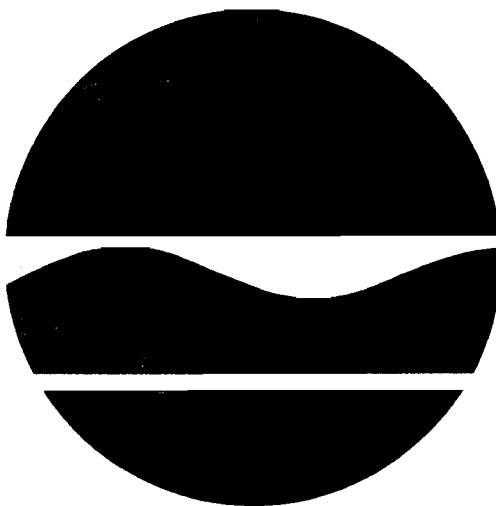


**DAVIS-HOWLAND OIL
CORPORATION
Inactive Hazardous Waste Site**

**City of Rochester, Monroe County, New York
Site No. 08-28-088**

GROUNDWATER SAMPLE RESULTS

April, 1995



Prepared by:

**New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation**

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BACKGROUND

The Davis-Howland Oil Corporation site (No. 8-28-088) consists of adjacent properties, upon which the Davis-Howland Oil Corporation conducted operations. The Davis-Howland Oil Corporation plant is situated at 200 Anderson Avenue in the City of Rochester, Monroe County. Please see Figure 1.

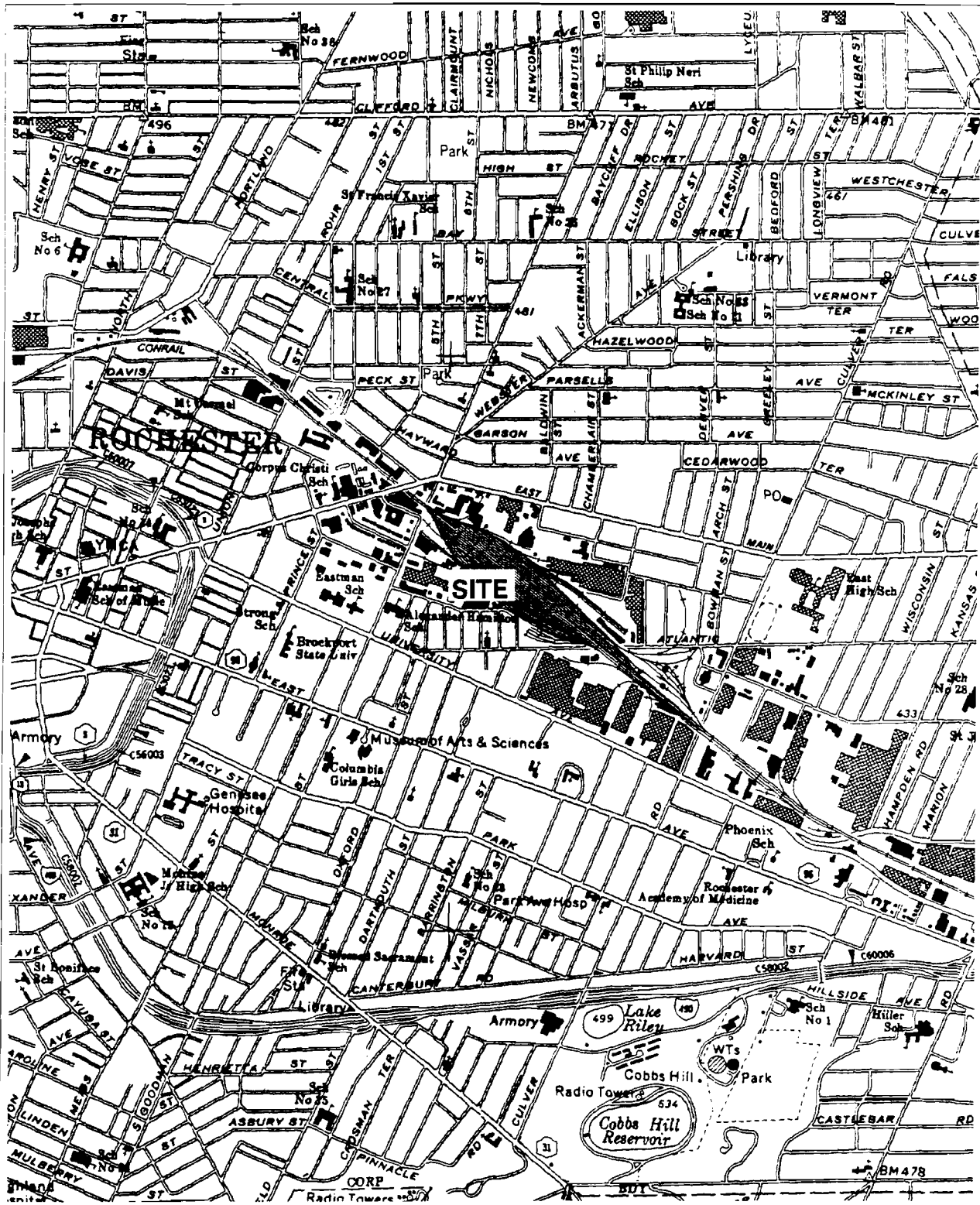
In June of 1991, New York State Department of Environmental Conservation (NYSDEC) staff inspected the site in response to an oil spill complaint and found several hundred drums of oils and solvents and several areas of stained soils. A DEC contractor was subsequently hired to overpack leaking drums.

Surface and subsurface soil samples were collected. Surface soils were analysed for volatile organic compounds (VOC) and total petroleum hydrocarbons (TPH). Subsurface soil samples were analysed for VOC, semivolatiles, Pesticides/polychlorobiphenyls (PCBs), TPH and metals. The analytical results indicated that the surface soils were contaminated with petroleum products and solvents, and the subsurface soils were contaminated with solvents, petroleum products and metals.

Davis-Howland removed all drums of liquid waste and completed a surficial soil clean-up to a depth of one to two feet in July, 1992.

Davis-Howland installed shallow wells and collected groundwater samples in the Spring of 1992. Groundwater samples were analysed for VOC, TPH, and total metals. Results indicated levels of volatiles up to five orders of magnitude greater than New York State Standards and elevated levels of metals and TPH.

Groundwater samples have not been collected since the Spring of 1992. In addition, groundwater samples have not been analysed for target compound list (TCL) semivolatiles and PCBs/pesticides. The New York State Department of Environmental Conservation (NYSDEC) is proceeding with the process of acquiring a consultant to assist in the Remedial Investigation/Feasibility Study (RI/FS) for the site. Staff from the NYSDEC have concluded that the collection of additional data was necessary to assist with the development of the RI/FS Work Plan for the site.



Site Location Map

828088 Davis-Howland Oil Corporation

NYSDOT Planimetric Quadrangle(s):

0 500 1000 1500 2000

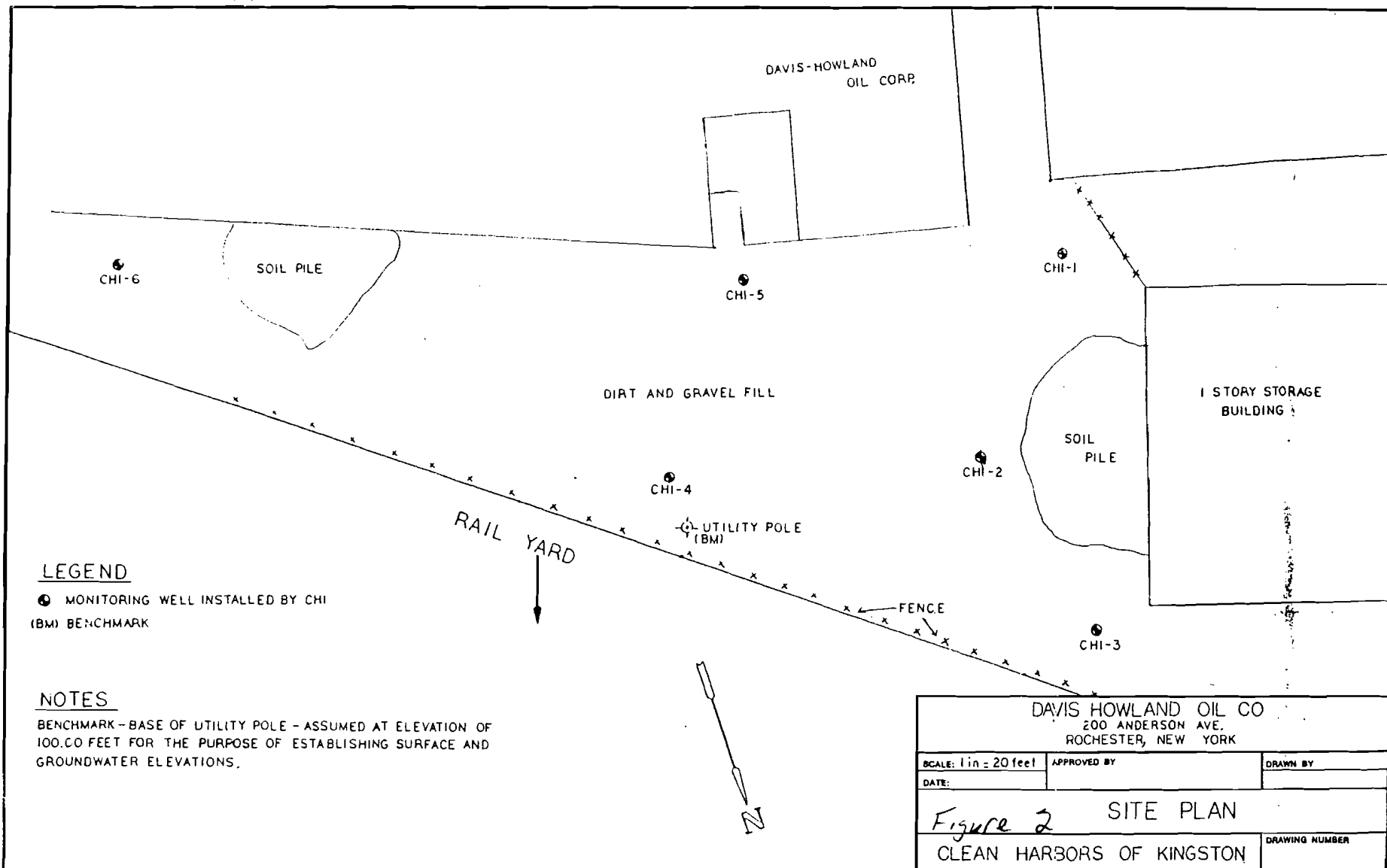
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Scale 1:24,000

April 25, 1995

Figure 1

Anderson Avenue



PURPOSE AND SCOPE

The purpose of the sample collection was to collect updated information on the concentration levels of volatile organic compounds, semivolatile organic compounds, pesticides/polychlorobiphenyls (PCBs) and metals, associated with the groundwater at the Davis-Howland Oil Corporation site. Analysis of the samples will assist in better defining the scope of the RI/FS Work Plan, and the potential risk to the public, posed by the site.

SAMPLE LOCATION - ANALYSIS - OBSERVATIONS

There are six wells at the Davis-Howland site (See Figure 2). The wells are entitled CHI-1 through CHI-6. Each well is a shallow well (total well depth of ten (10) feet below ground surface). All wells are screened over an eight (8) foot interval with the exception of well CHI-1 which is screened over a six (6) foot interval. Groundwater elevations, measured during the Spring of 1992 sampling event, indicated that groundwater was approximately four (4) foot below grade.

Sample locations and the types of analysis are provided as follows:

Sample Field ID	B237-01	B237-02	B237-03	B237-04	B237-05	B237-06
Well Designation	CHI-1	CHI-2	CHI-3	CHI-4	CHI-6	CHI-6
Analytical Methods						
Volatile Organics	CLP#91-1	CLP#91-1	CLP#91-1	CLP#91-1	EPA#8240	CLP#91-1
Semivolatiles	CLP#91-2	CLP#91-2	CLP#91-2	CLP#91-2	EPA#8270	CLP#91-2
Pesticide/PCBs	CLP#91-3	CLP#91-3	CLP#91-3	CLP#91-3	NA	CLP#91-3
TAL Metals	CLP-M	CLP-M	CLP-M	CLP-M	CLP-M	CLP-M

NA = Not analysed for parameter.

The following observations were made during the field work:

1. An oily layer, greater than one foot thick, was found floating on top of the groundwater in monitoring well CHI-6. A sample of the non-aqueous phase liquid was collected (Sample ID# B237-05). The sample was analysed for volatile organics, semivolatile organics and inorganics.
2. An oily, floating sheen was noted during the purging of the wells designated CHI-1 and CHI-4.
3. Well CHI-5 was not sampled. The protective casing was bent at the ground level. It was not possible to remove the old bailer from the well. (Bailers, removed from the wells sampled, are stored on site.)
4. Water purged from well CHI-4 had a slight sulfur odor.
5. Specific conductivity readings of water purged from wells CHI-1, CHI-2 and CHI-4 were greater than 4000 umhos/cm. The specific conductivity readings of water purged from well CHI-3 were approximately 500 umhos/cm.
6. Depth to water was measured from the top of the steel, protective casing. An accurate determination of groundwater elevation was not possible, because of a lack of elevation data. An estimate of the average depth to groundwater is approximately four (4) feet below the ground surface.
7. The turbidity meter did not operate properly due to the cold weather conditions. The water collected in the samples contained visual particulates, and was estimated to be greater than 200 NTU.

The groundwater field sample data records are contained in Appendix A.

INVESTIGATION RESULTS

A summary of sample analysis results may be found in the following tables:

Volatile organics	Table 1
Semivolatile Organics	Table 2
TAL Metals	Table 3

The only concentrations recorded above the detection limits for pesticides/PCBs was in samples B237-04 and B237-04MSD. The concentrations in ug/l are as follows:

<u>Parameter</u>	<u>Groundwater Std.</u>	<u>B237-04</u>	<u>B237-04MSD</u>
gamma BHC (Lindane)	Limit of detection	0.12	Not Applicable
delta-BHC	Limit of detection		0.14

The limit of detection for pesticides was in the range of 0.10 ug/l to 0.20 ug/l with the exception of 4,4-DDT and Toxaphene. The limit of detection for 4,4-DDT was 1.0 ug/l, and the limit of detection for toxaphene was 10 ug/l. The limit of detection for the PCBs was 2.0 ug/l with the exception of Aroclor-1221 at 4.0 ug/l.

A partial copy of the sample results may be found in Appendix C.

Table 1

Summary of Volatile Organic Results for Groundwater Samples Collected from Monitoring Wells on December 14, 1994
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l							
	^a NYS DEC Class GA Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6		^b B237-05 MW-CHI6
Chloromethane	5	ND	ND	ND	ND	ND		ND
Bromomethane	5	ND	ND	ND	ND	ND		ND
Vinyl Chloride	2	1500	4900	ND	ND	ND		ND
Chloroethane	5	ND	ND	ND	ND	ND		ND
Methylene Chloride	5 ^c	ND	ND	ND	7100 J	ND		ND
Acetone	50	ND	ND	ND	5100 J	ND		ND
Carbon Disulfide	NA	ND	ND	ND	ND	ND		ND
1,1-Dichloroethene	5	ND	ND	ND	1100 J	ND		ND
1,1-Dichloroethane	5	1400	2200	ND	ND	290		ND
1,2-Dichloroethene (total)	5	13000	25000 DJ	15000	54000	ND		ND
Chloroform	7	ND	ND	ND	ND	ND		ND
1,2-Dichloroethane	5 ^c	ND	ND	ND	ND	ND		ND
2-Butanone	50	ND	ND	ND	ND	ND		ND
1,1,1-Trichloroethane	5	2800	ND	ND	5700 J	3900		1000000 ug/kg
Carbon Tetrachloride	5 ^c	ND	ND	ND	ND	ND		ND
Bromodichloromethane	50	ND	ND	ND	ND	ND		ND
1,2-Dichloropropane	5	ND	ND	ND	ND	ND		ND
cis-1,3-Dichloropropene	5	ND	ND	ND	ND	ND		ND
Trichloroethene	5 ^c	ND	130 J	2200	75000	ND		ND
Dibromochloromethane	50	ND	ND	ND	ND	ND		ND
1,1,2-Trichloroethane	5	ND	ND	ND	ND	ND		ND
Benzene	0.7	ND	ND	ND	ND	ND		ND
trans-1,3-Dichloropropene	5 ^c	ND	ND	ND	ND	ND		ND
Bromoform	50	ND	ND	ND	ND	ND		ND
4-Methyl-2-Pentanone	NA ^c	ND	ND	ND	ND	ND		ND
2-Hexanone	50	ND	ND	ND	ND	ND		ND
Tetrachloroethene	5	ND	ND	ND	ND *	ND		ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND		ND
Toluene	5	2700	650 J	ND	ND *	ND		ND
Chlorobenzene	5	ND	ND	ND	ND	ND		ND
Ethylbenzene	5	2300	300 J	ND	ND *	ND		ND
Styrene	5	ND	ND	ND	ND	ND		ND
Xylene (total)	5 (each isomer)	11000	790 J	ND	ND	ND		ND
Sample quantitation limit		1000	1000	1000	10000	200		120000 ug/kg
TICs								
Total Ethylmethylbenzene isomer		2900 J						
Propylbenzene isomer		700 J						
Trimethylbenzene isomer		2100 J						
Unknown		500 J						

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

* See semivolatile TICs

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

Analysis of B23705 was performed using EPA method 8240. Results reported in ug/kg.

c = Guidance Value

Table 2

Summary of Semivolatile Organic Results for Groundwater Samples Collected from Monitoring Wells on December 14, 1994
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l						B237-05 MW-CHI6
	NYS DEC Class GA ^a Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6	
Phenol	1 *	ND	ND	ND	16	ND	ND
bis(2-Chloroethyl) Ether	1	ND	ND	ND	ND	ND	ND
2-Chlorophenol	1 *	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	4.7 **	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7 **	ND	ND	ND	ND	ND	ND
2-Methylphenol	1 *	11 J	7 J	ND	5 J	ND	ND
2,2-oxybis (1-Chloropropane)	5 c	ND	ND	ND	ND	ND	ND
4-Methylphenol	1 *	26 J	12 J	ND	62	1 J	ND
N-Nitroso-Di-n-Propylamine	NA	ND	ND	ND	ND	ND	ND
Hexachloroethane	5 c	ND	ND	ND	ND	ND	ND
Nitrobenzene	5	ND	ND	ND	ND	ND	ND
Isophrone	50 c	ND	ND	ND	ND	ND	ND
2-Nitrophenol	1 *	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1 *	73 J	6 J	ND	ND	ND	ND
bis (2-Chloroethoxy) Methane	5 c	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1 *	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND
Naphthalene	10 c	240	3 J	ND	2 J	ND	ND
4-Chloroaniline	5 c	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	ND	ND
4-Chloro-3-Methylphenol	1 *	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NA	200	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	1 *	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	1 *	ND	ND	ND	ND	ND	ND
2-chloronaphthalene	10 c	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5 c	ND	ND	ND	ND	ND	ND
Dimethylphthalate	50 c	ND	ND	ND	ND	ND	ND
Acenaphthylene	NA	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5 c	ND	ND	ND	ND	ND	ND
Acenaphthene	20 c	ND	ND	ND	ND	2 J	13000 ug/kg DJ
Sample quantitation limit		50	10	10	10	10	200000 ug/kg

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

* Value applies to sum of like substances.

** Value applies to sum of like substances.

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

Analysis of B23705 was performed using EPA method 8270. Results reported in ug/kg.

c = Guidance Value

Table 2
Summary of Semivolatile Organic Results for Groundwater Samples Collected from Monitoring Wells on December 14, 1994
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l						B237-05 ^b MW-CHI6
	NYS DEC Class GA ^a Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6	
2,4-Dinitrophenol	1 *	ND	ND	ND	ND	ND	ND
4-Nitrophenol	1 *	ND	ND	ND	ND	ND	ND
Dibenzofuran	NA	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5 c	ND	ND	ND	ND	ND	ND
Diethylphthalate	50 c	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NA	ND	ND	ND	ND	ND	ND
Fluorene	50 c	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5 c	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	1 *	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	50 c	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NA	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.035	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1 *	ND	ND	ND	ND	ND	ND
Phenanthrene	50 c	ND	ND	ND	ND	1 J	27000 ug/kg DJ
Anthracene	50 c	ND	ND	ND	ND	ND	ND
Carbazole	NA	ND	ND	ND	ND	ND	ND
Di-n-Butylphthalate	50	ND	ND	ND	ND	ND	ND
Fluoranthene	50 c	ND	ND	ND	ND	2 J	50000 ug/kg DJ
Pyrene	50 c	ND	ND	ND	ND	2 J	36000 ug/kg DJ
Butylbenzylphthalate	50 c	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	5 c	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	0.002 c	ND	ND	ND	ND	ND	ND
Chrysene	0.002 c	ND	ND	ND	ND	ND	ND
bis (2-Ethylhexyl)Phthalate	50	14	ND	ND	ND	6 J	ND
Di-n-Octyl Phthalate	50 c	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	0.002 c	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	0.002 c	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	***	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) Pyrene	0.002 c	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	NA	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	NA	ND	ND	ND	ND	ND	ND
Sample quantitation limit		50	10	10	10	10	200000 ug/kg

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

* Value applies to sum of like substances.

*** Standard is set at lowest possible limit of detection.

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

Analysis of B23705 was performed using EPA method 8270. Results reported in ug/kg.

c = Guidance Value

Table 2
Summary of Semivolatile Organic Tentatively Identified Compounds (TICs) Results
for Groundwater Samples Collected from Monitoring Wells on December 14, 1994
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l							
	^a NYS DEC Class GA Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6		^b B237-05 MW-CHI6
Propylbenzene	5	140 JN						
2,3-Dihydro-1h-Indene	NA	140 JN						
1-methylnapthalene	NA	80 JN						
Tetrachloroethene	5				32 JN'			
Ethylbenzene	5			8 JN				
Toluene	5				55 JN'			
Adol Condensation Product				7 ABJN				
Sulfur (S6)			16 JN					
Molecular Sulfur			20 JN	2 JN				
Total Ethylbenzene Isomers				18 JN	39 J'			
Total Propylbenzene Isomers					60J'			
Total Ethylmethylbenzene Isome		840 J	12 J					
Total Trimethylbenzene Isomers		700 J			18 J'			
Total Methylpropylbenzene Isom		235 J						
Total Diethylbenzene Isomers		240 J						
Total Ethyldimethylbenzene Isom		70 J						
Total Dimethylindene Isomers		49 J						
Total Unknown Hydrocarbons					80 J'	244 J		5490000 ug/kg J
Total PAH								200000 ug/kg J
Total Unknown Acid				4 J	100 J'			
Total Unknown Siloxane				8 J				
Total Unknown Ketone					100 J'			
Total Unknowns		683 J	684 J	112 J	318 J'	173 J		1510000 ug/kg J

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

N = Tentatively Identified

AB = Adol Condensation Product

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

Analysis of B23705 was performed using EPA method 8270. Results reported in ug/kg.

c = Guidance Value

Table 3
Summary of Inorganic Results for Groundwater
Samples Collected from Monitoring Wells on December 14, 1994
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l						B23705 MW-CHI6
	NYS DEC Class GA ^a Groundwater Standard	B23701 MW-CHI1	B23702 MW-CHI2	B23703 MW-CHI3	B23704 MW-CHI4	B23706 MW-CHI6	
Aluminum	NA	34500	58400	31000	89300	181000	150000 ug/kg
Antimony	3 c	ND N	ND N	ND N	ND N	ND N	ND
Arsenic	25	42.6 S**	56.2 **	20.5 +**	51.2 S**	13.2 S**	ND
Barium	1000	1110 E	774 E	394 E	1150 E	1940 E	1100 ug/kg B
Beryllium	3 c	2.1 B	2.5 B	1.3 B	3.7 B	7.3	ND
Cadmium	10	7.5	62.1	12.4	8.8	41.1	ND
Calcium	NA	923000	1260000	318000	1320000	2250000	26300 ug/kg B
Chromium	50	114 E	93.0 E	51.2 E	124 E	277 E	7500
Cobalt	NA	65.3 EN	91.1 EN	39.1 BN	108 EN	271 EN	ND
Copper	200	545	274	124	409	686	47100 ug/kg
Iron	300 *	156000	145000	57100	197000	704000	249000 ug/kg
Lead	25	2260	270	139	195	232	1900 ug/kg
Magnesium	35000 c	107000	188000	74800	262000	553000	ND
Manganese	300 *	3820	7420	2730	9230	22300	ND
Mercury	2	1.2 N	0.56 N	0.48 N	0.34 N	ND N	ND
Nickel	NA	126 E	189 E	53.1 E	180 E	440 E	ND
Potassium	NA	38700 E	47100 E	18400 E	27700 E	34700 E	ND
Selenium	10	ND N	ND EN	ND WN	ND EN	ND WN	ND
Silver	50	ND N	3.2 BN	ND N	ND N	7.5 BN	ND
Sodium	20000	322000	688000	31600	833000	87600	ND
Thall	4 c	ND N	ND N	ND WN	ND N	ND N	ND
Vanadium	NA	94.2 EN	125 EN	60.1 EN	168 EN	303 EN	ND
Zinc	300	3070 E	9630 E	4120 E	1420 E	2520 E	2700 ug/kg B
Cyanide	100	NR	NR	NR	NR	NR	NR

ND = Not detected above sample quantitation limit

NA = Not Available

NR = No analysis requested.

B = Value greater than or equal to the instrument detection limit,
but less than the contract required detection limit.

E = Value estimated or not reported due to presence of interference.

S = Value determined by Method of Standard Addition.

N = Indicates spike sample recovery is not within control limits.

** = Indicates duplicate analysis is not within control limits.

+ = Indicates the correlation coefficient for method of standard addition is less than 0.995.

WN = Post digestion spike for Furnace AA analysis is out of control limits,
while sample absorbance is less than 50% of spike absorbance

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product. Results reported in ug/kg.

c = Guidance Value

* = The standard for the sum of iron and manganese is 500 ug/l.

DISCUSSION

Volatiles:

1. In general the same volatiles are present in the groundwater as were present in the groundwater in the Spring of 1992. Please see Appendix B for the 1992 Groundwater Sample Results.
2. Vinyl chloride, found in wells B237-01 and B237-02 is a new compound not listed in the sample results of 1992.
3. Some volatiles in Sample B237-04 came out as tentatively identified compounds (TICs) in the semivolatile analysis.
4. See Table 4 for potential volatiles of concern.

Semivolatiles:

1. The percent response for the addition of N-nitroso-di-n-propylamine in the matrix spike sample is low.
2. The following compounds should be placed on the list of potential chemicals of concern:
 - a. N-nitroso-di-n-propylamine
 - b. Compounds that are present in concentrations greater than the groundwater standards or guidance values. These compounds are unchlorinated phenols, naphthalene, 2-methylnaphthalene, 1-methylnaphthalene and propylbenzene.
 - c. Include chemicals that have low groundwater standards.
 - d. Include a select list of polycyclic aromatic hydrocarbons.
 - e. Include the benzene isomers listed in the TICs.
3. See Table 5 for potential chemicals of concern.

Pesticide/PCBs:-

1. Delta BHC was not detected in Sample B237-04, but was detected in the matrix spike and matrix spike duplicate samples (B237-04MS and B237-04MSD). Delta BHC was not added as a spike, but gamma BHC was added as a spike. It may be possible that the gamma BHC spike contained trace amounts of delta BHC.

Metals:

1. Water samples collected for metals analysis were very turbid.
2. Percent response of the matrix spikes for certain metals is below the acceptable response range of 75-125%. These are as follows:

Antimony	0% response	Cobalt	73.6% response
Mercury	73% response	Selenium	0% response
Silver	56.3% response	Thallium	70.6% response
Vanadium	71.1% response		
3. Many of the sample results exceed groundwater standards and guidance values.
4. Groundwater sample results for the 1992 sampling may be found in Appendix B.

CONCLUSIONS

The following conclusions are proposed:

1. Monitoring well #CHI-6 is grossly contaminated with an oily product, floating on the groundwater. The well is located near both the Davis-Howland building and a number of oil storage tanks, operated by the Davis-Howland Oil Corporation. The land on which the storage tanks are located is property that is/was leased to the Davis-Howland Oil Corporation. Well #CHI-6 may not need to be resampled, during the remedial investigation. The property on which the storage tanks are located, and surrounding properties, should be included in the remedial investigation.
2. Monitoring well #CHI-5 should be decommissioned and replaced.
3. Due to problems with turbidity, the wells entitled CHI-1, CHI-2, CHI-3

and CHI-4 should be redeveloped.

4. Potential chemicals of concern have been identified for groundwater. The potential chemicals of concern may be identified as follows:
 - a. Volatiles: Compounds listed in Table 4.
 - b. Semivolatiles: Compounds listed in Table 5, and tentatively identified compounds.
 - c. Pesticides/PCBs: Hexachlorocyclohexanes.
 - d. Metals: All parameters.
5. The first round of groundwater samples taken during the Remedial Investigation/Feasibility Study will be analysed for the full Target Compound List of volatile organic compounds, semivolatile organic compounds, pesticides/PCBs and Target Analyte List metals. The development of a site specific compound list may be considered after reviewing previous groundwater results and the first round of sampling under the Remedial Investigation. The New York State Department of Health must review and approve any proposed site specific compound list.
6. Each groundwater sample taken from each monitoring well during the December 14, 1994 sampling event contained levels of VOCs, SVOCs and metals far in excess of New York State drinking water standards as well as New York State DEC Class GA groundwater standards . The levels of contamination present in groundwater in all monitoring wells pose a potential threat to the public.

Due to the extremely high levels of contaminants in the groundwater it is important that the upcoming RI/FS accurately identify any users of groundwater in the area. Also, the potential for homes along Anderson St. and Norwood St. to be impacted by contaminated groundwater must be evaluated.

Table 4
Summary of Volatile Organic Chemicals of Concern for Groundwater
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l						Identified in Previous Sampling
	NYS DEC Class GA Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6	
Vinyl Chloride	2	1500	4900	ND	ND	ND	ND
Methylene Chloride	5 ^c	ND	ND	ND	7100 J	ND	ND X
Acetone	50 ^c	ND	ND	ND	5100 J	ND	ND X
1,1-Dichloroethene	5	ND	ND	ND	1100 J	ND	ND X
1,1-Dichloroethane	5	1400	2200	ND	ND	290	ND X
1,2-Dichloroethene (total)	5	13000	25000 DJ	15000	54000	ND	ND X
1,1,1-Trichloroethane	5	2800	ND	ND	5700 J	3900	1000000 ug/kg X
Trichloroethene	5	ND	130 J	2200	75000	ND	ND X
Tetrachloroethene	5	ND	ND	ND	ND *	ND	ND X
Toluene	5	2700	650 J	ND	ND *	ND	ND X
Ethylbenzene	5	2300	300 J	ND	ND *	ND	ND X
Xylene (total)	5 (each isomer)	11000	790 J	ND	ND	ND	ND X
Sample quantitation limit		1000	1000	1000	10000	200	120000 ug/kg
TICs							
Total Ethylmethylbenzene isomer		2900 J					
Propylbenzene isomer		700 J					
Trimethylbenzene isomer		2100 J					
Unknown		500 J					

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

* See semivolatile TICs

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

Analysis of B23705 was performed using EPA method 8240. Results reported in ug/kg.

c = Guidance Value

Table 5
Summary of Semivolatile Organic Chemicals of Concern
Davis-Howland Oil Corporation, Rochester, NY (Site No. 8-28-088)

Parameter	Concentration in ug/l						
	NYS DEC Class GA ^a Groundwater Standard	B237-01 MW-CHI1	B237-02 MW-CHI2	B237-03 MW-CHI3	B237-04 MW-CHI4	B237-06 MW-CHI6	B237-05 ^b MW-CHI6
Phenol	1 *	ND	ND	ND	16	ND	ND
2-Methylphenol	1 *	11 J	7 J	ND	5 J	ND	ND
4-Methylphenol	1 *	26 J	12 J	ND	62	1 J	ND
N-Nitroso-Di-n-Propylamine	NA	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	1 *	73 J	6 J	ND	ND	ND	ND
Naphthalene	10 c	240	3 J	ND	2 J	ND	ND
2-Methylnaphthalene	NA	200	ND	ND	ND	ND	ND
Acenaphthene	20 c	ND	ND	ND	ND	2 J	13000 ug/kg DJ
N-Nitrosodiphenylamine	50 c	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.035	ND	ND	ND	ND	ND	ND
Phenanthrene	50 c	ND	ND	ND	ND	1 J	27000 ug/kg DJ
Fluoranthene	50 c	ND	ND	ND	ND	2 J	50000 ug/kg DJ
Pyrene	50 c	ND	ND	ND	ND	2 J	36000 ug/kg DJ
Benzo (a) Anthracene	0.002 c	ND	ND	ND	ND	ND	ND
Chrysene	0.002 c	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	0.002 c	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	0.002 c	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	***	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) Pyrene	0.002 c	ND	ND	ND	ND	ND	ND
Tentatively Identified Compounds							

ND = Not detected above sample quantitation limit

NA = Not Available

J = Estimated Value

D = Concentration at secondary dilution factor

* Value applies to sum of like substances.

*** Standard is set at lowest possible limit of detection.

a = NYSDEC October, 1993, Ambient Water Quality Standards and Guidance Values

b = Sample B23705 was collected from floating product.

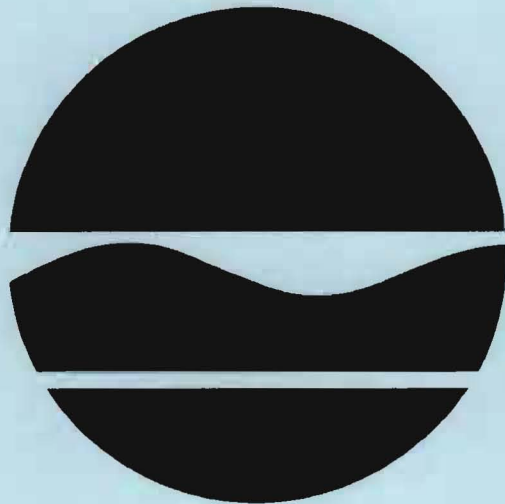
Analysis of B23705 was performed using EPA method 8270. Results reported in ug/kg.

c = Guidance Value

**DAVIS-HOWLAND OIL
CORPORATION
Inactive Hazardous Waste Site**

**City of Rochester, Monroe County, New York
Site No. 08-28-088**

**APPENDICES for
GROUNDWATER SAMPLE RESULTS
April, 1995**



**Prepared by:
New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation**

APPENDIX A
FIELD SAMPLE DATA RECORDS

GROUNDWATER FIELD SAMPLE DATA RECORD

Number: 8-28-188 Site: Davis-Hawford Oil Corp.
 Sample Location ID: CHI-1 B237-01 Date: 12/14/94
 Time: Start: _____ End: _____ Signature of Sampler: M. Doyle

Water Level/Well Data

Well Depth 11.7 Ft ☒ Measured ☐ Historical Top of Well _____ Well Riser Stick-up _____ Ft Protective ☒ Ft Casing/Well Difference
☒ Top of Protective Casing
 Depth to Water 7.1 Ft Well Material: ☒ PVC ☒ Yes Well Dia. ☒ 2 inch Water Level Equip. Used: ☒ Elect. Cond. Probe
☐ SS ☐ No ☐ 4 inch ☐ Float Activated
☐ _____ ☐ 6 inch ☐ Press. Transducer
 Height of Water Column X 4.7 Ft ☐ .16 Gal/Ft (2 in.) = 0.75 Gal/Vol Well Integrity: Yes No
☐ .65 Gal/Ft (4 in.) ☐ 1.5 Gal/Ft (6 in.) 2.5 Total Gal Purged Prot. Casing Secure _____
☐ _____ Gal/Ft (in.) Concrete Collar Intact _____
 Other _____

Equipment Documentation

Purging/Sampling Equipment Used: (✓ If Used For)
 Purging Sampling Equipment ID
☒ ☒ Peristaltic Pump _____
☐ ☐ Submersible Pump _____
☐ ☐ Bailer Disp. 50 ft
☐ ☐ PVC/Silicon Tubing _____
☐ ☐ Teflon/Silicon Tubing _____
☐ ☐ Airlift _____
☐ ☐ Hand Pump _____
☐ ☐ In-line Filter _____
☐ ☐ Press/Vac Filter _____
 Decontamination Fluids Used: (✓ All That Apply at Location)
☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☒ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☒ None for Bailer

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected _____ In-line _____
 _____ In Container _____ Turbid _____ Clear _____ Cloudy
 _____ Colored _____ Odor _____
 Purge Data @ 0.75 Gal. @ 1.5 Gal. @ 2.5 Gal. @ _____ Gal. @ _____ Gal.
 Temperature, Deg. C 6.5 8.2 9.8 _____
 pH, units 7.2 7.2 7.2 _____
 Specific Conductivity 3150 3150 4500 _____
 (umhos/cm. @ 25 Deg. C.)
 Oxidation - Reduction, +/- mv _____
 Dissolved Oxygen, ppm _____
 TURBIDITY (NTU) 192 >200 >200

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA			40 mL X 2		7:35
BVA			80 mL		8:00
Post-TPCB			80 mL		9:40
Trachymyces		HNO ₃	2 L		9:43

Notes: Well Vol. 2 + 3 Flaming Gradient
HNA - Read - Background
Temp

GROUNDWATER FIELD SAMPLE DATA RECORD

Number: 8-28-088 Site: Davis-Hawthorn Oil Corp.
 Sample Location ID: CHI-2 (B237-02) Date: 12/14/94
 Time: Start: _____ End: _____ Signature of Sampler: M. Day

Water Level/Well Data

Well Depth 13 Ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing
 Well Riser Stick-up _____ Ft. (from ground) Protective _____ Ft. Casing/Well Difference
 Depth to Water 6.9 Ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column 6.1 Ft. X ☒ .16 Gal/Ft. (2 in.) ☐ .65 Gal/Ft. (4 in.) ☐ 1.5 Gal/Ft. (6 in.) ☐ _____ Gal/Ft. (____ in.) = 3 Total Gal Purged
 Well Integrity: Prot. Casing Secure _____ Yes _____ No
 Concrete Collar Intact _____
 Other _____

Equipment Documentation

Purging/Sampling Equipment Used:

Decontamination Fluids Used:

(✓ If Used For)
 Purging Sampling

Peristaltic Pump
 Submersible Pump
 Bailer
 PVC/Silicon Tubing
 Teflon/Silicon Tubing
 Airlift
 Hand Pump
 In-line Filter
 Press/Vac Filter

Equipment ID

Disp. 3.16

(✓ All That Apply at Location)

_____ Methanol (100%)
 _____ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☒ Liquinox Solution
 _____ Hexane
 _____ HNO₃/D.I. Water Solution
 _____ Potable Water
☒ None for Baiters

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected _____ In-line _____ Turbid _____ Clear _____ Cloudy
 _____ In Container _____ Colored _____ Odor

Purge Data	0 Gal.	1.5 Gal.	3 Gal.	_____ Gal.	_____ Gal.
Temperature, Deg. C	<u>7.9</u>	<u>8.6</u>	<u>12.2</u>		
pH, units	<u>7.7</u>	<u>7.6</u>	<u>7.6</u>		
Specific Conductivity (umhos/cm. @ 25 Deg. C.)	<u>>5000</u>	<u>>5000</u>	<u>>5000</u>		
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm					
TURBIDITY (NTU)	<u><200</u>	<u>>200</u>	<u>>200</u>		

Sample Collection Requirements
 (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
<u>VOA</u>			<u>40 mL X 2</u>		<u>10:10</u>
<u>BNA</u>			<u>80 mL</u>		<u>10:12</u>
<u>Rest/PCB</u>		<u>HNO₃</u>	<u>80 mL</u>		<u>10:16</u>
<u>Inorganic</u>			<u>1 L</u>		<u>10:20</u>

Notes: HNU - Not working - No Floating Solids

GROUNDWATER FIELD SAMPLE DATA RECORD

Number: 8-28-088 Site: Davis-Hawland Oil Corp.
 Date: 12/14/94
 Sample Location ID: CHI-3 (B237-03)
 Time: Start: _____ End: _____ Signature of Sampler: Mr. Doyle

Water Level/Well Data

Well Depth 10 Ft. Measured ☒ Historical ☐ Top of Well _____ Well Riser Stick-up _____ Ft. Protective _____ Ft. Casing/Well Difference _____
 Depth to Water 6.84 Ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column X 1.16 Gal/Ft (2 in.) = 1 Gal/Vol Well Integrity: Yes No
 X 6.36 Ft. X 1.5 Gal/Ft (6 in.) = 3 Total Gal Purged Prot. Casing Secure _____ Concrete Collar Intact _____ Other _____

Equipment Documentation

Purging/Sampling Equipment Used:

Decontamination Fluids Used:

(✓ If Used For)
 Purging Sampling

Equipment ID

(✓ All That Apply at Location)

☐ Peristaltic Pump
☒ Submersible Pump
☒ Bailer
☐ PVC/Silicon Tubing
☐ Teflon/Silicon Tubing
☐ Airlift
☐ Hand Pump
☐ In-line Filter
☐ Press/Vac Filter

Disp. Sample

☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☒ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☒ None for Baiters

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected _____ In-line _____ Turbid _____ Clear _____ Cloudy
 _____ In Container _____ Colored _____ Odor

Purge Data	0	1.5	3		
Temperature, Deg. C	8.8	8.5	10.1		
pH, units	7.3	7.9	7.9		
Specific Conductivity (umhos/cm. @ 25 Deg. C.)	550	500	500		
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm					
TURBIDITY (NTU)	NR	NR	NR		

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA			40 mL X 2		10:50
BVA			80 mL		11:53
Post / PCB			80 mL		12:15
Inorganics		HNO ₃	3 L		1:00

Notes: Turbidity
Temp 22C

GROUNDWATER FIELD SAMPLE DATA RECORD

Water Level/Well Data

Equipment Documentation

Decontamination Fluids Used:

☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☒ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☒ None for Butlers

Field Analysis Data

Purge Data	0 Gal.	1.5 Gal.	3 Gal.	Gal.	Gal.
Temperature, Deg. C	8.9	9.4	10.4		
pH, units	7.6	7.6	7.5		
Specific Conductivity (umhos/cm. @ 25 Deg. C.)	4250	4630	5000		
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm					
TURBIDITY (NTU)	NR	NR	NR		

Sample Collection Requirements (✓ If Required at this Location)

Notes: Floating Product - Very small amt. - small
MS/MSD This Sample
H₂O - ≥ 30 ppm @ bucket

GROUNDWATER FIELD SAMPLE DATA RECORD

Number: 8-28-088 Site: Davis-Hawland Oil Corp.
 Sample Location ID: CHI-5 No Sample Date: _____
 Time: Start: _____ End: _____ Signature of Sampler: _____

Water Level/Well Data

Well Depth 10 Ft. ☐ Measured ☒ Top of Well Well Riser Stick-up _____ Ft. Protective _____ Ft.
☒ Historical ☐ Top of Protective Casing (from ground) Casing/Well Difference
 Depth to Water _____ Ft. Well Material: _____ Well Locked?: ☒ 2 inch Water Level Equip. Used:
☐ PVC ☐ Yes _____ 4 inch ☒ Elect. Cond. Probe
☐ SS ☐ No _____ 6 inch _____ Float Activated
 Height of Water Column _____ Ft. _____ Ga/Ft (2 in.) _____ Ga/Vol Well Integrity: Yes No
 _____ Ga/Ft (4 in.) _____ Total Gal Purged Prot. Casing Secure _____
 _____ Ga/Ft (6 in.) _____ Concrete Collar Intact _____
 _____ Ga/Ft (in.) _____ Other _____

Equipment Documentation

Purging/Sampling Equipment Used: **Decontamination Fluids Used:**
 (✓ If Used For) (✓ All That Apply at Location)
 Purging Sampling Equipment ID
☐ Peristaltic Pump _____
☒ Submersible Pump Disposal
☐ Bailer _____
☐ PVC/Silicon Tubing _____
☐ Teflon/Silicon Tubing _____
☐ Airlift _____
☐ Hand Pump _____
☐ In-line Filter _____
☐ Press/Vac Filter _____
☐ Methanol (100%) _____
☐ 25% Methanol/75% ASTM Type II water _____
☒ Deionized Water _____
☒ Liquinox Solution _____
☐ Hexane _____
☐ HNO₃/D.I. Water Solution _____
☐ Potable Water _____
☒ None for Baiters _____

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected _____ In-line _____ Sample Observations:
 _____ In Container _____ Turbid _____ Clear _____ Cloudy
 _____ Colored _____ Odor
 Purge Data _____ Gal. _____ Gal. _____ Gal. _____ Gal. _____ Gal.
 Temperature, Deg. C _____
 pH, units _____
 Specific Conductivity _____
 (umhos/cm. @ 25 Deg. C.) _____
 Oxidation - Reduction, +/- mv _____
 Dissolved Oxygen, ppm _____
TURBIDITY (NTU)

Sample Collection Requirements
 (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
<u>VOA</u>			<u>40 mL X 2</u>		
<u>BNA</u>			<u>80 mL</u>		
<u>Post / PCB</u>			<u>80 mL</u>		
<u>Isoprenoids</u>		<u>HNO₃</u>	<u>1 L</u>		
Notes: <u>Bailer stuck in well.</u>					
<u>No sample</u>					

GROUNDWATER FIELD SAMPLE DATA RECORD

Number: 8-28-088 Site: Davis-Hawland Oil Corp.
 Date: 12/14/94
 Sample Location ID: CHI-6 B237-05 + B237-06
 Time: Start: _____ End: _____ Signature of Sampler: _____

Water Level/Well Data

Well Depth 10 Ft. ☒ Measured ☐ Top of Well ☐ Well Riser Stick-up _____ Ft. ☐ Protective _____ Ft.
☒ Historical ☐ Top of Protective Casing (from ground) ☐ Casing/Well Difference
 Depth to Water NR Ft. Well Material: _____ Well Locked?: ☐ Yes ☐ Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch ☐ Protective _____ Ft.
☐ SS ☐ No ☐ Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column ☒ .16 Gal/Vol (2 in.) ☐ .65 Gal/Vol (4 in.) = [_____ Gal/Vol Well Integrity: _____ Yes _____ No
 _____ Ft. ☐ 1.5 Gal/Vol (6 in.) ☐ _____ Total Gal Purged Prot. Casing Secure _____
☐ _____ Gal/Vol (_____ in.) ☐ _____ Concrete Collar Intact _____
☐ _____ Other _____

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)
 Purging _____ Sampling _____
☒ ☒ Peristaltic Pump
☐ ☐ Submersible Pump
☐ ☐ Bailer Disposal
☐ ☐ PVC/Silicon Tubing
☐ ☐ Teflon/Silicon Tubing
☐ ☐ Airlift
☐ ☐ Hand Pump
☐ ☐ In-line Filter
☐ ☐ Press/Vac Filter
 Equipment ID _____

Decontamination Fluids Used:

(✓ All That Apply at Location)
☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☒ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☒ None for Baiters

Field Analysis Data

Ambient Air VOC _____ ppm Well Mouth _____ ppm Field Data Collected ☐ In-line ☐ Turbid ☐ Clear ☐ Cloudy
☐ In Container ☐ Colored ☐ Odor
 Purge Data _____ Gal. _____ Gal. _____ Gal. _____ Gal. _____ Gal.
 Temperature, Deg. C _____
 pH, units _____
 Specific Conductivity _____
 (umhos/cm. @ 25 Deg. C.) _____
 Oxidation - Reduction, +/- mv _____
 Dissolved Oxygen, ppm _____
TURBIDITY (NTU)

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA			40 mL X2		B23706 12:27
BNA			80 mL		B23705 12:30
Post/PCB			80 mL		B23706 12:40
Isotignics		HNO ₃	4 L		

Notes: Only first 2 quite thick floatings in well. Product layer > 1'
Two sets of samples collected. Floating product layer (B23705)
and water sample B237-06

APPENDIX B

1992 GROUNDWATER SAMPLE RESULTS Results from Clean Harbors of Kingston

VOLATILE ORGANIC COMPOUNDS
GROUNDWATER ANALYSIS
DAVIS HOWLAND OIL COMPANY
200 ANDERSON AVENUE
ROCHESTER, NEW YORK

COMPOUND	CHI-1	CHI-2	CHI-3	CHI-4	CHI-5	CHI-6	REGULATORY LEVELS
ACETONE	1,800	12,000	TRACE	ND	8,800	9,100	NL
1,1-DICHLOROETHANE	1,100	ND	ND	ND	ND	ND	5
1,1-DICHLOROETHENE	520	ND	ND	ND	ND	ND	5
TRANS-1,2-DICHLOROETHENE	ND	2,700	85,000	TRACE	610	620	5
ETHYLBENZENE	2,200	960	ND	ND	ND	ND	5
METHYLENE CHLORIDE	820	ND	26,000	120,000	ND	ND	5
TETRA CHLOROETHENE	ND	ND	ND	ND	880	850	5
TOLUENE	3,800	3,000	ND	ND	2,800	2,700	5
1,1-TRICHLOROETHANE	8,300	ND	ND	49,000	850	850	5
TRICHLOROETHENE	2,000	ND	200,000	490,000	1,500	1,600	5
XYLENES	14,000	2,100	ND	ND	670	680	5

NOTES:

1. ALL RESULTS IN PARTS PER BILLION
2. ND-NONE DETECTED
3. TRACE-COMPOUND PRESENT BUT BELOW METHOD DETECTION LIMITS
4. NL-NO REGULATORY LEVEL LISTED FOR THIS COMPOUND
5. REGUALTORY LEVELS OBTAINED FROM " NEW YORK STATE AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES"
REVISED ON SEPTEMBER 25, 1990.
6. GROUNDWATER CLASS "GA" REGULATORY LEVELS ARE GIVEN.

TOTAL METAL ANALYSIS
GROUNDWATER
DAVIS HOWLAND OIL COMPANY
200 ANDERSON AVENUE
ROCHESTER, NEW YORK

METAL	CHI-1	CHI-2	CHI-3	CHI-4	CHI-5	CHI-6	REGULATORY LEVELS
ARSENIC	ND	ND	ND	ND	ND	ND	25
BARIUM	2.5	0.47	0.26	0.08	0.26	0.29	1000
CADMIUM	ND	ND	0.04	ND	ND	ND	10
CHROMIUM	0.32	0.03	0.02	ND	ND	0.01	50
LEAD	4.6	ND	ND	ND	ND	ND	25
MERCURY	0.0034	0.0003	0.0004	ND	0.0004	0.0003	2
SELENIUM	ND	ND	ND	ND	ND	ND	10
SILVER	ND	ND	ND	ND	ND	3.3	50

NOTES:

1. RESULTS FROM CHI-1 THROUGH CHI-6 REPORTED IN PARTS PER MILLION
2. ND-NONE DETECTED
3. REGULATORY LEVELS ARE IN PARTS PER BILLION

APPENDIX C

PARTIAL COPY OF SAMPLE RESULTS



ecology and environment, inc.

International Specialists in the Environment

ANALYTICAL SERVICES CENTER

4493 Walden Avenue

Lancaster, New York 14086

Tel. (716) 685-8080, Fax: (716) 685-0852

January 13, 1995

LAB NAME: Ecology and Environment, Inc.

CASE NUMBER: RB094

SDG NUMBER: 1214

CONTRACT NUMBER: C003181

SAMPLES IN SDG: B23701 B23702 B23703
B23704 B23705 B23706

SDG NARRATIVE:

Enclosed are the analytical results for samples received at the Analytical Services Center on December 15, 1994. The samples were analyzed for the following parameters according to NYSDEC Analytical Services Protocol, September 1989, Revision 12/91:

Volatiles	Method 91-1/8240
Semivolatiles	Method 91-2/8270
Pesticide/PCB	Method 91-3
TAL Metals	Method CLP-M

Based on the amount of mass spectral information available, the GC/MS computer is not always able to supply three matches for the unknown.

As requested, the liquid product from sample B23705 was analyzed only. This matrix was inappropriate for organic CLP analyses. The sample was diluted in solvent and directly injected into the GC/MS instrument's and then analyzed for volatile and semi-volatile compounds.

VOLATILES

All aqueous samples except the trip blank were determined to have a pH of 6 s.u. The trip blank was determined to have a pH of 2 s.u.

The required storage blank is labeled STORAGE BLK of all appropriate forms. The storage blank was analyzed after contract required hold time had expired.

Case Narrative

NYSDEC

SDG # 1214

Page 2 of 3

The level of target compounds present made analysis of samples B23701, B23703, and B23704 without dilution inappropriate. The matrix of sample B23705 necessitated analysis of the methanol extract at an additional dilution.

The level of 1,2-dichloroethene detected in sample B23702 exceeded the instrument's calibrated range. The sample was reanalyzed at a secondary dilution. Results from both analyses are included in this report.

SEMIVOLATILES

Sample B23701 was analyzed at a 5-fold dilution. As evidenced by the chromatogram, the matrix of this sample made analysis without dilution inappropriate. All surrogate recoveries reported have been flagged "D".

Internal standard area response criterion was not met for sample B23704 and the method blank SBLKW1. The sample and blank were reanalyzed. Area responses were then acceptable for the method blank but similar responses outside of the QC limits were achieved for the sample. A matrix effect is indicated.

Sample B23705 was analyzed as direct injection. Surrogate compounds were not added to the sample. Internal standard area response criterion was not met. The sample was reanalyzed at a secondary dilution with acceptable area responses. A matrix effect is indicated.

Only 500 mLs was available for matrix spike/spike duplicate (MS/MSD) analysis. Quantitation limits reported have been elevated accordingly.

Several of the early eluting peaks in the semi-volatile fractions of sample B23701, B23702, and B23703 are volatile compounds. Results for these compounds are reported in the volatile section and these peaks were not considered as tentatively identified compounds (TICs).

Toluene, tetrachloroethene, and ethylbenzene were detected in the semi-volatile fraction of B23704 but not in the volatile fraction due to the dilution which was required for successful analysis. The compounds are reported as semi-volatile TICs.

Spectra for several compounds include mass ions of the matrix background. This background interference could not be eliminated by subtraction.

Method blanks SBLKW1 and SBLKW2 contained TICs. The reported TICs do not interfere with the quantitation of any of the target compounds.

Case Narrative

NYSDEC

SDG # 1214

Page 3 of 3

PESTICIDE/PCB

Several samples did not meet the current advisory surrogate recovery criterion. Sample matrix is suspected. No further action is required.

The "X" flag indicates a compound in a breakdown product of endrin. Due to breakdown endrin recovery for the matrix spike blank (MSB) is low at 34%. All other spike recoveries for the MSB and all recoveries for the MS/MSD were acceptable.

Limited volume was available for the MS/MSD analysis. Quantitation limits reported have been elevated accordingly.

Metals

Selenium quantitation limits reported for samples B23701, B23702, B23704, and B23706 have been elevated based on the post-digestion analytical spike recoveries. A matrix interference is indicated.

Barium, cobalt, chromium, nickel, potassium, vanadium, and zinc values for all aqueous samples have been flagged "E" based on the serial dilution results. A matrix interference is indicated.

Sample matrix interference is also suspected in adversely affecting matrix spike recoveries.

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 the Manager's designee, as verified by the following signature.

Gary Hahn
for

Gary Hahn - Manager
Analytical Services Center
January 13, 1995

cc: Martin Doyle
Albany

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23701

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D4419

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 100.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	1000	U
74-83-9	Bromomethane	1000	U
75-01-4	Vinyl Chloride	1500	
75-00-3	Chloroethane	1000	U
75-09-2	Methylene Chloride	1000	U
67-64-1	Acetone	1000	U
75-15-0	Carbon Disulfide	1000	U
75-35-4	1,1-Dichloroethene	1000	U
75-34-3	1,1-Dichloroethane	1400	
540-59-0	1,2-Dichloroethene (total)	13000	
67-66-3	Chloroform	1000	U
107-06-2	1,2-Dichloroethane	1000	U
78-93-3	2-Butanone	1000	U
71-55-6	1,1,1-Trichloroethane	2800	
56-23-5	Carbon Tetrachloride	1000	U
75-27-4	Bromodichloromethane	1000	U
78-87-5	1,2-Dichloropropane	1000	U
10061-01-5	cis-1,3-Dichloropropene	1000	U
79-01-6	Trichloroethene	1000	U
124-48-1	Dibromochloromethane	1000	U
79-00-5	1,1,2-Trichloroethane	1000	U
71-43-2	Benzene	1000	U
10061-02-6	trans-1,3-Dichloropropene	1000	U
75-25-2	Bromoform	1000	U
108-10-1	4-Methyl-2-Pentanone	1000	U
591-78-6	2-Hexanone	1000	U
127-18-4	Tetrachloroethene	1000	U
79-34-5	1,1,2,2-Tetrachloroethane	1000	U
108-88-3	Toluene	2700	
108-90-7	Chlorobenzene	1000	U
100-41-4	Ethylbenzene	2300	
100-42-5	Styrene	1000	U
1330-20-7	Xylene (total)	11000	

FORM I VOA

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23701

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D4419

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 100.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.12	500	J
2.	ETHYLMETHYLBENZENE ISOMER	21.33	1600	J
3.	PROPYLBENZENE ISOMER	21.59	700	J
4.	ETHYLMETHYLBENZENE ISOMER	22.02	600	J
5.	TRIMETHYLBENZENE ISOMER	22.47	2100	J
6.	ETHYLMETHYLBENZENE ISOMER	23.37	700	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23702

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix: (soil/water) WATER Lab Sample ID: 19245

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4420

Level: (low/med) LOW Date Received: 12/15/94

% Moisture: not dec. Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm) Dilution Factor: 100.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	1000	U
74-83-9-----	Bromomethane	1000	U
75-01-4-----	Vinyl Chloride	4900	
75-00-3-----	Chloroethane	1000	U
75-09-2-----	Methylene Chloride	1000	U
67-64-1-----	Acetone	1000	U
75-15-0-----	Carbon Disulfide	1000	U
75-35-4-----	1,1-Dichloroethene	1000	U
75-34-3-----	1,1-Dichloroethane	2200	
540-59-0-----	1,2-Dichloroethene (total)	21000	E
67-66-3-----	Chloroform	1000	U
107-06-2-----	1,2-Dichloroethane	1000	U
78-93-3-----	2-Butanone	1000	U
71-55-6-----	1,1,1-Trichloroethane	1000	U
56-23-5-----	Carbon Tetrachloride	1000	U
75-27-4-----	Bromodichloromethane	1000	U
78-87-5-----	1,2-Dichloropropane	1000	U
10061-01-5-----	cis-1,3-Dichloropropene	1000	U
79-01-6-----	Trichloroethene	130	J
124-48-1-----	Dibromochloromethane	1000	U
79-00-5-----	1,1,2-Trichloroethane	1000	U
71-43-2-----	Benzene	1000	U
10061-02-6-----	trans-1,3-Dichloropropene	1000	U
75-25-2-----	Bromoform	1000	U
108-10-1-----	4-Methyl-2-Pentanone	1000	U
591-78-6-----	2-Hexanone	1000	U
127-18-4-----	Tetrachloroethene	1000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1000	U
108-88-3-----	Toluene	650	J
108-90-7-----	Chlorobenzene	1000	U
100-41-4-----	Ethylbenzene	300	J
100-42-5-----	Styrene	1000	U
1330-20-7-----	Xylene (total)	790	J

FORM I VOA

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23702

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D4420

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 100.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23702DL

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245DL

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0613

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 200.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	2000	U
74-83-9-----	Bromomethane	2000	U
75-01-4-----	Vinyl Chloride	2100	D
75-00-3-----	Chloroethane	2000	U
75-09-2-----	Methylene Chloride	2000	U
67-64-1-----	Acetone	2000	U
75-15-0-----	Carbon Disulfide	2000	U
75-35-4-----	1,1-Dichloroethene	2000	U
75-34-3-----	1,1-Dichloroethane	1200	DJ
540-59-0-----	1,2-Dichloroethene (total)	25000	D
67-66-3-----	Chloroform	2000	U
107-06-2-----	1,2-Dichloroethane	2000	U
78-93-3-----	2-Butanone	2000	U
71-55-6-----	1,1,1-Trichloroethane	2000	U
56-23-5-----	Carbon Tetrachloride	2000	U
75-27-4-----	Bromodichloromethane	2000	U
78-87-5-----	1,2-Dichloropropane	2000	U
10061-01-5-----	cis-1,3-Dichloropropene	2000	U
79-01-6-----	Trichloroethene	2000	U
124-48-1-----	Dibromochloromethane	2000	U
79-00-5-----	1,1,2-Trichloroethane	2000	U
71-43-2-----	Benzene	2000	U
10061-02-6-----	trans-1,3-Dichloropropene	2000	U
75-25-2-----	Bromoform	2000	U
108-10-1-----	4-Methyl-2-Pentanone	2000	U
591-78-6-----	2-Hexanone	2000	U
127-18-4-----	Tetrachloroethene	2000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	2000	U
108-88-3-----	Toluene	400	DJ
108-90-7-----	Chlorobenzene	2000	U
100-41-4-----	Ethylbenzene	270	DJ
100-42-5-----	Styrene	2000	U
1330-20-7-----	Xylene (total)	390	DJ

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23702DL

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245DL

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0613

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 200.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23703

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19246

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D4421

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 100.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	1000	U
74-83-9-----	Bromomethane	1000	U
75-01-4-----	Vinyl Chloride	1000	U
75-00-3-----	Chloroethane	1000	U
75-09-2-----	Methylene Chloride	1000	U
67-64-1-----	Acetone	1000	U
75-15-0-----	Carbon Disulfide	1000	U
75-35-4-----	1,1-Dichloroethene	1000	U
75-34-3-----	1,1-Dichloroethane	1000	U
540-59-0-----	1,2-Dichloroethene (total)	15000	
67-66-3-----	Chloroform	1000	U
107-06-2-----	1,2-Dichloroethane	1000	U
78-93-3-----	2-Butanone	1000	U
71-55-6-----	1,1,1-Trichloroethane	1000	U
56-23-5-----	Carbon Tetrachloride	1000	U
75-27-4-----	Bromodichloromethane	1000	U
78-87-5-----	1,2-Dichloropropane	1000	U
10061-01-5-----	cis-1,3-Dichloropropene	1000	U
79-01-6-----	Trichloroethene	2200	
124-48-1-----	Dibromochloromethane	1000	U
79-00-5-----	1,1,2-Trichloroethane	1000	U
71-43-2-----	Benzene	1000	U
10061-02-6-----	trans-1,3-Dichloropropene	1000	U
75-25-2-----	Bromoform	1000	U
108-10-1-----	4-Methyl-2-Pentanone	1000	U
591-78-6-----	2-Hexanone	1000	U
127-18-4-----	Tetrachloroethene	1000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1000	U
108-88-3-----	Toluene	1000	U
108-90-7-----	Chlorobenzene	1000	U
100-41-4-----	Ethylbenzene	1000	U
100-42-5-----	Styrene	1000	U
1330-20-7-----	Xylene (total)	1000	U

FORM I VOA

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23703

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19246

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: D4421

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/16/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 100.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0614

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1000.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	10000	U
74-83-9-----	Bromomethane	10000	U
75-01-4-----	Vinyl Chloride	10000	U
75-00-3-----	Chloroethane	10000	U
75-09-2-----	Methylene Chloride	7100	J
67-64-1-----	Acetone	5100	J
75-15-0-----	Carbon Disulfide	10000	U
75-35-4-----	1,1-Dichloroethene	1100	J
75-34-3-----	1,1-Dichloroethane	10000	U
540-59-0-----	1,2-Dichloroethene (total)	54000	
67-66-3-----	Chloroform	10000	U
107-06-2-----	1,2-Dichloroethane	10000	U
78-93-3-----	2-Butanone	10000	U
71-55-6-----	1,1,1-Trichloroethane	5700	J
56-23-5-----	Carbon Tetrachloride	10000	U
75-27-4-----	Bromodichloromethane	10000	U
78-87-5-----	1,2-Dichloropropane	10000	U
10061-01-5-----	cis-1,3-Dichloropropene	10000	U
79-01-6-----	Trichloroethene	75000	
124-48-1-----	Dibromochloromethane	10000	U
79-00-5-----	1,1,2-Trichloroethane	10000	U
71-43-2-----	Benzene	10000	U
10061-02-6-----	trans-1,3-Dichloropropene	10000	U
75-25-2-----	Bromoform	10000	U
108-10-1-----	4-Methyl-2-Pentanone	10000	U
591-78-6-----	2-Hexanone	10000	U
127-18-4-----	Tetrachloroethene	10000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10000	U
108-88-3-----	Toluene	10000	U
108-90-7-----	Chlorobenzene	10000	U
100-41-4-----	Ethylbenzene	10000	U
100-42-5-----	Styrene	10000	U
1330-20-7-----	Xylene (total)	10000	U

FORM I VOA

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23704

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0614

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1000.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23705

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: H0618

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 10.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 10 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
---------	----------	---	---

74-87-3-----	Chloromethane	120000	U
74-83-9-----	Bromomethane	120000	U
75-01-4-----	Vinyl Chloride	120000	U
75-00-3-----	Chloroethane	120000	U
75-09-2-----	Methylene Chloride	120000	U
67-64-1-----	Acetone	120000	U
75-15-0-----	Carbon Disulfide	120000	U
75-35-4-----	1,1-Dichloroethene	120000	U
75-34-3-----	1,1-Dichloroethane	120000	U
540-59-0-----	1,2-Dichloroethene (total)	120000	U
67-66-3-----	Chloroform	120000	U
107-06-2-----	1,2-Dichloroethane	120000	U
78-93-3-----	2-Butanone	120000	U
71-55-6-----	1,1,1-Trichloroethane	1000000	
56-23-5-----	Carbon Tetrachloride	120000	U
75-27-4-----	Bromodichloromethane	120000	U
78-87-5-----	1,2-Dichloropropane	120000	U
10061-01-5-----	cis-1,3-Dichloropropene	120000	U
79-01-6-----	Trichloroethene	120000	U
124-48-1-----	Dibromochloromethane	120000	U
79-00-5-----	1,1,2-Trichloroethane	120000	U
71-43-2-----	Benzene	120000	U
10061-02-6-----	trans-1,3-Dichloropropene	120000	U
75-25-2-----	Bromoform	120000	U
108-10-1-----	4-Methyl-2-Pentanone	120000	U
591-78-6-----	2-Hexanone	120000	U
127-18-4-----	Tetrachloroethene	120000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	120000	U
108-88-3-----	Toluene	120000	U
108-90-7-----	Chlorobenzene	120000	U
100-41-4-----	Ethylbenzene	120000	U
100-42-5-----	Styrene	120000	U
1330-20-7-----	Xylene (total)	120000	U

FORM I VOA

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23705

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: H0618

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 10.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 10 (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23706

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0617

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

74-87-3-----	Chloromethane	200	U
74-83-9-----	Bromomethane	200	U
75-01-4-----	Vinyl Chloride	200	U
75-00-3-----	Chloroethane	200	U
75-09-2-----	Methylene Chloride	200	U
67-64-1-----	Acetone	200	U
75-15-0-----	Carbon Disulfide	200	U
75-35-4-----	1,1-Dichloroethene	200	U
75-34-3-----	1,1-Dichloroethane	290	
540-59-0-----	1,2-Dichloroethene (total)	200	U
67-66-3-----	Chloroform	200	U
107-06-2-----	1,2-Dichloroethane	200	U
78-93-3-----	2-Butanone	200	U
71-55-6-----	1,1,1-Trichloroethane	3900	
56-23-5-----	Carbon Tetrachloride	200	U
75-27-4-----	Bromodichloromethane	200	U
78-87-5-----	1,2-Dichloropropane	200	U
10061-01-5-----	cis-1,3-Dichloropropene	200	U
79-01-6-----	Trichloroethene	200	U
124-48-1-----	Dibromochloromethane	200	U
79-00-5-----	1,1,2-Trichloroethane	200	U
71-43-2-----	Benzene	200	U
10061-02-6-----	trans-1,3-Dichloropropene	200	U
75-25-2-----	Bromoform	200	U
108-10-1-----	4-Methyl-2-Pentanone	200	U
591-78-6-----	2-Hexanone	200	U
127-18-4-----	Tetrachloroethene	200	U
79-34-5-----	1,1,2,2-Tetrachloroethane	200	U
108-88-3-----	Toluene	200	U
108-90-7-----	Chlorobenzene	200	U
100-41-4-----	Ethylbenzene	200	U
100-42-5-----	Styrene	200	U
1330-20-7-----	Xylene (total)	200	U

FORM I VOA

3/90

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23706

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0617

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 20.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704MS

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MS

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0615

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1000.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3-----	Chloromethane	10000	U
74-83-9-----	Bromomethane	10000	U
75-01-4-----	Vinyl Chloride	10000	U
75-00-3-----	Chloroethane	10000	U
75-09-2-----	Methylene Chloride	6700	J
67-64-1-----	Acetone	4700	J
75-15-0-----	Carbon Disulfide	10000	U
75-35-4-----	1,1-Dichloroethene	50000	
75-34-3-----	1,1-Dichloroethane	10000	U
540-59-0-----	1,2-Dichloroethene (total)	51000	
67-66-3-----	Chloroform	10000	U
107-06-2-----	1,2-Dichloroethane	10000	U
78-93-3-----	2-Butanone	10000	U
71-55-6-----	1,1,1-Trichloroethane	5000	J
56-23-5-----	Carbon Tetrachloride	10000	U
75-27-4-----	Bromodichloromethane	10000	U
78-87-5-----	1,2-Dichloropropane	10000	U
10061-01-5-----	cis-1,3-Dichloropropene	10000	U
79-01-6-----	Trichloroethene	120000	
124-48-1-----	Dibromochloromethane	10000	U
79-00-5-----	1,1,2-Trichloroethane	10000	U
71-43-2-----	Benzene	50000	
10061-02-6-----	trans-1,3-Dichloropropene	10000	U
75-25-2-----	Bromoform	10000	U
108-10-1-----	4-Methyl-2-Pentanone	10000	U
591-78-6-----	2-Hexanone	10000	U
127-18-4-----	Tetrachloroethene	10000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10000	U
108-88-3-----	Toluene	50000	
108-90-7-----	Chlorobenzene	50000	
100-41-4-----	Ethylbenzene	10000	U
100-42-5-----	Styrene	10000	U
1330-20-7-----	Xylene (total)	10000	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704MSD

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MSD

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: H0616

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: not dec.

Date Analyzed: 12/21/94

GC Column: VOCOL ID: 0.530 (mm)

Dilution Factor: 1000.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

74-87-3-----	Chloromethane	10000	U
74-83-9-----	Bromomethane	10000	U
75-01-4-----	Vinyl Chloride	10000	U
75-00-3-----	Chloroethane	10000	U
75-09-2-----	Methylene Chloride	6700	J
67-64-1-----	Acetone	4400	J
75-15-0-----	Carbon Disulfide	10000	U
75-35-4-----	1,1-Dichloroethene	48000	
75-34-3-----	1,1-Dichloroethane	10000	U
540-59-0-----	1,2-Dichloroethene (total)	49000	
67-66-3-----	Chloroform	10000	U
107-06-2-----	1,2-Dichloroethane	10000	U
78-93-3-----	2-Butanone	10000	U
71-55-6-----	1,1,1-Trichloroethane	4800	J
56-23-5-----	Carbon Tetrachloride	10000	U
75-27-4-----	Bromodichloromethane	10000	U
78-87-5-----	1,2-Dichloropropane	10000	U
10061-01-5-----	cis-1,3-Dichloropropene	10000	U
79-01-6-----	Trichloroethene	110000	
124-48-1-----	Dibromochloromethane	10000	U
79-00-5-----	1,1,2-Trichloroethane	10000	U
71-43-2-----	Benzene	48000	
10061-02-6-----	trans-1,3-Dichloropropene	10000	U
75-25-2-----	Bromoform	10000	U
108-10-1-----	4-Methyl-2-Pentanone	10000	U
591-78-6-----	2-Hexanone	10000	U
127-18-4-----	Tetrachloroethene	10000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10000	U
108-88-3-----	Toluene	48000	
108-90-7-----	Chlorobenzene	49000	
100-41-4-----	Ethylbenzene	10000	U
100-42-5-----	Styrene	10000	U
1330-20-7-----	Xylene (total)	10000	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23701

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5036

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 5.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

108-95-2-----	Phenol	50	U
111-44-4-----	bis(2-Chloroethyl) Ether	50	U
95-57-8-----	2-Chlorophenol	50	U
541-73-1-----	1,3-Dichlorobenzene	50	U
106-46-7-----	1,4-Dichlorobenzene	50	U
95-50-1-----	1,2-Dichlorobenzene	50	U
95-48-7-----	2-Methylphenol	11	J
108-60-1-----	2,2'-oxybis(1-Chloropropane)	50	U
106-44-5-----	4-Methylphenol	26	J
621-64-7-----	N-Nitroso-Di-n-Propylamine	50	U
67-72-1-----	Hexachloroethane	50	U
98-95-3-----	Nitrobenzene	50	U
78-59-1-----	Isophorone	50	U
88-75-5-----	2-Nitrophenol	50	U
105-67-9-----	2,4-Dimethylphenol	73	
111-91-1-----	bis(2-Chloroethoxy) Methane	50	U
120-83-2-----	2,4-Dichlorophenol	50	U
120-82-1-----	1,2,4-Trichlorobenzene	50	U
91-20-3-----	Naphthalene	240	
106-47-8-----	4-Chloroaniline	50	U
87-68-3-----	Hexachlorobutadiene	50	U
59-50-7-----	4-Chloro-3-Methylphenol	50	U
91-57-6-----	2-Methylnaphthalene	200	
77-47-4-----	Hexachlorocyclopentadiene	50	U
88-06-2-----	2,4,6-Trichlorophenol	50	U
95-95-4-----	2,4,5-Trichlorophenol	120	U
91-58-7-----	2-Chloronaphthalene	50	U
88-74-4-----	2-Nitroaniline	120	U
131-11-3-----	Dimethylphthalate	50	U
208-96-8-----	Acenaphthylene	50	U
606-20-2-----	2,6-Dinitrotoluene	50	U
99-09-2-----	3-Nitroaniline	120	U
83-32-9-----	Acenaphthene	50	U

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23701

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5036

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0(uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N

pH: 6.9

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

CAS NO.

COMPOUND

Q

51-28-5-----	2,4-Dinitrophenol	120	U
100-02-7-----	4-Nitrophenol	120	U
132-64-9-----	Dibenzofuran	50	U
121-14-2-----	2,4-Dinitrotoluene	50	U
84-66-2-----	Diethylphthalate	50	U
7005-72-3-----	4-Chlorophenyl-phenylether	50	U
86-73-7-----	Fluorene	50	U
100-01-6-----	4-Nitroaniline	120	U
534-52-1-----	4,6-Dinitro-2-methylphenol	120	U
86-30-6-----	N-Nitrosodiphenylamine (1)	50	U
101-55-3-----	4-Bromophenyl-phenylether	50	U
118-74-1-----	Hexachlorobenzene	50	U
87-86-5-----	Pentachlorophenol	120	U
85-01-8-----	Phenanthrene	50	U
120-12-7-----	Anthracene	50	U
86-74-8-----	Carbazole	50	U
84-74-2-----	Di-n-Butylphthalate	50	U
206-44-0-----	Fluoranthene	50	U
129-00-0-----	Pyrene	50	U
85-68-7-----	Butylbenzylphthalate	50	U
91-94-1-----	3,3'-Dichlorobenzidine	50	U
56-55-3-----	Benzo(a)Anthracene	50	U
218-01-9-----	Chrysene	50	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	14	J
117-84-0-----	Di-n-Octyl Phthalate	50	U
205-99-2-----	Benzo(b) Fluoranthene	50	U
207-08-9-----	Benzo(k) Fluoranthene	50	U
50-32-8-----	Benzo(a) Pyrene	50	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	50	U
53-70-3-----	Dibenz(a,h) Anthracene	50	U
191-24-2-----	Benzo(g,h,i) Perylene	50	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23701

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5036

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) N

pH: 6.9

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
1. 10-36-51	Propylbenzene	7.68	140	JN
2.	ETHYLMETHYLBENZENE ISOMER	7.94	550	J
3.	TRIMETHYLBENZENE ISOMER	8.16	360	J
4.	ETHYLMETHYLBENZENE ISOMER	8.34	290	J
5.	TRIMETHYLBENZENE ISOMER	9.37	340	J
6. 49-61-17	2,3-Dihydro-1H-Indene	9.64	140	JN
7.	METHYLPROPYLBENZENE ISOMER	10.11	180	J
8.	DIETHYLBENZENE ISOMER	10.23	240	J
9.	METYLPROPYLBENZENE ISOMER	11.55	55	J
10.	ETHYLDIMETHYLBENZENE ISOMER	11.61	70	J
11.	UNKNOWN	11.98	60	J
12.	UNKNOWN	12.16	85	J
13.	DIMETHYLINDENE ISOMER	13.13	49	J
14.	UNKNOWN	14.72	38	J
15. 90-12-0	1-Methylnaphthalene	15.29	80	JN
16.	UNKNOWN	20.98	500	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23702

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5037

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.0

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	7	J
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	12	
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	6	J
111-91-1-----	bis(2-Chloroethoxy) Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	3	J
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23702

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214
Matrix: (soil/water) WATER Lab Sample ID: 19245
Sample wt/vol: 1000 (g/mL) ML Lab File ID: B5037
Level: (low/med) LOW Date Received: 12/15/94
% Moisture: decanted: (Y/N) Date Extracted: 12/16/94
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/30/94
Injection Volume: 2.0(uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a) Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b) Fluoranthene	10	U
207-08-9-----	Benzo(k) Fluoranthene	10	U
50-32-8-----	Benzo(a) Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	10	U
53-70-3-----	Dibenz(a,h) Anthracene	10	U
191-24-2-----	Benzo(g,h,i) Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23702

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5037

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 17

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ETHYLMETHYLBENZENE ISOMER	7.86	12	J
2.	UNKNOWN	10.00	170	J
3.	UNKNOWN	12.65	70	J
4.	UNKNOWN	13.49	80	J
5.	UNKNOWN	13.59	20	J
6.	UNKNOWN	14.58	22	J
7.	UNKNOWN	15.23	18	J
8.	UNKNOWN	15.51	14	J
9.	UNKNOWN	16.95	17	J
10.	UNKNOWN	17.33	23	J
11.	UNKNOWN	17.93	31	J
12. 77-04-349	Sulfur (S6)	18.54	16	JN
13.	UNKNOWN	18.84	20	J
14.	UNKNOWN	21.50	160	J
15.	UNKNOWN	22.01	25	J
16.	UNKNOWN	22.13	14	J
17. 10-54-4500	Molecular Sulfur	26.13	20	JN

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23703

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214
Matrix: (soil/water) WATER Lab Sample ID: 19246
Sample wt/vol: 1000 (g/mL) ML Lab File ID: B5038
Level: (low/med) LOW Date Received: 12/15/94
% Moisture: decanted: (Y/N) Date Extracted: 12/16/94
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/30/94
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.5

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy) Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23703

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214
Matrix: (soil/water) WATER Lab Sample ID: 19246
Sample wt/vol: 1000 (g/mL) ML Lab File ID: B5038
Level: (low/med) LOW Date Received: 12/15/94
% Moisture: decanted: (Y/N) Date Extracted: 12/16/94
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/30/94
Injection Volume: 2.0 (uL) Dilution Factor: 1.0
GPC Cleanup: (Y/N) N pH: 7.5

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

CAS NO.

COMPOUND

Q

51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a) Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b) Fluoranthene	10	U
207-08-9-----	Benzo(k) Fluoranthene	10	U
50-32-8-----	Benzo(a) Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	10	U
53-70-3-----	Dibenz(a,h) Anthracene	10	U
191-24-2-----	Benzo(g,h,i) Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS.

DEC SAMPLE NO.

B23703

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19246

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5038

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.5

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN SILOXANE	3.98	8	J
2. 12-34-22	Aldol Condensation Product	4.59	7	ABJN
3. 10-04-14	Ethylbenzene	5.05	8	JN
4.	UNKNOWN	12.34	6	J
5.	UNKNOWN	14.71	3	J
6.	UNKNOWN	16.89	34	J
7.	UNKNOWN	17.19	2	J
8.	UNKNOWN	17.56	31	J
9. 77-04-349	Sulfur (S6)	18.51	2	JN
10.	UNKNOWN	20.21	6	J
11.	UNKNOWN	21.04	6	J
12.	UNKNOWN	21.91	4	J
13.	UNKNOWN	23.07	4	J
14.	UNKNOWN	23.25	4	J
15.	UNKNOWN	23.78	6	J
16.	UNKNOWN ACID	25.35	4	J
17. 10-54-4500	Molecular Sulfur	26.08	18	JN
18.	UNKNOWN	29.51	6	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9354

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/22/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.4

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	20	
111-44-4-----	bis(2-Chloroethyl) Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	5	J
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	53	
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy) Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	2	J
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9354

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/22/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

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

CAS NO.

COMPOUND

Q

51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a) Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b) Fluoranthene	10	U
207-08-9-----	Benzo(k) Fluoranthene	10	U
50-32-8-----	Benzo(a) Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	10	U
53-70-3-----	Dibenz(a,h) Anthracene	10	U
191-24-2-----	Benzo(g,h,i) Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS.

DEC SAMPLE NO.

B23704

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: G9354

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/22/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN KETONE	1.67	100	J
2. 10-88-83	Toluene	1.87	55	JN
3.	UNKNOWN HYDROCARBON	2.07	80	J
4. 12-71-84	Tetrachloroethene	2.28	32	JN
5.	ETHYLBENZENE ISOMER	3.26	13	J
6.	ETHYLBENZENE ISOMER	3.49	26	J
7.	UNKNOWN	5.56	55	J
8.	UNKNOWN	5.77	16	J
9.	PROPYLBENZENE ISOMER	6.00	38	J
10.	PROPYLBENZENE ISOMER	6.08	22	J
11.	TRIMETHYLBENZENE ISOMER	6.23	18	J
12.	UNKNOWN	10.32	42	J
13.	UNKNOWN	12.58	50	J
14.	UNKNOWN	13.60	22	J
15.	UNKNOWN ACID	14.40	100	J
16.	UNKNOWN	16.99	26	J
17.	UNKNOWN	17.86	47	J
18.	UNKNOWN	17.94	34	J
19.	UNKNOWN	19.83	26	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704RE

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247RE

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5043

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.4

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

108-95-2-----	Phenol	16	
111-44-4-----	bis(2-Chloroethyl) Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	5	J
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	62	
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy) Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	2	J
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704RE

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247RE

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5043

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.4

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

CAS NO.

COMPOUND

Q

51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	10	U
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	10	U
129-00-0-----	Pyrene	10	U
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo (a) Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis (2-Ethylhexyl) Phthalate	10	U
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo (b) Fluoranthene	10	U
207-08-9-----	Benzo (k) Fluoranthene	10	U
50-32-8-----	Benzo (a) Pyrene	10	U
193-39-5-----	Indeno (1,2,3-cd) Pyrene	10	U
53-70-3-----	Dibenz (a,h) Anthracene	10	U
191-24-2-----	Benzo (g,h,i) Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

DEC SAMPLE NO.

B23704RE

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247RE

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5043

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	2.91	32	J
2. 12-71-84	Tetrachloroethene	3.44	22	JN
3. 10-04-14	Ethylbenzene	5.04	8	JN
4.	UNKNOWN	7.47	32	J
5.	UNKNOWN	7.70	12	J
6.	ETHYLMETHYLBENZENE ISOMER	7.88	22	J
7.	TRIMETHYLBENZENE ISOMER	8.11	8	J
8.	UNKNOWN	11.80	14	J
9.	UNKNOWN	13.59	10	J
10.	UNKNOWN	14.21	32	J
11.	UNKNOWN	14.96	12	J
12.	UNKNOWN	15.24	18	J
13.	UNKNOWN ACID	15.60	27	J
14.	UNKNOWN	16.15	16	J
15.	UNKNOWN	17.03	10	J
16.	UNKNOWN	18.01	180	J
17.	UNKNOWN	20.31	14	J
18.	UNKNOWN	21.39	58	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23705

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5004

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

108-95-2-----	Phenol	100000	U
111-44-4-----	bis(2-Chloroethyl) Ether	100000	U
95-57-8-----	2-Chlorophenol	100000	U
541-73-1-----	1,3-Dichlorobenzene	100000	U
106-46-7-----	1,4-Dichlorobenzene	100000	U
95-50-1-----	1,2-Dichlorobenzene	100000	U
95-48-7-----	2-Methylphenol	100000	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	100000	U
106-44-5-----	4-Methylphenol	100000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	100000	U
67-72-1-----	Hexachloroethane	100000	U
98-95-3-----	Nitrobenzene	100000	U
78-59-1-----	Isophorone	100000	U
88-75-5-----	2-Nitrophenol	100000	U
105-67-9-----	2,4-Dimethylphenol	100000	U
111-91-1-----	bis(2-Chloroethoxy)Methane	100000	U
120-83-2-----	2,4-Dichlorophenol	100000	U
120-82-1-----	1,2,4-Trichlorobenzene	100000	U
91-20-3-----	Naphthalene	100000	U
106-47-8-----	4-Chloroaniline	100000	U
87-68-3-----	Hexachlorobutadiene	100000	U
59-50-7-----	4-Chloro-3-Methylphenol	100000	U
91-57-6-----	2-Methylnaphthalene	100000	U
77-47-4-----	Hexachlorocyclopentadiene	100000	U
88-06-2-----	2,4,6-Trichlorophenol	100000	U
95-95-4-----	2,4,5-Trichlorophenol	250000	U
91-58-7-----	2-Chloronaphthalene	100000	U
88-74-4-----	2-Nitroaniline	250000	U
131-11-3-----	Dimethylphthalate	100000	U
208-96-8-----	Acenaphthylene	100000	U
606-20-2-----	2,6-Dinitrotoluene	100000	U
99-09-2-----	3-Nitroaniline	250000	U
83-32-9-----	Acenaphthene	14000	J

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23705

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5004

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	250000	U
100-02-7-----	4-Nitrophenol	250000	U
132-64-9-----	Dibenzofuran	100000	U
121-14-2-----	2,4-Dinitrotoluene	100000	U
84-66-2-----	Diethylphthalate	100000	U
7005-72-3-----	4-Chlorophenyl-phenylether	100000	U
86-73-7-----	Fluorene	100000	U
100-01-6-----	4-Nitroaniline	250000	U
534-52-1-----	4,6-Dinitro-2-methylphenol	250000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	100000	U
101-55-3-----	4-Bromophenyl-phenylether	100000	U
118-74-1-----	Hexachlorobenzene	100000	U
87-86-5-----	Pentachlorophenol	250000	U
85-01-8-----	Phenanthrene	27000	J
120-12-7-----	Anthracene	100000	U
86-74-8-----	Carbazole	100000	U
84-74-2-----	Di-n-Butylphthalate	100000	U
206-44-0-----	Fluoranthene	55000	J
129-00-0-----	Pyrene	34000	J
85-68-7-----	Butylbenzylphthalate	100000	U
91-94-1-----	3,3'-Dichlorobenzidine	100000	U
56-55-3-----	Benzo(a) Anthracene	100000	U
218-01-9-----	Chrysene	100000	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	100000	U
117-84-0-----	Di-n-Octyl Phthalate	100000	U
205-99-2-----	Benzo(b) Fluoranthene	100000	U
207-08-9-----	Benzo(k) Fluoranthene	100000	U
50-32-8-----	Benzo(a) Pyrene	100000	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	100000	U
53-70-3-----	Dibenz(a,h) Anthracene	100000	U
191-24-2-----	Benzo(g,h,i) Perylene	100000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS..

DEC SAMPLE NO.

B23705

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5004

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	17.47	360000	J
2.	UNKNOWN	17.94	170000	J
3.	UNKNOWN	18.72	180000	J
4.	UNKNOWN HYDROCARBON	18.83	190000	J
5.	UNKNOWN	19.63	420000	J
6.	UNKNOWN HYDROCARBON	20.43	460000	J
7.	UNKNOWN HYDROCARBON	21.16	450000	J
8.	UNKNOWN HYDROCARBON	22.03	950000	J
9.	UNKNOWN HYDROCARBON	23.48	360000	J
10.	UNKNOWN HYDROCARBON	24.57	170000	J
11.	UNKNOWN HYDROCARBON	29.61	220000	J
12.	UNKNOWN	32.07	310000	J
13.	UNKNOWN HYDROCARBON	33.07	200000	J
14.	UNKNOWN HYDROCARBON	33.84	180000	J
15.	UNKNOWN	35.43	160000	J
16.	UNKNOWN	35.92	180000	J
17.	UNKNOWN	36.58	180000	J
18.	UNKNOWN	36.82	180000	J
19.	UNKNOWN	38.11	170000	J
20.	UNKNOWN	38.98	180000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23705DL

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249DL

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5009

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0(uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH:

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	200000	U
111-44-4-----	bis(2-Chloroethyl) Ether	200000	U
95-57-8-----	2-Chlorophenol	200000	U
541-73-1-----	1,3-Dichlorobenzene	200000	U
106-46-7-----	1,4-Dichlorobenzene	200000	U
95-50-1-----	1,2-Dichlorobenzene	200000	U
95-48-7-----	2-Methylphenol	200000	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	200000	U
106-44-5-----	4-Methylphenol	200000	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	200000	U
67-72-1-----	Hexachloroethane	200000	U
98-95-3-----	Nitrobenzene	200000	U
78-59-1-----	Isophorone	200000	U
88-75-5-----	2-Nitrophenol	200000	U
105-67-9-----	2,4-Dimethylphenol	200000	U
111-91-1-----	bis(2-Chloroethoxy)Methane	200000	U
120-83-2-----	2,4-Dichlorophenol	200000	U
120-82-1-----	1,2,4-Trichlorobenzene	200000	U
91-20-3-----	Naphthalene	200000	U
106-47-8-----	4-Chloroaniline	200000	U
87-68-3-----	Hexachlorobutadiene	200000	U
59-50-7-----	4-Chloro-3-Methylphenol	200000	U
91-57-6-----	2-Methylnaphthalene	200000	U
77-47-4-----	Hexachlorocyclopentadiene	200000	U
88-06-2-----	2,4,6-Trichlorophenol	200000	U
95-95-4-----	2,4,5-Trichlorophenol	500000	U
91-58-7-----	2-Chloronaphthalene	200000	U
88-74-4-----	2-Nitroaniline	500000	U
131-11-3-----	Dimethylphthalate	200000	U
208-96-8-----	Acenaphthylene	200000	U
606-20-2-----	2,6-Dinitrotoluene	200000	U
99-09-2-----	3-Nitroaniline	500000	U
83-32-9-----	Acenaphthene	13000	DJ

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23705DL

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249DL

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5009

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N

pH:

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/KG

Q

51-28-5-----	2,4-Dinitrophenol	500000	U
100-02-7-----	4-Nitrophenol	500000	U
132-64-9-----	Dibenzofuran	200000	U
121-14-2-----	2,4-Dinitrotoluene	200000	U
84-66-2-----	Diethylphthalate	200000	U
7005-72-3-----	4-Chlorophenyl-phenylether	200000	U
86-73-7-----	Fluorene	200000	U
100-01-6-----	4-Nitroaniline	500000	U
534-52-1-----	4,6-Dinitro-2-methylphenol	500000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	200000	U
101-55-3-----	4-Bromophenyl-phenylether	200000	U
118-74-1-----	Hexachlorobenzene	200000	U
87-86-5-----	Pentachlorophenol	500000	U
85-01-8-----	Phenanthrene	27000	DJ
120-12-7-----	Anthracene	200000	U
86-74-8-----	Carbazole	200000	U
84-74-2-----	Di-n-Butylphthalate	200000	U
206-44-0-----	Fluoranthene	50000	DJ
129-00-0-----	Pyrene	36000	DJ
85-68-7-----	Butylbenzylphthalate	200000	U
91-94-1-----	3,3'-Dichlorobenzidine	200000	U
56-55-3-----	Benzo(a)Anthracene	200000	U
218-01-9-----	Chrysene	200000	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	200000	U
117-84-0-----	Di-n-Octyl Phthalate	200000	U
205-99-2-----	Benzo(b) Fluoranthene	200000	U
207-08-9-----	Benzo(k) Fluoranthene	200000	U
50-32-8-----	Benzo(a) Pyrene	200000	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	200000	U
53-70-3-----	Dibenz(a,h) Anthracene	200000	U
191-24-2-----	Benzo(g,h,i) Perylene	200000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

3/90

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS.

DEC SAMPLE NO.

B23705DL

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) SOIL

Lab Sample ID: 19249DL

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: B5009

Level: (low/med) MED

Date Received: 12/15/94

% Moisture: decanted: (Y/N) N

Date Extracted:

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 12/28/94

Injection Volume: 2.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N

pH:

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

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	17.42	360000	J
2.	UNKNOWN	19.58	700000	J
3.	UNKNOWN HYDROCARBON	20.36	240000	J
4.	UNKNOWN HYDROCARBON	21.08	450000	J
5.	UNKNOWN	21.19	150000	J
6.	UNKNOWN PAH	21.38	200000	J
7.	UNKNOWN HYDROCARBON	21.94	950000	J
8.	UNKNOWN HYDROCARBON	22.48	150000	J
9.	UNKNOWN HYDROCARBON	23.38	460000	J
10.	UNKNOWN HYDROCARBON	27.46	490000	J
11.	UNKNOWN HYDROCARBON	29.52	550000	J
12.	UNKNOWN HYDROCARBON	32.01	340000	J
13.	UNKNOWN HYDROCARBON	33.78	240000	J
14.	UNKNOWN HYDROCARBON	34.00	240000	J
15.	UNKNOWN	35.35	300000	J
16.	UNKNOWN HYDROCARBON	35.86	250000	J
17.	UNKNOWN	36.52	360000	J
18.	UNKNOWN HYDROCARBON	36.74	250000	J
19.	UNKNOWN HYDROCARBON	39.48	240000	J
20.	UNKNOWN HYDROCARBON	40.66	280000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23706

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5040

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.6

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) Ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	1	J
621-64-7-----	N-Nitroso-Di-n-Propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy) Methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-Methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	2	J

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

Lab Name: E & E INC.

Contract: C003181

B23706

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5040

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.6

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.

COMPOUND

51-28-5-----	2,4-Dinitrophenol	25	U
100-02-7-----	4-Nitrophenol	25	U
132-64-9-----	Dibenzofuran	10	U
121-14-2-----	2,4-Dinitrotoluene	10	U
84-66-2-----	Diethylphthalate	10	U
7005-72-3-----	4-Chlorophenyl-phenylether	10	U
86-73-7-----	Fluorene	10	U
100-01-6-----	4-Nitroaniline	25	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	U
86-30-6-----	N-Nitrosodiphenylamine (1)	10	U
101-55-3-----	4-Bromophenyl-phenylether	10	U
118-74-1-----	Hexachlorobenzene	10	U
87-86-5-----	Pentachlorophenol	25	U
85-01-8-----	Phenanthrene	1	J
120-12-7-----	Anthracene	10	U
86-74-8-----	Carbazole	10	U
84-74-2-----	Di-n-Butylphthalate	10	U
206-44-0-----	Fluoranthene	2	J
129-00-0-----	Pyrene	2	J
85-68-7-----	Butylbenzylphthalate	10	U
91-94-1-----	3,3'-Dichlorobenzidine	10	U
56-55-3-----	Benzo(a)Anthracene	10	U
218-01-9-----	Chrysene	10	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	6	J
117-84-0-----	Di-n-Octyl Phthalate	10	U
205-99-2-----	Benzo(b) Fluoranthene	10	U
207-08-9-----	Benzo(k) Fluoranthene	10	U
50-32-8-----	Benzo(a) Pyrene	10	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	10	U
53-70-3-----	Dibenz(a,h) Anthracene	10	U
191-24-2-----	Benzo(g,h,i) Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS..

DEC SAMPLE NO.

B23706

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: B5040

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 6.6

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	14.05	11	J
2.	UNKNOWN	15.85	18	J
3.	UNKNOWN HYDROCARBON	17.29	17	J
4.	UNKNOWN	17.59	28	J
5.	UNKNOWN	18.40	16	J
6.	UNKNOWN	19.25	15	J
7.	UNKNOWN HYDROCARBON	20.23	35	J
8.	UNKNOWN HYDROCARBON	20.93	20	J
9.	UNKNOWN	21.05	11	J
10.	UNKNOWN	21.26	38	J
11.	UNKNOWN HYDROCARBON	21.78	50	J
12.	UNKNOWN HYDROCARBON	23.22	30	J
13.	UNKNOWN HYDROCARBON	24.34	10	J
14.	UNKNOWN HYDROCARBON	29.38	22	J
15.	UNKNOWN HYDROCARBON	33.63	13	J
16.	UNKNOWN HYDROCARBON	33.86	19	J
17.	UNKNOWN HYDROCARBON	35.75	14	J
18.	UNKNOWN	36.36	22	J
19.	UNKNOWN HYDROCARBON	36.63	14	J
20.	UNKNOWN	37.89	14	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704MS

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MS

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: B5044

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS:	Q
108-95-2-----	Phenol	110	
111-44-4-----	bis(2-Chloroethyl) Ether	20	U
95-57-8-----	2-Chlorophenol	110	
541-73-1-----	1,3-Dichlorobenzene	20	U
106-46-7-----	1,4-Dichlorobenzene	51	
95-50-1-----	1,2-Dichlorobenzene	20	U
95-48-7-----	2-Methylphenol	5	J
108-60-1-----	2,2'-oxybis(1-Chloropropane)	20	U
106-44-5-----	4-Methylphenol	66	
621-64-7-----	N-Nitroso-Di-n-Propylamine	22	
67-72-1-----	Hexachloroethane	20	U
98-95-3-----	Nitrobenzene	20	U
78-59-1-----	Isophorone	20	U
88-75-5-----	2-Nitrophenol	20	U
105-67-9-----	2,4-Dimethylphenol	20	U
111-91-1-----	bis(2-Chloroethoxy)Methane	20	U
120-83-2-----	2,4-Dichlorophenol	20	U
120-82-1-----	1,2,4-Trichlorobenzene	58	
91-20-3-----	Naphthalene	2	J
106-47-8-----	4-Chloroaniline	20	U
87-68-3-----	Hexachlorobutadiene	20	U
59-50-7-----	4-Chloro-3-Methylphenol	120	
91-57-6-----	2-Methylnaphthalene	20	U
77-47-4-----	Hexachlorocyclopentadiene	20	U
88-06-2-----	2,4,6-Trichlorophenol	20	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	20	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethylphthalate	20	U
208-96-8-----	Acenaphthylene	20	U
606-20-2-----	2,6-Dinitrotoluene	20	U
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	88	

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704MS

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MS

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: B5044

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) UG/L

Q

51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	97	
132-64-9-----	Dibenzofuran	20	U
121-14-2-----	2,4-Dinitrotoluene	80	
84-66-2-----	Diethylphthalate	20	U
7005-72-3-----	4-Chlorophenyl-phenylether	20	U
86-73-7-----	Fluorene	20	U
100-01-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	20	U
101-55-3-----	4-Bromophenyl-phenylether	20	U
118-74-1-----	Hexachlorobenzene	20	U
87-86-5-----	Pentachlorophenol	150	
85-01-8-----	Phenanthrene	20	U
120-12-7-----	Anthracene	20	U
86-74-8-----	Carbazole	20	U
84-74-2-----	Di-n-Butylphthalate	20	U
206-44-0-----	Fluoranthene	20	U
129-00-0-----	Pyrene	88	
85-68-7-----	Butylbenzylphthalate	20	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a) Anthracene	20	U
218-01-9-----	Chrysene	20	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	20	U
117-84-0-----	Di-n-Octyl Phthalate	20	U
205-99-2-----	Benzo(b) Fluoranthene	20	U
207-08-9-----	Benzo(k) Fluoranthene	20	U
50-32-8-----	Benzo(a) Pyrene	20	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	20	U
53-70-3-----	Dibenz(a,h) Anthracene	20	U
191-24-2-----	Benzo(g,h,i) Perylene	20	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

Lab Name: E & E INC.

Contract: C003181

B23704MSD

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MSD

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: B5042

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	120	
111-44-4-----	bis (2-Chloroethyl) Ether	20	U
95-57-8-----	2-Chlorophenol	110	
541-73-1-----	1,3-Dichlorobenzene	20	U
106-46-7-----	1,4-Dichlorobenzene	55	
95-50-1-----	1,2-Dichlorobenzene	20	U
95-48-7-----	2-Methylphenol	3	J
108-60-1-----	2,2'-oxybis (1-Chloropropane)	20	U
106-44-5-----	4-Methylphenol	4	J
621-64-7-----	N-Nitroso-Di-n-Propylamine	18	J
67-72-1-----	Hexachloroethane	20	U
98-95-3-----	Nitrobenzene	20	U
78-59-1-----	Isophorone	20	U
88-75-5-----	2-Nitrophenol	20	U
105-67-9-----	2,4-Dimethylphenol	20	U
111-91-1-----	bis (2-Chloroethoxy) Methane	20	U
120-83-2-----	2,4-Dichlorophenol	20	U
120-82-1-----	1,2,4-Trichlorobenzene	65	
91-20-3-----	Naphthalene	2	J
106-47-8-----	4-Chloroaniline	20	U
87-68-3-----	Hexachlorobutadiene	20	U
59-50-7-----	4-Chloro-3-Methylphenol	120	
91-57-6-----	2-Methylnaphthalene	20	U
77-47-4-----	Hexachlorocyclopentadiene	20	U
88-06-2-----	2,4,6-Trichlorophenol	20	U
95-95-4-----	2,4,5-Trichlorophenol	50	U
91-58-7-----	2-Chloronaphthalene	20	U
88-74-4-----	2-Nitroaniline	50	U
131-11-3-----	Dimethylphthalate	20	U
208-96-8-----	Acenaphthylene	20	U
606-20-2-----	2,6-Dinitrotoluene	20	U
99-09-2-----	3-Nitroaniline	50	U
83-32-9-----	Acenaphthene	78	

FORM I SV-1

3/90

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DEC SAMPLE NO.

B23704MSD

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MSD

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID: B5042

Level: (low/med) LOW

Date Received: 12/15/94

% Moisture: decanted: (Y/N)

Date Extracted: 12/16/94

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/30/94

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH: 7.4

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

CAS NO.

COMPOUND

Q

51-28-5-----	2,4-Dinitrophenol	50	U
100-02-7-----	4-Nitrophenol	97	
132-64-9-----	Dibenzofuran	20	U
121-14-2-----	2,4-Dinitrotoluene	66	
84-66-2-----	Diethylphthalate	20	U
7005-72-3-----	4-Chlorophenyl-phenylether	20	U
86-73-7-----	Fluorene	20	U
100-01-6-----	4-Nitroaniline	50	U
534-52-1-----	4,6-Dinitro-2-methylphenol	50	U
86-30-6-----	N-Nitrosodiphenylamine (1)	20	U
101-55-3-----	4-Bromophenyl-phenylether	20	U
118-74-1-----	Hexachlorobenzene	20	U
87-86-5-----	Pentachlorophenol	160	E
85-01-8-----	Phenanthrene	20	U
120-12-7-----	Anthracene	20	U
86-74-8-----	Carbazole	20	U
84-74-2-----	Di-n-Butylphthalate	20	U
206-44-0-----	Fluoranthene	20	U
129-00-0-----	Pyrene	83	
85-68-7-----	Butylbenzylphthalate	20	U
91-94-1-----	3,3'-Dichlorobenzidine	20	U
56-55-3-----	Benzo(a)Anthracene	20	U
218-01-9-----	Chrysene	20	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	20	U
117-84-0-----	Di-n-Octyl Phthalate	20	U
205-99-2-----	Benzo(b) Fluoranthene	20	U
207-08-9-----	Benzo(k) Fluoranthene	20	U
50-32-8-----	Benzo(a) Pyrene	20	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	20	U
53-70-3-----	Dibenz(a,h) Anthracene	20	U
191-24-2-----	Benzo(g,h,i) Perylene	20	U

(1) - Cannot be separated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-01

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19244

Sample wt/vol: 1000 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 2.00

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

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.10	U
319-85-7-----	beta-BHC	0.10	U
319-86-8-----	delta-BHC	0.10	U
58-89-9-----	gamma-BHC (Lindane)	0.10	U
76-44-8-----	Heptachlor	0.10	U
309-00-2-----	Aldrin	0.10	U
1024-57-3-----	Heptachlor epoxide	0.10	U
959-98-8-----	Endosulfan I	0.10	U
60-57-1-----	Dieldrin	0.20	U
72-55-9-----	4,4'-DDE	0.20	U
72-20-8-----	Endrin	0.20	U
33213-65-9-----	Endosulfan II	0.20	U
72-54-8-----	4,4'-DDD	0.20	U
1031-07-8-----	Endosulfan sulfate	0.20	U
50-29-3-----	4,4'-DDT	0.20	U
72-43-5-----	Methoxychlor	1.0	U
53494-70-5-----	Endrin ketone	0.20	U
7421-93-4-----	Endrin aldehyde	0.20	U
5103-71-9-----	alpha-Chlordane	0.10	U
5103-74-2-----	gamma-Chlordane	0.10	U
8001-35-2-----	Toxaphene	10	U
12674-11-2-----	Aroclor-1016	2.0	U
11104-28-2-----	Aroclor-1221	4.0	U
11141-16-5-----	Aroclor-1232	2.0	U
53469-21-9-----	Aroclor-1242	2.0	U
12672-29-6-----	Aroclor-1248	2.0	U
11097-69-1-----	Aroclor-1254	2.0	U
11096-82-5-----	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-02

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19245

Sample wt/vol: 1000 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 2.00

GPC Cleanup: (Y/N) N

pH: 7.0

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.10	U
319-85-7-----	beta-BHC	0.10	U
319-86-8-----	delta-BHC	0.10	U
58-89-9-----	gamma-BHC (Lindane)	0.10	U
76-44-8-----	Heptachlor	0.10	U
309-00-2-----	Aldrin	0.10	U
1024-57-3-----	Heptachlor epoxide	0.10	U
959-98-8-----	Endosulfan I	0.10	U
60-57-1-----	Dieldrin	0.20	U
72-55-9-----	4,4'-DDE	0.20	U
72-20-8-----	Endrin	0.20	U
33213-65-9-----	Endosulfan II	0.20	U
72-54-8-----	4,4'-DDD	0.20	U
1031-07-8-----	Endosulfan sulfate	0.20	U
50-29-3-----	4,4'-DDT	0.20	U
72-43-5-----	Methoxychlor	1.0	U
53494-70-5-----	Endrin ketone	0.20	U
7421-93-4-----	Endrin aldehyde	0.20	U
5103-71-9-----	alpha-Chlordane	0.10	U
5103-74-2-----	gamma-Chlordane	0.10	U
8001-35-2-----	Toxaphene	10	U
12674-11-2-----	Aroclor-1016	2.0	U
11104-28-2-----	Aroclor-1221	4.0	U
11141-16-5-----	Aroclor-1232	2.0	U
53469-21-9-----	Aroclor-1242	2.0	U
12672-29-6-----	Aroclor-1248	2.0	U
11097-69-1-----	Aroclor-1254	2.0	U
11096-82-5-----	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-03

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19246

Sample wt/vol: 1000 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.5

Sulfur Cleanup: (Y/N) Y

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

CAS NO.	COMPOUND	Q
319-84-6	alpha-BHC	0.050 U
319-85-7	beta-BHC	0.050 U
319-86-8	delta-BHC	0.050 U
58-89-9	gamma-BHC (Lindane)	0.050 U
76-44-8	Heptachlor	0.050 U
309-00-2	Aldrin	0.050 U
1024-57-3	Heptachlor epoxide	0.050 U
959-98-8	Endosulfan I	0.050 U
60-57-1	Dieldrin	0.10 U
72-55-9	4,4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-54-8	4,4'-DDD	0.10 U
1031-07-8	Endosulfan sulfate	0.10 U
50-29-3	4,4'-DDT	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin ketone	0.10 U
7421-93-4	Endrin aldehyde	0.10 U
5103-71-9	alpha-Chlordane	0.050 U
5103-74-2	gamma-Chlordane	0.050 U
8001-35-2	Toxaphene	5.0 U
12674-11-2	Aroclor-1016	1.0 U
11104-28-2	Aroclor-1221	2.0 U
11141-16-5	Aroclor-1232	1.0 U
53469-21-9	Aroclor-1242	1.0 U
12672-29-6	Aroclor-1248	1.0 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-04

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247

Sample wt/vol: 1000 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 2.00

GPC Cleanup: (Y/N) N

pH: 7.4

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.10	U
319-85-7-----	beta-BHC	0.10	U
319-86-8-----	delta-BHC	0.10	U
58-89-9-----	gamma-BHC (Lindane)	0.12	P
76-44-8-----	Heptachlor	0.10	U
309-00-2-----	Aldrin	0.10	U
1024-57-3-----	Heptachlor epoxide	0.10	U
959-98-8-----	Endosulfan I	0.10	U
60-57-1-----	Dieldrin	0.20	U
72-55-9-----	4,4'-DDE	0.20	U
72-20-8-----	Endrin	0.20	U
33213-65-9-----	Endosulfan II	0.20	U
72-54-8-----	4,4'-DDD	0.20	U
1031-07-8-----	Endosulfan sulfate	0.20	U
50-29-3-----	4,4'-DDT	0.20	U
72-43-5-----	Methoxychlor	1.0	U
53494-70-5-----	Endrin ketone	0.20	U
7421-93-4-----	Endrin aldehyde	0.20	U
5103-71-9-----	alpha-Chlordane	0.10	U
5103-74-2-----	gamma-Chlordane	0.10	U
8001-35-2-----	Toxaphene	10	U
12674-11-2-----	Aroclor-1016	2.0	U
11104-28-2-----	Aroclor-1221	4.0	U
11141-16-5-----	Aroclor-1232	2.0	U
53469-21-9-----	Aroclor-1242	2.0	U
12672-29-6-----	Aroclor-1248	2.0	U
11097-69-1-----	Aroclor-1254	2.0	U
11096-82-5-----	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-06

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19248

Sample wt/vol: 1000 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 6.6

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.050	U
319-85-7-----	beta-BHC	0.050	U
319-86-8-----	delta-BHC	0.050	U
58-89-9-----	gamma-BHC (Lindane)	0.050	U
76-44-8-----	Heptachlor	0.050	U
309-00-2-----	Aldrin	0.050	U
1024-57-3-----	Heptachlor epoxide	0.050	U
959-98-8-----	Endosulfan I	0.050	U
60-57-1-----	Dieldrin	0.10	U
72-55-9-----	4,4'-DDE	0.10	U
72-20-8-----	Endrin	0.10	U
33213-65-9-----	Endosulfan II	0.10	U
72-54-8-----	4,4'-DDD	0.10	U
1031-07-8-----	Endosulfan sulfate	0.10	U
50-29-3-----	4,4'-DDT	0.10	U
72-43-5-----	Methoxychlor	0.50	U
53494-70-5-----	Endrin ketone	0.10	U
7421-93-4-----	Endrin aldehyde	0.10	U
5103-71-9-----	alpha-Chlordane	0.050	U
5103-74-2-----	gamma-Chlordane	0.050	U
8001-35-2-----	Toxaphene	5.0	U
12674-11-2-----	Aroclor-1016	1.0	U
11104-28-2-----	Aroclor-1221	2.0	U
11141-16-5-----	Aroclor-1232	1.0	U
53469-21-9-----	Aroclor-1242	1.0	U
12672-29-6-----	Aroclor-1248	1.0	U
11097-69-1-----	Aroclor-1254	1.0	U
11096-82-5-----	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-04MS

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MS

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.4

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.10	U
319-85-7-----	beta-BHC	0.10	U
319-86-8-----	delta-BHC	0.10	P
58-89-9-----	gamma-BHC (Lindane)	0.90	P
76-44-8-----	Heptachlor	0.90	P
309-00-2-----	Aldrin	0.72	
1024-57-3-----	Heptachlor epoxide	0.10	U
959-98-8-----	Endosulfan I	0.10	U
60-57-1-----	Dieldrin	1.6	
72-55-9-----	4,4'-DDE	0.20	U
72-20-8-----	Endrin	1.5	
33213-65-9-----	Endosulfan II	0.20	U
72-54-8-----	4,4'-DDD	0.20	U
1031- 7-8-----	Endosulfan sulfate	0.20	U
50-29-3-----	4,4'-DDT	1.6	
72-43-5-----	Methoxychlor	1.0	U
53494-70-5-----	Endrin ketone	0.20	U
7421-93-4-----	Endrin aldehyde	0.20	U
5103-71-9-----	alpha-Chlordane	0.10	U
5103-74-2-----	gamma-Chlordane	0.10	U
8001-35-2-----	Toxaphene	10	U
12674-11-2-----	Aroclor-1016	2.0	U
11104-28-2-----	Aroclor-1221	4.0	U
11141-16-5-----	Aroclor-1232	2.0	U
53469-21-9-----	Aroclor-1242	2.0	U
12672-29-6-----	Aroclor-1248	2.0	U
11097-69-1-----	Aroclor-1254	2.0	U
11096-82-5-----	Aroclor-1260	2.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B237-04MSD

Lab Name: E & E INC.

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix: (soil/water) WATER

Lab Sample ID: 19247MSD

Sample wt/vol: 500.0 (g/mL) ML

Lab File ID:

% Moisture: decanted: (Y/N)

Date Received: 12/15/94

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted: 12/17/94

Concentrated Extract Volume: 10000 (uL)

Date Analyzed: 01/08/95

Injection Volume: 2.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.4

Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

319-84-6-----	alpha-BHC	0.10	U
319-85-7-----	beta-BHC	0.10	U
319-86-8-----	delta-BHC	0.14	P
58-89-9-----	gamma-BHC (Lindane)	1.0	P
76-44-8-----	Heptachlor	0.98	P
309-00-2-----	Aldrin	0.80	
1024-57-3-----	Heptachlor epoxide	0.10	U
959-98-8-----	Endosulfan I	0.10	U
60-57-1-----	Dieldrin	1.7	
72-55-9-----	4,4'-DDE	0.20	U
72-20-8-----	Endrin	1.6	
33213-65-9-----	Endosulfan II	0.20	U
72-54-8-----	4,4'-DDD	0.20	U
1031-07-8-----	Endosulfan sulfate	0.20	U
50-29-3-----	4,4'-DDT	1.6	
72-43-5-----	Methoxychlor	1.0	U
53494-70-5-----	Endrin ketone	0.20	U
7421-93-4-----	Endrin aldehyde	0.20	U
5103-71-9-----	alpha-Chlordane	0.10	U
5103-74-2-----	gamma-Chlordane	0.10	U
8001-35-2-----	Toxaphene	10	U
12674-11-2-----	Aroclor-1016	2.0	U
11104-28-2-----	Aroclor-1221	4.0	U
11141-16-5-----	Aroclor-1232	2.0	U
53469-21-9-----	Aroclor-1242	2.0	U
12672-29-6-----	Aroclor-1248	2.0	U
11097-69-1-----	Aroclor-1254	2.0	U
11096-82-5-----	Aroclor-1260	2.0	U

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

B23701

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RB094 SAS No.: __ SDG No.: 1214__

Matrix (soil/water): WATER

Lab Sample ID: 19244

Level (low/med): LOW__

Date Received: 12/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L__

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	34500	-		P
7440-36-0	Antimony	25.3	U	N	P
7440-38-2	Arsenic	42.6	-	S*	F
7440-39-3	Barium	1110	-	E	P
7440-41-7	Beryllium	2.1	B		P
7440-43-9	Cadmium	7.5	-		P
7440-70-2	Calcium	923000	-		P
7440-47-3	Chromium	114	-	E	P
7440-48-4	Cobalt	65.3	-	EN	P
7440-50-8	Copper	545	-		P
7439-89-6	Iron	156000	-		P
7439-92-1	Lead	2260	-		F
7439-95-4	Magnesium	107000	-		P
7439-96-5	Manganese	3820	-		P
7439-97-6	Mercury	1.2	-	N	CV
7440-02-0	Nickel	126	-	E	P
7440-09-7	Potassium	38700	-	E	P
7782-49-2	Selenium	20.0	U	N	F
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	322000	-		P
7440-28-0	Thallium	2.0	U	N	F
7440-62-2	Vanadium	94.2	-	EN	P
7440-66-6	Zinc	3070	-	E	P
	Cyanide		-		NR

Color Before: BR__ Clarity Before: CL__ Texture: __

Color After: Y/CL__ Clarity After: C/CL__ Artifacts: __

Comments:

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NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

B23702

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix (soil/water): WATER

Lab Sample ID: 19245

Level (low/med): LOW

Date Received: 12/15/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	58400	-	-	P
7440-36-0	Antimony	25.3	U	N	P
7440-38-2	Arsenic	56.2	-	*	F
7440-39-3	Barium	774	-	E	P
7440-41-7	Beryllium	2.5	B	-	P
7440-43-9	Cadmium	62.1	-	-	P
7440-70-2	Calcium	1260000	-	-	P
7440-47-3	Chromium	93.0	-	E	P
7440-48-4	Cobalt	91.1	-	EN	P
7440-50-8	Copper	274	-	-	P
7439-89-6	Iron	145000	-	-	P
7439-92-1	Lead	270	-	-	F
7439-95-4	Magnesium	188000	-	-	P
7439-96-5	Manganese	7420	-	-	P
7439-97-6	Mercury	0.56	-	N	CV
7440-02-0	Nickel	189	-	E	P
7440-09-7	Potassium	47100	-	E	P
7782-49-2	Selenium	10.0	U	EN	F
7440-22-4	Silver	3.2	B	N	P
7440-23-5	Sodium	688000	-	-	P
7440-28-0	Thallium	2.0	U	N	F
7440-62-2	Vanadium	125	-	EN	P
7440-66-6	Zinc	9630	-	E	P
	Cyanide		-	-	NR

Color Before: BR Clarity Before: CL Texture:

Color After: Y/Y Clarity After: C Artifacts:

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

B23703

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix (soil/water): WATER

Lab Sample ID: 19246

Level (low/med): LOW

Date Received: 12/15/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	31000			P
7440-36-0	Antimony	25.3	U	N	P
7440-38-2	Arsenic	20.5		+	F
7440-39-3	Barium	394		E	P
7440-41-7	Beryllium	1.3	B		P
7440-43-9	Cadmium	12.4			P
7440-70-2	Calcium	318000			P
7440-47-3	Chromium	51.2		E	P
7440-48-4	Cobalt	39.1	B	EN	P
7440-50-8	Copper	124			P
7439-89-6	Iron	57100			P
7439-92-1	Lead	139			F
7439-95-4	Magnesium	74800			P
7439-96-5	Manganese	2730			P
7439-97-6	Mercury	0.48		N	CV
7440-02-0	Nickel	53.1		E	P
7440-09-7	Potassium	18400		E	P
7782-49-2	Selenium	2.0	U	WN	F
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	31600			P
7440-28-0	Thallium	2.0	U	WN	F
7440-62-2	Vanadium	60.1		EN	P
7440-66-6	Zinc	4120		E	P
	Cyanide				NR

Color Before: BR Clarity Before: CL Texture:

Color After: Y/CL Clarity After: C Artifacts:

Comments:

NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

B23704

Lab Code: EANDE__ Case No.: RB094 SAS No.: __ SDG No.: 1214__

Matrix (soil/water): WATER

Lab Sample ID: 19247

Level (low/med): LOW__

Date Received: 12/15/94

% Solids: __0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L__

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	89300	-	-	P
7440-36-0	Antimony	25.3	U	N	P
7440-38-2	Arsenic	51.2	-	S*	F
7440-39-3	Barium	1150	-	E	P
7440-41-7	Beryllium	3.7	B	-	P
7440-43-9	Cadmium	8.8	-	-	P
7440-70-2	Calcium	1320000	-	-	P
7440-47-3	Chromium	124	-	E	P
7440-48-4	Cobalt	108	-	EN	P
7440-50-8	Copper	409	-	-	P
7439-89-6	Iron	197000	-	-	P
7439-92-1	Lead	195	-	-	F
7439-95-4	Magnesium	262000	-	-	P
7439-96-5	Manganese	9230	-	-	P
7439-97-6	Mercury	0.34	-	N	CV
7440-02-0	Nickel	180	-	E	P
7440-09-7	Potassium	27700	-	E	P
7782-49-2	Selenium	10.0	U	EN	F
7440-22-4	Silver	3.0	U	N	P
7440-23-5	Sodium	833000	-	-	P
7440-28-0	Thallium	2.0	U	N	F
7440-62-2	Vanadium	168	-	EN	P
7440-66-6	Zinc	1420	-	E	P
	Cyanide		-	-	NR

Color Before: BR__ Clarity Before: CL__ Texture: __

Color After: Y/CL__ Clarity After: C/CL__ Artifacts: __

Comments:

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NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

B23705

Lab Name: ECOLOGY_AND_ENVIRONMENT__ Contract: C003181__

Lab Code: EANDE__ Case No.: RB094 SAS No.: __ SDG No.: 1214__

Matrix (soil/water): SOIL__ Lab Sample ID: 19249

Level (low/med): LOW__ Date Received: 12/15/94

% Solids: 100.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	150	-		P
7440-36-0	Antimony	5.1	U		P
7440-38-2	Arsenic	0.40	U		F
7440-39-3	Barium	1.1	B		P
7440-41-7	Beryllium	0.04	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	26.3	B		P
7440-47-3	Chromium	7.5	-		P
7440-48-4	Cobalt	0.82	U		P
7440-50-8	Copper	47.1	-		P
7439-89-6	Iron	249	-		P
7439-92-1	Lead	1.9	-		F
7439-95-4	Magnesium	23.2	U		P
7439-96-5	Manganese	0.16	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.7	U		P
7440-09-7	Potassium	49.2	U		P
7782-49-2	Selenium	0.40	U	W	F
7440-22-4	Silver	0.60	U		P
7440-23-5	Sodium	79.2	U		P
7440-28-0	Thallium	0.40	U		F
7440-62-2	Vanadium	0.72	U		P
7440-66-6	Zinc	2.7	B		P
	Cyanide		-		NR

Color Before: BR__ Clarity Before: CL__ Texture: OIL__

Color After: CL__ Clarity After: C__ Artifacts: __

Comments:

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NYSDEC ASP

1
INORGANIC ANALYSES DATA SHEET

NYSDEC SAMPLE NO.

B23706

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix (soil/water): WATER

Lab Sample ID: 19248

Level (low/med): LOW

Date Received: 12/15/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	181000	-	-	P
7440-36-0	Antimony	25.3	U	N	P
7440-38-2	Arsenic	13.2	-	S*	F
7440-39-3	Barium	1940	-	E	P
7440-41-7	Beryllium	7.3	-	-	P
7440-43-9	Cadmium	41.1	-	-	P
7440-70-2	Calcium	2250000	-	-	P
7440-47-3	Chromium	277	-	E	P
7440-48-4	Cobalt	271	-	EN	P
7440-50-8	Copper	686	-	-	P
7439-89-6	Iron	704000	-	-	P
7439-92-1	Lead	232	-	-	F
7439-95-4	Magnesium	553000	-	-	P
7439-96-5	Manganese	22300	-	-	P
7439-97-6	Mercury	0.20	U	N	CV
7440-02-0	Nickel	440	-	E	P
7440-09-7	Potassium	34700	-	E	P
7782-49-2	Selenium	10.0	U	WN	F
7440-22-4	Silver	7.5	B	N	P
7440-23-5	Sodium	87600	-	-	P
7440-28-0	Thallium	2.0	U	N	F
7440-62-2	Vanadium	303	-	EN	P
7440-66-6	Zinc	2520	-	E	P
	Cyanide		-	-	NR

Color Before: BR Clarity Before: CL Texture:

Color After: Y/Y Clarity After: C/CL Artifacts:

Comments:

NYSDEC ASP

5A
SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

B23704S

Lab Name: ECOLOGY AND ENVIRONMENT

Contract: C003181

Lab Code: EANDE

Case No.: RB094

SAS No.:

SDG No.: 1214

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		91840.0000	89320.0000	2000.000	126.0	-	P
Antimony	75-125	25.3000	25.3000	500.000	0.0	N	P
Arsenic	75-125	90.6000	51.1840	40.000	98.5	-	F
Barium	75-125	2707.0000	1148.0000	2000.000	77.9	-	P
Beryllium	75-125	45.2800	3.6790	50.000	83.2	-	P
Cadmium	75-125	51.7600	8.8080	50.000	85.9	-	P
Calcium						-	NR
Chromium	75-125	279.5000	124.3000	200.000	77.6	-	P
Cobalt	75-125	475.9000	107.8000	500.000	73.6	N	P
Copper	75-125	625.0000	408.7000	250.000	86.5	-	P
Iron		200100.0000	196600.0000	1000.000	350.0	-	P
Lead		226.6000	194.8000	20.000	159.0	-	F
Magnesium						-	NR
Manganese		9816.0000	9227.0000	500.000	117.8	-	P
Mercury	75-125	1.0700	0.3400	1.000	73.0	N	CV
Nickel	75-125	558.1000	179.9000	500.000	75.6	-	P
Potassium						-	NR
Selenium	75-125	2.0000	10.0000	10.000	0.0	N	F
Silver	75-125	28.1300	3.0000	50.000	56.3	N	P
Sodium						-	NR
Thallium	75-125	35.2800	2.0000	50.000	70.6	N	F
Vanadium	75-125	526.8000	168.5000	500.000	71.7	N	P
Zinc	75-125	1864.0000	1421.0000	500.000	88.6	-	P
Cyanide						-	NR

Comments:

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NYSDEC ASP

5A
SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

Lab Name: ECOLOGY_AND_ENVIRONMENT__

Contract: C003181__

B23705S

Lab Code: EANDE__

Case No.: RB094

SAS No.: ____

SDG No.: 1214__

Matrix (soil/water): SOIL__

Level (low/med): LOW__

% Solids for Sample: 100.0

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	98.5200	5.0600 U	100.000	98.5		P
Arsenic	75-125	7.9560	0.4000 U	8.000	99.4		F
Barium	75-125	417.8000	1.1394 B	400.000	104.2		P
Beryllium	75-125	9.9980	0.0400 U	10.000	100.0		P
Cadmium	75-125	10.2260	0.5000 U	10.000	102.3		P
Calcium							NR
Chromium	75-125	47.4600	7.4700 U	40.000	100.0		P
Cobalt	75-125	99.2000	0.8200 U	100.000	99.2		P
Copper	75-125	104.4600	47.1000	50.000	114.7		P
Iron							NR
Lead	75-125	6.4400	1.9420	4.000	112.4		F
Magnesium							NR
Manganese	75-125	101.5600	0.1600 U	100.000	101.6		P
Mercury							NR
Nickel	75-125	108.0600	1.6800 U	100.000	108.1		P
Potassium							NR
Selenium	75-125	2.2020	0.4000 U	2.000	110.1		F
Silver	75-125	7.6700	0.6000 U	10.000	76.7		P
Sodium							NR
Thallium	75-125	10.8120	0.4000 U	10.000	108.1		F
Vanadium	75-125	90.1000	0.7200 U	100.000	90.1		P
Zinc	75-125	113.1600	2.6880 B	100.000	110.5		P
Cyanide							NR

Comments:

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NYSDEC ASP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

NYSDEC SAMPLE NO.

B23704A

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

Matrix (soil/water): WATER 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		25.30	U	25.30	U	120.0	0.0		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt		250.20		107.80		215.0	66.2		P
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver		10.80		3.00	U	20.0	54.0		P
Sodium									NR
Thallium									NR
Vanadium		337.40		168.50		330.0	51.2		P
Zinc									NR

Comments:

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NYSDEC ASP

6
DUPLICATES

NYSDEC SAMPLE NO.

B23704D

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

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

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum		89320.0000	80310.0000	10.6		P
Antimony		25.3000	25.3000			P
Arsenic		51.1840	65.5700	24.6	*	F
Barium		1148.0000	1118.0000	2.6		P
Beryllium		3.6790	3.1510	15.5		P
Cadmium	5.0	8.8080	12.5600	35.1		P
Calcium		1322000.0000	1316000.0000	0.5		P
Chromium		124.3000	110.0000	12.2		P
Cobalt	50.0	107.8000	104.5000	3.1		P
Copper		408.7000	404.2000	1.1		P
Iron		196600.0000	187800.0000	4.6		P
Lead		194.8000	213.0000	8.9		F
Magnesium		261800.0000	262600.0000	0.3		P
Manganese		9227.0000	9183.0000	0.5		P
Mercury	0.2	0.3400	0.3400	0.0		CV
Nickel	40.0	179.9000	176.9000	1.7		P
Potassium	5000.0	27730.0000	24650.0000	11.8		P
Selenium		10.0000	10.0000			F
Silver		3.0000	3.0000			P
Sodium		833400.0000	779300.0000	6.7		P
Thallium		2.0000	2.0000			F
Vanadium	50.0	168.5000	148.0000	13.0		P
Zinc		1421.0000	1474.0000	3.7		P
Cyanide						NR

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NYSDEC ASP

6
DUPLICATES

NYSDEC SAMPLE NO.

B23705D

Lab Name: ECOLOGY_AND_ENVIRONMENT Contract: C003181

Lab Code: EANDE Case No.: RB094 SAS No.: SDG No.: 1214

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

% Solids for Sample: 100.0 % Solids for Duplicate: 100.0

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

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Aluminum	40.0	149.6200	155.8600	4.1	-	P
Antimony		5.0600	5.0600		-	P
Arsenic		0.4000	0.4000		-	F
Barium		1.1394	1.1336	0.5	-	P
Beryllium		0.0400	0.0400		-	P
Cadmium		0.5000	0.5000		-	P
Calcium		26.2800	28.1600	6.9	-	P
Chromium	2.0	7.4700	7.5000	0.4	-	P
Cobalt		0.8200	0.8200		-	P
Copper		47.1000	49.0000	4.0	-	P
Iron		249.2000	252.8000	1.4	-	P
Lead	0.6	1.9420	2.0000	2.9	-	F
Magnesium		23.2000	23.2000		-	P
Manganese		0.1600	0.1600		-	P
Mercury					-	NR
Nickel		1.6800	1.6800		-	P
Potassium		49.2000	49.2000		-	P
Selenium		0.4000	0.4000		-	F
Silver		0.6000	0.6000		-	P
Sodium		79.2000	79.2000		-	P
Thallium		0.4000	0.4000		-	F
Vanadium		0.7200	0.7200		-	P
Zinc		2.6880	2.5400	5.7	-	P
Cyanide					-	NR

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