109
Pyrene	8150	3420	8230	59	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	16300	9700	60	-5	35	26- 90
2-Chlorophenol	16300	12700	78	-1	50	25-102
1,4-Dichlorobenzene	8150	4020	49	-4	27	28 104
N-Nitroso-di-n-prop.(1)	8150	6620	81	0	38	41 126
1,2,4-Trichlorobenzene	8150	6000	74	-6	23	38 107
4-Chloro-3-methylphenol	16300	13000	80	1	33	26 103
Acenaphthene	8150	5070	61	-3	19	31-137
4-Nitrophenol	16300	19100	117 *	-6	50	11-114
2,4-Dinitrotoluene	8150	5130	63	-8	47	28- 89
Pentachlorophenol	16300	10500	64	-12	47	17-109
Pyrene	8150	8800	66	-11	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: 1 out of 22 outside limits

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix Spike - EPA Sample No.: EKS28 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	65.7	0	51.0	78	46-127
Heptachlor	65.7	0	54.0	82	35-130
Aldrin	65.7	0	60.4	92	34-132
Dieldrin	164	0	156	95	31-134
Endrin	164	0	173	106	42-139
4,4'-DDT	164	0	217	132	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	65.7	52.4	80	-3	50	46-127
Heptachlor	65.7	56.7	86	-5	31	35-130
Aldrin	65.7	63.7	97	-5	43	34-132
Dieldrin	164	170	104	-9	38	31-134
Endrin	164	187	114	-7	45	42-139
4,4'-DDT	164	236	144 *	-9	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: 1 out of 12 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Lab File ID: VSB1025F Lab Sample ID: VSB1025F

Date Analyzed: 10/25/90 Time Analyzed: 1541

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 006

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EKS19	EKS19V	EKS19V	1622
02	EKS20	EKS20V	EKS20V	1651
03	EKS21	EKS21V	EKS21V	1726
04	EKS22	EKS22V	EKS22V	1800
05	EKS23	EKS23V	EKS23V	1835
06	EKS24	EKS24V	EKS24V	1910
07	EKS25	EKS25V	EKS25V	1942
08	EKS26	EKS26V	EKS26V	2017
09	EKS27	ESK27V	EKS27V	2051
10	EKS28	EKS28V	EKS28V	2126
11	EKS29	EKS29V	EKS29V	2200

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Lab File ID: VSB1026F Lab Sample ID: VSB1026F

Date Analyzed: 10/26/90 Time Analyzed: 1543

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 006

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EKS22RE	EKS22VR	EKS22VR	1609
02	EKS24RE	EKS24VR	EKS24VR	1642
03	EKS27RE	EKS27VR	EKS27VR	1716

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Lab File ID: VSB1030F Lab Sample ID: VSB1030F

Date Analyzed: 10/30/90 Time Analyzed: 1259

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 006

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EKS27MS	EKS27VM1	EKS27VM1	1334
02	EKS27MSD	EKS27VD1	EKS27VD1	1409

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Lab File ID: LSB1026 Lab Sample ID: LSB1026

Date Extracted: 10/26/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 11/13/90 Time Analyzed: 1435

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 004

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EKS19	EKS19B	EKS19B	11/13/90
02	EKS20	EKS20B	EKS20B	11/13/90
03	EKS21	EKS21B	EKS21B	11/13/90
04	EKS21DL	EKS21BR	EKS21BR	11/14/90
05	EKS22	EKS22B	EKS22B	11/13/90
06	EKS23	EKS23B	EKS23B	11/13/90
07	EKS24	EKS24B	EKS24B	11/13/90
08	EKS24DL	EKS24BR	EKS24BR	11/14/90
09	EKS25	EKS25B	EKS25B	11/13/90
10	EKS26	EKS26B	EKS26B	11/13/90
11	EKS27	EKS27B	EKS27B	11/14/90
12	EKS28	EKS28B	EKS28B	11/14/90
13	EKS29	EKS29B	EKS29B	11/14/90

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ENCOTEC - AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Lab File ID: LSB1030 Lab Sample ID: LSB1030

Date Extracted: 10/30/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 11/13/90 Time Analyzed: 1521

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 004

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EKS28MS	EKS28BM	EKS28BM	11/14/90
02	EKS28MSD	EKS28BD	EKS28BD	11/14/90

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Lab Sample ID: MB102690-2 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 10/26/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed (1): 11/07/90 Date Analyzed (2): 11/07/90

Time Analyzed (1): 0302 Time Analyzed (2): 0302

Instrument ID (1): 3600-1D Instrument ID (2): 3600-1E

GC Column ID (1): RTX-35 GC Column ID (2): DB-5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EKS19	62395	11/07/90	11/07/90
02	EKS20	623964	11/07/90	11/07/90
03	EKS21	623972	11/07/90	11/07/90
04	EKS22	62398	11/07/90	11/07/90
05	EKS23	62399	11/07/90	11/07/90
06	EKS24	624002	11/07/90	11/07/90
07	EKS25	624012	11/07/90	11/07/90
08	EKS26	62402	11/07/90	11/07/90
09	EKS26DL	624024	11/07/90	11/07/90
10	EKS27	62403	11/08/90	11/08/90
11	EKS28	62404	11/07/90	11/07/90
12	EKS29	62411	11/07/90	11/07/90

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Lab Sample ID: MB103090-3 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 10/30/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed (1): 11/07/90 Date Analyzed (2): 11/07/90

Time Analyzed (1): 0343 Time Analyzed (2): 0343

Instrument ID (1): 3600-1D Instrument ID (2): 3600-1E

GC Column ID (1): RTX-35 GC Column ID (2): DB-5

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EKS28MS	62404MS	11/08/90	11/08/90
02	EKS28MSD	62404MSD	11/08/90	11/08/90

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1025F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1025F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	1	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	(Total)-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-02-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-01-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1025F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1025F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS19V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS19V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6 ~~2~~	~~BJ~~
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	2	J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS19V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS19V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	17.45	10	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS20V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS20V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6 ~~2~~	~~B~~ U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

RK 1-9-91

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS20V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS20V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS21V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	7	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-35-3	1,1-Dichloroethane	7	U
540-59-0	(Total)-1,2-Dichloroethene	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-02-5	Cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-01-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	7	U
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS21V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS22V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	13	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS22V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS22RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS22VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 Date Analyzed: 10/26/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6 2	~~B~~ U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	19	~~B~~ U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS22RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS22VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 Date Analyzed: 10/26/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	16.45	20	J
2.	UNKNOWN	17.18	8	J
3.	UNKNOWN	17.52	10	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS23V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS23V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	13	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	1	J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	13	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	13	U
591-78-6	2-Hexanone	13	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	7	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS23V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS23V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS24V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	7	U
67-64-1	Acetone	14	U
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-35-3	1,1-Dichloroethane	7	U
540-59-0	(Total)-1,2-Dichloroethene	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	14	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-02-5	Cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-01-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	14	U
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	3	J
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS24V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS24RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS24VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 Date Analyzed: 10/26/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	7 ~~8~~	~~B~~ U
67-64-1	Acetone	25	
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-35-3	1,1-Dichloroethane	7	U
540-59-0	(Total)-1,2-Dichloroethene	7	U
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	48	~~B~~ U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	14	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-02-5	Cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	7	U
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-01-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	36	
591-78-6	2-Hexanone	14	U
127-18-4	Tetrachloroethene	7	U
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	9	
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	3	J

RK

RK

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS24RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS24VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 Date Analyzed: 10/26/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	16.23	10	J
2.	UNKNOWN	16.45	20	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS25V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS25V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	4	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS25V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS25V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS26V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS26V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15	U
74-83-9	Bromomethane	15	U
75-01-4	Vinyl Chloride	15	U
75-00-3	Chloroethane	15	U
75-09-2	Methylene Chloride	7	U
67-64-1	Acetone	15	U
75-15-0	Carbon Disulfide	7	U
75-35-4	1,1-Dichloroethene	7	U
75-35-3	1,1-Dichloroethane	7	U
540-59-0	(Total)-1,2-Dichloroethene	200	
67-66-3	Chloroform	7	U
107-06-2	1,2-Dichloroethane	7	U
78-93-3	2-Butanone	15	U
71-55-6	1,1,1-Trichloroethane	7	U
56-23-5	Carbon Tetrachloride	7	U
108-05-4	Vinyl Acetate	15	U
75-27-4	Bromodichloromethane	7	U
78-87-5	1,2-Dichloropropane	7	U
10061-02-5	Cis-1,3-Dichloropropene	7	U
79-01-6	Trichloroethene	4	J
124-48-1	Dibromochloromethane	7	U
79-00-5	1,1,2-Trichloroethane	7	U
71-43-2	Benzene	7	U
10061-01-6	Trans-1,3-Dichloropropene	7	U
75-25-2	Bromoform	7	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	11	
79-34-5	1,1,2,2-Tetrachloroethane	7	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	7	U
100-41-4	Ethylbenzene	7	U
100-42-5	Styrene	7	U
1330-20-7	Total Xylenes	7	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS26V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS26V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: ESK27V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS27V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	8	U
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	8	U
75-35-4	1,1-Dichloroethene	8	U
75-35-3	1,1-Dichloroethane	8	U
540-59-0	(Total)-1,2-Dichloroethene	8	U
67-66-3	Chloroform	8	U
107-06-2	1,2-Dichloroethane	8	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	8	U
56-23-5	Carbon Tetrachloride	8	U
108-05-4	Vinyl Acetate	17	U
75-27-4	Bromodichloromethane	8	U
78-87-5	1,2-Dichloropropane	8	U
10061-02-5	Cis-1,3-Dichloropropene	8	U
79-01-6	Trichloroethene	8	U
124-48-1	Dibromochloromethane	8	U
79-00-5	1,1,2-Trichloroethane	8	U
71-43-2	Benzene	8	U
10061-01-6	Trans-1,3-Dichloropropene	8	U
75-25-2	Bromoform	8	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	8	U
79-34-5	1,1,2,2-Tetrachloroethane	8	U
108-88-3	Toluene	8	U
108-90-7	Chlorobenzene	8	U
100-41-4	Ethylbenzene	8	U
100-42-5	Styrene	8	U
1330-20-7	Total Xylenes	8	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: ESK27V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS27V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS27RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS27VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS27VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 Date Analyzed: 10/26/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	~~3~~ 6	~~B~~ U RK 1-9-91
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	8	U
75-35-4	1,1-Dichloroethene	8	U
75-35-3	1,1-Dichloroethane	8	U
540-59-0	(Total)-1,2-Dichloroethene	8	U
67-66-3	Chloroform	8	U
107-06-2	1,2-Dichloroethane	8	U
78-93-3	2-Butanone	34	~~B~~ U RK 1-9-91
71-55-6	1,1,1-Trichloroethane	8	U
56-23-5	Carbon Tetrachloride	8	U
108-05-4	Vinyl Acetate	17	U
75-27-4	Bromodichloromethane	8	U
78-87-5	1,2-Dichloropropane	8	U
10061-02-5	Cis-1,3-Dichloropropene	8	U
79-01-6	Trichloroethene	8	U
124-48-1	Dibromochloromethane	8	U
79-00-5	1,1,2-Trichloroethane	8	U
71-43-2	Benzene	8	U
10061-01-6	Trans-1,3-Dichloropropene	8	U
75-25-2	Bromoform	8	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	8	U
79-34-5	1,1,2,2-Tetrachloroethane	8	U
108-88-3	Toluene	8	U
108-90-7	Chlorobenzene	8	U
100-41-4	Ethylbenzene	8	U
100-42-5	Styrene	8	U
1330-20-7	Total Xylenes	8	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS27RE

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS27VR

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS27VR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 Date Analyzed: 10/26/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS28V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS28V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	6	U
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-35-3	1,1-Dichloroethane	6	U
540-59-0	(Total)-1,2-Dichloroethene	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-02-5	Cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-01-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS28V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS28V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS29V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS29V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 Date Analyzed: 10/25/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	17	U
74-83-9	Bromomethane	17	U
75-01-4	Vinyl Chloride	17	U
75-00-3	Chloroethane	17	U
75-09-2	Methylene Chloride	9	U
67-64-1	Acetone	17	U
75-15-0	Carbon Disulfide	9	U
75-35-4	1,1-Dichloroethene	9	U
75-35-3	1,1-Dichloroethane	9	U
540-59-0	(Total)-1,2-Dichloroethene	9	U
67-66-3	Chloroform	9	U
107-06-2	1,2-Dichloroethane	9	U
78-93-3	2-Butanone	17	U
71-55-6	1,1,1-Trichloroethane	9	U
56-23-5	Carbon Tetrachloride	9	U
108-05-4	Vinyl Acetate	17	U
75-27-4	Bromodichloromethane	9	U
78-87-5	1,2-Dichloropropane	9	U
10061-01-5	Cis-1,3-Dichloropropene	9	U
79-01-6	Trichloroethene	9	U
124-48-1	Dibromochloromethane	9	U
79-00-5	1,1,2-Trichloroethane	9	U
71-43-2	Benzene	9	U
10061-02-6	Trans-1,3-Dichloropropene	9	U
75-25-2	Bromoform	9	U
108-10-1	4-Methyl-2-Pentanone	17	U
591-78-6	2-Hexanone	17	U
127-18-4	Tetrachloroethene	9	U
79-34-5	1,1,2,2-Tetrachloroethane	9	U
108-88-3	Toluene	9	U
108-90-7	Chlorobenzene	9	U
100-41-4	Ethylbenzene	9	U
100-42-5	Styrene	9	U
1330-20-7	Total Xylenes	9	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS29V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: EKS29V

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 Date Analyzed: 10/25/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS19B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS19B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	850	U
111-44-4	bis(2-Chloroethyl)Ether	850	U
95-57-8	2-Chlorophenol	850	U
541-73-1	1,3-Dichlorobenzene	850	U
106-46-7	1,4-Dichlorobenzene	850	U
100-51-6	Benzyl Alcohol	850	U
95-50-1	1,2-Dichlorobenzene	850	U
95-48-7	2-Methylphenol	850	U
39638-32-9	bis(2-Chloroisopropyl)Ether	850	U
106-44-5	4-Methylphenol	850	U
621-64-7	N-Nitroso-Di-n-Propylamine	850	U
67-72-1	Hexachloroethane	850	U
98-95-3	Nitrobenzene	850	U
78-59-1	Isophorone	850	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	850	U
65-85-0	Benzoic Acid	4100	U
111-91-1	bis(2-Chloroethoxy)Methane	850	U
120-83-2	2,4-Dichlorophenol	850	U
120-82-1	1,2,4-Trichlorobenzene	850	U
91-20-3	Naphthalene	1100	
106-47-8	4-Chloroaniline	850	U
87-68-3	Hexachlorobutadiene	850	U
59-50-7	4-Chloro-3-Methylphenol	850	U
91-57-6	2-Methylnaphthalene	1800	
77-47-4	Hexachlorocyclopentadiene	850	U
88-06-2	2,4,6-Trichlorophenol	850	U
95-95-4	2,4,5-Trichlorophenol	4100	U
91-58-7	2-Chloronaphthalene	850	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethyl Phthalate	850	U
208-96-8	Acenaphthylene	850	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS19B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS19B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4100	U
83-32-9	Acenaphthene	850	U
51-28-5	2,4-Dinitrophenol	4100	U
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	370	J
121-14-2	2,4-Dinitrotoluene	850	U
606-20-2	2,6-Dinitrotoluene	850	U
84-66-2	Diethylphthalate	850	U
7005-72-3	4-Chlorophenyl-phenylether	850	U
86-73-7	Fluorene	850	U
100-10-6	4-Nitroaniline	4100	U
534-52-1	4,6-Dinitro-2-Methylphenol	4100	U
86-30-6	N-Nitrosodiphenylamine (1)	850	U
101-55-3	4-Bromophenyl-phenylether	850	U
118-74-1	Hexachlorobenzene	850	U
87-86-5	Pentachlorophenol	4100	U
85-01-8	Phenanthrene	850	
120-12-7	Anthracene	120	J
84-74-2	Di-n-Butylphthalate	850	U
206-44-0	Fluoranthene	680	J
129-00-0	Pyrene	580	J
85-68-7	Butylbenzylphthalate	850	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	310	J
117-81-7	bis(2-Ethylhexyl)Phthalate	850	U
218-01-9	Chrysene	380	J
117-84-0	Di-n-Octyl Phthalate	850	U
205-99-2	Benzo(b)Fluoranthene	230	J
207-08-9	Benzo(k)Fluoranthene	430	J
50-32-8	Benzo(a)Pyrene	230	J
193-39-5	Indeno(1,2,3-cd)Pyrene	96	J
53-70-3	Dibenz(a,h)Anthracene	850	U
191-24-2	Benzo(g,h,i)Perylene	150	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS19B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS19B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.12	600	J
2.		UNKNOWN	6.67	1000	J
3.	90-12-0	1-METHYL NAPHTHALENE	13.85	1000	J
4.		DIMETHYL NAPHTHALENE ISOMER	15.58	500	J
5.		DIMETHYL NAPHTHALENE ISOMER	15.85	800	J
6.		DIMETHYL NAPHTHALENE ISOMER	16.18	400	J
7.		TRIMETHYL NAPHTHALENE ISOMER	18.28	400	J
8.		TRIMETHYL NAPHTHALENE ISOMER	18.65	600	J
9.		UNKNOWN ALKANE	20.58	1000	J
10.		UNKNOWN	20.90	600	J
11.		UNKNOWN ALKANE	23.35	400	J
12.		UNKNOWN ALKANE	24.72	400	J
13.		UNKNOWN ALKANE	27.40	600	J
14.		UNKNOWN ALKANE	28.68	500	J
15.		UNKNOWN ALKANE	29.93	900	J
16.		UNKNOWN ALKANE	31.18	500	J
17.		UNKNOWN ALKANE	32.40	400	J
18.		UNKNOWN ALKANE	33.55	600	J
19.		UNKNOWN ALKANE	32.75	400	J
20.		UNKNOWN	37.25	300	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS20B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS20B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	850	U
111-44-4	bis(2-Chloroethyl)Ether	850	U
95-57-8	2-Chlorophenol	850	U
541-73-1	1,3-Dichlorobenzene	850	U
106-46-7	1,4-Dichlorobenzene	850	U
100-51-6	Benzyl Alcohol	850	U
95-50-1	1,2-Dichlorobenzene	850	U
95-48-7	2-Methylphenol	850	U
39638-32-9	bis(2-Chloroisopropyl)Ether	850	U
106-44-5	4-Methylphenol	850	U
621-64-7	N-Nitroso-Di-n-Propylamine	850	U
67-72-1	Hexachloroethane	850	U
98-95-3	Nitrobenzene	850	U
78-59-1	Isophorone	850	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	850	U
65-85-0	Benzoic Acid	4100	U
111-91-1	bis(2-Chloroethoxy)Methane	850	U
120-83-2	2,4-Dichlorophenol	850	U
120-82-1	1,2,4-Trichlorobenzene	850	U
91-20-3	Naphthalene	150	J
106-47-8	4-Chloroaniline	850	U
87-68-3	Hexachlorobutadiene	850	U
59-50-7	4-Chloro-3-Methylphenol	850	U
91-57-6	2-Methylnaphthalene	250	J
77-47-4	Hexachlorocyclopentadiene	850	U
88-06-2	2,4,6-Trichlorophenol	850	U
95-95-4	2,4,5-Trichlorophenol	4100	U
91-58-7	2-Chloronaphthalene	850	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethyl Phthalate	850	U
208-96-8	Acenaphthylene	850	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS20B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS20B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4100	U
83-32-9	Acenaphthene	850	U
51-28-5	2,4-Dinitrophenol	4100	U
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	850	U
121-14-2	2,4-Dinitrotoluene	850	U
606-20-2	2,6-Dinitrotoluene	850	U
84-66-2	Diethylphthalate	850	U
7005-72-3	4-Chlorophenyl-phenylether	850	U
86-73-7	Fluorene	850	U
100-10-6	4-Nitroaniline	4100	U
534-52-1	4,6-Dinitro-2-Methylphenol	4100	U
86-30-6	N-Nitrosodiphenylamine (1)	850	U
101-55-3	4-Bromophenyl-phenylether	850	U
118-74-1	Hexachlorobenzene	850	U
87-86-5	Pentachlorophenol	4100	U
85-01-8	Phenanthrene	200	J
120-12-7	Anthracene	850	U
84-74-2	Di-n-Butylphthalate	850	U
206-44-0	Fluoranthene	140	J
129-00-0	Pyrene	150	J
85-68-7	Butylbenzylphthalate	850	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	74	J
117-81-7	bis(2-Ethylhexyl)Phthalate	850	U
218-01-9	Chrysene	150	J
117-84-0	Di-n-Octyl Phthalate	850	U
205-99-2	Benzo(b)Fluoranthene	280	J
207-08-9	Benzo(k)Fluoranthene	850	U
50-32-8	Benzo(a)Pyrene	140	J
193-39-5	Indeno(1,2,3-cd)Pyrene	850	U
53-70-3	Dibenz(a,h)Anthracene	850	U
191-24-2	Benzo(g,h,i)Perylene	850	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS20B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS20B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.12	700	J
2.	UNKNOWN	6.65	1000	J
3.	UNKNOWN ALKANE	20.58	400	J
4.	UNKNOWN ALKANE	30.02	600	J
5.	UNKNOWN ALKANE	35.78	600	J
6.	UNKNOWN	37.27	500	J
7.	UNKNOWN	38.15	300	J
8.	UNKNOWN	39.93	700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	880	U
111-44-4	bis(2-Chloroethyl)Ether	880	U
95-57-8	2-Chlorophenol	880	U
541-73-1	1,3-Dichlorobenzene	880	U
106-46-7	1,4-Dichlorobenzene	880	U
100-51-6	Benzyl Alcohol	880	U
95-50-1	1,2-Dichlorobenzene	880	U
95-48-7	2-Methylphenol	880	U
39638-32-9	bis(2-Chloroisopropyl)Ether	880	U
106-44-5	4-Methylphenol	880	U
621-64-7	N-Nitroso-Di-n-Propylamine	880	U
67-72-1	Hexachloroethane	880	U
98-95-3	Nitrobenzene	880	U
78-59-1	Isophorone	880	U
88-75-5	2-Nitrophenol	880	U
105-67-9	2,4-Dimethylphenol	880	U
65-85-0	Benzoic Acid	4300	U
111-91-1	bis(2-Chloroethoxy)Methane	880	U
120-83-2	2,4-Dichlorophenol	880	U
120-82-1	1,2,4-Trichlorobenzene	880	U
91-20-3	Naphthalene	290	J
106-47-8	4-Chloroaniline	880	U
87-68-3	Hexachlorobutadiene	880	U
59-50-7	4-Chloro-3-Methylphenol	880	U
91-57-6	2-Methylnaphthalene	500	J
77-47-4	Hexachlorocyclopentadiene	880	U
88-06-2	2,4,6-Trichlorophenol	880	U
95-95-4	2,4,5-Trichlorophenol	4300	U
91-58-7	2-Chloronaphthalene	880	U
88-74-4	2-Nitroaniline	4300	U
131-11-3	Dimethyl Phthalate	880	U
208-96-8	Acenaphthylene	880	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4300	U
83-32-9	Acenaphthene	680	J
51-28-5	2,4-Dinitrophenol	4300	U
100-02-7	4-Nitrophenol	4300	U
132-64-9	Dibenzofuran	830	J
121-14-2	2,4-Dinitrotoluene	880	U
606-20-2	2,6-Dinitrotoluene	880	U
84-66-2	Diethylphthalate	880	U
7005-72-3	4-Chlorophenyl-phenylether	880	U
86-73-7	Fluorene	1500	
100-10-6	4-Nitroaniline	4300	U
534-52-1	4,6-Dinitro-2-Methylphenol	4300	U
86-30-6	N-Nitrosodiphenylamine (1)	450	J
101-55-3	4-Bromophenyl-phenylether	880	U
118-74-1	Hexachlorobenzene	880	U
87-86-5	Pentachlorophenol	4300	U
85-01-8	Phenanthrene	15000	E
120-12-7	Anthracene	2900	
84-74-2	Di-n-Butylphthalate	880	U
206-44-0	Fluoranthene	12000	
129-00-0	Pyrene	8100	
85-68-7	Butylbenzylphthalate	880	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)Anthracene	8500	
117-81-7	bis(2-Ethylhexyl)Phthalate	360	J
218-01-9	Chrysene	5700	
117-84-0	Di-n-Octyl Phthalate	880	U
205-99-2	Benzo(b)Fluoranthene	9500	
207-08-9	Benzo(k)Fluoranthene	6400	
50-32-8	Benzo(a)Pyrene	5700	
193-39-5	Indeno(1,2,3-cd)Pyrene	5000	
53-70-3	Dibenz(a,h)Anthracene	1200	
191-24-2	Benzo(g,h,i)Perylene	4700	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN PNA	23.18	2000	J
2.	UNKNOWN PNA	23.47	3000	J
3.	UNKNOWN	24.25	2000	J
4.	UNKNOWN PNA	25.40	10000	J
5.	UNKNOWN PNA	26.10	10000	J
6.	UNKNOWN PNA	27.48	800	J
7.	UNKNOWN PNA	27.70	400	J
8.	UNKNOWN PNA	30.93	700	J
9.	UNKNOWN	33.45	1000	J
10. 205-82-3	BENZO[J] FLUORANTHENE	35.22	3000	J
11.	UNKNOWN ALKANE	35.92	2000	J
12.	UNKNOWN	36.23	2000	J
13.	UNKNOWN	36.75	2000	J
14.	UNKNOWN	37.00	2000	J
15.	UNKNOWN	37.22	2000	J
16.	UNKNOWN	37.43	4000	J
17.	UNKNOWN	38.17	2000	J
18.	UNKNOWN	38.28	3000	J
19.	UNKNOWN	39.42	1000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS21DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	U
111-44-4	bis(2-Chloroethyl)Ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
100-51-6	Benzyl Alcohol	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1800	U
106-44-5	4-Methylphenol	1800	U
621-64-7	N-Nitroso-Di-n-Propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethylphenol	1800	U
65-85-0	Benzoic Acid	8500	U
111-91-1	bis(2-Chloroethoxy)Methane	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	320	DJ
106-47-8	4-Chloroaniline	1800	U
87-68-3	Hexachlorobutadiene	1800	U
59-50-7	4-Chloro-3-Methylphenol	1800	U
91-57-6	2-Methylnaphthalene	500	DJ
77-47-4	Hexachlorocyclopentadiene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	8500	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	8500	U
131-11-3	Dimethyl Phthalate	1800	U
208-96-8	Acenaphthylene	1800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS21DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	8500	U
83-32-9	Acenaphthene	720	DJ
51-28-5	2,4-Dinitrophenol	8500	U
100-02-7	4-Nitrophenol	8500	U
132-64-9	Dibenzofuran	810	DJ
121-14-2	2,4-Dinitrotoluene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	1600	DJ
100-10-6	4-Nitroaniline	8500	U
534-52-1	4,6-Dinitro-2-Methylphenol	8500	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	8500	U
85-01-8	Phenanthrene	16000	D
120-12-7	Anthracene	3100	D
84-74-2	Di-n-Butylphthalate	1800	U
206-44-0	Fluoranthene	20000	D
129-00-0	Pyrene	13000	D
85-68-7	Butylbenzylphthalate	1800	U
91-94-1	3,3'-Dichlorobenzidine	3500	U
56-55-3	Benzo(a)Anthracene	7800	D
117-81-7	bis(2-Ethylhexyl)Phthalate	330	DJ
218-01-9	Chrysene	6000	D
117-84-0	Di-n-Octyl Phthalate	1800	U
205-99-2	Benzo(b)Fluoranthene	11000	D
207-08-9	Benzo(k)Fluoranthene	2000	D
50-32-8	Benzo(a)Pyrene	4600	D
193-39-5	Indeno(1,2,3-cd)Pyrene	4200	D
53-70-3	Dibenz(a,h)Anthracene	550	DJ
191-24-2	Benzo(g,h,i)Perylene	3700	D

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS21DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS21BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS21BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.00	1000	J
2.	UNKNOWN	6.55	1000	J
3.	UNKNOWN	23.28	2000	J
4.	UNKNOWN	24.07	1000	J
5.	UNKNOWN	26.05	3000	J
6.	UNKNOWN PNA	26.95	3000	J
7.	UNKNOWN PNA	27.25	2000	J
8.	UNKNOWN PNA	29.57	2000	J
9.	UNKNOWN PNA	30.73	2000	J
10.	UNKNOWN	32.83	3000	J
11.	UNKNOWN PNA	34.95	3000	J
12.	UNKNOWN	35.18	2000	J
13.	UNKNOWN	35.63	2000	J
14.	UNKNOWN	35.75	2000	J
15.	UNKNOWN	35.90	2000	J
16.	UNKNOWN	36.00	2000	J
17.	UNKNOWN	36.52	2000	J
18.	UNKNOWN	37.18	3000	J
19.	UNKNOWN	37.97	700	J
20.	UNKNOWN	38.03	4000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS22B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	830	U
111-44-4	bis(2-Chloroethyl)Ether	830	U
95-57-8	2-Chlorophenol	830	U
541-73-1	1,3-Dichlorobenzene	830	U
106-46-7	1,4-Dichlorobenzene	830	U
100-51-6	Benzyl Alcohol	830	U
95-50-1	1,2-Dichlorobenzene	830	U
95-48-7	2-Methylphenol	830	U
39638-32-9	bis(2-Chloroisopropyl)Ether	830	U
106-44-5	4-Methylphenol	830	U
621-64-7	N-Nitroso-Di-n-Propylamine	830	U
67-72-1	Hexachloroethane	830	U
98-95-3	Nitrobenzene	830	U
78-59-1	Isophorone	830	U
88-75-5	2-Nitrophenol	830	U
105-67-9	2,4-Dimethylphenol	830	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	830	U
120-83-2	2,4-Dichlorophenol	830	U
120-82-1	1,2,4-Trichlorobenzene	830	U
91-20-3	Naphthalene	830	U
106-47-8	4-Chloroaniline	830	U
87-68-3	Hexachlorobutadiene	830	U
59-50-7	4-Chloro-3-Methylphenol	830	U
91-57-6	2-Methylnaphthalene	830	U
77-47-4	Hexachlorocyclopentadiene	830	U
88-06-2	2,4,6-Trichlorophenol	830	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	830	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	830	U
208-96-8	Acenaphthylene	830	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS22B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	830	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	830	U
121-14-2	2,4-Dinitrotoluene	830	U
606-20-2	2,6-Dinitrotoluene	830	U
84-66-2	Diethylphthalate	830	U
7005-72-3	4-Chlorophenyl-phenylether	830	U
86-73-7	Fluorene	830	U
100-10-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	830	U
101-55-3	4-Bromophenyl-phenylether	830	U
118-74-1	Hexachlorobenzene	830	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	830	U
120-12-7	Anthracene	830	U
84-74-2	Di-n-Butylphthalate	830	U
206-44-0	Fluoranthene	830	U
129-00-0	Pyrene	830	U
85-68-7	Butylbenzylphthalate	830	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	830	U
117-81-7	bis(2-Ethylhexyl)Phthalate	830	U
218-01-9	Chrysene	830	U
117-84-0	Di-n-Octyl Phthalate	830	U
205-99-2	Benzo(b)Fluoranthene	830	U
207-08-9	Benzo(k)Fluoranthene	830	U
50-32-8	Benzo(a)Pyrene	830	U
193-39-5	Indeno(1,2,3-cd)Pyrene	830	U
53-70-3	Dibenz(a,h)Anthracene	830	U
191-24-2	Benzo(g,h,i)Perylene	830	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS22B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS22B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS23B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS23B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	850	U
111-44-4	bis(2-Chloroethyl)Ether	850	U
95-57-8	2-Chlorophenol	850	U
541-73-1	1,3-Dichlorobenzene	850	U
106-46-7	1,4-Dichlorobenzene	850	U
100-51-6	Benzyl Alcohol	850	U
95-50-1	1,2-Dichlorobenzene	850	U
95-48-7	2-Methylphenol	850	U
39638-32-9	bis(2-Chloroisopropyl)Ether	850	U
106-44-5	4-Methylphenol	850	U
621-64-7	N-Nitroso-Di-n-Propylamine	850	U
67-72-1	Hexachloroethane	850	U
98-95-3	Nitrobenzene	850	U
78-59-1	Isophorone	850	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	850	U
65-85-0	Benzoic Acid	4100	U
111-91-1	bis(2-Chloroethoxy)Methane	850	U
120-83-2	2,4-Dichlorophenol	850	U
120-82-1	1,2,4-Trichlorobenzene	850	U
91-20-3	Naphthalene	500	J
106-47-8	4-Chloroaniline	850	U
87-68-3	Hexachlorobutadiene	850	U
59-50-7	4-Chloro-3-Methylphenol	850	U
91-57-6	2-Methylnaphthalene	950	
77-47-4	Hexachlorocyclopentadiene	850	U
88-06-2	2,4,6-Trichlorophenol	850	U
95-95-4	2,4,5-Trichlorophenol	4100	U
91-58-7	2-Chloronaphthalene	850	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethyl Phthalate	850	U
208-96-8	Acenaphthylene	850	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS23B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS23B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4100	U
83-32-9	Acenaphthene	850	U
51-28-5	2,4-Dinitrophenol	4100	U
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	290	J
121-14-2	2,4-Dinitrotoluene	850	U
606-20-2	2,6-Dinitrotoluene	850	U
84-66-2	Diethylphthalate	850	U
7005-72-3	4-Chlorophenyl-phenylether	850	U
86-73-7	Fluorene	850	U
100-10-6	4-Nitroaniline	4100	U
534-52-1	4,6-Dinitro-2-Methylphenol	4100	U
86-30-6	N-Nitrosodiphenylamine (1)	850	U
101-55-3	4-Bromophenyl-phenylether	850	U
118-74-1	Hexachlorobenzene	850	U
87-86-5	Pentachlorophenol	4100	U
85-01-8	Phenanthrene	980	
120-12-7	Anthracene	850	U
84-74-2	Di-n-Butylphthalate	850	U
206-44-0	Fluoranthene	370	J
129-00-0	Pyrene	300	J
85-68-7	Butylbenzylphthalate	850	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	170	J
117-81-7	bis(2-Ethylhexyl)Phthalate	850	U
218-01-9	Chrysene	300	J
117-84-0	Di-n-Octyl Phthalate	850	U
205-99-2	Benzo(b)Fluoranthene	320	J
207-08-9	Benzo(k)Fluoranthene	850	U
50-32-8	Benzo(a)Pyrene	150	J
193-39-5	Indeno(1,2,3-cd)Pyrene	150	J
53-70-3	Dibenz(a,h)Anthracene	850	U
191-24-2	Benzo(g,h,i)Perylene	250	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS23B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS23B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.0

Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	6.67	1000	J
2.	90-12-0	1-METHYL NAPHTHALENE	13.87	1000	J
3.		DIMETHYL NAPHTHALENE ISOMER	15.88	600	J
4.		UNKNOWN ALKANE	17.38	400	J
5.		TRIMETHYL NAPHTHALENE ISOMER	18.68	600	J
6.		UNKNOWN ALKANE	20.60	1000	J
7.		UNKNOWN	20.93	500	J
8.		UNKNOWN ALKANE	21.97	500	J
9.		UNKNOWN ALKANE	23.37	700	J
10.		UNKNOWN PNA	23.52	400	J
11.		UNKNOWN ALKANE	24.75	700	J
12.		UNKNOWN ALKANE	27.43	800	J
13.		UNKNOWN ALKANE	28.72	500	J
14.		UNKNOWN ORGANIC ACID	29.95	4000	J
15.		UNKNOWN ALKANE	31.22	600	J
16.		UNKNOWN ALKANE	32.42	700	J
17.		UNKNOWN ALKANE	33.58	1000	J
18.		UNKNOWN ALKANE	34.70	500	J
19.		UNKNOWN ALKANE	35.78	500	J
20.		UNKNOWN	37.30	600	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	900	U
111-44-4	bis(2-Chloroethyl)Ether	900	U
95-57-8	2-Chlorophenol	900	U
541-73-1	1,3-Dichlorobenzene	900	U
106-46-7	1,4-Dichlorobenzene	900	U
100-51-6	Benzyl Alcohol	900	U
95-50-1	1,2-Dichlorobenzene	900	U
95-48-7	2-Methylphenol	900	U
39638-32-9	bis(2-Chloroisopropyl)Ether	900	U
106-44-5	4-Methylphenol	900	U
621-64-7	N-Nitroso-Di-n-Propylamine	900	U
67-72-1	Hexachloroethane	900	U
98-95-3	Nitrobenzene	900	U
78-59-1	Isophorone	900	U
88-75-5	2-Nitrophenol	900	U
105-67-9	2,4-Dimethylphenol	900	U
65-85-0	Benzoic Acid	4400	U
111-91-1	bis(2-Chloroethoxy)Methane	900	U
120-83-2	2,4-Dichlorophenol	900	U
120-82-1	1,2,4-Trichlorobenzene	900	U
91-20-3	Naphthalene	260	J
106-47-8	4-Chloroaniline	900	U
87-68-3	Hexachlorobutadiene	900	U
59-50-7	4-Chloro-3-Methylphenol	900	U
91-57-6	2-Methylnaphthalene	130	J
77-47-4	Hexachlorocyclopentadiene	900	U
88-06-2	2,4,6-Trichlorophenol	900	U
95-95-4	2,4,5-Trichlorophenol	4400	U
91-58-7	2-Chloronaphthalene	900	U
88-74-4	2-Nitroaniline	4400	U
131-11-3	Dimethyl Phthalate	900	U
208-96-8	Acenaphthylene	900	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4400	U
83-32-9	Acenaphthene	1200	
51-28-5	2,4-Dinitrophenol	4400	U
100-02-7	4-Nitrophenol	4400	U
132-64-9	Dibenzofuran	780	J
121-14-2	2,4-Dinitrotoluene	900	U
606-20-2	2,6-Dinitrotoluene	900	U
84-66-2	Diethylphthalate	900	U
7005-72-3	4-Chlorophenyl-phenylether	900	U
86-73-7	Fluorene	1200	
100-10-6	4-Nitroaniline	4400	U
534-52-1	4,6-Dinitro-2-Methylphenol	4400	U
86-30-6	N-Nitrosodiphenylamine (1)	900	U
101-55-3	4-Bromophenyl-phenylether	900	U
118-74-1	Hexachlorobenzene	900	U
87-86-5	Pentachlorophenol	4400	U
85-01-8	Phenanthrene	14000	
120-12-7	Anthracene	3000	
84-74-2	Di-n-Butylphthalate	900	U
206-44-0	Fluoranthene	19000	E
129-00-0	Pyrene	13000	
85-68-7	Butylbenzylphthalate	900	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)Anthracene	6900	
117-81 [illegible]	---bis(2-Ethylhexyl)Phthalate	900	U
218-01-9	Chrysene	6400	
117-84-0	Di-n-Octyl Phthalate	900	U
205-99-2	Benzo(b)Fluoranthene	7800	
207-08-9	Benzo(k)Fluoranthene	5500	
50-32-8	Benzo(a)Pyrene	4800	
193-39-5	Indeno(1,2,3-cd)Pyrene	4100	
53-70-3	Dibenz(a,h)Anthracene	1600	
191-24-2	Benzo(g,h,i)Perylene	3600	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 1.0

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.65	2000	J
2.	UNKNOWN	22.40	4000	J
3.	UNKNOWN PNA	23.25	5000	J
4.	UNKNOWN PNA	23.45	6000	J
5.	UNKNOWN	24.25	5000	J
6.	UNKNOWN	26.27	9000	J
7.	UNKNOWN	26.68	3000	J
8.	UNKNOWN PNA	27.45	4000	J
9.	UNKNOWN PNA	27.70	3000	J
10.	UNKNOWN	27.88	3000	J
11.	UNKNOWN PNA	28.05	2000	J
12. 82-05-3	7H-BENZ[DE] ANTHRACENE-7-ONE	29.25	3000	J
13.	UNKNOWN PNA	29.56	3000	J
14.	UNKNOWN PNA	29.70	5000	J
15.	UNKNOWN ORGANIC ACID	29.95	6000	J
16.	UNKNOWN	30.82	4000	J
17.	UNKNOWN	32.35	800	J
18.	UNKNOWN	32.43	800	J
19.	UNKNOWN PNA	34.50	1000	J
20.	UNKNOWN PNA	35.03	5000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS24DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	U
111-44-4	bis(2-Chloroethyl)Ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
100-51-6	Benzyl Alcohol	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1800	U
106-44-5	4-Methylphenol	1800	U
621-64-7	N-Nitroso-Di-n-Propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethylphenol	1800	U
65-85-0	Benzoic Acid	8800	U
111-91-1	bis(2-Chloroethoxy)Methane	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	250	DJ
106-47-8	4-Chloroaniline	1800	U
87-68-3	Hexachlorobutadiene	1800	U
59-50-7	4-Chloro-3-Methylphenol	1800	U
91-57-6	2-Methylnaphthalene	1800	U
77-47-4	Hexachlorocyclopentadiene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	8800	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	8800	U
131-11-3	Dimethyl Phthalate	1800	U
208-96-8	Acenaphthylene	1800	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS24DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	8800	U
83-32-9	Acenaphthene	1200	DJ
51-28-5	2,4-Dinitrophenol	8800	U
100-02-7	4-Nitrophenol	8800	U
132-64-9	Dibenzofuran	790	DJ
121-14-2	2,4-Dinitrotoluene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	1300	DJ
100-10-6	4-Nitroaniline	8800	U
534-52-1	4,6-Dinitro-2-Methylphenol	8800	U
86-30-6	N-Nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	8800	U
85-01-8	Phenanthrene	15000	D
120-12-7	Anthracene	3400	D
84-74-2	Di-n-Butylphthalate	1800	U
206-44-0	Fluoranthene	21000	D
129-00-0	Pyrene	15000	D
85-68-7	Butylbenzylphthalate	1800	U
91-94-1	3,3'-Dichlorobenzidine	3600	U
56-55-3	Benzo(a)Anthracene	8000	D
117-81-7	bis(2-Ethylhexyl)Phthalate	1800	U
218-01-9	Chrysene	9200	D
117-84-0	Di-n-Octyl Phthalate	1800	U
205-99-2	Benzo(b)Fluoranthene	7400	D
207-08-9	Benzo(k)Fluoranthene	7300	D
50-32-8	Benzo(a)Pyrene	4500	D
193-39-5	Indeno(1,2,3-cd)Pyrene	3200	D
53-70-3	Dibenz(a,h)Anthracene	620	DJ
191-24-2	Benzo(g,h,i)Perylene	3500	D

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS24DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS24BR

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS24BR

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.0

Number TICs found: 14

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.97	800	J
2.	UNKNOWN	6.52	1000	J
3. 244-99-5	5H-INDENO[1,2-B] PYRIDINE	22.20	700	J
4.	UNKNOWN	23.25	1000	J
5.	UNKNOWN	24.02	900	J
6.	UNKNOWN	26.02	2000	J
7.	UNKNOWN	26.47	600	J
8.	UNKNOWN PNA	27.22	1000	J
9.	UNKNOWN PNA	29.43	1000	J
10.	UNKNOWN ORGNAIC ACID	29.72	2000	J
11.	UNKNOWN PNA	30.60	900	J
12.	UNBNOWN PNA	34.30	1000	J
13.	UNKNOWN PNA	34.82	4000	J
14.	UNKNOWN PNA	35.23	2000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS25B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS25B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	810	U
111-44-4	bis(2-Chloroethyl)Ether	810	U
95-57-8	2-Chlorophenol	810	U
541-73-1	1,3-Dichlorobenzene	810	U
106-46-7	1,4-Dichlorobenzene	810	U
100-51-6	Benzyl Alcohol	810	U
95-50-1	1,2-Dichlorobenzene	810	U
95-48-7	2-Methylphenol	810	U
39638-32-9	bis(2-Chloroisopropyl)Ether	810	U
106-44-5	4-Methylphenol	810	U
621-64-7	N-Nitroso-Di-n-Propylamine	810	U
67-72-1	Hexachloroethane	810	U
98-95-3	Nitrobenzene	810	U
78-59-1	Isophorone	810	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	810	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	810	U
120-83-2	2,4-Dichlorophenol	810	U
120-82-1	1,2,4-Trichlorobenzene	810	U
91-20-3	Naphthalene	450	J
106-47-8	4-Chloroaniline	810	U
87-68-3	Hexachlorobutadiene	810	U
59-50-7	4-Chloro-3-Methylphenol	810	U
91-57-6	2-Methylnaphthalene	750	J
77-47-4	Hexachlorocyclopentadiene	810	U
88-06-2	2,4,6-Trichlorophenol	810	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	810	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	810	U
208-96-8	Acenaphthylene	810	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS25B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS25B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	95	J
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	200	J
121-14-2	2,4-Dinitrotoluene	810	U
606-20-2	2,6-Dinitrotoluene	810	U
84-66-2	Diethylphthalate	810	U
7005-72-3	4-Chlorophenyl-phenylether	810	U
86-73-7	Fluorene	82	J
100-10-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	810	U
101-55-3	4-Bromophenyl-phenylether	810	U
118-74-1	Hexachlorobenzene	810	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	1500	
120-12-7	Anthracene	300	J
84-74-2	Di-n-Butylphthalate	110	J
206-44-0	Fluoranthene	2800	
129-00-0	Pyrene	1900	
85-68-7	Butylbenzylphthalate	950	
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	1100	
117-81-7	bis(2-Ethylhexyl)Phthalate	810	U
218-01-9	Chrysene	1100	
117-84-0	Di-n-Octyl Phthalate	810	U
205-99-2	Benzo(b)Fluoranthene	2900	
207-08-9	Benzo(k)Fluoranthene	810	U
50-32-8	Benzo(a)Pyrene	1100	
193-39-5	Indeno(1,2,3-cd)Pyrene	910	
53-70-3	Dibenz(a,h)Anthracene	230	J
191-24-2	Benzo(g,h,i)Perylene	910	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS25B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS25B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

Number TICs found: 19

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.15	600	J
2.		UNKNOWN	6.70	1000	J
3.	90-12-0	1-METHYL NAPHTHALENE	13.87	700	J
4.		DIMETHYL NAPHTHALENE ISOMER	15.90	400	J
5.		UNKNOWN ALKANE	20.60	700	J
6.		UNKNOWN ALKANE	23.37	400	J
7.		UNKNOWN	23.47	400	J
8.		UNKNOWN	27.45	400	J
9.		UNKNOWN PHTHALATE	29.33	1000	J
10		UNKNOWN ORGANIC ACID	29.98	1000	J
11.	205-82-3	BENZO[J] FLUORANTHENE	35.03	1000	J
12.		UNKNOWN ALKANE	35.77	900	J
13.		UNKNOWN	36.83	800	J
14.		UNKNOWN	37.30	800	J
15.		UNKNOWN ALKANE	37.85	800	J
16.		UNKNOWN	38.05	300	J
17.		UNKNOWN	38.18	600	J
18.		UNKNOWN	39.43	900	J
19.		UNKNOWN ALKANE	39.78	600	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS26B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS26B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	970	U
111-44-4	bis(2-Chloroethyl)Ether	970	U
95-57-8	2-Chlorophenol	970	U
541-73-1	1,3-Dichlorobenzene	970	U
106-46-7	1,4-Dichlorobenzene	970	U
100-51-6	Benzyl Alcohol	970	U
95-50-1	1,2-Dichlorobenzene	970	U
95-48-7	2-Methylphenol	970	U
39638-32-9	bis(2-Chloroisopropyl)Ether	970	U
106-44-5	4-Methylphenol	970	U
621-64-7	N-Nitroso-Di-n-Propylamine	970	U
67-72-1	Hexachloroethane	970	U
98-95-3	Nitrobenzene	970	U
78-59-1	Isophorone	970	U
88-75-5	2-Nitrophenol	970	U
105-67-9	2,4-Dimethylphenol	970	U
65-85-0	Benzoic Acid	4700	U
111-91-1	bis(2-Chloroethoxy)Methane	970	U
120-83-2	2,4-Dichlorophenol	970	U
120-82-1	1,2,4-Trichlorobenzene	970	U
91-20-3	Naphthalene	970	U
106-47-8	4-Chloroaniline	970	U
87-68-3	Hexachlorobutadiene	970	U
59-50-7	4-Chloro-3-Methylphenol	970	U
91-57-6	2-Methylnaphthalene	970	U
77-47-4	Hexachlorocyclopentadiene	970	U
88-06-2	2,4,6-Trichlorophenol	970	U
95-95-4	2,4,5-Trichlorophenol	4700	U
91-58-7	2-Chloronaphthalene	970	U
88-74-4	2-Nitroaniline	4700	U
131-11-3	Dimethyl Phthalate	970	U
208-96-8	Acenaphthylene	970	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS26B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS26B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4700	U
83-32-9	Acenaphthene	970	U
51-28-5	2,4-Dinitrophenol	4700	U
100-02-7	4-Nitrophenol	4700	U
132-64-9	Dibenzofuran	970	U
121-14-2	2,4-Dinitrotoluene	970	U
606-20-2	2,6-Dinitrotoluene	970	U
84-66-2	Diethylphthalate	970	U
7005-72-3	4-Chlorophenyl-phenylether	970	U
86-73-7	Fluorene	970	U
100-10-6	4-Nitroaniline	4700	U
534-52-1	4,6-Dinitro-2-Methylphenol	4700	U
86-30-6	N-Nitrosodiphenylamine (1)	970	U
101-55-3	4-Bromophenyl-phenylether	970	U
118-74-1	Hexachlorobenzene	970	U
87-86-5	Pentachlorophenol	4700	U
85-01-8	Phenanthrene	170	J
120-12-7	Anthracene	970	U
84-74-2	Di-n-Butylphthalate	970	U
206-44-0	Fluoranthene	360	J
129-00-0	Pyrene	290	J
85-68-7	Butylbenzylphthalate	970	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)Anthracene	970	U
117-81-7	bis(2-Ethylhexyl)Phthalate	970	U
218-01-9	Chrysene	180	J
117-84-0	Di-n-Octyl Phthalate	970	U
205-99-2	Benzo(b)Fluoranthene	230	J
207-08-9	Benzo(k)Fluoranthene	300	J
50-32-8	Benzo(a)Pyrene	150	J
193-39-5	Indeno(1,2,3-cd)Pyrene	160	J
53-70-3	Dibenz(a,h)Anthracene	970	U
191-24-2	Benzo(g,h,i)Perylene	170	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS26B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS26B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.17	2000	J
2.	UNKNOWN	6.68	900	J
3.	UNKNOWN ORGANIC ACID	30.00	1000	J
4.	UNKNOWN	35.72	800	J
5.	UNKNOWN	36.17	1000	J
6.	UNKNOWN	36.67	1000	J
7.	UNKNONW	36.90	1000	J
8.	UNKNOWN	37.35	2000	J
9.	UNKNOWN	38.08	800	J
10.	UNKNOWN	38.22	1000	J
11.	UNKNOWN	38.62	700	J
12.	UNKNOWN	39.23	600	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS27B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS27B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1100	U
111-44-4	bis(2-Chloroethyl)Ether	1100	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
100-51-6	Benzyl Alcohol	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U
95-48-7	2-Methylphenol	1100	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1100	U
106-44-5	4-Methylphenol	1100	U
621-64-7	N-Nitroso-Di-n-Propylamine	1100	U
67-72-1	Hexachloroethane	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
65-85-0	Benzoic Acid	5400	U
111-91-1	bis(2-Chloroethoxy)Methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	1100	U
106-47-8	4-Chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-Methylphenol	1100	U
91-57-6	2-Methylnaphthalene	190	J
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	5400	U
91-58-7	2-Chloronaphthalene	1100	U
88-74-4	2-Nitroaniline	5400	U
131-11-3	Dimethyl Phthalate	1100	U
208-96-8	Acenaphthylene	1100	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS27B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS27B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	5400	U
83-32-9	Acenaphthene	1100	U
51-28-5	2,4-Dinitrophenol	5400	U
100-02-7	4-Nitrophenol	5400	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
84-66-2	Diethylphthalate	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
86-73-7	Fluorene	1100	U
100-10-6	4-Nitroaniline	5400	U
534-52-1	4,6-Dinitro-2-Methylphenol	5400	U
86-30-6	N-Nitrosodiphenylamine (1)	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	5400	U
85-01-8	Phenanthrene	210	J
120-12-7	Anthracene	1100	U
84-74-2	Di-n-Butylphthalate	1100	U
206-44-0	Fluoranthene	210	J
129-00-0	Pyrene	180	J
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	2200	U
56-55-3	Benzo(a)Anthracene	1100	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1100	U
218-01-9	Chrysene	1100	U
117-84-0	Di-n-Octyl Phthalate	1100	U
205-99-2	Benzo(b)Fluoranthene	150	J
207-08-9	Benzo(k)Fluoranthene	1100	U
50-32-8	Benzo(a)Pyrene	1100	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1100	U
53-70-3	Dibenz(a,h)Anthracene	1100	U
191-24-2	Benzo(g,h,i)Perylene	1100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS27B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS27B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.0

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.95	1000	J
2.	UNKNOWN	6.53	2000	J
3.	UNKNOWN ORGANIC ACID	29.72	2000	J
4.	UNKNOWN	39.75	500	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS28B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS28B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	810	U
111-44-4	bis(2-Chloroethyl)Ether	810	U
95-57-8	2-Chlorophenol	810	U
541-73-1	1,3-Dichlorobenzene	810	U
106-46-7	1,4-Dichlorobenzene	810	U
100-51-6	Benzyl Alcohol	810	U
95-50-1	1,2-Dichlorobenzene	810	U
95-48-7	2-Methylphenol	810	U
39638-32-9	bis(2-Chloroisopropyl)Ether	810	U
106-44-5	4-Methylphenol	810	U
621-64-7	N-Nitroso-Di-n-Propylamine	810	U
67-72-1	Hexachloroethane	810	U
98-95-3	Nitrobenzene	810	U
78-59-1	Isophorone	810	U
88-75-5	2-Nitrophenol	810	U
105-67-9	2,4-Dimethylphenol	810	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	810	U
120-83-2	2,4-Dichlorophenol	810	U
120-82-1	1,2,4-Trichlorobenzene	810	U
91-20-3	Naphthalene	810	U
106-47-8	4-Chloroaniline	810	U
87-68-3	Hexachlorobutadiene	810	U
59-50-7	4-Chloro-3-Methylphenol	810	U
91-57-6	2-Methylnaphthalene	810	U
77-47-4	Hexachlorocyclopentadiene	810	U
88-06-2	2,4,6-Trichlorophenol	810	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	810	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	810	U
208-96-8	Acenaphthylene	810	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS28B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS28B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	110	J
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	810	U
121-14-2	2,4-Dinitrotoluene	810	U
606-20-2	2,6-Dinitrotoluene	810	U
84-66-2	Diethylphthalate	810	U
7005-72-3	4-Chlorophenyl-phenylether	810	U
86-73-7	Fluorene	120	J
100-10-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	810	U
101-55-3	4-Bromophenyl-phenylether	810	U
118-74-1	Hexachlorobenzene	810	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	1800	
120-12-7	Anthracene	340	J
84-74-2	Di-n-Butylphthalate	810	U
206-44-0	Fluoranthene	2500	
129-00-0	Pyrene	3400	
85-68-7	Butylbenzylphthalate	96	J
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	1800	
117-81-7	bis(2-Ethylhexyl)Phthalate	810	U
218-01-9	Chrysene	810	U
117-84-0	Di-n-Octyl Phthalate	810	U
205-99-2	Benzo(b)Fluoranthene	2500	
207-08-9	Benzo(k)Fluoranthene	400	J
50-32-8	Benzo(a)Pyrene	1200	
193-39-5	Indeno(1,2,3-cd)Pyrene	970	
53-70-3	Dibenz(a,h)Anthracene	110	J
191-24-2	Benzo(g,h,i)Perylene	990	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS28B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS28B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.0

Number TICs found: 11

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.05	1000	J
2.		UNKNOWN	6.60	1000	J
3.		UNKNOWN ORGANIC ACID	29.72	1000	J
4.		UNKNOWN	33.35	400	J
5.	205-82-3	BENZO[J] FLUORANTHENE	34.78	800	J
6.		UNKNOWN	35.57	1000	J
7.		UNKNOWN ALKANE	37.62	700	J
8.		UNKNOWN	37.70	400	J
9.		UNKNOWN	37.80	500	J
10.		UNKNOWN	39.20	500	J
11.		UNKNOWN	39.75	1000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS29B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS29B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1100	U
111-44-4	bis(2-Chloroethyl)Ether	1100	U
95-57-8	2-Chlorophenol	1100	U
541-73-1	1,3-Dichlorobenzene	1100	U
106-46-7	1,4-Dichlorobenzene	1100	U
100-51-6	Benzyl Alcohol	1100	U
95-50-1	1,2-Dichlorobenzene	1100	U
95-48-7	2-Methylphenol	1100	U
39638-32-9	bis(2-Chloroisopropyl)Ether	1100	U
106-44-5	4-Methylphenol	1100	U
621-64-7	N-Nitroso-Di-n-Propylamine	1100	U
67-72-1	Hexachloroethane	1100	U
98-95-3	Nitrobenzene	1100	U
78-59-1	Isophorone	1100	U
88-75-5	2-Nitrophenol	1100	U
105-67-9	2,4-Dimethylphenol	1100	U
65-85-0	Benzoic Acid	5500	U
111-91-1	bis(2-Chloroethoxy)Methane	1100	U
120-83-2	2,4-Dichlorophenol	1100	U
120-82-1	1,2,4-Trichlorobenzene	1100	U
91-20-3	Naphthalene	150	J
106-47-8	4-Chloroaniline	1100	U
87-68-3	Hexachlorobutadiene	1100	U
59-50-7	4-Chloro-3-Methylphenol	1100	U
91-57-6	2-Methylnaphthalene	240	J
77-47-4	Hexachlorocyclopentadiene	1100	U
88-06-2	2,4,6-Trichlorophenol	1100	U
95-95-4	2,4,5-Trichlorophenol	5500	U
91-58-7	2-Chloronaphthalene	1100	U
88-74-4	2-Nitroaniline	5500	U
131-11-3	Dimethyl Phthalate	1100	U
208-96-8	Acenaphthylene	1100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS29B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS29B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	5500	U
83-32-9	Acenaphthene	1100	U
51-28-5	2,4-Dinitrophenol	5500	U
100-02-7	4-Nitrophenol	5500	U
132-64-9	Dibenzofuran	1100	U
121-14-2	2,4-Dinitrotoluene	1100	U
606-20-2	2,6-Dinitrotoluene	1100	U
84-66-2	Diethylphthalate	1100	U
7005-72-3	4-Chlorophenyl-phenylether	1100	U
86-73-7	Fluorene	1100	U
100-10-6	4-Nitroaniline	5500	U
534-52-1	4,6-Dinitro-2-Methylphenol	5500	U
86-30-6	N-Nitrosodiphenylamine (1)	1100	U
101-55-3	4-Bromophenyl-phenylether	1100	U
118-74-1	Hexachlorobenzene	1100	U
87-86-5	Pentachlorophenol	5500	U
85-01-8	Phenanthrene	540	J
120-12-7	Anthracene	1100	U
84-74-2	Di-n-Butylphthalate	1100	U
206-44-0	Fluoranthene	980	J
129-00-0	Pyrene	710	J
85-68-7	Butylbenzylphthalate	1100	U
91-94-1	3,3'-Dichlorobenzidine	2300	U
56-55-3	Benzo(a)Anthracene	430	J
117-81-7	bis(2-Ethylhexyl)Phthalate	1100	U
218-01-9	Chrysene	610	J
117-84-0	Di-n-Octyl Phthalate	1100	U
205-99-2	Benzo(b)Fluoranthene	630	J
207-08-9	Benzo(k)Fluoranthene	1100	U
50-32-8	Benzo(a)Pyrene	220	J
193-39-5	Indeno(1,2,3-cd)Pyrene	270	J
53-70-3	Dibenz(a,h)Anthracene	1100	U
191-24-2	Benzo(g,h,i)Perylene	310	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: EKS29B

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EKS29B

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 dec. ____ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/14/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

Number TICs found: 11

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	5.12	2000	J
2.		UNKNOWN	6.62	3000	J
3.	10544-50-0	SULFUR	24.73	900	J
4.		UNKNOWN ORGANIC ACID	29.73	900	J
5.		UNKNOWN PHTHALATE	31.52	600	J
6.		UNKNOWN ALKANE	35.55	1000	J
7.		UNKNOWN	37.07	800	J
8.		UNKNOWN ALKANE	37.62	600	J
9.		UNKNOWN	37.93	600	J
10.		UNKNOWN	39.20	600	J
11.		UNKNOWN	39.75	700	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS19

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62395

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	21	U
319-85-7	beta-BHC	21	U
319-86-8	delta-BHC	21	U
58-89-9	Lindane	21	U
76-44-8	Heptachlor	21	U
309-00-2	Aldrin	21	U
1024-57-3	Heptachlor epoxide	21	U
959-98-8	Endosulfan I	21	U
60-57-1	Dieldrin	41	U
72-55-9	4,4'-DDE	41	U
72-20-8	Endrin	41	U
33213-65-9	Endosulfan II	41	U
72-54-8	4,4'-DDD	41	U
1031-07-8	Endosulfan sulfate	41	U
50-29-3	4,4'-DDT	41	U
72-43-5	Methoxychlor	210	U
53494-70-5	Endrin ketone	41	U
5103-71-9	alpha-Chlordane	210	U
5103-74-2	gamma-Chlordane	210	U
8001-35-2	Toxaphene	410	U
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	360	X
11097-69-1	Aroclor-1254	410	U
11096-82-5	Aroclor-1260	300	JX

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS20

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 623964

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 4.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	82	U
319-85-7	beta-BHC	82	U
319-86-8	delta-BHC	82	U
58-89-9	Lindane	82	U
76-44-8	Heptachlor	82	U
309-00-2	Aldrin	82	U
1024-57-3	Heptachlor epoxide	82	U
959-98-8	Endosulfan I	82	U
60-57-1	Dieldrin	160	U
72-55-9	4,4'-DDE	160	U
72-20-8	Endrin	160	U
33213-65-9	Endosulfan II	160	U
72-54-8	4,4'-DDD	160	U
1031-07-8	Endosulfan sulfate	160	U
50-29-3	4,4'-DDT	160	U
72-43-5	Methoxychlor	820	U
53494-70-5	Endrin ketone	160	U
5103-71-9	alpha-Chlordane	820	U
5103-74-2	gamma-Chlordane	820	U
8001-35-2	Toxaphene	1600	U
12674-11-2	Aroclor-1016	820	U
11104-28-2	Aroclor-1221	820	U
11141-16-5	Aroclor-1232	820	U
53469-21-9	Aroclor-1242	820	U
12672-29-6	Aroclor-1248	4200	X
11097-69-1	Aroclor-1254	1600	U
11096-82-5	Aroclor-1260	2800	X

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS21

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 623972

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 25 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	43	U
319-85-7	beta-BHC	43	U
319-86-8	delta-BHC	43	U
58-89-9	Lindane	43	U
76-44-8	Heptachlor	43	U
309-00-2	Aldrin	43	U
1024-57-3	Heptachlor epoxide	43	U
959-98-8	Endosulfan I	43	U
60-57-1	Dieldrin	85	U
72-55-9	4,4'-DDE	85	U
72-20-8	Endrin	85	U
33213-65-9	Endosulfan II	85	U
72-54-8	4,4'-DDD	85	U
1031-07-8	Endosulfan sulfate	85	U
50-29-3	4,4'-DDT	85	U
72-43-5	Methoxychlor	430	U
53494-70-5	Endrin ketone	85	U
5103-71-9	alpha-Chlordane	430	U
5103-74-2	gamma-Chlordane	430	U
8001-35-2	Toxaphene	850	U
12674-11-2	Aroclor-1016	430	U
11104-28-2	Aroclor-1221	430	U
11141-16-5	Aroclor-1232	430	U
53469-21-9	Aroclor-1242	430	U
12672-29-6	Aroclor-1248	430	U
11097-69-1	Aroclor-1254	850	U
11096-82-5	Aroclor-1260	580	JX

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS22

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62398

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 20 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	Lindane	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	40	U
72-55-9	4,4'-DDE	40	U
72-20-8	Endrin	40	U
33213-65-9	Endosulfan II	40	U
72-54-8	4,4'-DDD	40	U
1031-07-8	Endosulfan sulfate	40	U
50-29-3	4,4'-DDT	40	U
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin ketone	40	U
5103-71-9	alpha-Chlordane	200	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	400	U
11096-82-5	Aroclor-1260	400	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS23

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62399

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 22 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	21	U
319-85-7	beta-BHC	21	U
319-86-8	delta-BHC	21	U
58-89-9	Lindane	21	U
76-44-8	Heptachlor	21	U
309-00-2	Aldrin	21	U
1024-57-3	Heptachlor epoxide	21	U
959-98-8	Endosulfan I	21	U
60-57-1	Dieldrin	41	U
72-55-9	4,4'-DDE	41	U
72-20-8	Endrin	41	U
33213-65-9	Endosulfan II	41	U
72-54-8	4,4'-DDD	41	U
1031-07-8	Endosulfan sulfate	41	U
50-29-3	4,4'-DDT	41	U
72-43-5	Methoxychlor	210	U
53494-70-5	Endrin ketone	41	U
5103-71-9	alpha-Chlordane	210	U
5103-74-2	gamma-Chlordane	210	U
8001-35-2	Toxaphene	410	U
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	540	X
11097-69-1	Aroclor-1254	410	U
11096-82-5	Aroclor-1260	110	JX

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS24

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 624002

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 27 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.5 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	44	U
319-85-7	beta-BHC	44	U
319-86-8	delta-BHC	44	U
58-89-9	Lindane	44	U
76-44-8	Heptachlor	44	U
309-00-2	Aldrin	44	U
1024-57-3	Heptachlor epoxide	44	U
959-98-8	Endosulfan I	44	U
60-57-1	Dieldrin	88	U
72-55-9	4,4'-DDE	88	U
72-20-8	Endrin	88	U
33213-65-9	Endosulfan II	88	U
72-54-8	4,4'-DDD	88	U
1031-07-8	Endosulfan sulfate	88	U
50-29-3	4,4'-DDT	88	U
72-43-5	Methoxychlor	440	U
53494-70-5	Endrin ketone	88	U
5103-71-9	alpha-Chlordane	440	U
5103-74-2	gamma-Chlordane	440	U
8001-35-2	Toxaphene	880	U
12674-11-2	Aroclor-1016	440	U
11104-28-2	Aroclor-1221	440	U
11141-16-5	Aroclor-1232	440	U
53469-21-9	Aroclor-1242	440	U
12672-29-6	Aroclor-1248	440	U
11097-69-1	Aroclor-1254	880	U
11096-82-5	Aroclor-1260	880	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS25

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 624012

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	40	U
319-85-7	beta-BHC	40	U
319-86-8	delta-BHC	40	U
58-89-9	Lindane	40	U
76-44-8	Heptachlor	40	U
309-00-2	Aldrin	40	U
1024-57-3	Heptachlor epoxide	40	U
959-98-8	Endosulfan I	40	U
60-57-1	Dieldrin	79	U
72-55-9	4,4'-DDE	79	U
72-20-8	Endrin	79	U
33213-65-9	Endosulfan II	79	U
72-54-8	4,4'-DDD	79	U
1031-07-8	Endosulfan sulfate	79	U
50-29-3	4,4'-DDT	79	U
72-43-5	Methoxychlor	400	U
53494-70-5	Endrin ketone	79	U
5103-71-9	alpha-Chlordane	400	U
5103-74-2	gamma-Chlordane	400	U
8001-35-2	Toxaphene	790	U
12674-11-2	Aroclor-1016	400	U
11104-28-2	Aroclor-1221	400	U
11141-16-5	Aroclor-1232	400	U
53469-21-9	Aroclor-1242	400	U
12672-29-6	Aroclor-1248	400	U
11097-69-1	Aroclor-1254	790	U
11096-82-5	Aroclor-1260	1400	X

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS26

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62402

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	24	U
319-85-7	beta-BHC	24	U
319-86-8	delta-BHC	24	U
58-89-9	Lindane	24	U
76-44-8	Heptachlor	24	U
309-00-2	Aldrin	24	U
1024-57-3	Heptachlor epoxide	24	U
959-98-8	Endosulfan I	24	U
60-57-1	Dieldrin	47	U
72-55-9	4,4'-DDE	47	U
72-20-8	Endrin	47	U
33213-65-9	Endosulfan II	47	U
72-54-8	4,4'-DDD	47	U
1031-07-8	Endosulfan sulfate	47	U
50-29-3	4,4'-DDT	47	U
72-43-5	Methoxychlor	240	U
53494-70-5	Endrin ketone	47	U
5103-71-9	alpha-Chlordane	240	U
5103-74-2	gamma-Chlordane	240	U
8001-35-2	Toxaphene	470	U
12674-11-2	Aroclor-1016	240	U
11104-28-2	Aroclor-1221	240	U
11141-16-5	Aroclor-1232	240	U
53469-21-9	Aroclor-1242	240	U
12672-29-6	Aroclor-1248	240	U
11097-69-1	Aroclor-1254	470	U
11096-82-5	Aroclor-1260	470	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS26DL

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 624024

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 32 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 4.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	94	U
319-85-7	beta-BHC	94	U
319-86-8	delta-BHC	94	U
58-89-9	Lindane	94	U
76-44-8	Heptachlor	94	U
309-00-2	Aldrin	94	U
1024-57-3	Heptachlor epoxide	94	U
959-98-8	Endosulfan I	94	U
60-57-1	Dieldrin	190	U
72-55-9	4,4'-DDE	190	U
72-20-8	Endrin	190	U
33213-65-9	Endosulfan II	190	U
72-54-8	4,4'-DDD	190	U
1031-07-8	Endosulfan sulfate	190	U
50-29-3	4,4'-DDT	190	U
72-43-5	Methoxychlor	940	U
53494-70-5	Endrin ketone	190	U
5103-71-9	alpha-Chlordane	940	U
5103-74-2	gamma-Chlordane	940	U
8001-35-2	Toxaphene	1900	U
12674-11-2	Aroclor-1016	940	U
11104-28-2	Aroclor-1221	940	U
11141-16-5	Aroclor-1232	940	U
53469-21-9	Aroclor-1242	940	U
12672-29-6	Aroclor-1248	940	U
11097-69-1	Aroclor-1254	1900	U
11096-82-5	Aroclor-1260	1900	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS27

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62403

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 41 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/08/90

GPC Cleanup: (Y/N) Y pH: 6.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	27	U
319-85-7	beta-BHC	27	U
319-86-8	delta-BHC	27	U
58-89-9	Lindane	27	U
76-44-8	Heptachlor	27	U
309-00-2	Aldrin	27	U
1024-57-3	Heptachlor epoxide	27	U
959-98-8	Endosulfan I	27	U
60-57-1	Dieldrin	54	U
72-55-9	4,4'-DDE	54	U
72-20-8	Endrin	54	U
33213-65-9	Endosulfan II	54	U
72-54-8	4,4'-DDD	54	U
1031-07-8	Endosulfan sulfate	54	U
50-29-3	4,4'-DDT	54	U
72-43-5	Methoxychlor	270	U
53494-70-5	Endrin ketone	54	U
5103-71-9	alpha-Chlordane	270	U
5103-74-2	gamma-Chlordane	270	U
8001-35-2	Toxaphene	540	U
12674-11-2	Aroclor-1016	270	U
11104-28-2	Aroclor-1221	270	U
11141-16-5	Aroclor-1232	270	U
53469-21-9	Aroclor-1242	270	U
12672-29-6	Aroclor-1248	270	U
11097-69-1	Aroclor-1254	540	U
11096-82-5	Aroclor-1260	540	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS28

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62404

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 19 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	Lindane	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	40	U
72-55-9	4,4'-DDE	40	U
72-20-8	Endrin	40	U
33213-65-9	Endosulfan II	40	U
72-54-8	4,4'-DDD	40	U
1031-07-8	Endosulfan sulfate	40	U
50-29-3	4,4'-DDT	40	U
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin ketone	40	U
5103-71-9	alpha-Chlordane	200	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	400	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	1400	X
11097-69-1	Aroclor-1254	400	U
11096-82-5	Aroclor-1260	410	X

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EKS29

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: 62411

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

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. 42 dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	28	U
319-85-7	beta-BHC	28	U
319-86-8	delta-BHC	28	U
58-89-9	Lindane	28	U
76-44-8	Heptachlor	28	U
309-00-2	Aldrin	28	U
1024-57-3	Heptachlor epoxide	28	U
959-98-8	Endosulfan I	28	U
60-57-1	Dieldrin	55	U
72-55-9	4,4'-DDE	55	U
72-20-8	Endrin	55	U
33213-65-9	Endosulfan II	55	U
72-54-8	4,4'-DDD	55	U
1031-07-8	Endosulfan sulfate	55	U
50-29-3	4,4'-DDT	55	U
72-43-5	Methoxychlor	280	U
53494-70-5	Endrin ketone	55	U
5103-71-9	alpha-Chlordane	280	U
5103-74-2	gamma-Chlordane	280	U
8001-35-2	Toxaphene	550	U
12674-11-2	Aroclor-1016	280	U
11104-28-2	Aroclor-1221	280	U
11141-16-5	Aroclor-1232	280	U
53469-21-9	Aroclor-1242	280	U
12672-29-6	Aroclor-1248	280	U
11097-69-1	Aroclor-1254	550	U
11096-82-5	Aroclor-1260	460	JX

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1026F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1026F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/26/90

Column (pack/cap) CAP Dilution Factor: 1.0

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.

VBLK3

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1030F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1030F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/30/90

Column: (pack/cap) CAP Dilution Factor: 1.0

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	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	(Total)-1,2-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-02-5	Cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-01-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK3

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: VSB1030F

Sample wt/vol: 5.0 (g/mL) G Lab File ID: VSB1030F

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 10/30/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1026

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1026

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
39638-32-9	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1026

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1026

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
606-20-2	2,6-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-10-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660	U
129-00-0	Pyrene	660	U
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660	U
218-01-9	Chrysene	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1026

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1026

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1030

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1030

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/30/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
39638-32-9	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1030

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1030

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/30/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
606-20-2	2,6-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-10-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	660	U
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660	U
129-00-0	Pyrene	660	U
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660	U
218-01-9	Chrysene	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: LSB1030

Sample wt/vol: 30.0 (g/mL) G Lab File ID: LSB1030

Level: (low/med) LOW Date Received:

% Moisture: not dec. dec. Date Extracted: 10/30/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/13/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKL1

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: MB102690-2

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

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

% Moisture: not dec. __ dec. __ Date Extracted: 10/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	Lindane	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKL2

Lab Name: ENCOTEC-AA Contract: 68-D9-0033

Lab Code: ENCOT Case No.: 15152 SAS No.: _____ SDG No.: EKS19

Matrix: (soil/water) SOIL Lab Sample ID: MB103090-3

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

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

% Moisture: not dec. __ dec. __ Date Extracted: 10/30/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 11/07/90

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	Lindane	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	gamma-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

CRL Receipt Date 11/26/90 FIT Receipt Date 1/17/91 Review Completed 1/28/91

TO: M. Jaster
FROM: C. Kouris
SUBJECT: South Dayton Dump
PAN: OH05215B (1 hour charged for review) Case # 15152

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# _____	Low Soil	# 11	Low Soil
_____	Low Water	_____	Low Water
_____	Drinking Water	_____	Drinking Water
_____	Other	_____	Other

Project Data Status _____ Completed!!

X Incomplete, awaiting org Soil

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 10/23/90

0759:2

recycled paper

12/18

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

1/17/91
1 of 2

DATE: 1.16.91

SUBJECT: Review of Region V CLP Data
Received for Review on NOVEMBER 26, 1990

FROM: Curtis Ross, Director (SSCRL)
Central Regional Laboratory Jay Thatcher

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: SOUTH DAYTON DUMP (OH) SMO Case No. 15152

EPA Data Set No. _____ No. of Samples: 11 D.U./Activity Numbers TFA/TFA102

CRL No. 91FJ31S87 - S97

SMO Traffic No. MEHN82- 92

CLP Laboratory: SILVER Hrs. Required for Review: 6+1 0.5hrs.

Following are our findings.

The laboratory's portion of case 15152 contains 11 low level soil samples analyzed for total metals and cyanide

(See next page)

1-9-91

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

DATA QUALIFIERS

LABORATORY: SILVER **CASE NO: 15152**

ICP ANALYSES: The lab flagged (*) on the duplicate audit for Cu (28.1% RPD). The technical criteria for soil sample (35% RPD) was not exceeded by Cu. Cu data are not qualified on this basis. The ICP serial dilution for Cu (26.8% difference) is out of control. All Cu data are estimated (J) due to interference.

The lab flagged (*) on the duplicate audit for Fe (22.7% RPD). The technical criteria for soil sample (35% RPD) was not exceeded by Fe. Fe data are not qualified on this basis. All Fe data are acceptable.

The duplicate audit for K (200% RPD) was not flagged by the lab because the difference between the sample and the duplicate is less than 2xCRDL. K data are not qualified on this basis. All K data are acceptable.

GFAA ANALYSES: The duplicate audit for Se (43.2% RPD) was not flagged by the lab because the difference between the sample and the duplicate is less than 2xCRDL. Se data are not qualified on this basis. Samples MEHN83 and 89 for Se were flagged (W) by the lab and are estimated (J) due to interference.

Samples MEHN82, 85 and 86 for Tl were flagged (W) by the lab and are estimated (UJ) due to interference.

OTHER QUALIFIERS: Samples MEHN84 and 90 for Hg (form 1) were corrected by the reviewer. All Hg data are acceptable.

The matrix spike recovery for CN (56.4%) is out of control. All CN data are estimated (UJ) due to a possible elevated detection limit.

BAI YUEN

Bai Yuen

1-9-91

QC EXCEPTION SUMMARY REPORT

CASE # 15152
DATA SET #
LAB Q.C.# MEHN82
DATE: 1-9-91

SITE South Dayton Dump (OH)
LAB Silver
REVIEWED BY Bai Yuen

MATRIX: Soil
CONC. : Low

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK.
SOIL SAMPLE DUP.

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Int Calver	Contin Calver	Prep Blk AQ	Prep Blk SOL	ICS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk. %R	AQ Dup RPD	AQ Spk. %R	Ser Dil AQ	Ser Dil SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blank Blank	Blank Spike %R	Spkd Sample RPD	
Aluminum																								
Antimony																								
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium																								
Chromium																								
Cobalt																								
Copper															268									
Iron																								
Lead																								
Magnesium																								
Manganese																								
Mercury																								
Nickel																								
Potassium																								
Selenium																								
Silver																								
Sodium																								
Thallium																								
Tin																								
Vanadium																								
Zinc																								
Cyanide											56.4													

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

SOW No.: 7/88

EPA Sample No.	Lab Sample ID
MEHN82	
MEHN82D	
MEHN82S	
MEHN83	
MEHN84	
MEHN85	
MEHN85D	
MEHN85S	
MEHN86	
MEHN87	
MEHN88	
MEHN89	
MEHN90	
MEHN91	
MEHN92	

RECEIVED
NOV 26 1990
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 signatures.

Signature: Melba Bencich Name: MELBA BENCICH

Date: NOVEMBER 21, 1990 Title: DOCUMENT CONTROL OFFICER

EPA SAMPLE NO. 9

1

INORGANIC ANALYSIS DATA SHEET

MEHN82

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 80.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5730.00			P
7440-36-0	Antimony	7.20	U		P
7440-38-2	Arsenic	23.90			F
7440-39-3	Barium	991.00			P
7440-41-7	Beryllium	.72	B		P
7440-43-9	Cadmium	1.30			P
7440-70-2	Calcium	33800.00			P
7440-47-3	Chromium	18.50			P
7440-48-4	Cobalt	3.70	B		P
7440-50-8	Copper	66.80		E*	P
7439-89-6	Iron	15900.00		*	P
7439-92-1	Lead	64.10			F
7439-95-4	Magnesium	6270.00			P
7439-96-5	Manganese	309.00			P
7439-97-6	Mercury	.12	U		CV
7440-02-0	Nickel	28.90			P
7440-09-7	Potassium	729.00	B		P
7782-49-2	Selenium	2.20			F
7440-22-4	Silver	1.00	U		P
7440-23-5	Sodium	157.00	B		P
7440-28-0	Thallium	.50	U	W	F
7440-62-2	Vanadium	18.20			P
7440-66-6	Zinc	112.00			P
	Cyanide	1.20	U	N	C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:
PB 10X DILUTION.
AS 5X DILUTION.

EPA SAMPLE NO. 10

MEHN83

INORGANIC ANALYSIS DATA SHEET

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 62.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3800.00			P
7440-36-0	Antimony	9.40	U		P
7440-38-2	Arsenic	6.80			F
7440-39-3	Barium	23.20	B		P
7440-41-7	Beryllium	.32	U		P
7440-43-9	Cadmium	1.30	U		P
7440-70-2	Calcium	13300.00			P
7440-47-3	Chromium	16.90			P
7440-48-4	Cobalt	2.30	U		P
7440-50-8	Copper	48.90		E*	P
7439-89-6	Iron	18000.00		*	P
7439-92-1	Lead	43.00		S	F
7439-95-4	Magnesium	7790.00			P
7439-96-5	Manganese	344.00			P
7439-97-6	Mercury	.16	U		CV
7440-02-0	Nickel	13.90			P
7440-09-7	Potassium	308.00	B		P
7782-49-2	Selenium	1.20	B	W	F
7440-22-4	Silver	1.30	U		P
7440-23-5	Sodium	123.00	B		P
7440-28-0	Thallium	.65	U		F
7440-62-2	Vanadium	7.30	B		P
7440-66-6	Zinc	550.00			P
	Cyanide	1.60	U	N	C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: YELLOW Clarity After: Artifacts:

Comments:
PB 6X DILUTION.

EPA SAMPLE NO. 11

1

INORGANIC ANALYSIS DATA SHEET

MEHN84

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 75.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	4740.00			P	
7440-36-0	Antimony	31.60			P	
7440-38-2	Arsenic	8.30		S	F	
7440-39-3	Barium	157.00			P	
7440-41-7	Beryllium	.70	B		P	
7440-43-9	Cadmium	14.00			P	
7440-70-2	Calcium	4790.00			P	
7440-47-3	Chromium	91.70			P	
7440-48-4	Cobalt	5.60	B		P	
7440-50-8	Copper	2220.00		E*	P	
7439-89-6	Iron	77000.00		*	P	
7439-92-1	Lead	3300.00			P	
7439-95-4	Magnesium	2660.00			P	
7439-96-5	Manganese	437.00			P	
7439-97-6	Mercury	0.31 ~~.13~~	U		CV	B U 1-9-91
7440-02-0	Nickel	262.00			P	
7440-09-7	Potassium	569.00	B		P	
7782-49-2	Selenium	.91	B		F	
7440-22-4	Silver	1.10	U		P	
7440-23-5	Sodium	114.00	B		P	
7440-28-0	Thallium	.53	U		F	
7440-62-2	Vanadium	33.90			P	
7440-66-6	Zinc	2350.00			P	
	Cyanide	1.30	U	N	C	

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:
AS 2X DILUTION.

EPA SAMPLE NO. 12

1

INORGANIC ANALYSIS DATA SHEET

MEHN85

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 80.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3360.00			P
7440-36-0	Antimony	7.20	U		P
7440-38-2	Arsenic	12.60			F
7440-39-3	Barium	117.00			P
7440-41-7	Beryllium	1.70			P
7440-43-9	Cadmium	1.00	U		P
7440-70-2	Calcium	1260.00			P
7440-47-3	Chromium	6.30			P
7440-48-4	Cobalt	8.80	B		P
7440-50-8	Copper	56.70		E*	P
7439-89-6	Iron	2840.00		*	P
7439-92-1	Lead	10.40			F
7439-95-4	Magnesium	294.00	B		P
7439-96-5	Manganese	7.20			P
7439-97-6	Mercury	.12	U		CV
7440-02-0	Nickel	13.60			P
7440-09-7	Potassium	364.00	B		P
7782-49-2	Selenium	1.60			F
7440-22-4	Silver	1.00	U		P
7440-23-5	Sodium	118.00	B		P
7440-28-0	Thallium	.50	U	W	F
7440-62-2	Vanadium	27.90			P
7440-66-6	Zinc	9.20			P
	Cyanide	1.20	U	N	C

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:

EPA SAMPLE NO. 13

MEHN86

INORGANIC ANALYSIS DATA SHEET

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 82.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1990.00			P
7440-36-0	Antimony	7.10	U		P
7440-38-2	Arsenic	10.30			F
7440-39-3	Barium	81.00			P
7440-41-7	Beryllium	.47	B		P
7440-43-9	Cadmium	1.00	B		P
7440-70-2	Calcium	1710.00			P
7440-47-3	Chromium	11.00			P
7440-48-4	Cobalt	5.00	B		P
7440-50-8	Copper	74.10		E*	P
7439-89-6	Iron	4230.00		*	P
7439-92-1	Lead	59.30			F
7439-95-4	Magnesium	439.00	B		P
7439-96-5	Manganese	55.20			P
7439-97-6	Mercury	.12	U		CV
7440-02-0	Nickel	17.20			P
7440-09-7	Potassium	329.00	B		P
7782-49-2	Selenium	2.20		S	F
7440-22-4	Silver	.97	U		P
7440-23-5	Sodium	43.70	B		P
7440-28-0	Thallium	.49	U	W	F
7440-62-2	Vanadium	11.50	B		P
7440-66-6	Zinc	57.60			P
	Cyanide	1.20	U	N	C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:
PB 5X DILUTION.

EPA SAMPLE NO. 14

MEHN87

INORGANIC ANALYSIS DATA SHEET

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 73.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4620.00			P
7440-36-0	Antimony	7.90	U		P
7440-38-2	Arsenic	11.10		S	F
7440-39-3	Barium	167.00			P
7440-41-7	Beryllium	2.00			P
7440-43-9	Cadmium	1.10	U		P
7440-70-2	Calcium	2650.00			P
7440-47-3	Chromium	8.60			P
7440-48-4	Cobalt	8.20	B		P
7440-50-8	Copper	47.40		E*	P
7439-89-6	Iron	5630.00		*	P
7439-92-1	Lead	15.90			F
7439-95-4	Magnesium	537.00	B		P
7439-96-5	Manganese	27.00			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	17.20			P
7440-09-7	Potassium	429.00	B		P
7782-49-2	Selenium	1.70			F
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	81.00	B		P
7440-28-0	Thallium	.54	U		F
7440-62-2	Vanadium	28.10			P
7440-66-6	Zinc	14.40			P
	Cyanide	1.40	U	N	C

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:
AS 2X DILUTION.

EPA SAMPLE NO. 15

1

INORGANIC ANALYSIS DATA SHEET

MEHN88

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2970.00			P
7440-36-0	Antimony	13.20	B		P
7440-38-2	Arsenic	8.90		S	F
7440-39-3	Barium	130.00			P
7440-41-7	Beryllium	.72	B		P
7440-43-9	Cadmium	5.90			P
7440-70-2	Calcium	4460.00			P
7440-47-3	Chromium	20.60			P
7440-48-4	Cobalt	5.20	B		P
7440-50-8	Copper	316.00		E*	P
7439-89-6	Iron	14800.00		*	P
7439-92-1	Lead	474.00			P
7439-95-4	Magnesium	2580.00			P
7439-96-5	Manganese	130.00			P
7439-97-6	Mercury	.12	U		CV
7440-02-0	Nickel	94.70			P
7440-09-7	Potassium	232.00	B		P
7782-49-2	Selenium	2.40			F
7440-22-4	Silver	1.00	U		P
7440-23-5	Sodium	64.40	B		P
7440-28-0	Thallium	.50	U		F
7440-62-2	Vanadium	16.00			P
7440-66-6	Zinc	2210.00			P
	Cyanide	1.20	U	N	C

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:
AS 2X DILUTION.

EPA SAMPLE NO. 16

1

INORGANIC ANALYSIS DATA SHEET

MEHN89

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 71.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5350.00			P
7440-36-0	Antimony	8.20	U		P
7440-38-2	Arsenic	11.60		S	F
7440-39-3	Barium	150.00			P
7440-41-7	Beryllium	1.40	B		P
7440-43-9	Cadmium	8.60			P
7440-70-2	Calcium	4810.00			P
7440-47-3	Chromium	43.00			P
7440-48-4	Cobalt	6.20	B		P
7440-50-8	Copper	2200.00		E*	P
7439-89-6	Iron	48300.00		*	P
7439-92-1	Lead	1590.00			P
7439-95-4	Magnesium	2230.00			P
7439-96-5	Manganese	272.00			P
7439-97-6	Mercury	.14	U		CV
7440-02-0	Nickel	402.00			P
7440-09-7	Potassium	1030.00	B		P
7782-49-2	Selenium	1.10	B	W	F
7440-22-4	Silver	1.10	U		P
7440-23-5	Sodium	338.00	B		P
7440-28-0	Thallium	.56	U		F
7440-62-2	Vanadium	27.40			P
7440-66-6	Zinc	1490.00			P
	Cyanide	1.40	U	N	C

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:
AS 3X DILUTION.

EPA SAMPLE NO. 17

1

INORGANIC ANALYSIS DATA SHEET

MEHN90

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 54.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11100.00			P	
7440-36-0	Antimony	12.10	B		P	
7440-38-2	Arsenic	69.30			F	
7440-39-3	Barium	190.00			P	
7440-41-7	Beryllium	5.50			P	
7440-43-9	Cadmium	1.50	U		P	
7440-70-2	Calcium	10000.00			P	
7440-47-3	Chromium	23.20			P	
7440-48-4	Cobalt	22.10			P	
7440-50-8	Copper	76.60		E*	P	
7439-89-6	Iron	11100.00		*	P	
7439-92-1	Lead	49.70			F	
7439-95-4	Magnesium	3720.00			P	
7439-96-5	Manganese	162.00			P	
7439-97-6	Mercury	0.30 ~~.10~~	U		CV	B.Y. 1-9-91
7440-02-0	Nickel	56.60			P	
7440-09-7	Potassium	1630.00	B		P	
7782-49-2	Selenium	4.60		S	F	
7440-22-4	Silver	1.50	U		P	
7440-23-5	Sodium	272.00	B		P	
7440-28-0	Thallium	2.00	B		F	
7440-62-2	Vanadium	69.60			P	
7440-66-6	Zinc	75.10			P	
	Cyanide	1.80	U	N	C	

Color Before: BLACK Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:
PB 5X DILUTION.
AS 10X DILUTION.

EPA SAMPLE NO. 18

1

INORGANIC ANALYSIS DATA SHEET

MEHN91

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 81.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600.00			P
7440-36-0	Antimony	7.10	U		P
7440-38-2	Arsenic	8.10		S	F
7440-39-3	Barium	120.00			P
7440-41-7	Beryllium	.35	B		P
7440-43-9	Cadmium	.98	U		P
7440-70-2	Calcium	83700.00			P
7440-47-3	Chromium	27.60			P
7440-48-4	Cobalt	4.70	B		P
7440-50-8	Copper	37.60		E*	P
7439-89-6	Iron	16300.00		*	P
7439-92-1	Lead	94.80			P
7439-95-4	Magnesium	28000.00			P
7439-96-5	Manganese	446.00			P
7439-97-6	Mercury	.12	U		CV
7440-02-0	Nickel	23.10			P
7440-09-7	Potassium	1190.00	B		P
7782-49-2	Selenium	2.60		S	F
7440-22-4	Silver	1.10	B		P
7440-23-5	Sodium	136.00	B		P
7440-28-0	Thallium	.49	U		F
7440-62-2	Vanadium	24.30			P
7440-66-6	Zinc	126.00			P
	Cyanide	1.20	U	N	C

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts:

Comments:
SE 2X DILUTION.

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. 19

MEHN92

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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

Level (low/med): LOW Date Received: 10/24/90

% Solids: 62.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8460.00			P
7440-36-0	Antimony	18.20	B		P
7440-38-2	Arsenic	20.10		S	F
7440-39-3	Barium	265.00			P
7440-41-7	Beryllium	2.50			P
7440-43-9	Cadmium	8.40			P
7440-70-2	Calcium	34900.00			P
7440-47-3	Chromium	30.40			P
7440-48-4	Cobalt	10.90	B		P
7440-50-8	Copper	796.00		E*	P
7439-89-6	Iron	25500.00		*	P
7439-92-1	Lead	811.00			P
7439-95-4	Magnesium	15500.00			P
7439-96-5	Manganese	294.00			P
7439-97-6	Mercury	.16	U		CV
7440-02-0	Nickel	65.50			P
7440-09-7	Potassium	915.00	B		P
7782-49-2	Selenium	3.70		S	F
7440-22-4	Silver	1.30	U		P
7440-23-5	Sodium	239.00	B		P
7440-28-0	Thallium	.73	B		F
7440-62-2	Vanadium	35.50			P
7440-66-6	Zinc	480.00			P
	Cyanide	1.60	U	N	C

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:
AS 4X DILUTION.

U.S. EPA - CLP

3
BLANKS

Lab name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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	18.0	U	34.6	B	18.0	U	36.4	B	3.600	U	P
Antimony	34.7	B	29.0	U	29.0	U	29.0	U	5.800	U	P
Arsenic	3.0	U	3.0	U	3.0	U			.600	U	F
Barium	4.0	U	4.0	U	4.0	U	4.0	U	.800	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	.200	U	P
Cadmium	4.0	U	4.0	U	4.0	U	4.0	U	.800	U	P
Calcium	24.4	B	48.8	B	21.0	U	56.9	B	6.508	B	P
Chromium	-5.8	B	5.0	U	5.0	U	5.0	U	-1.349	B	P
Cobalt	7.0	U	7.0	U	7.0	U	7.0	U	1.400	U	P
Copper	9.1	B	4.0	U	4.0	U	4.0	U	.800	U	P
Iron	-18.2	B	8.0	U	8.0	U	8.0	U	-3.458	B	P
Lead	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Magnesium	31.0	U	31.0	U	31.0	U	38.6	B	6.200	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	.600	U	P
Mercury	.2	U	.2	U	.2	U	.2	U	.100	U	CV
Nickel	28.0	U	28.0	U	28.0	U	28.0	U	5.600	U	P
Potassium	761.0	U	761.0	U	761.0	U	761.0	U	-163.105	B	P
Selenium	3.0	U	3.0	U	3.0	U			.600	U	F
Silver	4.0	U	4.0	U	4.0	U	4.0	U	.800	U	P
Sodium	79.0	U	79.0	U	79.0	U	79.0	U	15.800	U	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U	.400	U	F
Vanadium	4.0	U	4.0	U	-5.7	B	4.0	U	.800	U	P
Zinc	2.0	U	2.0	U	2.0	U	2.0	U	.400	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	1.000	U	C

U.S. EPA - CLP

3
BLANKS

Lab name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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											
Antimony											
Arsenic	3.0	U	3.0	U	3.0	U					F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	1.0	U	1.0	U	1.0	U	1.0	U	.200	U	F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U	3.0	U					F
Silver											
Sodium											
Thallium	2.0	U	2.0	U	2.0	U					F
Vanadium											
Zinc											
Cyanide	10.0	U	10.0	U	10.0	U			1.000	U	C

U.S. EPA - CLP

3
BLANKS

Lab name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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											
Antimony											
Arsenic	3.0	U	3.0	U	3.0	U					F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			1.0	U							F
Magnesium											
Mangamese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U	3.0	U					F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide									1.000	U	C

FORM III - IN

U.S. EPA - CLP

3
BLANKS

Lab name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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											
Antimony											
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U			F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U	3.0	U	3.0	U			F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide									1.000	U	C

U.S. EPA - CLP

3
BLANKS

Lab name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

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											
Antimony											
Arsenic			3.0	U	3.0	U					F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			3.0	U	3.0	U					F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEHN82S

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 80.2

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									NR
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	75-125	.5250		.1247	U	.62	84.7		CV
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEHN85S

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 80.3

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	117.2283		7.2229	U	124.53	94.1		P
Arsenic	75-125	21.6663		12.5953		9.96	91.1		F
Barium	75-125	642.1879		116.8021		498.13	105.5		P
Beryllium	75-125	14.2204		1.6730		12.45	100.8		P
Cadmium	75-125	11.6220		.9963	U	12.45	93.3		P
Calcium									NR
Chromium	75-125	57.5547		6.3045		49.81	102.9		P
Cobalt	75-125	139.2865		8.8006	B	124.53	104.8		P
Copper	75-125	103.5331		56.6924		62.27	75.2		P
Iron									NR
Lead	75-125	145.7883		12.4533	U	124.53	117.1		P
Magnesium									NR
Manganese	75-125	139.7851		7.1992		124.53	106.5		P
Mercury									NR
Nickel	75-125	145.5095		13.6009		124.53	105.9		P
Potassium									NR
Selenium	75-125	3.9203		1.5841		2.49	93.8		F
Silver	75-125	12.1382		.9963	U	12.45	97.5		P
Sodium									NR
Thallium	75-125	12.1146		.4981	U	12.45	97.3		F
Vanadium	75-125	154.7625		27.9326		124.53	101.8		P
Zinc	75-125	146.7026		9.1762		124.53	110.4		P
Cyanide	75-125	7.0200		1.2453	U	12.45	56.4	N	C

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEHN85S

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix: SOIL Level (low/med): LOW

% Solids for Sample: 80.3

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									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead	75-125	14.4259		10.3661		4.98	81.5		F
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.

MEHN82D

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix (water/soil): SOIL Level (low/med): LOW

% Solids for Sample: 80.2 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	%RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury		.1247	U	.1247	U			CV
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

FORM VI - IN

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U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEHN85D

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix (water/soil): SOIL Level (low/med): LOW

% Solids for Sample: 80.3 % Solids for Duplicate: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	%RPD	Q	M
Aluminum		3358.1122		2977.5935		12.0		P
Antimony		7.2229	U	7.2229	U			P
Arsenic		12.5953		12.6227		.2		F
Barium	49.8	116.8021		126.4238		7.9		P
Beryllium	1.2	1.6730		1.3145		24.0		P
Cadmium		.9963	U	.9963	U			P
Calcium	1245.3	1256.9213		1141.9465	B	9.6		P
Chromium	2.5	6.3045		6.0237		4.6		P
Cobalt		8.8006	B	7.8062	B	12.0		P
Copper		56.6924		42.7249		28.1	*	P
Iron		2839.0649		3566.9280		22.7	*	P
Lead		10.3661		9.9900		3.7		F
Magnesium		294.1128	B	263.0965	B	11.1		P
Manganese	3.7	7.1992		6.5887		8.9		P
Mercury								
Nickel	10.0	13.6009		10.9021		22.0		P
Potassium		364.2134	B	189.5392	U	200.0		P
Selenium	1.2	1.5841		1.0237	B	43.0		F
Silver		.9963	U	.9963	U			P
Sodium		118.1506	B	108.9526	B	8.1		P
Thallium		.4981	U	.4981	U			F
Vanadium	12.5	27.9326		23.7434		16.2		P
Zinc	5.0	9.1762		8.0526		13.0		P
Cyanide		1.2453	U	1.2453	U			C

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEHN85D

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

Matrix (water/soil): SOIL Level (low/med): LOW

% Solids for Sample: 80.3 % Solids for Duplicate:

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	%RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead		12.4533	U	12.4533	U			P
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

ICP ID Number: ICAP61-87 Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	18.0	P
Antimony	206.84		60	29.0	P
Arsenic			10		
Barium	493.41		200	4.0	P
Beryllium	313.04		5	1.0	P
Cadmium	228.80		5	4.0	P
Calcium	317.93		5000	21.0	P
Chromium	267.72		10	5.0	P
Cobalt	228.62		50	7.0	P
Copper	324.75		25	4.0	P
Iron	259.94		100	8.0	P
Lead	220.35		3	50.0	P
Magnesium	279.05		5000	31.0	P
Manganese	257.61		15	3.0	P
Mercury			0.2		
Nickel	231.60		40	28.0	P
Potassium	766.49		5000	761.0	P
Selenium			5		
Silver	328.07		10	4.0	P
Sodium	589.00		5000	79.0	P
Thallium			10		
Vanadium	292.40		50	4.0	P
Zinc	213.86		20	2.0	P

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

ICP ID Number: Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: AA30

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium	276.80	BD	10	2.0	F
Vanadium			50		
Zinc			20		

Comments:

5

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

ICP ID Number: Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: AA40Z

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead	283.30	BZ	3	1.0	F
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

ICP ID Number: Date: 10/15/90

Flame AA ID Number:

Furnace AA ID Number: SH-22

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic	197.20	BS	10	3.0	F
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium	196.00	BS	5	3.0	F
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SILVER VALLEY LABS., INC. Contract: 68-D9-0071

Lab Code: SILVER Case No.: 15152 SAS No.: SDG No.: MEHN82

ICP ID Number: Date: 10/15/90

Flame AA ID Number: SPECTRO HG3

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury	256.00		0.2	.2	CV
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED Soil SAMPLES

CK 1/28/91

Physical State*	Waste Characteristics**	Category***	SI Name	Sample Collection Information and Parameters / Compound Selected (values in µg/L or µg/kg)	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10 (BACKGROUND)	S11	12
				Date	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	10/23/90	
				Time	1130	1140	1140	1150	1230	1245	1235	1235	1330	1345	1335	
				~~Well Depth (feet)~~	—	—	—	—	—	—	—	—	—	—	—	
				~~CGL Log Number~~	—	—	—	—	—	—	—	—	—	—	—	
				CLP Organic Traffic Report Number	EKS 19	EKS 20	EKS 21	EKS 22	EKS 23	EKS 24	EKS 25	EKS 26	EKS 27	EKS 28	EKS 29	
				CLP Inorganic Traffic Report Number	MEHN82	MEHN83	MEHN84	MEHN85	MEHN86	MEHN87	MEHN88	MEHN89	MEHN90	MEHN91	MEHN92	
				~~Temperature (°C)~~	—	—	—	—	—	—	—	—	—	—		
				~~Specific Conductivity (µmhos/cm)~~	—	—	—	—	—	—	—	—	—	—		
				~~pH~~	—	—	—	—	—	—	—	—	—	—		
				Volatile Organics												
Gas	A,D,G,I	OCC	NK	chloroethane												
Gas	A,D,G,I	OCC	NK	bromomethane												
Gas	A,D,G,I	OCC	NK	vinyl chloride												
Gas	A,D,G,I	OCC	NK	chloroethane												
Liquid	A,D,H,I	SOL	NH,CLA	methylene chloride												
Liquid	E,H,I,A	SOL	K,CLA	acetone	—	—	—	—	—	25 J	—	—	—	—	—	
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	NK	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	NK	1,1-dichloroethane												
Liquid	A,D,G	SOL	NK	1,2-dichloroethene (total)	—	—	—	—	—	—	—	200	—	—	—	
Liquid	A,D	SOL	NK	chloroform												
Liquid	A,D,G	SOL	NK	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)	2J	—	—	—	1J	—	—	—	—	—	—	
Liquid	A,D	SOL	NK	1,1,1-trichloroethane												
Liquid	A,D	SOL	NK	carbon tetrachloride												
Liquid	A,D,G	SOL	NYD	vinyl acetate												
Liquid	A,D	OCC	NK	bromodichloromethane												
Liquid	A,D,G	SOL	NK	1,2-dichloropropane												
Liquid	A,D,G	SOL	NK	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	NK	trichloroethene	—	—	—	—	—	—	—	4J	—	—	—	
Liquid	A,D	OCC	NK	dibromochloromethane												
Liquid	A,D	SOL	NK	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	NK	trans-1,3-dichloropropene												
Liquid	A,D	SOL	NK,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone	—	—	—	—	—	36J	—	—	—	—	—	
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	NK	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene								11				
Liquid	A,D,E	SOL	NK	1,1,2,2-tetrachloroethane	3J	—	—	—	7	7J	4J	2J	—	—	—	
Liquid	A,D,G	SOL	NA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)	—	—	—	—	—	3J	—	—	—	—	—	

Table 4-1 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8	S9	S10 (Background)	S11	12
				Semivolatile Organics												
S, thick L	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	NH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,E	SOL	NA	1,3-dichlorobenzene												
Solid	A,D,E	OCC	NA	1,4-dichlorobenzene												
Liquid	A,D,E	SOL	A	benzyl alcohol												
Liquid	A,D,E	OCC	NA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
Liquid	A,D	OCC	NH	bis(2-chloroisopropyl)ether												
	A,B	OCC	P	4-methylphenol												
	A	OCC	N-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	NH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	N	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	NH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	NA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene	1,100	150	290J	--	500J	260J	450J	--	--	--	150J	
Solid	A,D	OCC	NH	4-chloroaniline												
Liquid	A,D,B	OCC	NH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene	1,800	250J	500J	--	950	130J	750J	190J	--	--	240J	
Liquid	A,D,B	OCC	NH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene	--	--	680J	--	--	1,200	95J	--	--	110J	--	
Solid	A,B,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran	370J	--	830J	--	290J	780J	200J	--	--	--	--	
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	NH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene	--	--	1,500	--	--	1,200	82J	--	--	120J	--	
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine	--	--	450J	--	--	--	--	--	--	--	--	
Liquid	A,D	OCC	NH	4-bromophenyl-phenylether												
Solid	A,D	OCC	NA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene	850J	200J	16,000D	--	980	14,000	1,500	170J	210J	1,800	540J	

Table 4-1 (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Name	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8	S9	S10 (background)	S11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene	120J	--	2900	--	--	3000	300J	--	--	340J	--	
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate	--	--	--	--	--	--	110J	--	--	--	--	
Solid	A,D	OCC	PAH	fluoranthene	680J	140J	12000		370J	21000D	2800	360J	210J	2500	980J	
Solid	A,D	OCC	PAH	pyrene	580J	150J	8100	--	300J	13000	1900	290J	180J	3400	710J	
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate	--	--	--	--	--	--	950	--	--	96J	--	
	A,D	OCC	NA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo(a)anthracene	310J	74J	8500	--	170J	6900	1100	--	--	1800	430J	
Solid	A,D	OCC	PAH	chrysene	380J	150J	5700J	--	300J	6400J	1100J	180J	--	--	610J	
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate	--	--	360J	--	--	--	--	--	--	--	--	
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo(b)fluoranthene	230J	280J	9500	--	320J	7800	2900	230J	150J	2500	630J	
Solid	A,D	OCC	PAH	benzo(k)fluoranthene	430J	--	6400	--	--	5500	--	300J	--	400J	--	
Solid	A,D,K,E	OCC	PAH	benzo(a)pyrene	230J	140J	5700	--	150J	4800	1100	150J	--	1200	220J	
Solid	A,D	OCC	PAH	indeno(1,2,3-cd)pyrene	96J	--	5000	--	150J	4100	910	160J	--	970	270J	
Solid	A,D	OCC	PAH	dibenzo(a,h)anthracene	--	--	1300	--	--	1600	230J	--	--	110J	--	
Solid	A,D	OCC	PAH	benzo(g,h,i)perylene	150J	--	4700	--	250J	3600	910	170J	--	990	310J	
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Marlate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248	360X	4900X	--	--	540X	--	--	--	--	1400X	--	
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260	300JX	4300X	580JX	--	110JX	--	1400X	--	--	410X	460JX	

Table 4-1 (Cont.)

CK 1/28/91

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	S 1 MEHN 82	S 2 MEHN 83	S 3 MEHN 84	S 4 MEHN 85	S 5 MEHN 86	S 6 MEHN 87	S 7 MEHN 88	S 8 MEHN 89	S 9 MEHN 90	S 10 MEHN 91 (BACKGROUND)	S 11 MEHN 92	S 12
				Analyte Detected (values in mg/kg or µg/L)	Sample Number											
Solid	A,D	MES	CSC/CMC	aluminum	5730	3800	4740	3360	1990	4620	2970	5350	11100	10600	8460	
Solid	A,D	MES	RM	antimony	--	--	31.6	--	--	--	13.2B	--	13.1B	--	18.2B	
Solid	A,D	MES	RM	arsenic	23.9	6.8	8.3	12.6	10.3	11.1	8.9	11.6	69.3	8.1	20.1	
Solid	A,D	MES	CSC/CMC	barium	991	23.2B	157	117	81	167	130	150	190	120	265	
Solid	A,D	MES	M	beryllium	0.72B	--	0.7B	1.7	0.47B	2	0.72B	1.4B	5.5	0.35B	2.5	
Solid	A,D	MES	RM	cadmium	1.3	--	14	--	1B	--	5.9	8.6	--	--	8.4	
Solid	D	MES	CSC/CMC	calcium	33800	13300	4790	1260	1710	2650	4460	4810	10000	83700	34900	
Solid	A,D	MES	RM	chromium	18.5	16.9	91.7	6.3	11	8.6	20.6	43	23.2	27.6	30.4	
Solid	A,D	MES	RM	cobalt	3.7B	--	5.6B	8.8B	5B	8.2B	5.2B	6.2B	22.1	4.7B	10.9B	
Solid	A,D	MES	RM	copper	66.8EJ	48.9EJ	222DEJ	56.7EJ	74.1EJ	47.4EJ	316EJ	220DEJ	76.6EJ	37.6EJ	79.6EJ	
Solid	A,D	MES	RM,CSC;CMC	iron	15900	18000	77000	2840	4230	5630	14800	48300	11100	16300	25500	
Solid	A,D	MES	RM	lead	64.1	43	3300	10.4	59.3	15.9	474	1590	49.7	94.8	811	
Solid	A,D	MES	CSC/CMC	magnesium	6270	7790	2660	294B	439B	537B	2580	2230	3720	28000	15500	
Solid	A,D	MES	RM	manganese	309	344	437	7.2	55.2	27	130	272	162	446	294	
Liquid	A,D	MES	RM	mercury	--	--	0.31	--	--	--	--	--	0.3	--	--	
Solid	A,D	MES	RM	nickel	28.9	13.9	76.2	13.6	17.2	17.2	94.7	402	56.6	23.1	65.5	
Solid	D	MES	CSC,CMC	potassium	729B	308B	569B	314B	329B	429B	232B	1030B	1630B	1190B	915B	
Solid	A,D	MES	M	selenium	2.2	1.2BWJ	0.91B	1.6	2.2	1.7	2.4	1.1BWJ	4.6	2.6	3.7	
Solid	A,D	MES	RM	silver	--	--	--	--	--	--	--	--	--	1.1B	--	
Solid	D	MES	CSC,CMC	sodium	157B	123B	114B	118B	43.7B	81B	64.4B	338B	272B	136B	239B	
Solid	A,D	MES	RM	thallium	--	--	--	--	--	--	--	--	2B	--	0.73B	
Solid	A,D	MES	RM	vanadium	18.2	7.3B	33.9	27.9	11.5B	28.1	16	27.4	69.6	24.3	35.5	
Solid	A,D	MES	CML,CSC,RM	zinc	112	550	2350	9.2	57.6	14.4	2210	1490	75.1	126	480	
Solid	A	IOC	IOC	cyanide												

— Not detected.

cu – interference ∴ estimate
Se
CN estimated due to possible d.l.
K, Fe – acceptable
Hg

Table 4-1 (Cont.)

background

Sample Collection Information and Parameters	Sample Number											
	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	S 10	S 11	~~S 12~~
TICs: ug/Kg	MEHN 82	MEHN 83	MEHN 84	MEHN 85	MEHN 86	MEHN 87	MEHN 88	MEHN 89	MEHN 90	MEHN 91	MEHN 92	
(~~[illegible]~~)												
1-Methyl naphthalene	1000 J				1000 J		700 J					
(90-12-0)												
Benzo[j] Fluoranthene			3000 J				1000 J			800 J		
(205-82-3)												
7H-Benz[de] Anthracene-7-one						3000 J						
(82-05-3)												
5H-Indeno[1,2-B] Pyridine						700 J						
(244-99-5)												
( )												
( )												
( )												
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( )												
( )												
( )												
( )												
( )												
( )												
( )												

† TIC Chemical Abstracts Service (CAS) numbers, if available, are provided in parentheses.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

ADD TO TCL's

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	Analysis by Method of Standard Additions.	Value is quantitative.
R	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ	DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative..
U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
N	Duplicate injection precision not met.	Value may be semiquantitative.
W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

[redacted]

W[illegible] LOG AND DRILLING REP[illegible]T

ORIGINAL

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

No. 179363

County Montgomery Township ~~[illegible]~~ Moraine Section of Township ——

Owner Dayton Power & Light Address Ned Sermi Bldg; Dayton Ohio

Location of property Intersection of East River Rd & Springboro Pike North East Corner

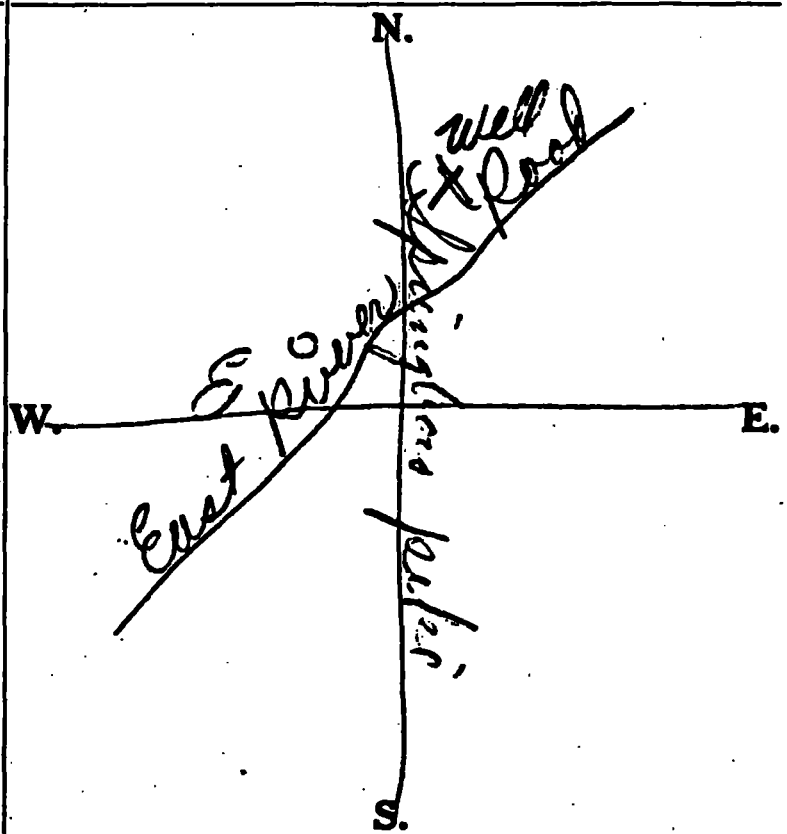
CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 14" Length of casing 108'	Pumping rate 1000 G.P.M. Duration of test 8 hrs.
Type of screen Red Brass Length of screen 30'	Drawdown 10 ft. Date July 20, 1956
Type of pump —	Developed capacity 1000 gpm
Capacity of pump —	Static level—depth to water 30' ft.
Depth of pump setting —	Pump installed by
Date of completion —	

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill	0 Feet	18 Ft.
Gravel	18	33
Gravel	33	57
Gravel	57	62
Gravel	62	78
Till	78	104
Gravel	104	140
Till	140	143

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Donald J Rae Date July 20/1956

Address Vandalia, Ohio Signed Don Rae

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

PLEASE USE PENCIL OR TYPEWRITER
DO NOT USE INK.

№ 342961

County Montgomery Township [illegible] Section of Township

Owner The Dayton Power & Light Co. Address 25 N. Main St. Dayton

Location of property Tait Station - Between Plant & Railroad off Carillon Blvd. S of Dayton

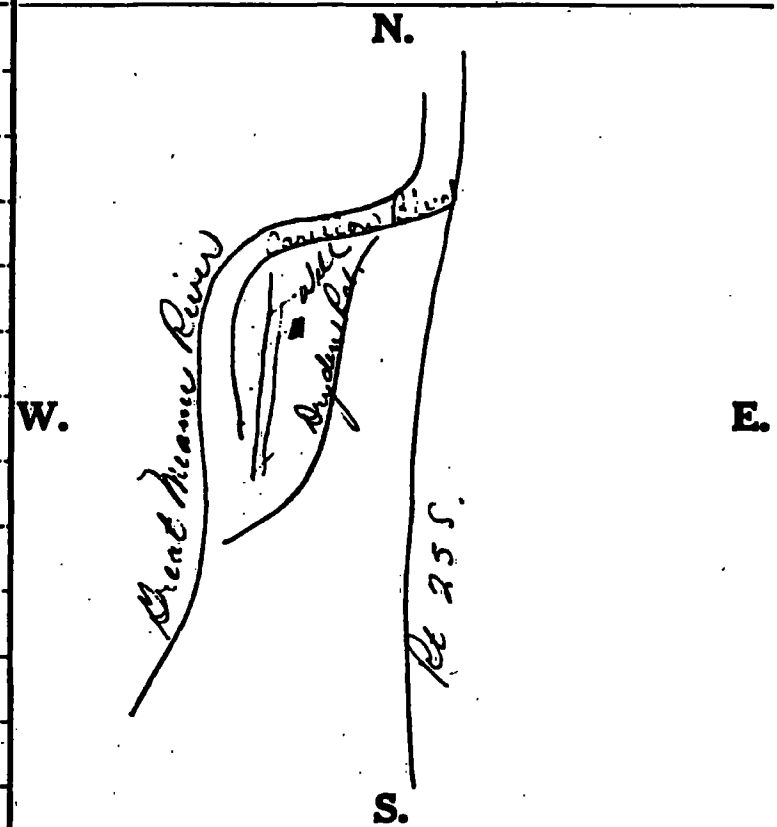
CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 20" O.D. Length of casing 168 ft.	Pumping Rate 3010 G.P.M. Duration of test 8 hrs.
Type of screen Red Brass Length of screen 65 ft.	Drawdown 17 ft. Date 4-1-66
Type of pump	Static level-depth to water 47 ft.
Capacity of pump	Quality (clear, cloudy, taste, odor) clear
Depth of pump setting	
Date of completion	Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
Fill	0 Feet	3 Ft.
Dry gravel	3	40
Large wet gravel	40	60
Coarse gravel	60	65
Coarse sand & coarse gravel	65	70
Dirty sand & gravel	70	75
Dirty large gravel	75	80
Cemented gravel - water bearing	80	126
Coarse sand & coarse gravel	126	140
Cemented gravel	140	165
Medium sand	165	168
Clay	168	170

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Moody's of Dayton Inc Date April 7th 1966

Address P.O. Box 155, Vandalia, Ohio Signed Ed. B. Wagner - President

*If additional space is needed to complete well log, use next consecutive numbered form.

WELL-LOG AND DRILLING REPORT

Page 1 of 2

№ 342985

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio 43212

PLEASE USE PENCIL OR TYPEWRITER

DO NOT USE INK.

County Montgomery Township ~~Miami~~ Moraine Section of Township

Owner Dayton Power & Light Co. Address Dayton, Ohio

Location of property Tait Station - Well #4

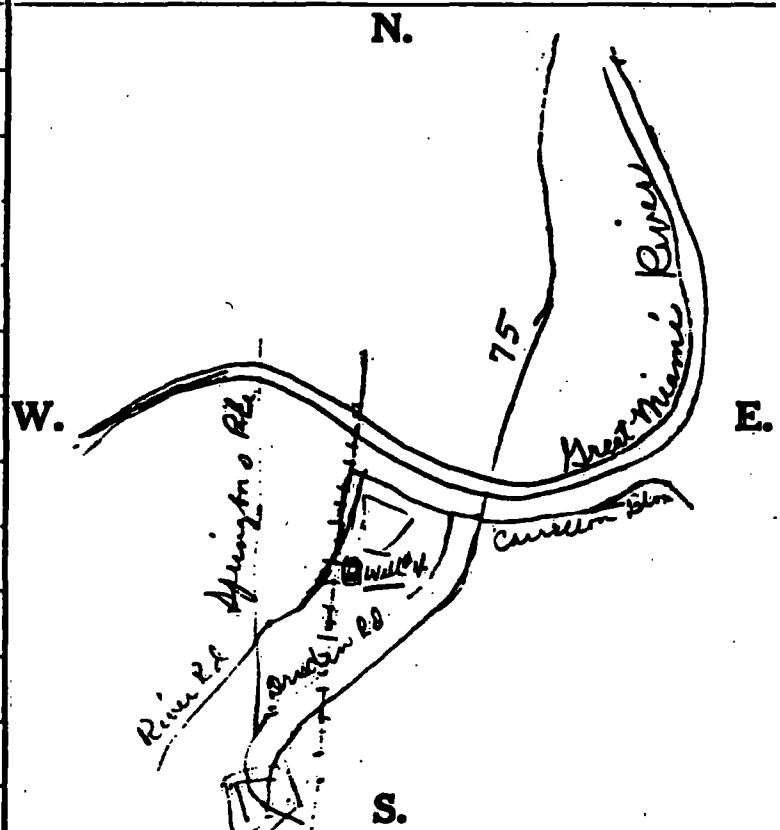
CONSTRUCTION DETAILS	BAILING OR PUMPING TEST
Casing diameter 20" Length of casing 148'	Pumping Rate 1000 G.P.M. Duration of test 8 hrs
Type of screen Red Brass Length of screen 50'	Drawdown 8 ft. Date 7/8/67
Type of pump Turbine	Static level-depth to water 50 ft
Capacity of pump 1000 G.P.M.	Quality (clear, cloudy, taste, odor) Clear
Depth of pump setting 147'	
Date of completion June 7, 1967	Pump installed by C. O. Burgess

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
Road Bed & Fill	0 Feet	2 Ft.
Till	2	8
Dry Sand & Gravel	8	15
Coarse Sand & Gravel	15	25
Sand, Gravel & boulders	25	35
Coarse sand & Coarse gravel	35	57
Till	57	64
Dty Crse sand, gravel & bldrs	66	79
Good Coarse sand & gravel	79	100
" " " " "	100	115
Med. sand & Med. gravel	115	126
" " & fine "	126	130
Fine sand & Med "	130	140

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm Moody's of Dayton, Inc. Date November 13, 1967

Address P.O. Box 155, Vandalia, Ohio 45377 Signed V. C. Caspel

*If additional space is needed to complete well log, use next consecutive numbered form.

Continued

WELL LOG AND DRILLING REPORT

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio ~~43212~~

Page 2

№ 342986

PLEASE USE PENCIL OR TYPEWRITER

DO NOT USE INK.

County Montgomery Township ~~[illegible]~~ Moraine Section of Township

Owner Dayton Power & Light Co. Address Dayton, Ohio

Location of property Tait Station - Well #4

CONSTRUCTION DETAILS

Casing diameter 20" Length of casing 148'

Type of screen Red Brass Length of screen 50'

Type of pump Turbine

Capacity of pump 1000 G.P.M.

Depth of pump setting 147'

Date of completion June, 1967

BAILING OR PUMPING TEST

Pumping Rate 1000 G.P.M. Duration of test 8 hrs.

Drawdown 8 ft. Date 7/8/67

Static level-depth to water 50 ft.

Quality (clear, cloudy, taste, odor) Clear

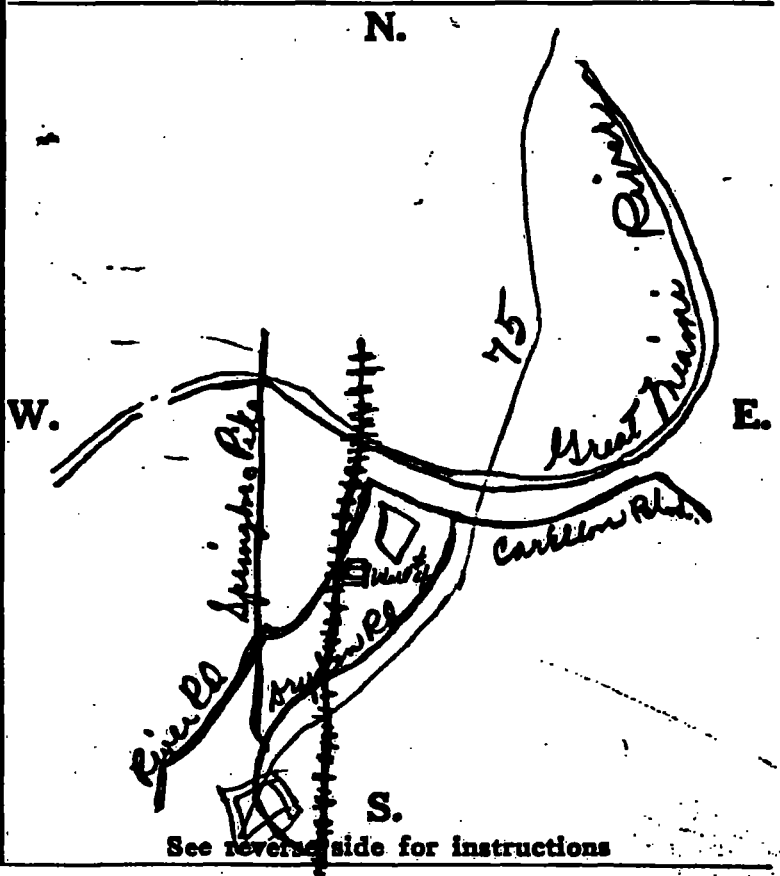
Pump installed by

WELL LOG*

Formations Sandstone, shale, limestone, gravel and clay	From	To
(Continued)	0 Feet	Ft.
Fine sand & Coarse gravel	140	144
Blue Clay	144	146
Good Med. Sand & Coarse gravel	146	156
" " " " " "	156	165
Yellow Clay	165	167
Coarse sand & Coarse gravel (slightly dirty)	167	178
Coarse sand & Coarse gravel	178	198
Clay	198	200

SKETCH SHOWING LOCATION

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



See reverse side for instructions

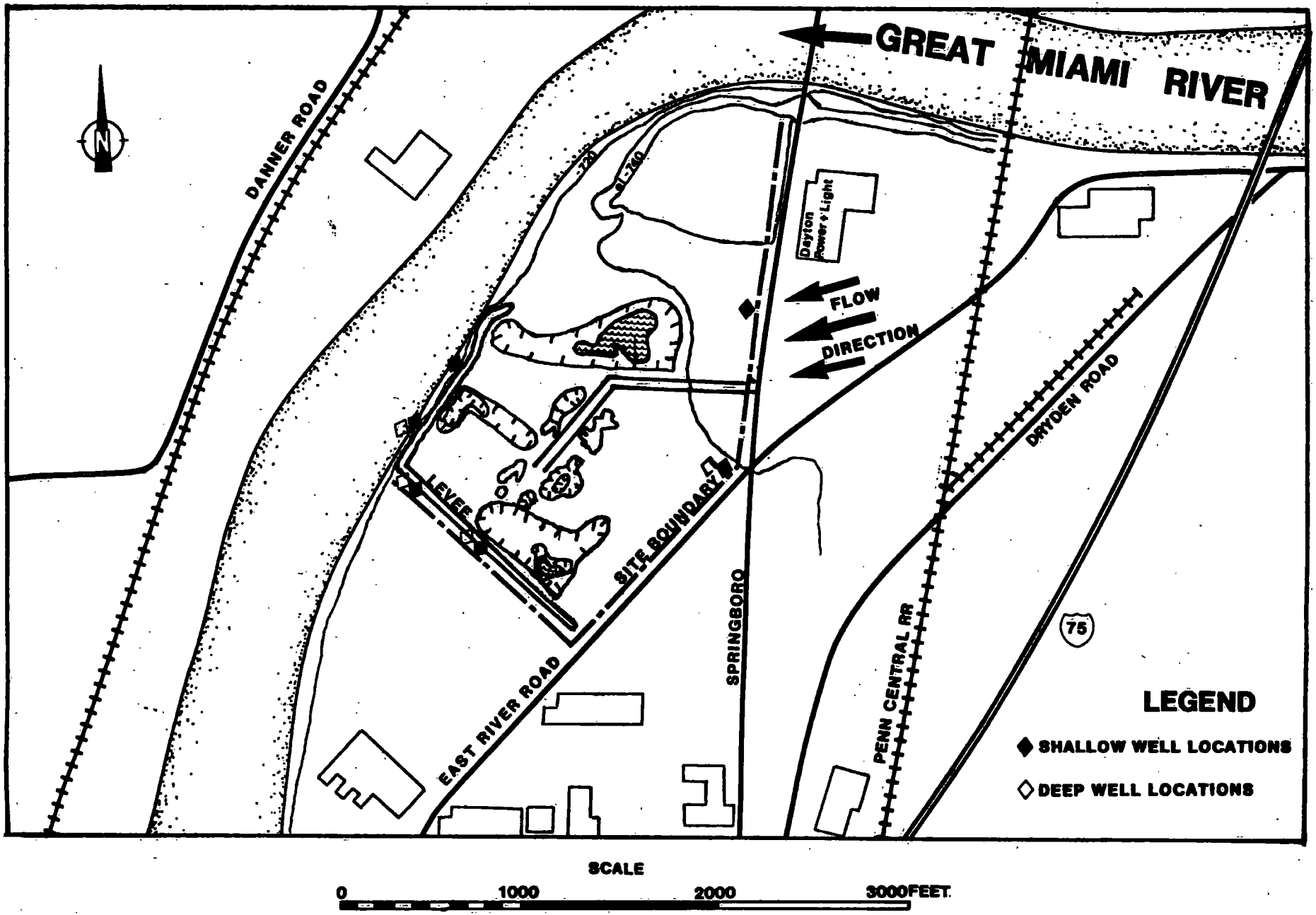
Drilling Firm Moody's of Dayton

Address P.O. Box 155, Vandalia, Ohio 45377

Date November 13, 1967

Signed V. C. Casper

*If additional space is needed to complete well log, use next consecutive numbered form.



SCALE

0 1000 2000 3000FEET

FIGURE 2: SOUTH DAYTON DUMP SITE

LOCATIONS OF TEN MONITOR WELLS.

NOTE: WELLS WILL BE PLACED ATOP THE LEVEE

PLEASE USE PENCIL OR TYPEWRITER. DO NOT USE INK.

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

No. 242831

County Montgomery Township Miami Section of Township 13

Owner Shell Oil Co. Address Dayton, Ohio

Location of property Northwest Corner of State Route 725 & 74

CONSTRUCTION DETAILS

Casing diameter 5 5/8 Length of casing 60'

Type of screen Length of screen

Type of pump

Capacity of pump

Depth of pump setting

Date of completion Feb. 7, 1961

BAILING OR PUMPING TEST

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

Drawdown 4 ft. Date

Developed capacity 400 gal. hr.

Static level—depth to water 35 ft.

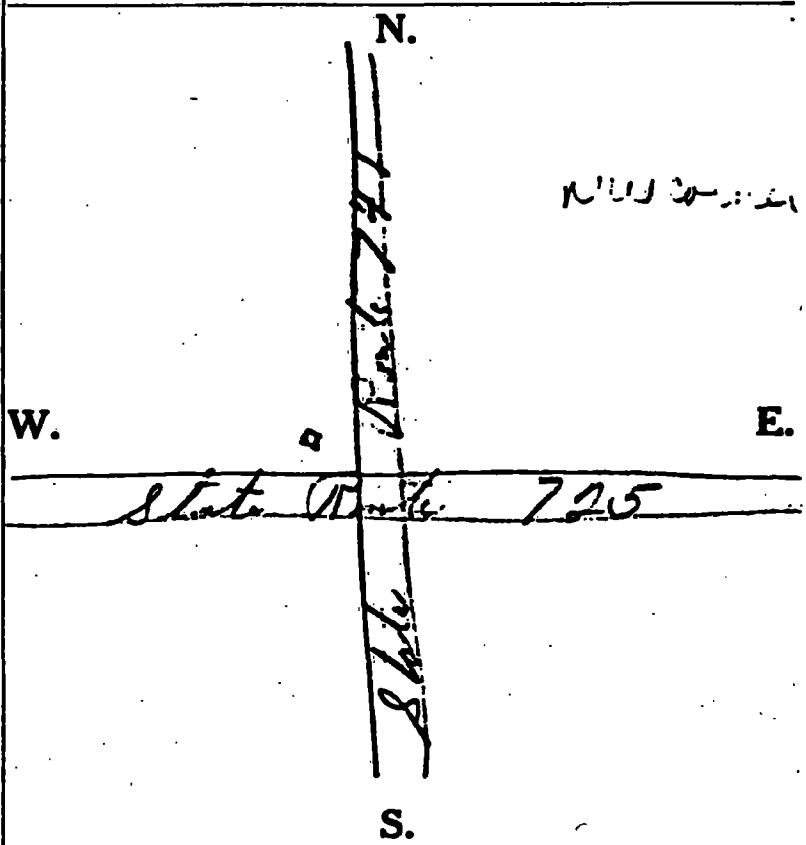
Pump installed by

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
Pit	0 Feet	5 Ft.
Brown Clay & Gravel	5	27
Grey Clay	27	33
Blue Clay	33	40
Blue Clay & Shale	40	60
Blue Shale & Limestone	60	75
Water at 50'		
Pipe Perforated at 50'		

SKETCH SHOWING LOCATION

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



See reverse side for instructions

Drilling Firm THOMAS WELL DRILLING
Address 3848 MIAMISBURG-CENTERVILLE RD. MIAMISBURG, OHIO

Date Feb. 28, 1961

Signed Chas. R. Thomas

93

Y = 1,515,300
(5000 x 5000)
y = 618,000-S

WELL LOG AND DRILLING REPORT

State of Ohio
OHIO WATER RESOURCES BOARD
Department of Public Works
553 E. Broad St., Columbus 15, Ohio

№ 49170

County Montgomery Township ~~Miami~~ Section of Township or Lot Number Moraine

Owner _____ Address _____

Location of property 1/2 mile west of Dryden Rd. in the west Moraine Plat

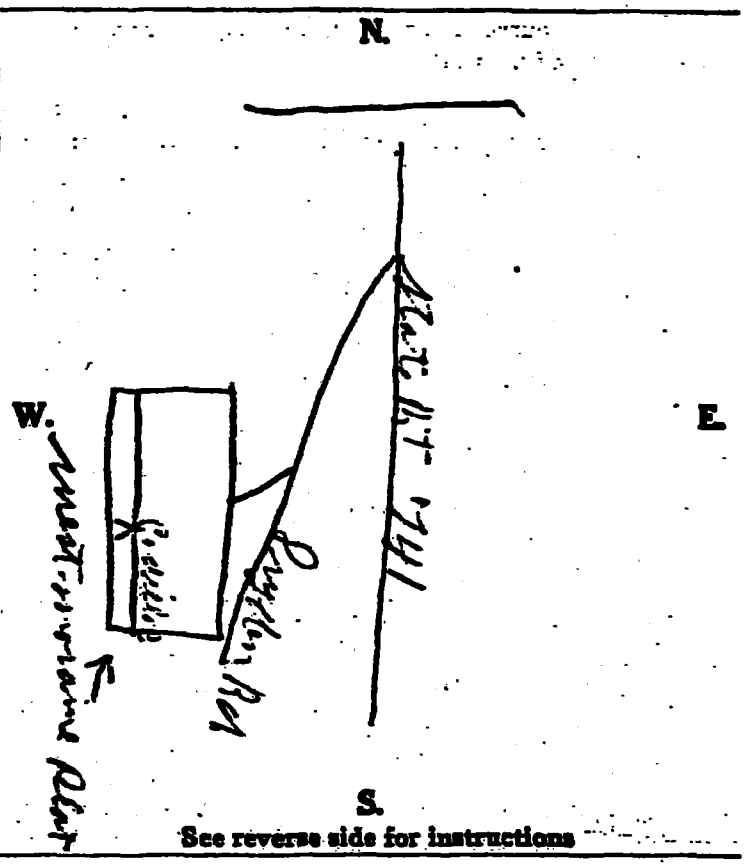
CONSTRUCTION DETAILS	PUMPING TEST
Casing diameter 6" Length of casing 54'	Pumping rate ____ G.P.M. Duration of test ____ hrs.
Type of screen ____ Length of screen ____	Drawdown 2 ft. Date ____
Type of pump ____	Developed capacity 1000 gal per Hr.
Capacity of pump ____	Static level of completed well 21 ft.
Depth of pump setting ____	Pump installed by Owner

WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
top soil	0 Feet	3 Ft.
dry Gravel	3	38
Hardpan	38	39
fine water sand	39	47
Hardpan	47	50
water sand & Gravel	50	54

SKETCH SHOWING LOCATION

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



See reverse side for instructions

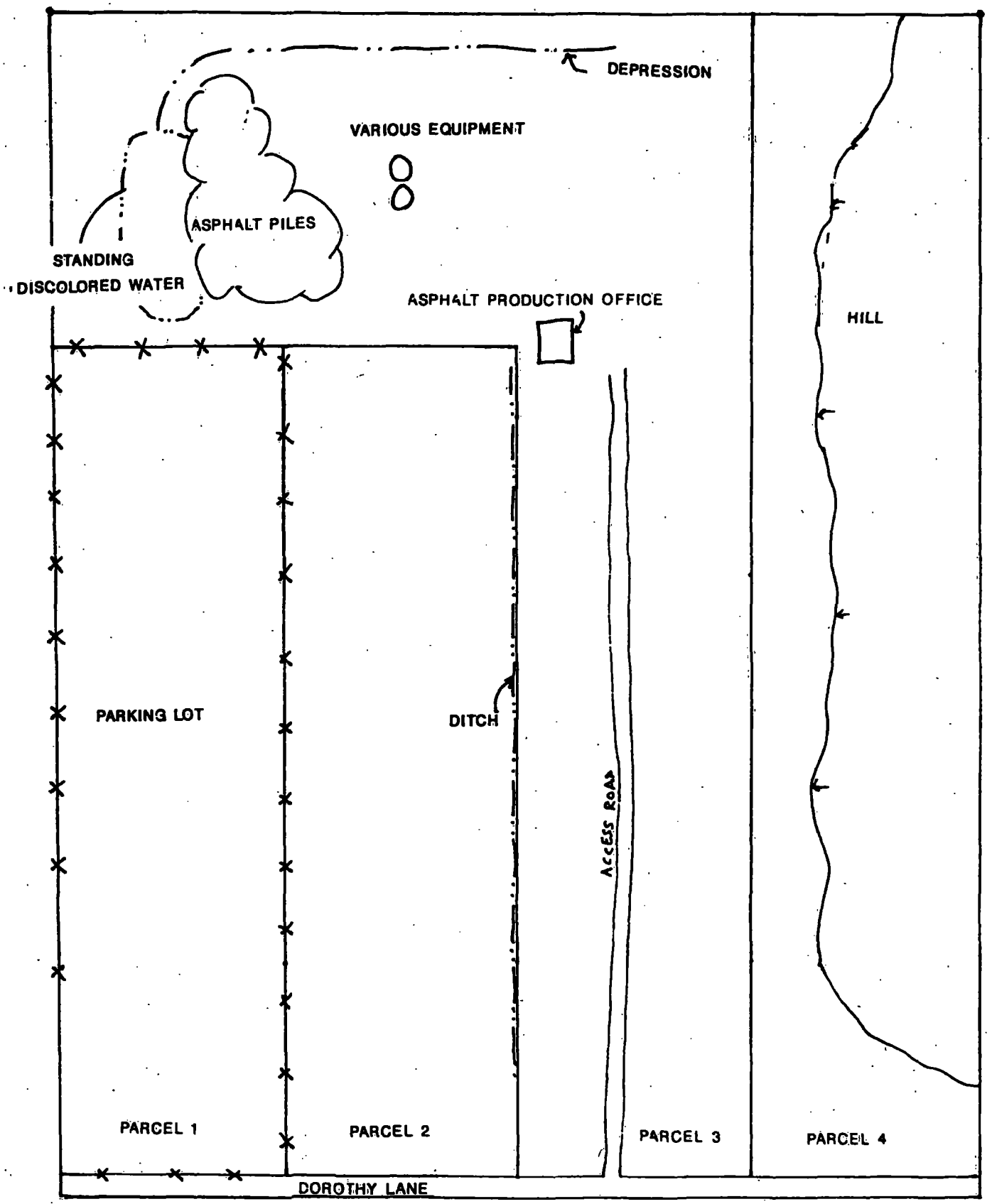
Drilling Firm W. U. Scott

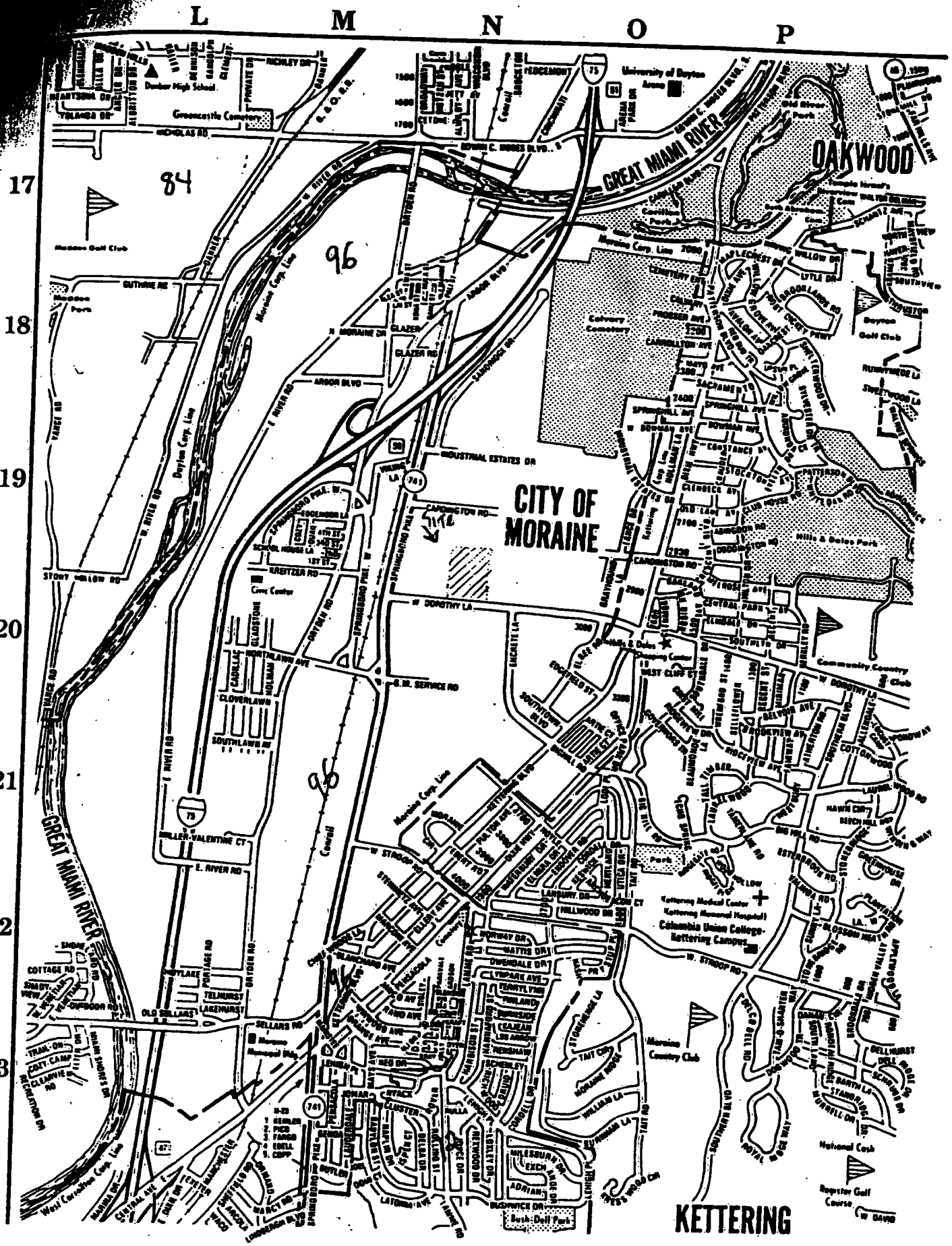
Address RR #3 Box 219-B Dayton Ohio

Date 6-20-54

Signed W. U. Scott

A


DEPRESSION
VARIOUS EQUIPMENT
ASPHALT PILES
STANDING
DISCOLORED WATER
ASPHALT PRODUCTION OFFICE
HILL
PARKING LOT
DITCH
ACCESS ROAD
PARCEL 1
PARCEL 2
PARCEL 3
PARCEL 4
DOROTHY LANE



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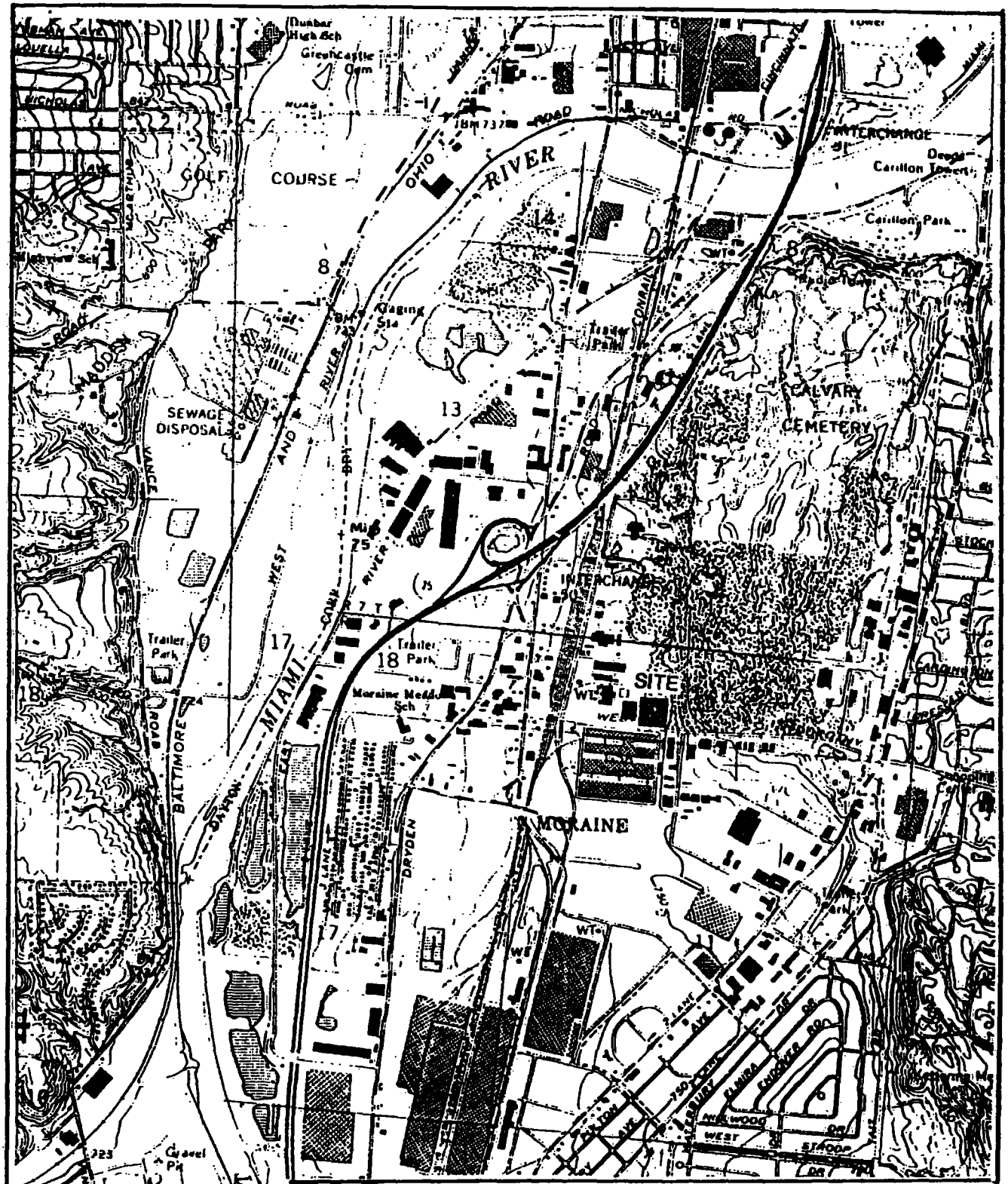
96
OAKWOOD
GREAT MIAMI RIVER
CITY OF MORAINE
KETTERING
University of Dayton Arena
Dunbar High School
Greencastle Cemetery
Madden Golf Club
Madden Park
Moraine Corp. Line
Dayton Corp. Line
Calvary Cemetery
Hills & Dales Park
Community Country Club
Civic Center
Kettering Medical Center
Kettering Memorial Hospital
Columbia Union College-Kettering Campus
Moraine Country Club
Moraine Municipal Bldg.
West Carrollton Corp. Line
National Cash
Register Golf Course
Bush-Dell Park



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

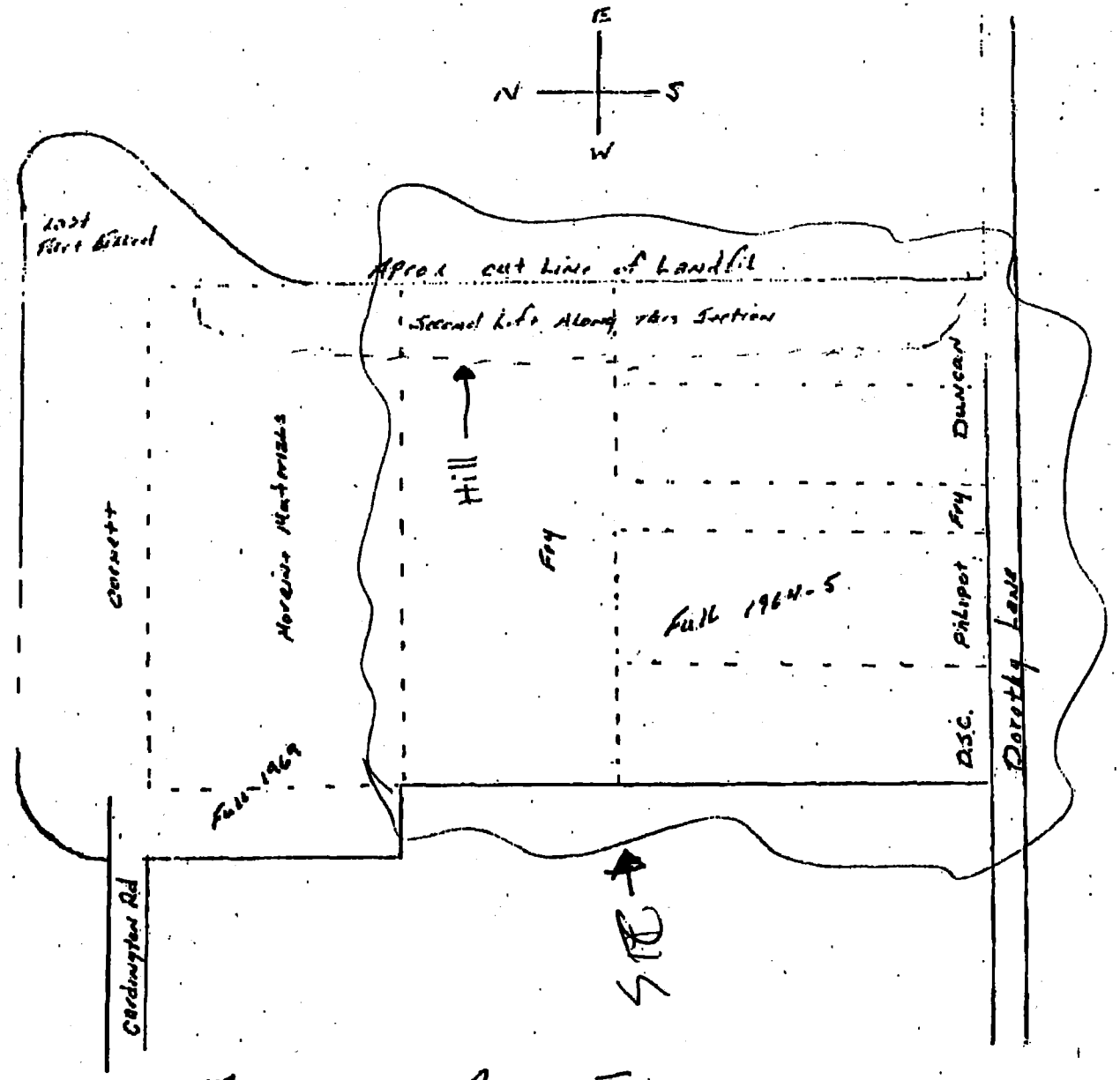
TITLE: SOUTH SANITARY LANDFILL	FIGURE 1
SITE: SITE LOCATION	SCALE: 1:24000
CITY: MORAINE / STATE: OHIO	P.A.N.: FOHO584GA
SOURCE: USGS TOPO.MAP	DATE 1966
	REVISED 1981

Louis Baylock
Res. Trash

Dayton Showcase Co.
2601 W. Dorothy Lane

Aqua, Ohio 45356

Dayton, Ohio



Moraine Materials
513/297-3110

Cornett Trucking
Herb Cornett
2700 Cardington Dr.
513/299-8301

12/18

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 1/18/91

1/22

SUBJECT: Review of Region V CLP Data
Received for Review on Nov 21, 1990

FROM: Curtis Ross, Director (5SCRL) Patrick J. Chenille for
Central Regional Laboratory

TO: Data User: Alt

We have reviewed the data for the following case(s).

SITE NAME: South Dayton Dump (OH) SMO Case No. 15162

EPA Data Set No. _____ No. of Samples: 11 D.U./Activity Numbers TFA+TFA102

CRL No. 91F31587-97

SMO Traffic No. EKS 19-29

CLP Laboratory: Oncor Hrs. Required for Review: W+2=.14

Following are our findings.

THIS DATA REVIEW COVERS THE ANALYSIS OF 11 SOILS FOR VOLATILES, S-VOLATILES AND PESTICIDE/PCB. THERE WERE NO MAJOR PROBLEMS WITH THE DATASET WHICH WOULD CAUSE IT TO BE CALLED UNUSABLE. HOWEVER, THERE ARE SEVERAL POINTS WHICH ARE OF IMPORTANCE TO BE DISCUSSED IN THE FOLLOWING NARRATIVE.

ROBERT KATZEN
WESTON/ESAT
1-10-90.

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, CLP/Sample Management Office

1 Holding Time

VOA: All Holding times are satisfactory.

S-VOA: Holding times are within QC limits.

Pesticides: Holding times are satisfactory.

2 GC/MS Tuning and GC Instrument Performance

The GC/MS tuning data as well as that of the GC instrument performance are satisfactory.

3 Calibration

Calibration outliers are listed in the calibration outlier forms.

4 Blanks

VOA: Methylene Chloride below CRQL was found in VBLK1, VBLK2 and VBLK3. 2-Butanone just above CRQL and Toluene below CRQL were found in VBLK3.

When a common contaminant is found in a corresponding sample as shown by FormIV at less than 10X the amount in the blank, the compound in the sample is given the Quant Limit(U).

S-VOA: The blanks were clean.

Pesticide: No Pesticides were found in the Pesticide blank.

5 Surrogate Recovery

VOA: Toluene-d8 was elevated for the following samples: EKS22, EKS22RE, EKS24, EKS24RE, EKS27, EKS27RE, EKS27MS and EKS27MSD.
Bromofluorobenzene was below QC limits for EKS22, EKS22RE, EKS24, EKS24RE, EKS27, EKS27MS and EKS27MSD.

The above sample fractions are estimated(J) for positives and estimated(UJ) for negatives.

S-VOA: All surrogates are satisfactory.

Pesticides: DBC was above advisory QC limits for: EKS19, EKS20, EKS21, EKS23, EKS24, EKS25, EKS26, EKS27,EKS28, EKS28MS and EKS28MSD. The diluted sample of EKS26 had satisfactory DBC results. The other sample fractions with DBC outliers are estimated(J).

6 Matrix Spikes

VOA: Sample EKS27 had the MS%REC of Toluene just above QC limits.

Robert Katz
312-353-2917

S-VOA: Sample EKS28 had 4-Nitrophenol just above QC limits in the MSD.

Pesticide: EKS28 has the MSD%REC of 4,4'-DDT above QC limits.

The corresponding samples are estimated(J) for the above listed outlier.

7 Internal Standards

VOA: 1,4-Difluorobenzene was out of area QC range for EKS22, EKS24, EKS27, EKS22RE and EKS24RE.
Chlorobenzene was out of QC range for EKS22, EKS24, EKS27, EKS22RE and EKS24RE and EKS27MSD.

The compounds calculated on these internal standards in the sample fractions mentioned are estimated(J) for positives and estimated(UJ) for negatives.
The list of internal standards and the compounds they calculate follow in Table 4.

S-VOA: The internal standards were satisfactory.

8 Duplicates

No duplicates or blanks were listed as being in dataset.

9 Compound Identification

The chromatograms were well interpreted by the analyst.

10 Compound Quantitation

The CRQL's were adjusted for dilutions and concentrations.

11 System Performance

The system performance was satisfactory.

12 Overall assessment

EKS21DL(S-VOA) has the diluted value of Phenanthrene since the original analysis has this compound exceeding standard limits. The same applies to EKS24 and the compound Fluoranthrene

The following S-VOA fractions have 11 to 20 Tic's:
EKS19, EKS21, EKS21DL, EKS23, EKS24, EKS24DL, EKS25, EKS26, EKS28 and EKS29.

Robert Katzer
317-353-2917

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 15152

CONTRACTOR ENCOT

Instrument # 006	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/25/90			10/26/90 1459											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	0.614			0.381	37.5	*									
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBLK1	VBLK2		
EKS 19-29	EKS 22RE		
	EKS 24RE		
	EKS 27RE		

Reviewer's Initials/Date: RK 1-9-91

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

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 15152

CONTRACTOR ENCOT

Instrument # 006	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	10/30/90														
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	0.689	48.3	J												
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															
	VBlk3														
	EKS 27ms/msd														

AFFECTED SAMPLES:

Reviewer's Initials/Date: RK 1-9-91

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

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 15152 CONTRACTOR ENCOT

Instrument # 004	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	11/12/90			11/13/90 1045			11/13/90 2254			11/14/90 1844					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether		-													
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether															
4-Methylphenol															
N-Nitroso-Di-n-Propylamine															
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid	0.120			0.154	28.3	J	0.154	28.3	J	0.160	33.3	J			
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	0.062			0.093	50.0	J	0.074			0.089	43.6	J			
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol								--							
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline	0.187			0.206			0.211			0.357	87.7	J			
Acenaphthene															
2,4-Dinitrophenol	0.136			0.085	37.5	J	0.116			0.106					
4-Nitrophenol	0.114			0.066	42.1	J	0.107			0.100					
Dibenzofuran															

AFFECTED SAMPLES:

SBLK 1 EKS 27-29 EKS 24DL
SBLK 2 EKS 25 ms/msd
EKS 19-26 EKS 21DL

Reviewer Initials/Date: RK 1-9-91

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

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 15152 CONTRACTOR ENCOT

Instrument # 004	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	11/12/90			11/13/90 1045			11/13/90 2252			11/14/90 1844					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene		-													
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline															
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene	0.278			0.359			0.248			0.208	25.2	J			
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene	0.672			1.094	25.5	J	0.795			0.870					
Di-n-Octyl 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	1.011			0.917			0.784			0.673	33.4	J			

SEE PAGE 1 FOR AFFECTED SAMPLES.

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

Reviewer's Initials/Date: RK 1-9-91

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

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

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} - 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

* TABLE 4

VOLATILE INTERNAL STANDARDS WITH CORRESPONING TCL ANALYTES ASSIGNED FOR QUANTITATION

Bromochloromethane	1,4-Difluorobenzene	Chlorobenzene-d_5
Chloromethane	2- Butanone	2-Hexanone
Bromomethane	1,1,1-Trichloroethane	4-Methyl-2-Pentanone
*Vinyl Chloride	Carbon Tetrachloride	Tetrachloroethene
Chloroethane	Vinyl Acetate	1,1,2,2-Tetrachloroethane
Methylene Chloride	Bromodichloromethane	*Toluene
Acetone	*1,2-Dichloropropane	Chlorobenzene
Carbon Disulfide	trans-1,3-Dichloropropane	*Ethylbenzene
*1,1-Dichloroethene	Trichloroethene	Styrene
1,1-Dichloroethane	Dibromochloromethane	Xylene (total)
1,2-Dichloroethene (total)	1,1,2-Trichloroethane	Bromofluorobenzene (surr)
*Chloroform	Benzene	Toluene-d_8 (surr)
1,2-Dichloroethane	cis-1,3-Dichloropropene	
1,2-Dichloroethane-d_4 (surr)	Bromoform	

(surr) = surrogate compound
*Calibration check compounds

SEMIVOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

1,4-Dichlorobenzene-d_4	Naphthalene-d_8	Acenaphthene-d_{10}	Phenanthrene-d_{10}	Chrysene-d_{12}	Perylene-d_{12}
Phenol	Nitrobenzene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl Phthalate
bis(2-Chloroethyl) ether	Isophorone	2,4,6-Trichlorophenol	N-nitrosodiphenylamine	Butylbenzyl Phthalate	Benzo(b)fluoranthene
2-Chlorophenol	2-Nitrophenol	2,4,5-Trichlorophenol	1,2-Diphenylhydrazine	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
1,3-Dichlorobenzene	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl Phenyl Ether	Benzo(a)anthracene	Benzo(a)pyrene
1,4-Dichlorobenzene	Benzoic acid	2-Nitroaniline	Hexachlorobenzene	bis(2-ethylhe Phthalate	Indeno(1,2,3-cd) pyrene
Benzyl Alcohol	bis(2-Chloroethoxy)methane	Dimethyl Phthalate	Pentachlorophenol	Chrysene	Dibenz(a,h) anthracene
1,2-Dichlorobenzene	2,4-Dichlorophenol	Acenaphthylene	Phenanthrene	Terphenyl-d_{14} (surr)	Benzo(g,h,i) perylene
2-Methylphenol	1,2,4-Trichlorobenzene	3-Nitroaniline	Anthracene		
bis(2-Chloroisopropyl)ether	Naphthalene	Acenaphthene	Di-n-butyl Phthalate		
4-Methylphenol	4-Chloroaniline	2,4-Dinitrophenol	Fluoranthene		
N-nitroso-Di-n-propylamine	Hexachlorobutadiene	4-Nitrophenol			
Hexachloroethane	4-Chloro-3-methylphenol	Dibenzofuran			
2-Fluorophenol (surr)	2-Methylnaphthalene	2,4-Dinitrotoluene			
Phenol-d_6 (surr)	Nitrobenzene-d_5 (surr)	2,6-Dinitrotoluene			
		Diethyl Phthalate			
		4-Chlorophenyl-phenyl ether			
		Fluorene			
		4-Nitroaniline			
		2-Fluorobiphenyl (surr)			
		2,4,6-Tribromo Phenol (surr)			

Surr = surrogate compound

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

NOV 2 0 1990

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

SITE NUMBER/SAS No. 15152 SITE NAME South Dayton Dump LABORATORY Enviro-Tech/Silver DATE SHIPPED 10/23/90

PERFUND DU NUMBER TFA102 EPA RPM or OSC (S.M.S.) (CES) CERCLIS NUMBER OHD980611388 PAGE 1 OF 1

TIVITY NUMBER ZZ

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	WATER OR LIQUIDS												SEDIMENTS or SOILS										
			VOLATILE NEUTRAL ORG ORGANIC SCAN TOX17534 UG/L	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN TOX17544 UG/L	PESTICIDES/PCB PCS 17544 UG/L	PESTICIDES TOX17534 UG/L	TOTAL METALS IN WATER MET7115 UG/L	MET7115 UG/L	MET7234 UG/L	MET7234 UG/L	MET7234 UG/L	MET7234 UG/L	MET7234 UG/L	MET7234 UG/L	VOLATILE NEUTRAL ORG ORGANIC SCAN TOX17533 UG/KG	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN TOX17533 UG/KG	PESTICIDES/PCB PESTICIDES TOX17533 UG/KG	PESTICIDES TOX17533 UG/KG	TOTAL METALS MET7513 UG/KG	MET7513 UG/KG	MET7513 UG/KG	MET7513 UG/KG	MET7513 UG/KG	MET7513 UG/KG
11FJ31587	EKS 19	MEHN 82																							
88	20	83																							
89	21	84																							
90	22	85																							
91	23	86																							
92	24	87																							
93	25	88																							
94	26	89																							
95	27	90																							
96	28	91																							
97	29	92																							

NOV 2 0 1990 a. C. Harvey IESAT

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: [illegible]
SAS No. (if applicable):

1. Sample Description *(Enter in Column A)*
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) *(Specify)*

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

2. Region Number: V
Sampling Co.: [illegible]
Sampler (Name): Kelly [illegible]

3. Ship To: ENCOT [illegible] 48106

4. Date Shipped: 10/[illegible]/90
Carrier: F
Airbill Number: [illegible]

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Date Received: 10/24/90
Received by: [illegible]
Laboratory Contract Number:
Unit Price: $798.00

6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From, box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA *	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
EKS 19	5	L	N	X	X			51	[illegible]	[illegible]				
EKS 20	5	L	N	X	X			52	[illegible]	[illegible]				
EKS 21	5	L	N	X	X			53	[illegible]	[illegible]				
EKS 22	5	L	N	X	X			54	[illegible]	[illegible]				
EKS 23		L	N	X	X			55	[illegible]	[illegible]				
EKS 24		L	N	X	X			56	[illegible]	[illegible]	First	Sample		
EKS 25		L	N	X	X			57	[illegible]	[illegible]	received	EKS19.		
EKS 26	5	L	N	X	X			58	[illegible]	[illegible]	Last Sample			
EKS 27	5	L	N	X	X			59	[illegible]	[illegible]	received	EKS24.		
EKS 28	5	L	N	X	X		KM	510	[illegible]	[illegible]	SDG:	EKS19		
** ~~EKS 29~~	~~5~~	~~L~~	N	X	X		[illegible]	511	[illegible]	[illegible]		TKM		
~~[illegible]~~	~~5~~	~~L~~	~~N~~	~~X~~	~~X~~			~~512~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~			
~~[illegible]~~	~~5~~	~~L~~	~~N~~	~~X~~	~~X~~			~~513~~	~~[illegible]~~	~~[illegible]~~	~~XM~~	10-24-90		

* VOA [illegible] not preserved.

Shipment is Complete

007

EPA Form 9110-2 (11-89) Replaces EPA Form 2075-7 which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

Tim's Notes — Interview

- All material that is in GROUND has been burned
- entire AREA around SDD has been a dump & burned
- Horace Bash & Brother 1931 bought property
- since 1950-1951 present operator
  Back in early days took everything, burned it and salvaged metal
  DD accept "some" barrels, then scraped them
  barrels came from diff. industries in AREA
  no knowledge of any hazardous waste, & when they were burned made it's own cover
- current permission for solid waste from City & STATE
- all solid waste from Delco Marine, they have their own keys so no one has to be here

- no fly ash accepted
- GIVES WOOD, concrete blocks away
- no fires or injuries
- $100.00/year to Moraine
- STATE correspondence —

M E M O R A N D U M

DATE: November 12, 1990

TO: File and Sample Management

FROM: Kelly Maley KM

SUBJECT: South Dayton Dump, Moraine, Ohio
F05-8611-174/FOH0521SB
Case #15152

This memo serves as documentation that an error was made in the separation and shipment of the sample paperwork for the above mentioned site. The pink copies of the OTR and ITR were sent with the samples to the laboratories. These should have been brought back to the Region V Fit office and submitted to sample management. It should be noted that this error did not jeopardize the integrity of the samples.

5920:10

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U.S. EPA ID NO: OHD 980611388

PROJ. ACCT. NO.: F0H052150

TDD: F05-8611-001

SPLIT SAMPLES ACCEPTED( ) DECLINED(X)

FACILITY/OCCUPANT NAME: South Dayton Dump

FACILITY/OCCUPANT ADDRESS: 1976 Springboro Road Moraine, OH. 45439

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	10/23/90	1130		EK519	MEHN82	Soil 1	X	X	X	X	X			Soil
S2	10/23/90	1140		EK520	MEHN83	Soil 2	X	X	X	X	X			Soil
S3	10/23/90	1140		EK521	MEHN84	Soil 3	X	X	X	X	X			Soil
S4	10/23/90	1150		EK522	MEHN85	Soil 4	X	X	X	X	X			Soil
S5	10/23/90	1230		EK523	MEHN86	Soil 5	X	X	X	X	X			Soil
S6	10/23/90	1245		EK524	MEHN87	Soil 6	X	X	X	X	X			Soil
S7	10/23/90	1225		EK525	MEHN88	Soil 7	X	X	X	X	X			Soil
S8	10/23/90	1235		EK526	MEHN89	Soil 8	X	X	X	X	X			Soil
S9	10/23/90	1330		EK527	MEHN90	Soil 9	X	X	X	X	X			Soil
S10	10/23/90	1345		EK528	MEHN91	Soil 10	X	X	X	X	X			Soil
S11	10/23/90	1335		EK529	MEHN92	Soil 11	X	X	X	X	X			Soil
~~S12~~	~~10/23/90~~			~~EK530~~	~~MEHN93~~	KM								
~~S13~~	~~10/23/90~~			~~EK531~~	~~MEHN94~~	KM								

TRANSFERRED BY: Kelly Moley (Signature) 10/23/90 (Date) (Time)

RECEIVED BY: Alvin Grillot (Signature) (Date) OCT. 23 90 (Time)

TITLE: operator

TELEPHONE: 299 8803

DISTRIBUTION
- WHITE: FIT SITE FILE
- YELLOW: FACILITY/OCCUPANT
- GREEN: FIT SAMPLE MANAGEMENT
- PINK: U.S. EPA

U.S. EPA ID NO: OHD 980611388

PROJ. ACCT. NO: F0H052150

TDD: F05-8611-001

SPLIT SAMPLES - ACCEPTED ( ) DECLINED (X)

FACILITY/OCCUPANT NAME: South Dayton Dump

FACILITY/OCCUPANT ADDRESS: 1976 Springboro Road Moraine, OH 45439

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	10/23/90	1130		EK519	MEIN82	Soil 1	X	X	X	X	X			Soil
S2	10/23/90	1140		EK520	MEIN83	Soil 2	X	X	X	X	X			Soil
S3	10/23/90	1140		EK521	MEIN84	Soil 3	X	X	X	X	X			Soil
S4	10/23/90	1150		EK522	MEIN85	Soil 4	X	X	X	X	X			Soil
S5	10/23/90	1230		EK523	MEIN86	Soil 5	X	X	X	X	X			Soil
S6	10/23/90	1245		EK524	MEIN87	Soil 6	X	X	X	X	X			Soil
S7	10/23/90	1225		EK525	MEIN88	Soil 7	X	X	X	X	X			Soil
S8	10/23/90	1235		EK526	MEIN89	Soil 8	X	X	X	X	X			Soil
S9	10/23/90	1320		EK527	MEIN90	Soil 9	X	X	X	X	X			Soil
S10	10/23/90	1345		EK528	MEIN91	Soil 10	X	X	X	X	X			Soil
S11	10/23/90	1335		EK529	MEIN92	Soil 11	X	X	X	X	X			Soil
~~S12~~	~~10/23/90~~			~~EK530~~	~~MEIN93~~	KM								
~~S13~~	~~10/23/90~~			~~EK531~~	~~MEIN94~~	KM								

TRANSFERRED BY: Kelly Maley (Signature) 10/23/90 (Date) (Time)

RECEIVED BY: [illegible] (Signature) (Date) (Time)

TITLE: [illegible]

TELEPHONE: [illegible]

DISTRIBUTION
- WHITE: FIT SITE FILE
- YELLOW: FACILITY/OCCUPANT
- GREEN: FIT SAMPLE MANAGEMENT
- PINK: U.S. EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

FIT Inspection Date: October 23, 1990

CERCLIS Site Name: South Dayton Dump

Site Address: 1976 Springboro Rd., Moraine, OH, 45439

Recipient Information: Alcine Grillot
Name

Site Operator
Title

2708 Kreitzer Rd Moraine Ohio 45439
Street Address

Moraine OH
City State Zip Code

(513) 299-8803
Telephone Number

Ecology and Environment, Inc. has been retained by the United States Environmental Protection Agency (U.S. EPA) under contract 68-01-7347 for the purpose of evaluating sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA).

A copy of the report regarding the inspection conducted at the above-referenced property will be forwarded by the U.S. EPA within 6 months. If a copy of the inspection report is not received within 6 months of the inspection date noted above, a written request may be sent to the U.S. EPA representative indicated below.

It is essential to include the U.S. EPA Identification Number listed below to ensure that your request is properly referenced.

U.S. EPA Identification Number OHD 980611388

Address requests to:

William Messenger, Chief
Pre-Remedial Unit (5HR11)
United States Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604
(312) 353-1057

Distribution:
White: FIT Site File; TDD No.: F05-8611-174 ; PAN: FOHO521SB
Yellow: Recipient
Pink: U.S. EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF:

FIT Inspection Date: October 23, 1990

CERCLIS Site Name: South Dayton Dump

Site Address: 1976 Springboro Rd., Moraine, OH 45439

Recipient Information: Alcine Grillot
Name

Site Operator
Title

2708 Kuntz Rd Moraine Ohio 45439
Street Address

Moraine Off
City State Zip Code

(513) 299-8803
Telephone Number

Ecology and Environment, Inc. has been retained by the United States Environmental Protection Agency (U.S. EPA) under contract 68-01-7347 for the purpose of evaluating sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and the Superfund Amendments and Reauthorization Act (SARA).

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U.S. EPA Identification Number OHD 980611388

Address requests to:

William Messenger, Chief
Pre-Remedial Unit (5HR11)
United States Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604
(312) 353-1057

Distribution:

White: FIT Site File; TDD No.: F05-8611-174 ; PAN: F0H052KB
Yellow: Recipient
Pink: U.S. EPA

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 15152

SAS No. (if applicable):

1. Type of Activity (Check one): ☐ ENF ☐ NPLD ☐ RA ☒ SI ☐ STSI ☐ ER ☐ O&M ☐ RD ☐ ST ☐ Other (Specify) ☐ ESI ☐ PA ☐ RIFS ☐ STPA

2. Region Number: V

Sampling Co.: FIT

4. Date Shipped: 10/23/90

Carrier: F

Sampler (Name): Kelly Maley

Airbill Number: 9074784331

Non-Superfund Program

3. Ship To: ENCOT 3185 Research Park Dr Ann Arbor, MI. 48108 Attn: Scott Devore

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

Site Name: South Dayton Dump

City, State: Dayton, OH.

Site Spill ID: N/A

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

CLP Sample Number (From labels)	(A) Sample Description (From box 5)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA *	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	
EKS 19	5	L	N	X	X			S1	10/23/90/1130	MEHN82	
EKS 20	5	L	N	X	X			S2	10/23/90/1140	MEHN83	
EKS 21	5	L	N	X	X			S3	10/23/90/1140	MEHN84	
EKS 22	5	L	N	X	X			S4	10/23/90/1150	MEHN85	
EKS 23	5	L	N	X	X			S5	10/23/90/1230	MEHN86	
EKS 24	5	L	N	X	X			S6	10/23/90/1245	MEHN87	
EKS 25	5	L	N	X	X			S7	10/23/90/1225	MEHN88	
EKS 26	5	L	N	X	X			S8	10/23/90/1235	MEHN89	
EKS 27	5	L	N	X	X			S9	10/23/90/1330	MEHN90	
EKS 28	5	L	N	X	X			S10	10/23/90/1315	MEHN91	
* ~~EKS 29~~	~~5~~	~~L~~	N	X	X		** not cancelled KM	S11	10/23/90/1335	MEHN92	
~~EKS 30~~	~~5~~	~~L~~	N	X	X			~~S12~~	~~10/23/90~~	~~MEHN93~~	KM
~~EKS 31~~	~~5~~	~~L~~	N	X	X			~~S13~~	~~10/23/90~~	~~MEHN94~~	KM

* VOA sample not preserved.

Shipment is Complete

EPA Form 9110-2 (11-89) Replaces EPA Form 2075-7, which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

EPA

Inorganic Traffic Report
(For CLP Use Only)

Case Number: 15152
SAS No. (If applicable):

1. Type of Activity (Check one): ENF, ER, ESI, NPLD, O&M, PA, RA, RD, RIFS, SI, ST, STPA, STSI, Other (Specify)

Non-Superfund Program

Site Name: South Dayton Dump

City, State: Dayton, OH.

Site Spill ID: N/A

2. Region Number: V

Sampling Co.: FIT

Sampler (Name): Kelly Maley

3. Ship To: Silver Valley One Government Gulch Kellogg, ID. Attn: Lee Haynes 83837

4. Date Shipped: 10/23/90

Airbill Number: 9074784342

Carrier: F

Double volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis: Total Metals	(C) RAS Analysis: Cyanide	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding Organic Sample Number
MEHN 82	5	L	X	X		51	10/23/90/1130	EKS 19
MEHN 83	5	L	X	X		52	10/23/90/1140	EKS 20
MEHN 84	5	L	X	X		53	10/23/90/1140	EKS 21
MEHN 85	5	L	X	X		54	10/23/90/1150	EKS 22
MEHN 86	5	L	X	X		55	10/23/90/1230	EKS 23
MEHN 87	5	L	X	X		56	10/23/90/1245	EKS 24
MEHN 88	5	L	X	X		57	10/23/90/1225	EKS 25
MEHN 89	5	L	X	X		58	10/23/90/1235	EKS 26
MEHN 90	5	L	X	X		59	10/23/90/1330	EKS 27
MEHN 91	5	L	X	X		510	10/23/90/1345	EKS 28
MEHN 92	5	L	X	X		511	10/23/90/1335	EKS 29
~~MEHN 93~~	~~5~~	~~L~~	~~X~~	~~X~~		~~512~~	~~10/23/90~~	~~EKS 30~~ KM
~~MEHN 94~~	~~5~~	~~L~~	~~X~~	~~X~~		~~513~~	~~10/23/90~~	~~EKS 31~~ KM

Shipment is Complete

EPA Form 9110-1 (8-88) Replaces EPA Form 2075-6, which may be used. Green - SMO Copy Pink - Region Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FDH0521
PROJECT NAME: TDD: F05-8611-174 / Case: 15152
SAMPLERS: (Signature) Kelly Maley

Cooler #30

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	MS/MSD 8oz	1oz 120ml					REMARKS Tag numbers	Lab Sample #
EKS19	10/23/10	1130		X	S1	3	1	2					131305-04	Soil/Sed.
EKS20	10/23/10	1140		X	S2	3	1	2					131306-08	Soil/Sed
EKS21	10/23/10	1140		X	S3	3	1	2					131310-12	Soil/Sed
EKS22	10/23/10	1150		X	S4	3	1	2					131314-16	Soil/Sed.
EKS23	10/23/10	1230		X	S5	3	1	2					131318-20	Soil/Sed.
EKS24	10/23/10	1245		X	S6	3	1	2					131322-24	Soil/Sed.
EKS25	10/23/10	1225		X	S7	3	1	2					131326-28	Soil/Sed.
EKS26	10/23/10	1235		X	S8	3	1	2					131330-32	Soil/Sed.
EKS27	10/23/10	1330		X	S9	3	1	2					131334-36	Soil/Sed.
EKS28	10/23/10	1345		X	S10	3	1	2					131338-40	Soil/Sed.
EKS29	10/23/10	1335		X	S11	3	1	2					131342-44	Soil/Sed.
~~EKS30~~	~~10/23/10~~			~~X~~	~~S12~~	~~3~~	~~1~~	~~2~~					~~131346-48~~	~~Soil/Sed.~~
~~EKS31~~	~~10/23/10~~			~~X~~	~~S13~~	~~3~~	~~1~~	~~2~~					~~131350-52~~	~~Soil/Sed.~~
													Lot # 802-0132013/602-0132013	
													120 ml: 10/23/2013	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Kelly Maley	10/23/10 1430				
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: Shipped Fed Ex to: ENCOT airbill #9074 8433 1 Custody Seals 1296861, 1296862	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 10391

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
F0H0521	TDD: F05-8611-174 / Case 15152

SAMPLERS: (Signature) Kelly Maley

[illegible] 243

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Metals/Cu 8 oz						Tag numbers	Lab Conc Matrix
MEHN 82	10/23/90	1130		X	S1	1	1						131301	Soil/Sed
MEHN 83	10/23/90	1140		X	S2	1	1						131305	Soil/Sed
MEHN 84	10/23/90	1140		X	S3	1	1						131309	Soil/Sed
MEHN 85	10/23/90	1150		X	S4	1	1						131313	Soil/Sed
MEHN 86	10/23/90	1230		X	S5	1	1						131317	Soil/Sed
MEHN 87	10/23/90	1245		X	S6	1	1						131321	Soil/Sed
MEHN 88	10/23/90	1225		X	S7	1	1						131325	Soil/Sed
MEHN 89	10/23/90	1235		X	S8	1	1						131329	Soil/Sed
MEHN 90	10/23/90	1330		X	S9	1	1						131333	Soil/Sed
MEHN 91	10/23/90	1345		X	S10	1	1						131337	Soil/Sed
MEHN 92	10/23/90	1335		X	S11	1	1						131341	Soil/Sed
~~MEHN 93~~	~~10/23/90~~			~~X~~	~~S12~~	~~1~~	~~1~~						~~131345~~	~~Soil/Sed KM~~
~~MEHN 94~~	~~10/23/90~~			~~X~~	~~S13~~	~~1~~	~~1~~						~~131349~~	~~Soil/Sed KM~~
								Lot # 8 oz:					0157043	
													~~S13 - 0157043 KM~~	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Kelly Maley	10/23/90 1430				
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	Shipped Fed Ex to: Silver airbill # 9074784542 Custody Seals 129688, 129689

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 10392

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U. S. EPA ID NO OHD980611388

PROJ. ACCT. NO. FOH05215B

TDD F05-8611-001

SPLIT SAMPLES ACCEPTED( ) DECLINED(X)

FACILITY/OCCUPANT NAME South Dayton Dump

FACILITY/OCCUPANT ADDRESS 1976 Springboro Road Moraine, OH. 45439

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	10/23/90	1130		EKS19	MEHN82	Soil 1	X	X	X	X	X			Soil
S2	10/23/90	1140		EKS20	MEHN83	Soil 2	X	X	X	X	X			Soil
S3	10/23/90	1140		EKS21	MEHN84	Soil 3	X	X	X	X	X			Soil
S4	10/23/90	1150		EKS22	MEHN85	Soil 4	X	X	X	X	X			Soil
S5	10/23/90	1230		EKS23	MEHN86	Soil 5	X	X	X	X	X			Soil
S6	10/23/90	1245		EKS24	MEHN87	Soil 6	X	X	X	X	X			Soil
S7	10/23/90	1225		EKS25	MEHN88	Soil 7	X	X	X	X	X			Soil
S8	10/23/90	1235		EKS26	MEHN89	Soil 8	X	X	X	X	X			Soil
S9	10/23/90	1330		EKS27	MEHN90	Soil 9	X	X	X	X	X			Soil
S10	10/23/90	1345		EKS28	MEHN91	Soil 10	X	X	X	X	X			Soil
S11	10/23/90	1335		EKS29	MEHN92	Soil 11	X	X	X	X	X			Soil
~~S12~~	~~10/23/90~~			~~EKS30~~	~~MEHN93~~	KM								
~~S13~~	~~10/23/90~~			~~EKS31~~	~~MEHN94~~	KM								

TRANSFERRED BY Kelly Maley 10/23/90
(Signature) (Date) (Time)

RECEIVED BY: Alcine Grillot
(Signature) (Date) Oct. 23 90 (Time)

DISTRIBUTION
WHITE: FIT SITE FILE
YELLOW: FACILITY/OCCUPANT
GREEN: FIT SAMPLE MANAGEMENT
PINK: U.S. EPA

TITLE operator

TELEPHONE 2998803

907478434 3

SENDER'S COPY

Sender's Federal Express Account Number: 1270-9810-3 | Date: 10/28/10

1 From: Kelly Matey | Your Phone Number (Very Important): (312) 775-7763
Company: ECOLOGY & ENVIRONMENT
Street Address: 5634 NORTHWEST HWY
City: CHICAGO | State: IL | ZIP Required:

2 To (Recipient's Name) Please Print: Scott DeVore | Recipient's Phone Number (Very Important): 313 861-1389
Company: Environmental Quality Technology
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): 3115 Research Park Drive
City: Ann Arbor | State: MI | ZIP Required: 48108

YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice): FT1105-05-FMD-SDMT-24

3 PAYMENT: 1 [X] Bill Sender Acct. No. Reqd. | 2 [ ] Bill Recipient's FedEx Acct. No. Fill in Account Number below | 3 [ ] Bill 3rd Party FedEx Acct. No. Fill in Account Number below (req'd.) | 4 [ ] Bill Credit Card Fill in Credit Card Number below | 5 [ ] Cash/Check
Acct./Credit Card No.: Exp. Date:

IF HOLD FOR PICK-UP: Print FEDEX Address Here
Address: City: State: ZIP Required:

4 SERVICES (Check only one box)

Priority Overnight Service (Delivery by next business morning†)
31 [X] YOUR PACKAGING
16 [ ] FEDEX LETTER
12 [ ] FEDEX PAK*
13 [ ] FEDEX BOX
14 [ ] FEDEX TUBE

Standard Overnight Service (Delivery by next business afternoon†)
[ ] YOUR PACKAGING
[ ] FEDEX LETTER
[ ] FEDEX PAK*
[ ] FEDEX BOX
[ ] FEDEX TUBE

Economy Two-Day Service (Formerly Standard Air) (Delivery by second business day†)
30 [ ] ECONOMY TWO-DAY SVC.

Heavyweight Service (for Extra Large or any package over 150 lbs.)
70 [ ] HEAVYWEIGHT**
80 [ ] DEDICATED HEAVYWEIGHT**

† Delivery commitment may be later in some areas.
* Declared Value Limit $100.
** Call for delivery schedule.

DELIVERY AND SPECIAL HANDLING (Check services required)
1 [ ] HOLD FOR PICK-UP (Fill in Box 1b)
2 [X] DELIVER WEEKDAY
3 [ ] DELIVER SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ] DRY ICE (Lbs.)
6 [ ] OTHER SPECIAL SERVICE
7 [ ]
8 [ ]
9 [ ] SATURDAY PICK-UP (Extra charge)
10 [ ]
11 [ ] DESCRIPTION
12 [ ] HOLIDAY DELIVERY (Extra charge)

Packages	Weight in Pounds/kg	Total Declared Value (See Back)
1	56	
Total	Total	Total
1	56	

DAY SHIPMENT (Chargeable Weight)

Received At: 1 [ ] Regular Stop | 3 [ ] Drop Box | 4 [ ] B.S.C. | 5 [ ] Station | 2 [ ] On-Call Stop

FedEx Emp. No.: 7 1 6 2 5 1 | Date/Time: 10/28 1130

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide, available upon request. See back of sender's copy of this airbill for information.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss for a timely claim. Maximum liability limitations found in the current Federal Express Service Guide apply. Your right to recover from Federal Express for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the declared value specified in Box 5b. Recovery cannot exceed actual documented loss. Maximum for Declared Value for FedEx Letter and FedEx Pak packages is $100.00. In the event of customer delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature:

Federal Express Use: Base Charges | Declared Value Charge | Other | Other | Total Charges

REVISION DATE 8/89 PART #119500 GBFS FORMAT 4041

041

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FEDERAL EXPRESS

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QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 907478434 2

907478434 2

SENDER'S COPY

Sender's Federal Express Account Number: 1270-9810-3 | Date: 10/28/10

1 From: Kelly Matey | Your Phone Number (Very Important): (312) 775-7763
Company: ECOLOGY & ENVIRONMENT
Street Address: 5634 NORTHWEST HWY
City: CHICAGO | State: IL | ZIP Required:

2 To (Recipient's Name) Please Print: Lee [illegible] | Recipient's Phone Number (Very Important): [illegible]
Company: [illegible]
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes): [illegible]
City: [illegible] | State: [illegible] | ZIP Required: [illegible]

YOUR INTERNAL BILLING REFERENCE INFORMATION (First 24 characters will appear on invoice): [illegible]

3 PAYMENT: [illegible]

4 SERVICES (Check only one box) / DELIVERY AND SPECIAL HANDLING (Check services required) / SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY: [illegible]

Received At: [illegible]

5 Release Signature: [illegible] | Date/Time: [illegible]

041

S. Dayton Dump, OH.

TDD: EQS-8611-174
PAN: EDH052158

10/23/90

SAMPLE NO.	DATE	TIME	BOTTLES	TAG NO.	OTR	ITR	DESCRIPTION
S1	10/23/90		8oz m/c	131301		MEHN 82	Soil
S1		1130	8oz ex.	02	EKS 19		gray/black
S1			120ml VOA	03			fill material
S1				04			gobbly
S2	10/23/90		8oz m/c	131305		MEHN 83	Soil
S2		1140	8oz ex.	06	EKS 20		dark
S2			120ml VOA	07			brown
S2				08			saturated
							sandy silt
S3	10/23/90		8oz m/c	131309		MEHN 84	Soil
S3		1140	8oz ex.	10	EKS 21		dark
S3			120ml VOA	11			brown
S3				12			loam
S4	10/23/90		8oz m/c	131313		MEHN 85	Soil
S4		1150	8oz ex	14	EKS 22		black
S4			120ml VOA	15			sandy
S4				16			ash
S5	10/23/90		8oz m/c	131317		MEHN 86	Soil
S5		1230	8oz ex.	18	EKS 23		black
S5			120ml VOA	19			sandy
S5				20			loam

S. Dayton Dump, OH PAN: 10/23/90

SAMPLE NO.	DATE	TIME	BOTTLES	TAG NO.	OTR	ITR	DESCRIPTION
S6	10/23/90		8oz m/c	131321		MEHN 87	
S6			8oz ex.	22	[redacted]		Soil black sandy loam
S6		1245	120ml VOA	23	EKS 24		
S6				24			
S7	10/23/90		8oz m/c	131325		MEHN 88	Soil - black sandy ash
S7		1225	8oz ex	26	EKS 25		
S7			120ml VOA	27			
S7				28			
S8	10/23/90		8oz m/c	131329		MEHN 89	Soil - black/brown sandy loam
S8		1235	8oz ex	30	EKS 26		
S8			120ml VOA	31			
S8				32			
S9	10/23/90		8oz m/c	131333		MEHN 90	Soil black sandy silt
S9			8oz ex.	34	EKS 27		
S9		1330	120ml VOA	35			
S9				36			
S10	10/23/90		8oz m/c	131337		MEHN 91	Soil dark brown loam back ground
S10		1345	8oz ex	38	EKS 28		
S10			120ml VOA	39			
S10				40			

St Bay [illegible] Dump PAN: _____ 10/23/90 ___ OF ___

SAMPLE NO.	DATE	TIME	BOTTLES	TAG NO.	OTR	ITR	DESCRIPTION
S11	10/23/90		8 oz m/c	131341		MEHN	92 Soil
S11	↓	1335	8 oz ex.	42	EKS		~~black~~
S11			120 ml VOA	43	29		dark gray
S11	↓		↓	44	↓		clay loam
S12	10/23/90		8 oz m/c	131345		MEHN	93
S12	↓		8 oz ex	46	EKS		
S12			120 ml VOA	47	30		
S12	↓		↓	48	↓		
S13	10/23/90		8 oz m/c	131349		MEHN	94
S13	↓		8 oz ex	50	EKS		
S13			120 ml VOA	51	31		
S13	↓		↓	52	↓		

8 oz lot 0157043
* S13 0137013
120 ml lot W0172013

F I T S A M P L E P R O P O S A L F O R M R E G I O N V

DATE FORM COMPLETED 9/7/90 PAN# FOH05215B TDD# F05-8611-174 EPA I.D.# OHD980611388

SITE NAME (PRINT) SOUTH DAYTON DUMP CITY MORAINE STATE OH

TEAM LEADER MICHELLE JASTER SAMPLER KELLY MALEY DATE SENT TO RSCC

CODE # 15152 DRINKING WATER SAS # ORGANIC INORGANIC

ROUTINE ANALYTICAL SERVICES (RAS)

LOW WATERS FRACTION	MONITORING WELLS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

LOW WATERS FRACTION	SURFACE WATERS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

LOW SOILS/SEDIMENTS/SLUDGES FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB	13 + 0 + 0 = 13	10/22/90	CNCOT				
METALS			SILVER				
CN							

RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER SAMPLES)

LOW DETECTION LIMITS/FAST TURN AROUND FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

! ! SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

SAS #

Confirmed

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 10/23/90 SAMPLING TIME 1130

ORGANIC TRAFFIC NUMBER EKS19
INORGANIC TRAFFIC NUMBER MEHN82

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131302	0157043
120 ml.	VOA	131303-04	W0172013
8 oz.	Metals/CN-	131301	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil — gray/black pebbly fill material

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 10/23/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER EKS20

INORGANIC TRAFFIC NUMBER MEHN83

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131306	0157043
120 ml.	VOA	131307-08	W0172013
8 oz.	Metals/CN-	131305	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - dark brown saturated sandy silt.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 10/23/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER EK521
INORGANIC TRAFFIC NUMBER MEHN84

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131310	01570143
120 ml.	VOA	131311-12	W0172013
8 oz.	Metals/CN-	131309	01570143

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - dark brown loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 10/23/90 SAMPLING TIME 1150

ORGANIC TRAFFIC NUMBER EKS22

INORGANIC TRAFFIC NUMBER MEHN85

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131314	0157043
120 ml.	VOA	131315-16	W0172013
8 oz.	Metals/CN-	131313	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black sandy ash.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S5

SAMPLING DATE 10/23/90 SAMPLING TIME 1230

ORGANIC TRAFFIC NUMBER EKS23

INORGANIC TRAFFIC NUMBER MEHN86

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131318	0157043
120 ml.	VOA	131319-20	W017 2013
8 oz.	Metals/CN-	131317	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black sandy loam

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S6

SAMPLING DATE 10/23/90 SAMPLING TIME 1245

ORGANIC TRAFFIC NUMBER EKS 24

INORGANIC TRAFFIC NUMBER MEHN 87

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131322	0157043
120 ml.	VOA	131323-24	W0172013
8 oz.	Metals/CN-	131321	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - black sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S7

SAMPLING DATE 10/23/90 SAMPLING TIME 1225

ORGANIC TRAFFIC NUMBER EKS25
INORGANIC TRAFFIC NUMBER MEHN88

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131326	0157043
120 ml.	VOA	131327-28	W0172013
8 oz.	Metals/CN-	131325	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - black sandy ash.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S8

SAMPLING DATE 10/23/90 SAMPLING TIME 1235

ORGANIC TRAFFIC NUMBER EKS26
INORGANIC TRAFFIC NUMBER MEHN89

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131330	0157043
120 ml.	VOA	131331-32	W0172013
8 oz.	Metals/CN-	131329	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - black/brown sandy loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION 59

SAMPLING DATE 10/23/90 SAMPLING TIME 1330

ORGANIC TRAFFIC NUMBER EKS27

INORGANIC TRAFFIC NUMBER MEHN90

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131334	01570413
120 ml.	VOA	131335-36	CW01720013
8 oz.	Metals/CN-	131333	01570413

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - black sandy silt.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174

CASE NUMBER 15152

SAMPLE #/STATION LOCATION S10

SAMPLING DATE 10/23/90 SAMPLING TIME 1345

ORGANIC TRAFFIC NUMBER EK528

INORGANIC TRAFFIC NUMBER MEHN91

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131338	0157043
120 ml.	VOA	131339-40	W017-2013
8 oz.	Metals/CN-	131337	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: soil - dark brown loam - Background.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A

pH

CONDUCTIVITY

TEMPERATURE

SAMPLE DESCRIPTION

SITE NAME/TDD# South Dayton Dump/F05-8611-174
CASE NUMBER 15152

SAMPLE #/STATION LOCATION S11

SAMPLING DATE 10/23/90 SAMPLING TIME 1335

ORGANIC TRAFFIC NUMBER EKS29
INORGANIC TRAFFIC NUMBER MEHN92

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8 oz.	ABN/Pest/PCB	131342	0157043
120 ml.	VOA	131343-44	W0172013
8 oz.	Metals/CN-	131341	0157043

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: Soil - dark gray clay loam.

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: N/A

INSTRUMENT READINGS N/A
pH
CONDUCTIVITY
TEMPERATURE

P 352 448 371

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

Sent to [illegible]	
Street and No.	
P.O., State and ZIP Code Dayton, OH 45406	
Postage	$ 1.25
Certified Fee	.85
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	1.20
TOTAL Postage and Fees	$ 3.30
Postmark or Date	

CHICAGO IL LOOP STA 60604 USPO 31 1990

PS Form 3800, June 1985 ☆U.S.G.P.O. 1989-234-555

*** U.S. POSTAL SERVICE ***
LOOP STATION 60604
211 S. CLARK ST.

CLERK #17
DATE: 08/31/90 05:14:45 PM

110 P O METER	3.30
110 P O METER	3.70
110 P O METER	3.30
110 P O METER	3.30
110 P O METER	3.30
110 P O METER	3.30
110 P O METER	3.30
TOTAL: $	23.50
CASH TENDERED $	30.00
CHANGE $	6.50

*** THANK YOU ***

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

August 31, 1990

Dayton, OH 45406

Re: Site Name: South Dayton Dump
TDD No.: F05-8611-174
PAN: FOHO521SB
U.S. EPA No.: OHD980611388

Dear Mrs.

This letter is in response to your recent inquiry requesting additional information concerning our firm. Ecology and Environment, Inc., has been retained by the U.S. Environmental Protection Agency (U.S. EPA) under contract 68-01-7347 for the purpose of evaluating candidate sites for the National Priorities List under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA).

Information supplied to the U.S. EPA through CERCLA notifications as required by Section 103(c) of CERCLA has identified the property in question as a possible candidate for the National Priorities List. As part of our evaluation, the U.S. EPA has asked us to perform an on-site inspection of the property in question. This is the reason for my request to visit your facility on October 22-23, 1990.

I have attached a copy of the Letter of Introduction provided by the U.S. EPA for Ecology and Environment, Inc., employees engaged in field investigation work, which outlines the statutory basis for such inspections. Also enclosed is a copy of Section 104(e) of CERCLA, outlining the authority of Ecology & Environment, Inc., to conduct inspections for the U.S. EPA, taken from Environment Reporter, published by the Bureau of National Affairs, Inc., Washington, D.C. 20037, February 24, 1989, 71:0710-0712.. So you have a better understanding of the questions we need to ask, I have also attached a copy of the site inspection form.

Because of the U.S. EPA efforts to support state requirements, please be advised that pursuant to Ohio Revised Code Section 3734.02(H) and Ohio Administrative Code 3745-27-13, U.S. EPA has submitted a request for the authorization of the Director of the Ohio Environmental Protection Agency (OEPA) to perform this intrusive sampling at your facility. Ohio Administrative Code 3745-27-13(c)(4) requires U.S. EPA to provide OEPA with acknowledgment of notice to the property owner. I have enclosed a second copy of this letter and a stamped self-addressed return envelope. Please acknowledge receipt of this letter by signing the second copy and returning the signed letter in the enclosed envelope. If U.S. EPA does

recycled paper

August 31, 1990

not receive acknowledgment within 10 days after your receipt of this letter sent via certified mail, the return receipt will be deemed constructive acknowledgment of this notice.

If you require additional information, please do not hesitate to call me.

Sincerely,

Michelle L. Jaster

Michelle L. Jaster
Enclosures

Acknowledgment of Notice

_____
Owner/Operator

_____
Date

> Current Date, 1990

>
>
> Dayton, OH 45406
>

Re: Site Name: > South Dayton Dump
TDD No.: > F05-8611-174
PAN: > FOH0521SB
U.S. EPA No.: > OHD980611388

Dear >: Mrs.

This letter is in response to your recent inquiry requesting additional information concerning our firm. Ecology and Environment, Inc., has been retained by the U.S. Environmental Protection Agency (U.S. EPA) under contract 68-01-7347 for the purpose of evaluating candidate sites for the National Priorities List under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA).

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Date

not receive acknowledgment within 30 days after your receipt of this letter sent via certified mail, the return receipt will be deemed constructive acknowledgment of this notice.

If you require additional information, please do not hesitate to call me.

Sincerely,

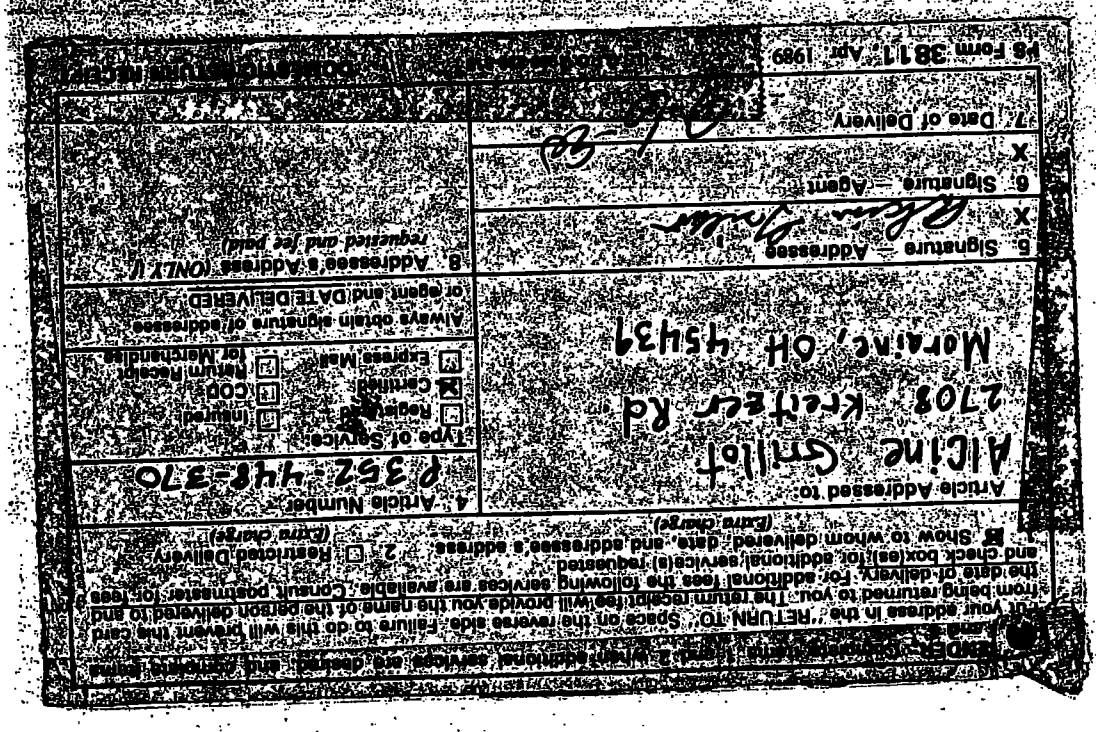
> Michelle L. Jaster

Enclosures

Acknowledgment of Notice

_____
Owner/Operator

_____
Date



ecology and environment, inc.
111 WEST JACKSON BLVD.,
CHICAGO, ILLINOIS 60604

DAYTON, OH 454
PM
7 SEP.

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AUG 3 '90
IL
1463736

Michelle Jaster
Ecology & Environment
111 West Jackson Blvd.
Chicago, IL 60604

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AL BUSINESS

INSTRUCTIONS
address and ZIP Code
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nt of article if space
rwise affix to back of
icle. Return Receipt
adjacent to number.

SEP 12 1990

U.S. MAIL

PENALTY FOR PRIVATE
USE, $300

Print Sender's name, address, and ZIP Code in the space below

Michelle Jaster % Ecology & Environment, Inc.
111 W. JACKSON BLVD. 12TH FL
Chicago, IL 60604

Thank you for using
Return Receipt Service.

P 352 448 370

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

☆U.S.G.P.O. 1989-234-555

Sent to Alcine Grillot	
Street and No. 2708 Kreitzer Rd.	
P.O., State and ZIP Code Moraine, OH 45439	
Postage	$ 1.25
Certified Fee	.85
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$ 2.10
Postmark or Date	

Odson AUG 31 1990 CHICAGO, IL LOOP

PS Form 3800, June 1985

*** U.S. POSTAL SERVICE ***
LOOP STATION 60604
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CLERK #17
DATE: 08/31/90 05:14:45 PM

110 P O METER	3.30
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CHANGE $	6.50

*** THANK YOU ***

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

August 31, 1990

Mr. Alcine Grillot
2708 Kreitzer Road
Moraine, OH 45439

Re: Site Name: South Dayton Dump
TDD No.: F05-8611-174
PAN: FOH0521SB
U.S. EPA No.: OHD980611388

Dear Mr. Grillot:

This letter is in response to your recent inquiry requesting additional information concerning our firm. Ecology and Environment, Inc., has been retained by the U.S. Environmental Protection Agency (U.S. EPA) under contract 68-01-7347 for the purpose of evaluating candidate sites for the National Priorities List under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA).

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recycled paper

August 31, 1990

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Sincerely,

Michelle L. Jaster

Michelle L. Jaster
Enclosures

Acknowledgment of Notice

_____
Owner/Operator

_____
Date

>Current Date, 1990

>Mr. Aleine Grillot
>2708 Kreitzer Rd.
>Moraine, OH 45439
>

Re: Site Name: >South Dayton Dump
TDD No.: >F05-8611-174
PAN: >FOH0521SB
U.S. EPA No.: >OHD980611388

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Sincerely,

>Michelle L. Jaster

Enclosures

Acknowledgment of Notice

_____
Owner/Operator

_____
Date

SI072(08/28/90)