



IEA

An Aquarion Company

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February 25, 1993

Mr. Harry Gregory
Roux Associates
775 Park Avenue
Suite 255
Huntington, NY 11743

Dear Mr. Gregory:

Please find enclosed the analytical results of 15 soil and 3 aqueous samples received at our laboratory on January 19 and 21, 1993. This report contains sections addressing the following information at a minimum:

- . sample summary
- . analytical methodology
- . state certifications
- . definitions of data qualifiers and terminology
- . analytical results
- . chain-of-custody

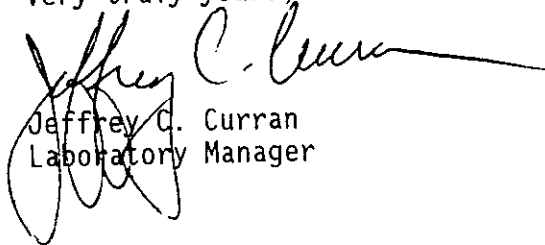
IEA Report #30930-0060	Purchase Order #05526Y
Project ID: Amtrak Sunnyside	

Copies of this analytical report and supporting data are maintained in our files for a minimum of five years unless special arrangements have been made. Unless specifically indicated, all analytical testing was performed at this laboratory location and no portion of the testing was subcontracted.

We appreciate your selection of our services and welcome any questions or suggestions you may have relative to this report. Please contact your customer service representative at (203) 261-4458 for any additional information. Thank you for utilizing our services; we hope you will consider us for your future analytical needs.

I have reviewed and approved the enclosed data for final release.

Very truly yours,



Jeffrey C. Curran
Laboratory Manager

JCC/adj

cc: J. Harry

30930-0060
 ROUX ASSOCIATES
 SAMPLE SUMMARY

Client ID	Lab ID	Matrix	Date Collected	Date Received
S-99	0060001	Soil	01/18/93	01/19/93
S-100	0060002	Soil	01/18/93	01/19/93
S-101	0060003	Soil	01/18/93	01/19/93
S-102	0060004	Soil	01/18/93	01/19/93
CS-43	0060005	Soil	01/18/93	01/19/93
FB 011893	0060006	Liquid	01/18/93	01/19/93
TB	0060007	Liquid	---	01/19/93
CS-75	0060008	Soil	01/19/93	01/21/93
S-103	0060009	Soil	01/19/93	01/21/93
CS-51	0060010	Soil	01/20/93	01/21/93
CS-50	0060011	Soil	01/20/93	01/21/93
S-115	0060012	Soil	01/20/93	01/21/93
S-113	0060013	Soil	01/20/93	01/21/93
S-111	0060014	Soil	01/20/93	01/21/93
CS-49	0060015	Soil	01/20/93	01/21/93
FB 012093	0060016	Liquid	01/20/93	01/21/93
S-114	0060017	Soil	01/20/93	01/21/93
S-112	0060018	Soil	01/20/93	01/21/93

30930-0060
ROUX ASSOCIATES
PROJECT SUMMARY

The client requested the samples be analyzed for the parameters listed in Table 1.0.

METHODOLOGY

Volatile organics were determined using purge and trap GC/MS. The instrumentation used was a Tekmar Dynamic Headspace Concentrator interfaced with a Hewlett-Packard Model 5995 GC/MS/DS.

Semi-volatile organics were determined using capillary GC/MS. The instrumentation used was a Hewlett-Packard Model 5890 gas chromatograph interfaced with Model 5970/5971 Mass Selective Detector.

Polychlorinated biphenyls (PCB's) were determined using GC/ECD. The instrumentation used was a HP Model 5890 gas chromatograph equipped with an electron capture detector (Ni⁶³).

Metals were determined by ICP using either a JA61 simultaneous ICAP or a PE6500-XR sequential ICP. Graphite furnace elements were determined using either a PEZ5100 or a PEZ3030 GFAAS. Mercury was determined by the cold vapor technique utilizing the Spectro Products Model HG-4 mercury analyzer.

The analyses were conducted according to NYSDEC '91 ASP Protocols.

DISCUSSION

Volatile Organics - In order to meet the 7-day from receipt holding time, the field blanks and the trip blank were analyzed along with the soil sample on a soil calibration curve.

Extractions - Sample S-100 for PCB's was inadvertently spiked with the incorrect concentration of the standard solution. The sample was re-extracted on 02/01/93 using the correct solution.

Semi-Volatile Organics - Samples S-101, S-100, S-100 MS, S-100 MSD and S-102 exhibited internal standard area suppression. Samples S-101 and S-102 were reanalyzed with similar results, therefore proving matrix interference. Samples S-100 MS and S-100MSD confirmed the matrix interference for sample S-100. Both analyses have been reported with the reanalysis designated with the suffix "RE".

PCB's - Samples S-100, S-100 MS, S-00 MSD, S-101, CS-75, S-103, CS-51, CS-50, S115, S-113, S-111, CS-49, S-114 and S-112 required dilutions because of the high concentration of aroclor 1260.

The third peak used for calculation of aroclor 1260 in sample S-112 was outside of RT windows due to matrix interference.

Samples S-102 and CS-43 required dilutions due to the sample matrix. The third peak used for calculation of aroclor 1260 in sample CS-43 was outside of RT windows.

After sample CS-43 was diluted, the aroclor present was indistinguishable on the RTX-35 column, therefore the results reported are from column DB-1701. The third peak of aroclor 1260 was outside of RT windows.

Samples CS-75 and CS-49 were confirmed by GC/MS for aroclor 1260.

There was no aroclor 1242 injected within 72 hours of the QC check standard on column 2, however the aroclors run every 72 hours are not used for quantitation, only for pattern recognition. Since this is a spike sample, aroclor 1242 is a known compound.

Because of the very high concentration of aroclor 1260 in sample S-100 and the dilution required, the spike percent recovery could not be calculated.

All samples with dilution factors of 100 and higher had surrogates diluted out.

In sample CS-50 and CS-50 DL, DCB was lost in matrix and is not reported.

DCB was below advisory QC limits on column 1 in samples FB 011893 and FB 012093 and method blank PBLK40.

DCB was below advisory QC limits on column 2 in sample FB 011893 and method blanks PBLK53, PBLK40 and PBLK51 and on column 1 in sample S-111 DL.

TCX was below advisory QC limits on column 2 in sample S-99 and method blanks PBLK44 and PBLK51.

DCB had high recovery because of interference with aroclors on column 1 in samples CS-43, S-100 MSD, CS-5-1 DL, CS-51, S-115 DL, S-113 and on column 2 in samples S-102, S-100 MS, S-100 MSD, CS-51 DL, CS-51, S-115 DL, S-111 DL, CS-49 and S-112 DL.

Many results have "P" flags due to the large percent RPD between column concentrations. This is believed to be due to the sample matrix.

Metals - IEC's are electronically employed by the TJA ICAP-61. However, the ICSA is utilized as a monitoring device to detect any additional adjustments that may be required. These modifications are calculated and applied manually. They are so noted in the raw data.

Copper, arsenic and selenium failed the control limits for spike recovery analysis of sample S-100, resulting in three "N" flags. It was noted during sample digestion that the sample contained numerous rocks. A problem with sample homogeneity appears to be the cause for the resultant flags.

No other problems were noted.

RESULTS

The results are presented in the following Tables. Also enclosed are the data packages containing all relevant data.

TABLE 1.0
30930-0060
ROUX ASSOCIATES
ANALYTICAL REQUESTS

<u>Sample Identification</u>	<u>Requested Parameters</u>
S-99, S-100, S-101, S-102, FB 011893	TCL volatile organics plus a library search for non-target compounds, TCL semi-volatile organics plus a library search for non-target compounds, PCB's, TAL metals
CS-43	PCB's, mercury
TB	TCL volatile organics plus a library search for non-target compounds
CS-75, S-103, CS-51, CS-50, S-115, S-113, S-111, CS-49, FB 012093, S-114, S-112	PCB'S

TABLE 2.0
30930-0060
ROUX ASSOCIATES
EPA TCL VOLATILE ORGANICS

All values are ug/Kg.

Sample Identification

<u>Dilution Factor</u>	<u>1.0</u>	<u>1.10</u>	<u>1.12</u>	<u>1.12</u>	<u>1.12</u>	
<u>Method Blank I.D.</u>	<u>VBLKG2</u>	<u>VBLKG2</u>	<u>VBLKG2</u>	<u>VBLKG2</u>	<u>VBLKG2</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>S-99</u>	<u>S-100</u>	<u>S-100 MS</u>	<u>S-100 MSD</u>	<u>Quantitation Limits with no Dilution</u>
Chloromethane	U	U	U	U	U	10
Bromomethane	U	U	U	U	U	10
Vinyl Chloride	U	U	U	U	U	10
Chloroethane	U	U	U	U	U	10
Methylene Chloride	8J	10JB	7JB	15B	13B	10
Acetone	10	11B	27B	9JB	13B	10
Carbon Disulfide	U	U	U	U	U	10
1,1-Dichloroethene	U	U	U	96	89	10
1,1-Dichloroethane	U	U	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	U	U	10
Chloroform	U	U	U	U	U	10
1,2-Dichloroethane	U	U	U	U	U	10
2-Butanone	U	U	U	4JB	6JB	10
1,1,1-Trichloroethane	U	U	U	1JB	1JB	10
Carbon Tetrachloride	U	U	U	U	U	10
Bromodichloromethane	U	U	U	U	U	10
1,2-Dichloropropane	U	U	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	U	U	10
Trichloroethene	U	U	U	56	57	10
Dibromochloromethane	U	U	U	U	U	10
1,1,2-Trichloroethane	U	U	U	U	U	10
Benzene	U	U	U	55	61	10
trans-1,3-Dichloropropene	U	U	U	U	U	10
Bromoform	U	U	U	U	U	10
4-Methyl-2-pentanone	U	U	U	U	U	10
2-Hexanone	U	U	U	U	U	10
Tetrachloroethene	U	U	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	U	U	10
Toluene	2J	2JB	2JB	49	55	10
Chlorobenzene	U	U	U	51	55	10
Ethylbenzene	U	U	U	U	U	10
Styrene	U	U	U	U	U	10
Xylene (total)	U	U	U	U	U	10

U, J, B - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 2.1
30930-0060
ROUX ASSOCIATES
EPA TCL VOLATILE ORGANICS

All values are ug/Kg unless noted.

Compound	Sample Identification					Quantitation Limits with no Dilution
	Dilution Factor					
	1.0	1.16	1.14	1.0	1.0	
Method Blank I.D.	VBLKG2	VBLKG2	VBLKG2	VBLKG2	VBLKG2	
	Method Blank	S-101	S-102	FB* 011893	TB*	
Chloromethane	U	U	U	U	U	10
Bromomethane	U	U	U	U	U	10
Vinyl Chloride	U	U	U	U	U	10
Chloroethane	U	U	U	U	U	10
Methylene Chloride	8J	6JB	8JB	10B	20B	10
Acetone	10	19B	16B	9JB	8JB	10
Carbon Disulfide	U	U	U	U	U	10
1,1-Dichloroethene	U	U	U	U	U	10
1,1-Dichloroethane	U	U	U	U	U	10
1,2-Dichloroethene (total)	U	U	U	U	U	10
Chloroform	U	U	U	U	U	10
1,2-Dichloroethane	U	U	U	U	U	10
2-Butanone	U	U	U	U	U	10
1,1,1-Trichloroethane	U	U	U	U	U	10
Carbon Tetrachloride	U	U	U	U	U	10
Bromodichloromethane	U	U	U	U	U	10
1,2-Dichloropropane	U	U	U	U	U	10
cis-1,3-Dichloropropene	U	U	U	U	U	10
Trichloroethene	U	U	U	U	U	10
Dibromochloromethane	U	U	U	U	U	10
1,1,2-Trichloroethane	U	U	U	U	U	10
Benzene	U	U	U	U	U	10
trans-1,3-Dichloropropene	U	U	U	U	U	10
Bromoform	U	U	U	U	U	10
4-Methyl-2-pentanone	U	U	U	U	U	10
2-Hexanone	U	U	U	U	U	10
Tetrachloroethene	U	U	U	U	U	10
1,1,2,2-Tetrachloroethane	U	U	U	U	U	10
Toluene	2J	1JB	U	U	U	10
Chlorobenzene	U	U	U	U	U	10
Ethylbenzene	U	U	U	U	U	10
Styrene	U	U	U	U	U	10
Xylene (total)	U	U	U	U	U	10

*Values are ug/L (see Discussion).

U, J, B - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 3.0
30930-0060
ROUX ASSOCIATES
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank VBLKG2

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
None detected			

Sample Identification: S-99

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
None detected			

Sample Identification: S-100

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Unknown alcohol	7.03	9J
	Unknown alkane	24.81	9J

Sample Identification: S-101

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
None detected			

Sample Identification: S-102

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
None detected			

TABLE 3.1
30930-0060
ROUX ASSOCIATES
VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: FB 011893

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/L</u>
541059	Cyclotetrasiloxane, hexamethyl	18.31	10JN
556672	Cyclotetrasiloxane, octamethyl	23.12	7JN
	Unknown siloxane	25.91	7J

Sample Identification: TB

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/L</u>
None detected			

TABLE 4.0
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Aqueous
Page 1 of 2

All values are ug/L.

<u>Dilution Factor</u>	<u>Sample Identification</u>		<u>Quantitation Limits with no Dilution</u>
	<u>1.0</u>	<u>1.01</u>	
<u>Method Blank I.D.</u>	<u>SBLK53</u>	<u>SBLK53</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>FB 011893</u>	
Phenol	0.5J	1JB	10
bis(2-Chloroethyl)ether	U	U	10
2-Chlorophenol	U	U	10
1,3-Dichlorobenzene	U	U	10
1,4-Dichlorobenzene	U	U	10
1,2-Dichlorobenzene	U	U	10
2-Methylphenol	U	U	10
2,2'-oxybis(1-Chloropropane)	U	U	10
4-Methylphenol	U	U	10
N-Nitroso-di-n-propylamine	U	U	10
Hexachloroethane	U	U	10
Nitrobenzene	U	U	10
Isophorone	U	U	10
2-Nitrophenol	U	U	10
2,4-Dimethylphenol	U	U	10
bis(2-Chloroethoxy)methane	U	U	10
2,4-Dichlorophenol	U	U	10
1,2,4-Trichlorobenzene	U	U	10
Naphthalene	U	U	10
4-Chloroaniline	U	U	10
Hexachlorobutadiene	U	U	10
4-Chloro-3-methylphenol	U	U	10
2-Methylnaphthalene	U	U	10
Hexachlorocyclopentadiene	U	U	10
2,4,6-Trichlorophenol	U	U	10
2,4,5-Trichlorophenol	U	U	25
2-Chloronaphthalene	U	U	10
2-Nitroaniline	U	U	25
Dimethylphthalate	U	U	10
Acenaphthylene	U	U	10
2,6-Dinitrotoluene	U	U	10
3-Nitroaniline	U	U	25
Acenaphthene	U	U	10

U, J, B - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.0
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Aqueous
Page 2 of 2

All values are ug/L.

<u>Dilution Factor</u>	<u>Sample Identification</u>		<u>Quantitation Limits with no Dilution</u>
	<u>1.0</u>	<u>1.01</u>	
<u>Method Blank I.D.</u>	<u>SBLK53</u>	<u>SBLK53</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>FB 011893</u>	
2,4-Dinitrophenol	U	U	25
4-Nitrophenol	U	U	25
Dibenzofuran	U	U	10
2,4-Dinitrotoluene	U	U	10
Diethylphthalate	0.3J	0.3JB	10
4-Chlorophenyl-phenylether	U	U	10
Fluorene	U	U	10
4-Nitroaniline	U	U	25
4,6-Dinitro-2-methylphenol	U	U	25
N-Nitrosodiphenylamine (1)	U	U	10
4-Bromophenyl-phenylether	U	U	10
Hexachlorobenzene	U	U	10
Pentachlorophenol	U	U	25
Phenanthrene	U	U	10
Anthracene	U	U	10
Carbazole	U	U	10
Di-n-butylphthalate	0.3J	0.3JB	10
Fluoranthene	U	U	10
Pyrene	U	U	10
Butylbenzylphthalate	U	U	10
3,3'-Dichlorobenzidine	U	U	10
Benzo(a)anthracene	U	U	10
Chrysene	U	U	10
bis(2-Ethylhexyl)phthalate	0.8J	1JB	10
Di-n-octylphthalate	U	0.4J	10
Benzo(b)fluoranthene	U	U	10
Benzo(k)fluoranthene	U	U	10
Benzo(a)pyrene	U	U	10
Indeno(1,2,3-cd)pyrene	U	U	10
Dibenzo(a,h)anthracene	U	U	10
Benzo(g,h,i)perylene	U	U	10

U, J, B, (1) - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.1
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Soil
Page 1 of 2

All values are ug/Kg.

<u>Compound</u>	Sample Identification					Quantitation Limits with no Dilution
	<u>1.0</u>	<u>1.14</u>	<u>1.14</u>	<u>1.14</u>	<u>1.14</u>	
	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	
	<u>Method</u> <u>Blank</u>	<u>S-99</u>	<u>S-100</u>	<u>S-100</u> <u>MS</u>	<u>S-100</u> <u>MSD</u>	
Phenol	U	U	U	2,000	1,900	330
bis(2-Chloroethyl)ether	U	U	U	U	U	330
2-Chlorophenol	U	U	U	1,900	1,900	330
1,3-Dichlorobenzene	U	U	U	U	U	330
1,4-Dichlorobenzene	U	U	U	1,300	1,200	330
1,2-Dichlorobenzene	U	U	U	U	U	330
2-Methylphenol	U	U	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	U	U	330
4-Methylphenol	U	U	U	U	U	330
N-Nitroso-di-n-propylamine	U	U	U	1,500	1,400	330
Hexachloroethane	U	U	U	U	U	330
Nitrobenzene	U	U	U	U	U	330
Isophorone	U	U	U	U	U	330
2-Nitrophenol	U	U	U	U	U	330
2,4-Dimethylphenol	U	U	U	U	U	330
bis(2-Chloroethoxy)methane	U	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	1,400	1,300	330
Naphthalene	U	9J	85J	87J	77J	330
4-Chloroaniline	U	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	2,400	2,400	330
2-Methylnaphthalene	U	11J	81J	86J	81J	330
Hexachlorocyclopentadiene	U	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	U	U	800
2-Chloronaphthalene	U	U	U	U	U	330
2-Nitroaniline	U	U	U	U	U	800
Dimethylphthalate	U	U	U	U	54J	330
Acenaphthylene	U	16J	380	480	540	330
2,6-Dinitrotoluene	U	U	U	U	U	330
3-Nitroaniline	U	U	U	U	U	800
Acenaphthene	U	U	74J	1,700	1,600	330

U, J - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.1
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Soil
Page 2 of 2

All values are ug/Kg.

<u>Compound</u>	<u>Sample Identification</u>					<u>Quantitation Limits with no Dilution</u>
	<u>1.0</u>	<u>1.14</u>	<u>1.14</u>	<u>1.14</u>	<u>1.14</u>	
	<u>Method Blank</u>	<u>S-99</u>	<u>S-100</u>	<u>S-100 MS</u>	<u>S-100 MSD</u>	
<u>Dilution Factor</u>						
<u>Method Blank I.D.</u>	SBLK51	SBLK51	SBLK51	SBLK51	SBLK51	
2,4-Dinitrophenol	U	U	U	U	U	800
4-Nitrophenol	U	U	U	3,200	2,900	800
Dibenzofuran	U	8J	70J	72J	62J	330
2,4-Dinitrotoluene	U	U	U	1,700	1,400	330
Diethylphthalate	U	24J	U	21J	U	330
4-Chlorophenyl-phenylether	U	U	U	U	U	330
Fluorene	U	U	110J	110J	80J	330
4-Nitroaniline	U	U	U	U	U	800
4,6-Dinitro-2-methylphenol	U	U	U	U	U	800
N-Nitrosodiphenylamine (1)	U	U	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	U	U	330
Hexachlorobenzene	U	U	U	U	U	330
Pentachlorophenol	U	U	U	1,600	1,600	800
Phenanthrene	U	45J	1,000	640	480	330
Anthracene	U	17J	460	350J	370J	330
Carbazole	U	26J	480	250J	270J	330
Di-n-butylphthalate	19J	36JB	160JB	62JB	U	330
Fluoranthene	U	100J	1,700	1,000	950	330
Pyrene	U	77J	U	2,000	2,000	330
Butylbenzylphthalate	5J	U	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	U	U	330
Benzo(a)anthracene	U	65J	1,100	820	760	330
Chrysene	U	110J	U	1,000	1,000	330
bis(2-Ethylhexyl)phthalate	28J	100JB	1,600B	250JB	270JB	330
Di-n-octylphthalate	U	U	U	U	U	330
Benzo(b)fluoranthene	U	100J	1,000	1,200	1,000	330
Benzo(k)fluoranthene	U	110J	940	770	680	330
Benzo(a)pyrene	U	88J	1,200	760	1,000	330
Indeno(1,2,3-cd)pyrene	U	110J	280J	230J	330J	330
Dibenzo(a,h)anthracene	U	13J	51J	35J	60J	330
Benzo(g,h,i)perylene	U	80J	150J	130J	220J	330

U, J, B, (1) - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.2
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Soil
Page 1 of 2

All values are ug/Kg.

Sample Identification						Quantitation Limits with no Dilution
<u>Dilution Factor</u>	<u>1.0</u>	<u>9.28</u>	<u>9.28</u>	<u>1.14</u>	<u>1.14</u>	
<u>Method Blank I.D.</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>S-101</u>	<u>S-101 RE</u>	<u>S-102</u>	<u>S-102 RE</u>	
Phenol	U	U	U	U	U	330
bis(2-Chloroethyl)ether	U	U	U	U	U	330
2-Chlorophenol	U	U	U	U	U	330
1,3-Dichlorobenzene	U	U	U	U	U	330
1,4-Dichlorobenzene	U	U	U	U	U	330
1,2-Dichlorobenzene	U	U	U	U	U	330
2-Methylphenol	U	U	U	U	U	330
2,2'-oxybis(1-Chloropropane)	U	U	U	U	U	330
4-Methylphenol	U	U	U	U	28J	330
N-Nitroso-di-n-propylamine	U	U	U	U	U	330
Hexachloroethane	U	U	U	U	U	330
Nitrobenzene	U	U	U	U	U	330
Isophorone	U	U	U	U	U	330
2-Nitrophenol	U	U	U	U	U	330
2,4-Dimethylphenol	U	41J	U	U	15J	330
bis(2-Chloroethoxy)methane	U	U	U	U	U	330
2,4-Dichlorophenol	U	U	U	U	U	330
1,2,4-Trichlorobenzene	U	U	U	U	U	330
Naphthalene	U	700J	660J	260J	280J	330
4-Chloroaniline	U	U	U	U	U	330
Hexachlorobutadiene	U	U	U	U	U	330
4-Chloro-3-methylphenol	U	U	U	U	U	330
2-Methylnaphthalene	U	430J	440J	190J	230J	330
Hexachlorocyclopentadiene	U	U	U	U	U	330
2,4,6-Trichlorophenol	U	U	U	U	U	330
2,4,5-Trichlorophenol	U	U	U	U	U	800
2-Chloronaphthalene	U	U	U	U	U	330
2-Nitroaniline	U	U	U	U	U	800
Dimethylphthalate	U	U	U	U	U	330
Acenaphthylene	U	2,500J	3,500	600	710	330
2,6-Dinitrotoluene	U	U	U	U	U	330
3-Nitroaniline	U	U	U	U	U	800
Acenaphthene	U	240J	290J	45J	U	330

U, J - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 4.2
30930-0060
ROUX ASSOCIATES
EPA TCL SEMI-VOLATILE ORGANICS

Soil
Page 2 of 2

All values are ug/Kg.

<u>Dilution Factor</u>	<u>Sample Identification</u>					<u>Quantitation Limits with no Dilution</u>
	<u>1.0</u>	<u>9.28</u>	<u>9.28</u>	<u>1.14</u>	<u>1.14</u>	
	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	<u>SBLK51</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>S-101</u>	<u>S-101 RE</u>	<u>S-102</u>	<u>S-102 RE</u>	
2,4-Dinitrophenol	U	U	U	U	U	800
4-Nitrophenol	U	U	U	U	U	800
Dibenzofuran	U	500J	600J	210J	180J	330
2,4-Dinitrotoluene	U	U	U	U	U	330
Diethylphthalate	U	U	U	41J	40J	330
4-Chlorophenyl-phenylether	U	U	U	U	U	330
Fluorene	U	460J	600J	U	U	330
4-Nitroaniline	U	U	U	U	U	800
4,6-Dinitro-2-methylphenol	U	U	U	U	U	800
N-Nitrosodiphenylamine (1)	U	U	U	U	U	330
4-Bromophenyl-phenylether	U	U	U	U	U	330
Hexachlorobenzene	U	U	U	U	U	330
Pentachlorophenol	U	U	U	U	U	800
Phenanthrene	U	3,100	3,600	680	630	330
Anthracene	U	3,100	3,200	370J	340J	330
Carbazole	U	3,600	2,300J	200J	350J	330
Di-n-butylphthalate	19J	U	160JB	49JB	U	330
Fluoranthene	U	7,000	6,800	260J	220J	330
Pyrene	U	6,900	7,800	U	710	330
Butylbenzylphthalate	5J	U	U	U	U	330
3,3'-Dichlorobenzidine	U	U	U	U	U	330
Benzo(a)anthracene	U	3,900	4,600	690	730	330
Chrysene	U	4,900	6,500	1,500	1,100	330
bis(2-Ethylhexyl)phthalate	28J	1,900JB	2,400JB	U	U	330
Di-n-octylphthalate	U	U	U	U	U	330
Benzo(b)fluoranthene	U	3,200	3,500	1,200	760	330
Benzo(k)fluoranthene	U	5,100	3,800	860	670	330
Benzo(a)pyrene	U	5,700	4,000	2,100	2,100	330
Indeno(1,2,3-cd)pyrene	U	920J	1,200J	770	670	330
Dibenzo(a,h)anthracene	U	U	U	250J	180J	330
Benzo(g,h,i)perylene	U	700J	550J	670	280J	330

U, J, B, (1) - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 5.0
30930-0060
ROUX ASSOCIATES
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank SBLK53

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/L</u>
	Unknown	8.89	12J
	Aldol condensation product	8.47	6JA
	Unknown	9.56	3J
	Unknown	10.61	2J

Sample Identification: FB 011893

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/L</u>
149575	Hexanoic acid, 2-ethyl	13.98	13JN
	Unknown	8.73	11JB
	Aldol condensation product	8.31	6JAB
	Unknown	9.41	3JB

Sample Identification: Method Blank SBLK51

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.64	13,000JA
	Unknown	7.91	1,200J
	Unknown	8.14	910J
625865	Furan, 2,5-dimethyl	5.04	730JN
	Unknown	10.25	560J
	Unknown hydrocarbon	8.33	390J
4436753	3-Hexene-2,5-dione	10.92	370JN
	Unknown acid	20.81	360J
110861	Pyridine	5.97	220JN
4127473	3-Penten-2-one, 4-methyl-	7.40	200JN
3404782	2-Hexene, 2,5-dimethyl-	7.50	140JN
	Unknown	35.30	140J
7116861	1-hexene, 5,5-dimethyl-	12.25	98JN
	Unknown hydrocarbon	12.96	94J
	Unknown alkane	9.04	84J
	Unknown	10.13	84J
	Unknown alkane	9.21	83J

J, A, B, N - See Appendix for definition.

TABLE 5.1
30930-0060
ROUX ASSOCIATES
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: Method Blank SBLK51 (continued)

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Unknown	35.83	81J
	Unknown	7.68	77J
	Unknown	11.76	67J

Sample Identification: S-99

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.50	13,000JAB
	Unknown	12.91	2,600J
	Unknown	7.91	1,100JB
	Unknown	10.81	730JB
	Unknown	7.77	730JB
	Unknown C ₈ H ₈	9.58	630J
	Unknown acid	14.92	540J
	Unknown	30.76	480J
	Unknown	10.43	470J
	Unknown	10.12	410J
	Unknown C ₃ alkylbenzene	10.35	280J
	Unknown alkane	8.19	230J
	Unknown	20.67	220JB
	Unknown	23.07	170J
	Unknown acid	25.40	140J
	Unknown	13.86	140J
	Unknown	12.74	130J
	Unknown	11.21	120J
	Unknown	7.27	120J
	Unknown	11.13	120J
	Unknown alkane	24.76	100J

J, A, B - See Appendix for definition.

TABLE 5.2
30930-0060
ROUX ASSOCIATES
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: S-100

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.48	14,000JAB
	Unknown	12.90	3,100J
	Unknown	10.44	2,600J
	Unknown	7.76	1,400JB
	Unknown	10.80	850J
	Unknown	10.11	500JB
	Unknown	11.20	260J
	Unknown alkane	8.18	240J
	Unknown	7.25	170J
	Unknown	12.73	110J
	Unknown	13.84	110J
	Unknown	20.68	100J
	Unknown	17.55	99J
	Unknown alkane	19.88	99J
	Unknown alkane	12.58	96J
	Unknown alkane	22.52	91J
	Unknown alkane	13.09	89J
	Unknown alkane	21.20	88J
	Unknown	8.80	85J
	Unknown alkane	12.32	84J

Sample Identification: S-101

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.37	59,000JAB
	Unknown	7.67	3,700JB
	Unknown	10.72	3,100J
	Unknown	12.78	1,900J
	Unknown	10.35	1,100J
	Unknown alkane	22.46	780J

J, A, B - See Appendix for definition.

TABLE 5.3
30930-0060
ROUX ASSOCIATES
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: S-101 RE

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.43	61,000JAB
	Unknown	7.75	3,700JB
	Unknown	10.80	3,000J
	Unknown	12.86	1,400J
	Unknown	10.44	1,300J
	Unknown alkane	22.57	690J

Sample Identification: S-102

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.59	12,000JAB
	Unknown	7.88	1,600JB
	Unknown	8.02	1,100J
	Unknown	10.91	1,000J
	Unknown	13.00	880J
	Unknown	10.54	660J
	Unknown	10.24	500J
	Unknown	12.91	330J
	Unknown hydrocarbon	7.37	320J
	Unknown MW=142	17.40	220J
	Unknown MW=142	17.68	220J
	Unknown	11.12	190J
	Unknown	13.96	190J
	Unknown	12.12	150J
	Unknown alkane	20.01	150J
	Unknown alkane	18.62	140J
	Unknown alkane	8.29	140J
	Unknown dimethyl naphthalene	19.30	130J
	Unknown	16.52	110J
	Unknown	13.38	110J
	Unknown	10.47	110J

J, A, B - See Appendix for definition.

TABLE 5.4
30930-0060
ROUX ASSOCIATES
SEMI-VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS

Sample Identification: S-102 RE

<u>CAS#</u>	<u>Compound</u>	<u>RT</u>	<u>Estimated Concentration, ug/Kg</u>
	Aldol condensation product	8.44	12,000JAB
	Unknown	12.87	2,100J
	Unknown	10.76	980J
	Unknown	7.72	980JB
	Unknown	7.86	900J
	Unknown	10.38	640J
	Unknown	10.07	500J
	Unknown hydrocarbon	7.21	400J
	Unknown	10.96	290J
	Unknown MW=142	17.50	250J
	Unknown	10.32	200J
	Unknown	13.78	190J
	Unknown	14.89	170J
	Unknown alkane	8.13	140J
	Unknown	11.96	140J
	Unknown	16.34	130J
	Unknown dimethyl naphthalene	19.11	130J
	Unknown alkane	19.84	130J
	Unknown alkane	18.44	120J
	Unknown	12.74	99J
	Unknown dimethyl naphthalene	18.88	92J

J, A, B - See Appendix for definition.

Aqueous

TABLE 6.0
30930-0060
ROUX ASSOCIATES
POLYCHLORINATED BIPHENYLS (PCB's)

All values are ug/L.

Sample Identification

Dilution Factor

1.0

1.0

Method Blank I.D.

PBLK40

PBLK40

Compound

Method
Blank

FB
011893

Quantitation
Limits with no
Dilution

PCB - 1016
PCB - 1221
PCB - 1232
PCB - 1242
PCB - 1248
PCB - 1254
PCB - 1260

U
U
U
U
U
U
U

U
U
U
U
U
U
U

1.0
2.0
1.0
1.0
1.0
1.0
1.0

U - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

Aqueous

TABLE 6.1
30930-0060
ROUX ASSOCIATES
POLYCHLORINATED BIPHENYLS (PCB'S)

All values are ug/L.

	Sample Identification		
<u>Dilution Factor</u>	<u>1.0</u>	<u>1.0</u>	
<u>Method Blank I.D.</u>	<u>PBLK53</u>	<u>PBLK53</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>FB 012093</u>	<u>Quantitation Limits with no Dilution</u>
PCB - 1016	U	U	1.0
PCB - 1221	U	U	2.0
PCB - 1232	U	U	1.0
PCB - 1242	U	U	1.0
PCB - 1248	U	U	1.0
PCB - 1254	U	U	1.0
PCB - 1260	U	U	1.0

U - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 6.2
30930-0060
ROUX ASSOCIATES
POLYCHLORINATED BIPHENYLS (PCB'S)

All values are ug/Kg.

Sample Identification

<u>Dilution Factor</u>	<u>1.0</u>	<u>1.14</u>	<u>11.4</u>	<u>114.0</u>	<u>10.0</u>	<u>10.0</u>	<u>Quantitation Limits with no Dilution</u>
<u>Method Blank I.D.</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>S-99</u>	<u>S-100</u>	<u>S-100 DL</u>	<u>S-100 MS</u>	<u>S-100 MSD</u>	
PCB - 1016	U	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	U	33
PCB - 1260	U	120P	5,400P	4,100PD	5,300P	5,300P	33

Sample Identification

<u>Dilution Factor</u>	<u>116.0</u>	<u>1,160.0</u>	<u>11.4</u>	<u>114.0</u>	<u>12.1</u>	<u>121.0</u>	<u>Quantitation Limits with no Dilution</u>
<u>Method Blank I.D.</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	<u>PBLK44</u>	
<u>Compound</u>	<u>S-101</u>	<u>S-101 DL</u>	<u>S-102</u>	<u>S-102 DL</u>	<u>CS-43</u>	<u>CS-43 DL</u>	
PCB - 1016	U	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	U	33
PCB - 1260	58,000P	71,000PD	1,400P	2,300JPD	1,400P	3,000JD	33

U, J, P, D - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 6.3
30930-0060
ROUX ASSOCIATES
POLYCHLORINATED BIPHENYLS (PCB'S)

All values are ug/Kg.

Sample Identification

<u>Dilution Factor</u>	<u>1.0</u>	<u>11.1</u>	<u>111.0</u>	<u>110.0</u>	<u>1,100.0</u>	<u>1.15</u>	
<u>Method Blank I.D.</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	
<u>Compound</u>	<u>Method Blank</u>	<u>CS-75</u>	<u>CS-75 DL</u>	<u>S-103</u>	<u>S-103 DL</u>	<u>CS-51</u>	<u>Quantitation Limits with no Dilution</u>
PCB - 1016	U	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	U	33
PCB - 1260	U	3,600CP	6,900PD	40,000P	65,000PD	1,100P	33

Sample Identification

<u>Dilution Factor</u>	<u>11.5</u>	<u>1.15</u>	<u>11.5</u>	<u>1.14</u>	<u>11.4</u>	
<u>Method Blank I.D.</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	
<u>Compound</u>	<u>CS-51 DL</u>	<u>CS-50</u>	<u>CD-50 DL</u>	<u>S-115</u>	<u>S-115 DL</u>	<u>Quantitation Limits with no Dilution</u>
PCB - 1016	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	33
PCB - 1260	1,100PD	250P	270JPD	480P	590PD	33

U, J, P, D, C - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

Soil

TABLE 6.4
30930-0060
ROUX ASSOCIATES
POLYCHLORINATED BIPHENYLS (PCB'S)

All values are ug/Kg.

Sample Identification

<u>Dilution Factor</u>	<u>1.0</u>	<u>11.4</u>	<u>114.0</u>	<u>1.18</u>	<u>11.8</u>	<u>11.4</u>	
<u>Method Blank I.D.</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>Quantitation Limits with no Dilution</u>
<u>Compound</u>	<u>Method Blank</u>	<u>S-113</u>	<u>S-113 DL</u>	<u>S-111</u>	<u>S-111 DL</u>	<u>CS-49</u>	
PCB - 1016	U	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	U	33
PCB - 1260	U	3,100P	3,400JPD	1,300	1,500PD	2,800CP	33

Sample Identification

<u>Dilution Factor</u>	<u>114.0</u>	<u>108.0</u>	<u>1,080.0</u>	<u>1.16</u>	<u>11.6</u>	
<u>Method Blank I.D.</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>PBLK51</u>	<u>Quantitation Limits with no Dilution</u>
<u>Compound</u>	<u>CS-49 DL</u>	<u>S-114</u>	<u>S-114 DL</u>	<u>S-112</u>	<u>S-112 DL</u>	
PCB - 1016	U	U	U	U	U	33
PCB - 1221	U	U	U	U	U	67
PCB - 1232	U	U	U	U	U	33
PCB - 1242	U	U	U	U	U	33
PCB - 1248	U	U	U	U	U	33
PCB - 1254	U	U	U	U	U	33
PCB - 1260	3,500JPD	120,000P	90,000PD	1,600P	1,700PD	33

U, J, P, D, C - See Appendix for definition.

Note: Sample detection limit = quantitation limit x dilution factor.

TABLE 7.0
30930-0060
ROUX ASSOCIATES
TAL METALS

All values are ug/L.

<u>Parameter</u>	<u>FB 011893</u>
Aluminum	22.0U
Antimony	21.0U
Arsenic	1.0U
Barium	6.0U
Beryllium	1.0U
Cadmium	2.0U
Calcium	11.0U
Chromium	3.0U
Cobalt	3.0U
Copper	3.0U
Iron	82.0U
Lead	1.0UW
Magnesium	23.1B
Manganese	1.0U
Mercury	0.20U
Nickel	21.0U
Potassium	626U
Selenium	2.0U
Silver	3.0U
Sodium	29.0U
Thallium	2.0U
Vanadium	6.0U
Zinc	4.0U

B, U, W - See Metals Appendix for definition.

TABLE 7.1
30930-0060
ROUX ASSOCIATES
TAL METALS

All values are mg/Kg dry basis.

<u>Parameter</u>	<u>CS-43</u>	<u>S-99</u>	<u>S-100</u>	<u>S-101</u>	<u>S-102</u>
Aluminum	NR	9,370	8,330	4,050	3,020
Antimony	NR	4.2U	4.3U	4.3U	10.7B
Arsenic	NR	16.8NS	7.7N	25.0N	21.2N
Barium	NR	50.6	84.8	154	74.5
Beryllium	NR	0.22B	0.20U	0.21U	0.20U
Cadmium	NR	0.40U	1.6	9.2	1.4
Calcium	NR	920B	5,900	8,680	1,630
Chromium	NR	18.8	23.2	124	29.4
Cobalt	NR	7.5B	6.7B	12.7	6.5B
Copper	NR	90.7N	132N	629N	344N
Iron	NR	21,300	21,800	91,800	41,800
Lead	NR	61.9	251	1,190	393
Magnesium	NR	2,180	2,510	2,370	1,180
Manganese	NR	321	318	667	233
Mercury	22.5	0.20	0.49	1.3	0.94
Nickel	NR	13.8	20.6	168	26.1
Potassium	NR	762B	804B	928B	616B
Selenium	NR	0.40UN	0.52BNW	0.78BN	1.4N
Silver	NR	0.60U	0.61U	0.62U	0.59U
Sodium	NR	96.9B	120B	260B	144B
Thallium	NR	0.40U	0.36U	0.45U	0.40U
Vanadium	NR	30.6	38.0	41.8	41.7
Zinc	NR	56.8	275	1,310	134

B, N, U, W - See Metals Appendix for definition.

NR - Not Requested

APPENDIX

- U - Indicates that the compound was analyzed for but not detected.
- J - Indicates that the compound was analyzed for and determined to be present in the sample. The mass spectrum of the compound meets the identification criteria of the method. The concentration listed is an estimated value, which is less than the specified minimum detection limit but is greater than zero.
- B - This flag is used when the analyte is found in the blanks as well as the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.
- N - Indicates that the compound was analyzed for but not requested as an analyte. Value will not be listed on tabular result sheet.
- S - Estimated due to surrogate outliers.
- X - Matrix spike compound.
- (1) - Cannot be separated.
- (2) - Decomposes to azobenzene. Measured and calibrated as azobenzene.
- A - This flag indicates that a TIC is a suspected aldol condensation product.
- E - Indicates that it exceeds calibration curve range.
- D - This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- C - Confirmed by GC/MS.
- T - Compound present in TCLP blank.
- P - This flag is used for a pesticide/aroclor target analyte when there is a greater than 25 percent difference for detected concentrations between the two GC columns (see Form X).

APPENDIX/METALS DATA

C - Concentration qualifiers

- U - Indicates analyte result less than instrument detection limit (IDL)
- B - Indicates analyte result between IDL and contract required detection limit (CRDL)

Q - QC qualifiers

- E - Reported value is estimated because of the presence of interference
- M - Duplicate injection precision not met
- N - Spiked sample recovery not within control limits
- S - The reported value was determined by the method of standard additions (MSA)
- W - Post-digest spike recovery furnace analysis was out of 85-115 percent control limit, while sample absorbance was less than 50 percent of spike absorbance
- * - Duplicate analysis not within control limit
- + - Correlation coefficient for MSA is less than 0.995

M - Method codes

- P - ICP
- A - Flame AA
- F - Furnace AA
- CV - Cold vapor AA (manual)
- C - Cyanide
- NR - Not Required
- NC - Not Calculated as per protocols

STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the IEA-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab-is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

IEA-Connecticut Certification Summary (as of June 1992)

State	Responsible Agency	Certification	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Kansas	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	E-210/E-1185
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	252891
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	46410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	Chemistry...Non- Potable Water and Wastewater	A43



IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203-261-4458
Fax 203-268-5346

SAMPLE DATA SUMMARY PACKAGE

CLIENT:
PROJECT ID:
P.O.#
SDG#:
IEA ID:

ROUX ASSOCIATES
AMTRAK SUNNYSIDE
05526Y
Z0060
30930-0060

Sunrise,
Florida
305-846-1730

Schaumburg,
Illinois
708-705-0740

N. Billerica,
Massachusetts
617-272-5212

Whippany,
New Jersey
201-428-8181

Research Triangle Park,
North Carolina
919-677-0090

Essex Junction,
Vermont
802-878-5138

APPENDIX A
NYSDEC ANALYTICAL DATA FORMS

0001

JOB # : 3093-0060

CLIENT NAME : ROUX ASSOCIATES

PROJECT ID : AMTRAC SUNNYSIDE

SAMPLE PREPARATION AND ANALYSIS SUMMARY
 B/N-A - TCL + TIC'S
 ANALYSIS

JOB # : 3093-0060

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
S-99	Soil	01/18/93	01/19/93	01/20/93	02/02/93
S-100	Soil	↓	01/19/93	↓	02/01/93
S-101	Soil	↓	01/19/93	↓	02/01/93
S-102	Soil	↓	01/19/93	↓	01/29/93
FIELD BLANK	Aqueous	01/18/93	01/19/93	01/21/93	02/01/93
S-100MS	Soil	01/18/93	01/19/93	01/20/93	02/02/93
S-100MSD	↓	↓	↓	↓	↓
S-101RE	↓	↓	↓	↓	02/02/93
S-102RE	↓	↓	↓	↓	02/01/93
S-100MSB	↓	NA	↓	↓	02/01/93
QC CHECK	↓	NA	↓	↓	02/01/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0006

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
S-99	SOIL	01/18/93	01/19/93	01/21/93	02/10/93
S-100					02/10/93
S-100DL					
S-100MS					02/12/93
S-100MSD					02/13/93
S-100MSK					02/10/93
QC CHECK STD					02/12/93
S-101					02/10/93
S-101DL					
S-102					
S-102DL					
CS-43					
CS-43DL					
CS-75		01/19/93	01/21/93	01/22/93	02/11/93
CS-75DL					
S-103					
S-103DL					02/16/93
CS-51		01/20/93			02/13/93
CS-51DL					
CS-50					
CS-50DL					

02/10

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0007

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
S-115	SOIL	01/20/93	01/21/93	01/22/93	02/13/93
S-115DL					
S-113					
S-113DL					
S-111					02/20/93
S-111DL					02/14/93
CS-49					
CS-49DL					
S-114					02/20/93
S-114DL					02/16/93
S-112					
S-112DL					
FIELD # 1/18	WATER	01/18/93	01/19/93	01/19/93	02/11/93
FIELD # 1/20		01/20/93	01/21/93	01/22/93	02/11/93



30930-0060
ROUX ASSOCIATES

SDG Narrative

Volatile Organics - In order to meet the 7-day from receipt holding time, the field blanks and the trip blank were analyzed along with the soil sample on a soil calibration curve.

Extractions - Sample S-100 for PCB's was inadvertently spiked with the incorrect concentration of the standard solution. The sample was re-extracted on 02/01/93 using the correct solution.

Semi-Volatile Organics - Samples S-101, S-100, S-100 MS, S-100 MSD and S-102 exhibited internal standard area suppression. Samples S-101 and S-102 were reanalyzed with similar results, therefore proving matrix interference. Samples S-100 MS and S-100MSD confirmed the matrix interference for sample S-100. Both analyses have been reported with the reanalysis designated with the suffix "RE".

PCB's - Samples S-100, S-100 MS, S-100 MSD, S-101, CS-75, S-103, CS-51, CS-50, S-115, S-113, S-111, CS-49, S-114 and S-112 required dilutions because of the high concentration of aroclor 1260.

The third peak used for calculation of aroclor 1260 in sample S-112 was outside of RT windows due to matrix interference.

Samples S-102 and CS-43 required dilutions due to the sample matrix. The third peak used for calculation of aroclor 1260 in sample CS-43 was outside of RT windows.

After sample CS-43 was diluted, the aroclor present was indistinguishable on the RTX-35 column, therefore the results reported are from column DB-1701. The third peak of aroclor 1260 was outside of RT windows.

Samples CS-75 and CS-49 were confirmed by GC/MS for aroclor 1260.

There was no aroclor 1242 injected within 72 hours of the QC check standard on column 2, however the aroclors run every 72 hours are not used for quantitation, only for pattern recognition. Since this is a spike sample, aroclor 1242 is a known compound.

Because of the very high concentration of aroclor 1260 in sample S-100 and the dilution required, the spike percent recovery could not be calculated.

All samples with dilution factors of 100 and higher had surrogates diluted out.

In sample CS-50 and CS-50 DL, DCB was lost in matrix and is not reported.

DCB was below advisory QC limits on column 1 in samples FB 011893 and FB 012093 and method blank PBLK40.

DCB was below advisory QC limits on column 2 in sample FB 011893 and method blanks PBLK53, PBLK40 and PBLK51 and on column 1 in sample S-111 DL.

TCX was below advisory QC limits on column 2 in sample S-99 and method blanks PBLK44 and PBLK51.

DCB had high recovery because of interference with aroclors on column 1 in samples CS-43, S-100 MSD, CS-5-1 DL, CS-51, S-115 DL, S-113 and on column 2 in samples S-102, S-100 MS, S-100 MSD, CS-51 DL, CS-51, S-115 DL, S-111 DL, CS-49 and S-112 DL.

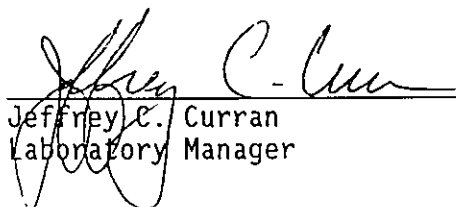
Many results have "P" flags due to the large percent RPD between column concentrations. This is believed to be due to the sample matrix.

Metals - IEC's are electronically employed by the TJA ICAP-61. However, the ICSCA is utilized as a monitoring device to detect any additional adjustments that may be required. These modifications are calculated and applied manually. They are so noted in the raw data.

Copper, arsenic and selenium failed the control limits for spike recovery analysis of sample S-100, resulting in three "N" flags. It was noted during sample digestion that the sample contained numerous rocks. A problem with sample homogeneity appears to be the cause for the resultant flags.

No other problems were noted.

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



Jeffrey C. Curran
Laboratory Manager

March 5, 1993
Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-99

Lab Name: IEA/CT

Contract: 0044

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060001

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

Lab File ID: G3851.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 9

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (mL)

Soil Aliquot Volume: _____ (uL)

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-99

0045

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060001

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

Lab File ID: G3851.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 9

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-100

0052

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060002

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

Lab File ID: G3852.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 11

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (mL)

Soil Aliquot Volume: _____ (uL)

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

74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7	JB
67-64-1	Acetone	27	B
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	2	JB
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

11/4 U JB LHD 01/26/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
0053
S-100

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060002

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

Lab File ID: G3852.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 11

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 2
PAS 01/29/93

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown ALCOHOL	7.03	9	9
2.	unknown ALKANE	24.87	9	9
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT

Contract: 0066

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060003

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

Lab File ID: G3853.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 14

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-102

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

0073

Matrix: (soil/water) SOIL

Lab Sample ID: 0060004

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

Lab File ID: G3859.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 12

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (mL)

Soil Aliquot Volume: _____ (uL)

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

74-87-3	-----Chloromethane	11	U
74-83-9	-----Bromomethane	11	U
75-01-4	-----Vinyl Chloride	11	U
75-00-3	-----Chloroethane	11	U
75-09-2	-----Methylene Chloride	8	JB
67-64-1	-----Acetone	16	B
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	11	U
75-34-3	-----1,1-Dichloroethane	11	U
540-59-0	-----1,2-Dichloroethene (total)	11	U
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-Dichloropropene	11	U
79-01-6	-----Trichloroethene	11	U
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-Dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-Pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	11	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-88-3	-----Toluene	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Xylene (total)	11	U

11-A U JB

LMS
01/31/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-102

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

0074

Matrix: (soil/water) SOIL

Lab Sample ID: 0060004

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

Lab File ID: G3859.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. 12

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0081

FIELDBLANK

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: 0060006

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

Lab File ID: G3864.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. _____

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541059	CYCLOTRIASILOXANE, HEXAMETHYL	18.31	10	DN
2. 294672	CYCLOTRIASILOXANE, OCTAMETHYL	23.12	7	DN
3.	UNKNOWN SILOXANE	25.91	7	DN
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: 0060007 **0094**

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

Lab File ID: G3865.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. _____

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	20	B
67-64-1	-----Acetone	8	JB
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	10	U
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (total)	10	U
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
79-01-6	-----Trichloroethene	10	U
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	10	U
10061-02-6	-----trans-1,3-Dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-88-3	-----Toluene	100.6	U JB
108-90-7	-----Chlorobenzene	10	U
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Xylene (total)	10	U

UAD
01/31/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIPBLANK 0095

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: 0060007

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

Lab File ID: G3865.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: not dec. _____

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0035

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	FIELDBLANK	105	113	108		0
02	TRIPBLANK	102	107	106		0
03						
04						
05						
06						
07						
08						
09						
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QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)
 SMC2 (BFB) = Bromofluorobenzene (86-115)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D System Monitoring Compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0.036

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKG2	101	100	110		0
02	S-99	101	96	113		0
03	S-100	108	96	112		0
04	S-101	113	94	103		0
05	S-100MS	109	101	110		0
06	S-100MSD	114	99	112		0
07	MSBS-100	100	105	110		0
08	QCCHKSTD	103	108	112		0
09	S-102	111	100	117		0
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QC LIMITS

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

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D System Monitoring Compound diluted out

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: IEA/CT

Contract:

0037

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix Spike - EPA Sample No.: S-100

Level(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	56	0	96	171	59-172
Trichloroethene	56	0	56	100	62-137
Benzene	56	0	55	98	66-142
Toluene	56	2	49	84	59-139
Chlorobenzene	56	0	51	91	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene	56	79	158	8	22	59-172
Trichloroethene	56	50	100	0	24	62-137
Benzene	56	54	108	10	21	66-142
Toluene	56	49	94	11	21	59-139
Chlorobenzene	56	49	98	7	21	60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

LW
01/31/93

COMMENTS:

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0038

Name: IEA/CT Contract: _____
 Lab Code: IEACT Case No.: 0000 SAS No.: _____ SDG No.: 2000
 Matrix Spike - EPA Sample No.: MSBS-100 Level: (low/med) low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS B CONCENTRATION (ug/Kg)	MSB % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	80	160*	59-172
Trichloroethene	↓	0	54	108	62-137
Benzene	↓	0	52	104	66-142
Toluene	↓	0	43	86	59-139
Chlorobenzene	↓	0	47	94	60-183

75-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene					22 59-172
Trichloroethene					24 62-137
Benzene					21 66-142
Toluene					21 59-139
Chlorobenzene					21 60-133

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

* Values outside of QC limits

PAS 07/29/93

RPD: _____ out of _____ outside limits
 Spike Recovery: _____ out of 5 outside limits

COMMENTS: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKG2

Lab Name: IEA/CT Contract:
 Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060
 Matrix: (soil/water) SOIL Lab Sample ID: VBLKG2 0133
 Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3850.D
 Level: (low/med) LOW Date Received: / /
 % Moisture: not dec. 0 Data Analyzed: 01/26/93
 GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (mL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10.2	U J
71-55-6	1,1,1-Trichloroethane	100.6	U J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

LHD
01/31/93

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKG2

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060**0134**

Matrix: (soil/water) SOIL

Lab Sample ID: VBLKG2

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

Lab File ID: G3850.D

Level: (low/med) LOW

Date Received: / /

% Moisture: not dec. 0

Data Analyzed: 01/26/93

GC Column: 007-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

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

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

EPA SAMPLE NO.

S-99 0180

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 70060 *analysis* SAS No.: _____ SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5931.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

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

CAS NO. COMPOUND UG/KG Q

51-28-5-----	2,4-Dinitrophenol	910	U
100-02-7-----	4-Nitrophenol	910	U
132-64-9-----	Dibenzofuran	8	J
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	24	J
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	380	U
100-01-6-----	4-Nitroaniline	910	U
534-52-1-----	4,6-Dinitro-2-methylphenol	910	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	910	U
85-01-8-----	Phenanthrene	45	J
120-12-7-----	Anthracene	17	J
86-74-8-----	Carbazole	26	J
84-74-2-----	Di-n-butylphthalate	36	JB
206-44-0-----	Fluoranthene	100	J
129-00-0-----	Pyrene	77	J
85-68-7-----	Butylbenzylphthalate	380	U
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)anthracene	65	J
218-01-9-----	Chrysene	110	J
117-81-7-----	bis(2-Ethylhexyl)phthalate	100	JB
117-84-0-----	Di-n-octylphthalate	380	U
205-99-2-----	Benzo(b)fluoranthene	100	J
207-08-9-----	Benzo(k)fluoranthene	110	J
50-32-8-----	Benzo(a)pyrene	88	J
193-39-5-----	Indeno(1,2,3-cd)pyrene	110	J
53-70-3-----	Dibenz(a,h)anthracene	13	J
191-24-2-----	Benzo(g,h,i)perylene	80	J

fl
2/5/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

s-99 0181

Lab Name: IEA/CT Contract: _____
 Lab Code: IEACT Case No.: 20060 SAS No.: _____ SDG No.: Z0060
 Matrix: (soil/water) SOIL cmc2/12/93 Lab Sample ID: 0060001
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5931.D
 Level: (low/med) LOW Date Received: 01/19/93
 % Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93
 Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/93
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 5.0

Number TICs found: 21
cmc2/11/93

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.50	13000	JAB
2.	UNKNOWN	12.91	2000	J
3.	↓	7.91	1100	B
4.	↓	10.81	720	B
5.	↓	7.77	720	B
6.	UNKNOWN CARBA	9.58	620	
7.	UNKNOWN ACID	14.92	540	
8.	UNKNOWN	20.76	480	
9.	↓	10.43	470	
10.	↓	10.12	410	
11.	UNKNOWN C-ALKYL BENZENE	10.25	280	
12.	UNKNOWN ALKANE	8.19	230	
13.	UNKNOWN	20.67	220	B
14.	↓	23.07	170	
15.	UNKNOWN ACID	25.40	140	
16.	UNKNOWN	18.86	140	
17.	↓	12.74	130	
18.	↓	11.21	120	
19.	↓	7.27	120	
20.	↓	11.13	120	
21.	UNKNOWN ALKANE	24.76	100	✓
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0234

EPA SAMPLE NO.

S-100

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 70060 SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

cmc2112193

Lab Sample ID: 0060002

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5920.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

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

Number TICs found: 21

cmc211193

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.48	1400	JAB
2.	UNKNOWN	12.90	3100	J
3.	↓	10.14	2600	
4.		7.76	1400	
5.		10.80	850	
6.		10.11	500	
7.		11.20	200	
8.		UNKNOWN ALKANE	8.18	
9.	UNKNOWN	7.25	170	B
10.	↓	12.73	110	↓
11.		9.07	110	
12.	UNKNOWN	13.84	110	J
13.	↓	6.42	100	
14.		20.15	100	
15.	UNKNOWN	20.68	100	J
16.	↓	17.55	99	
17.		19.88	99	
18.	UNKNOWN ALKANE	12.58	96	
19.	↓ ↓	22.57	91	
20.		13.09	89	
21.	UNKNOWN	21.20	88	
22.	UNKNOWN ALKANE	8.80	85	
23.	UNKNOWN ALKANE	12.32	84	↓
24.				
25.				
26.				
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*cmc
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060003

0283

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5921.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

108-95-2	Phenol	3100	U
111-44-4	bis(2-Chloroethyl) ether	3100	U
95-57-8	2-Chlorophenol	3100	U
541-73-1	1,3-Dichlorobenzene	3100	U
106-46-7	1,4-Dichlorobenzene	3100	U
95-50-1	1,2-Dichlorobenzene	3100	U
95-48-7	2-Methylphenol	3100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3100	U
106-44-5	4-Methylphenol	3100	U
621-64-7	N-Nitroso-di-n-propylamine	3100	U
67-72-1	Hexachloroethane	3100	U
98-95-3	Nitrobenzene	3100	U
78-59-1	Isophorone	3100	U
88-75-5	2-Nitrophenol	3100	U
105-67-9	2,4-Dimethylphenol	41	J
111-91-1	bis(2-Chloroethoxy)methane	3100	U
120-83-2	2,4-Dichlorophenol	3100	U
120-82-1	1,2,4-Trichlorobenzene	3100	U
91-20-3	Naphthalene	700	J
106-47-8	4-Chloroaniline	3100	U
87-68-3	Hexachlorobutadiene	3100	U
59-50-7	4-Chloro-3-methylphenol	3100	U
91-57-6	2-Methylnaphthalene	430	J
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7400	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7400	U
131-11-3	Dimethylphthalate	3100	U
208-96-8	Acenaphthylene	2500	J
606-20-2	2,6-Dinitrotoluene	3100	U
99-09-2	3-Nitroaniline	7400	U
83-32-9	Acenaphthene	240	J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT

Contract:

Lab Code: IReact

Case No.: Z0060 SAS No.:

SDG No.: Z0060 0285

Matrix: (soil/water) SOIL

conc
2/12/93

Lab Sample ID: 0060003

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5921.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 155.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

Number TICs found: *8*
conc 2/12/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.37	59000	JAB
2.	UNKNOWN	7.67	3700	JAB
3.		10.72	3100	J
4.		12.78	1900	
5.		10.35	1100	
6.	UNKNOWN ALKANE	22.46	760	↓
7.				
8.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101RE

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: ~~Z0060~~ SAS No.:

SDG No.: Z0060 0321

Matrix: (soil/water) SOIL

Lab Sample ID: 0060003RE

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5934.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 02/02/93

Injection Volume: 2.0(uL)

Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3100	U
111-44-4	bis(2-Chloroethyl) ether	3100	U
95-57-8	2-Chlorophenol	3100	U
541-73-1	1,3-Dichlorobenzene	3100	U
106-46-7	1,4-Dichlorobenzene	3100	U
95-50-1	1,2-Dichlorobenzene	3100	U
95-48-7	2-Methylphenol	3100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3100	U
106-44-5	4-Methylphenol	3100	U
621-64-7	N-Nitroso-di-n-propylamine	3100	U
67-72-1	Hexachloroethane	3100	U
98-95-3	Nitrobenzene	3100	U
78-59-1	Isophorone	3100	U
88-75-5	2-Nitrophenol	3100	U
105-67-9	2,4-Dimethylphenol	3100	U
111-91-1	bis(2-Chloroethoxy)methane	3100	U
120-83-2	2,4-Dichlorophenol	3100	U
120-82-1	1,2,4-Trichlorobenzene	3100	U
91-20-3	Naphthalene	660	J
106-47-8	4-Chloroaniline	3100	U
87-68-3	Hexachlorobutadiene	3100	U
59-50-7	4-Chloro-3-methylphenol	3100	U
91-57-6	2-Methylnaphthalene	440	J
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7400	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7400	U
131-11-3	Dimethylphthalate	3100	U
208-96-8	Acenaphthylene	3500	U
606-20-2	2,6-Dinitrotoluene	3100	U
99-09-2	3-Nitroaniline	7400	U
83-32-9	Acenaphthene	290	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101RE

0322

Lab Name: IEA/CT Contract: _____
 Lab Code: IEACT Case No.: Z0060 SAS No.: _____ SDG No.: Z0060
 Matrix: (soil/water) SOIL *Amc 2/12/93* Lab Sample ID: 0060003RE
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5934.D
 Level: (low/med) LOW Date Received: 01/19/93
 % Moisture: 14 decanted: (Y/N) N Date Extracted: 01/20/93
 Concentrated Extract Volume: 500(UL) Date Analyzed: 02/02/93
 Injection Volume: 2.0(uL) Dilution Factor: 8.0
 GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7400	U
100-02-7	4-Nitrophenol	7400	U
132-64-9	Dibenzofuran	600	J
121-14-2	2,4-Dinitrotoluene	3100	U
84-66-2	Diethylphthalate	3100	U
7005-72-3	4-Chlorophenyl-phenylether	3100	U
86-73-7	Fluorene	600	J
100-01-6	4-Nitroaniline	7400	U
534-52-1	4,6-Dinitro-2-methylphenol	7400	U
86-30-6	N-Nitrosodiphenylamine (1)	3100	U
101-55-3	4-Bromophenyl-phenylether	3100	U
118-74-1	Hexachlorobenzene	3100	U
87-86-5	Pentachlorophenol	7400	U
85-01-8	Phenanthrene	3600	
120-12-7	Anthracene	3200	
86-74-8	Carbazole	2300	J
84-74-2	Di-n-butylphthalate	160	JB
206-44-0	Fluoranthene	6800	
129-00-0	Pyrene	7800	
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	3100	U
56-55-3	Benzo(a)anthracene	4600	
218-01-9	Chrysene	6500	
117-81-7	bis(2-Ethylhexyl)phthalate	2400	JB
117-84-0	Di-n-octylphthalate	3100	U
205-99-2	Benzo(b)fluoranthene	3500	
207-08-9	Benzo(k)fluoranthene	3800	
50-32-8	Benzo(a)pyrene	4000	
193-39-5	Indeno(1,2,3-cd)pyrene	1200	J
53-70-3	Dibenz(a,h)anthracene	3100	U
191-24-2	Benzo(g,h,i)perylene	550	J

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-101RE

0323

Lab Name: IEA/CT

Contract:

Lab Code: IFACT

Case No.: Z0060 SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060003RE

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5934.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL)

Date Analyzed: 02/02/93

Injection Volume: 2.0(uL)

Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

Number TICs found: 6

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.43	61000	JAB
2.	UNKNOWN	7.75	3700	JAB
3.	↓	10.80	3000	↓
4.		12.86	1400	
5.		10.44	1300	
6.	UNKNOWN ALKANE	22.57	690	↓
7.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0359

S-102

Lab Name: IEA/CT Contract:
 Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060
 Matrix: (soil/water) SOIL *cmc 2/12/93* Lab Sample ID: 0060004
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5908.D
 Level: (low/med) LOW Date Received: 01/19/93
 % Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93
 Concentrated Extract Volume: 500(UL) Date Analyzed: 01/29/93
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 7.0

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

108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl) ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380 12	J
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	260	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	190	J
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	380 8	J
208-96-8	Acenaphthylene	600	
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	45	J

cmc 2/12/93

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-102

Lab Name: IEA/CT

Contract: 0360

Lab Code: IEACT

Case No.: Z0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

cmc
2/12/93

Lab Sample ID: 0060004

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5908.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 01/29/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
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51-28-5-----	2,4-Dinitrophenol	910	U
100-02-7-----	4-Nitrophenol	910	U
132-64-9-----	Dibenzofuran	210	J
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	41	JB
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	380	U
100-01-6-----	4-Nitroaniline	910	U
534-52-1-----	4,6-Dinitro-2-methylphenol	910	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	910	U
85-01-8-----	Phenanthrene	680	
120-12-7-----	Anthracene	370	J
86-74-8-----	Carbazole	200	J
84-74-2-----	Di-n-butylphthalate	49	JB
206-44-0-----	Fluoranthene	260	J
129-00-0-----	Pyrene	380	U
85-68-7-----	Butylbenzylphthalate	380	U
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)anthracene	690	
218-01-9-----	Chrysene	1500	
117-81-7-----	bis(2-Ethylhexyl)phthalate	380	U
117-84-0-----	Di-n-octylphthalate	380	U
205-99-2-----	Benzo(b)fluoranthene	1200	
207-08-9-----	Benzo(k)fluoranthene	860	
50-32-8-----	Benzo(a)pyrene	2100	
193-39-5-----	Indeno(1,2,3-cd)pyrene	770	
53-70-3-----	Dibenz(a,h)anthracene	250	J
191-24-2-----	Benzo(g,h,i)perylene	670	

JB
2/18/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-102

Lab Name: IEA/CT Contract: **0361**

Lab Code: IEACT Case No.: *Z0060* SAS No.: SDG No.: Z0060
cmc 2/12/93

Matrix: (soil/water) SOIL Lab Sample ID: 0060004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5908.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL) Date Analyzed: 01/29/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

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

Number TICs found: *21*
cmc 2/12/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDY CONDENSATION PRODUCT	8.59	12000	JAB
2.	UNKNOWN	7.88	1600	JB
3.	↓	8.02	1100	↓
4.	↓	10.91	1000	↓
5.	↓	13.00	800	↓
6.	↓	10.54	600	↓
7.	↓	10.24	500	↓
8.	↓	12.91	330	↓
9.	UNKNOWN HYDROCARBON	7.37	320	↓
10.	UNKNOWN MW 142	17.40	220	↓
11.	↓	17.68	220	↓
12.	UNKNOWN	11.12	190	↓
13.	↓	13.96	190	↓
14.	↓	12.12	150	↓
15.	UNKNOWN ALKANE	20.01	150	↓
16.	↓	18.62	140	↓
17.	↓	8.29	140	↓
18.	UNKNOWN DIMETHYL NAPHTHALENE ¹⁵⁰	19.30	130	↓
19.	UNKNOWN	16.52	110	↓
20.	↓	13.38	110	↓
21.	↓	10.47	110	↓
22.		20.80		
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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-102RE

Lab Name: IEA/CT Contract: 0412
 Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060
 Matrix: (soil/water) SOIL Lab Sample ID: 0060004RE
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5922.D
 Level: (low/med) LOW Date Received: 01/19/93
 % Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93
 Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	180	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	40	J
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	380	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	630	U
120-12-7	Anthracene	340	J
86-74-8	Carbazole	350	J
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	220	J
129-00-0	Pyrene	710	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	730	U
218-01-9	Chrysene	1100	U
117-81-7	bis(2-Ethylhexyl)phthalate	380	U
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	760	U
207-08-9	Benzo(k)fluoranthene	670	U
50-32-8	Benzo(a)pyrene	2100	U
193-39-5	Indeno(1,2,3-cd)pyrene	670	U
53-70-3	Dibenz(a,h)anthracene	180	J
191-24-2	Benzo(g,h,i)perylene	280	J

JB
2/18/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-102RE

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 20060 SAS No.:

SDG No.: Z0060 **0413**

Matrix: (soil/water) SOIL

cmc 2/12/93

Lab Sample ID: 0060004RE

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5922.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

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

Number TICs found: 21

cmc 2/12/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.44	12000	JAB
2.	UNKNOWN	12.87	2100	I
3.	↓	10.76	980	↓
4.	↓	7.72	980	B
5.	↓	7.86	900	↓
6.	↓	10.38	1040	↓
7.	↓	10.07	300	↓
8.	UNKNOWN HYDROCARBON	7.21	400	↓
9.	UNKNOWN	10.96	290	↓
10.	UNKNOWN MW=142	17.50	250	↓
11.	UNKNOWN	10.32	200	↓
12.	↓	13.78	190	↓
13.	↓	14.89	170	↓
14.	UNKNOWN ALKANE	8.13	140	↓
15.	UNKNOWN	11.96	140	↓
16.	↓	16.34	130	↓
17.	UNKNOWN DIMETHYL NAPHTHALENE	19.11	130	↓
18.	UNKNOWN ALKANE	19.84	130	↓
19.	↓	18.44	120	↓
20.	UNKNOWN	12.74	99	↓
21.	UNKNOWN DIMETHYL NAPHTHALENE	18.88	92	↓
22.				
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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: IEA/CT

Contract: 0465

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: 0060006

Sample wt/vol: 990 (g/mL) ML

Lab File ID: C5915.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: 01/21/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

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	0.3	JB
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	0.3	JB
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	1	JB
117-84-0-----	Di-n-octylphthalate	0.4	J
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELDBLANK

Lab Name: IEA/CT

Contract: **0466**

Lab Code: IEACT

Case No.: Z0060 SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

one 2/12/93

Lab Sample ID: 0060006

Sample wt/vol: 990

(g/mL) ML

Lab File ID: C5915.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: 01/21/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 02/01/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

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

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

Number TICs found: 84
02/21/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>149575</u>	<u>HEXANOIC ACID, 2-ETHYL-</u>	<u>13.98</u>	<u>13</u>	<u>JN</u>
2.	<u>UNKNOWN</u>	<u>8.73</u>	<u>11</u>	<u>JB</u>
3.	<u>ALDOL CONDENSATION PRODUCT</u>	<u>8.31</u>	<u>6</u>	<u>JAB</u>
4.	<u>UNKNOWN</u>	<u>9.41</u>	<u>3</u>	<u>JB</u>
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2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

0159

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK51	71	66	82	76	64	84	72	69	0
02	S-102	64	78	136	73	56	102	60	54	0
03	2-100MSB	61	54	83	63	65	55	60	66	0
04	QCCKECHKSTD	54	60	73	52	50	67	47	49	0
05	S-100	59	68	70	66	60	78	51	56	0
06	S-101	61D	83D	94D	75D	72D	87D	84D	80D	0
07	S-102RE	61	72	75	66	58	90	59	59	0
08	s-99	50	62	73	59	54	70	51	54	0
09	S-100MS	62	79	80	70	63	105	66	67	0
10	S-100MSD	56	70	79	68	65	92	64	60	0
11	S-101RE	58D	96D	101D	75D	69D	100D	78D	71D	0
12										
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QC LIMITS

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

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

0169

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 70060 SAS No.:

SDG No.: Z0060

cmz/lz/az

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK53	78	80	98	82	74	92	84	83	0
02	FIELDBLANK	80	73	78	73	65	94	75	72	0
03										
04										
05										
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QC LIMITS

- S1 (NBZ) = Nitrobenzene-d5 (35-114)
- S2 (FBP) = 2-Fluorobiphenyl (43-116)
- S3 (TPH) = Terphenyl-d14 (33-141)
- S4 (PHL) = Phenol-d5 (10-110)
- S5 (2FP) = 2-Fluorophenol (21-110)
- S6 (TBP) = 2,4,6-Tribromophenol (10-123)
- S7 (2CP) = 2-Chlorophenol-d4 (33-110) (advisory)
- S8 (DCB) = 1,2-Dichlorobenzene-d4 (16-110) (advisory)

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

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: LEA/CT Contract: _____ 0 0161
 Lab Code: LEACT Case No.: 00060 SAS No.: _____ SDG No.: 70000
 Matrix Spike - EPA Sample No.: S-100 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	2800	∅	2000	71	26- 90
2-Chlorophenol	2800	↓	1900	68	25-102
1,4-Dichlorobenzene	1900	↓	1300	68	28-104
N-Nitroso-di-n-prop. (1)	1900	↓	1500	79	41-126
1,2,4-Trichlorobenzene	1900	↓	1400	74	38-107
4-Chloro-3-methylphenol	2800	↓	2400	85	26-103
Acenaphthene	1900	74	1700	89	31-137
4-Nitrophenol	2800	∅	3200	114	11-114
2,4-Dinitrotoluene	1900	↓	1700	89	28- 89
Pentachlorophenol	2800	↓	1600	57	17-109
Pyrene	1900	↓	2000	105	35-142

cmc 2/2/93

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	2800	1900	68	4	35 26- 90
2-Chlorophenol	2800	1900	68	0	50 25-102
1,4-Dichlorobenzene	1900	1200	63	20	27 28-104
N-Nitroso-di-n-prop. (1)	1900	1400	74	7	38 41-126
1,2,4-Trichlorobenzene	1900	1300	68	0	23 38-107
4-Chloro-3-methylphenol	2800	2400	86	1	33 26-103
Acenaphthene	1900	1600	84	7	19 31-137
4-Nitrophenol	2800	2900	104	9	50 11-114
2,4-Dinitrotoluene	1900	1400	74	18	47 28- 89
Pentachlorophenol	2800	1600	57	0	47 17-109
Pyrene	1900	2000	105	0	36 35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

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

COMMENTS: _____

3D MSB
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0162

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 0000 SAS No.: _____ SDG No.: 70000

Matrix Spike - EPA Sample No.: S-100 MSB Level: (low/med) low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2500	∅	1500	60	26- 90
2-Chlorophenol	2500		1500	60	25-102
1,4-Dichlorobenzene	1700		1100	65	28-104
N-Nitroso-di-n-prop. (1)	1700		1100	65	41-126
1,2,4-Trichlorobenzene	1700		1000	59	38-107
4-Chloro-3-methylphenol	2500		1500	60	26-103
Acenaphthene	1700		916	54	31-137
4-Nitrophenol	2500		1700	68	11-114
2,4-Dinitrotoluene	1700		1100	65	28- 89
Pentachlorophenol	2500		1500	60	17-109
Pyrene	1700	✓	1100	65	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol					35 26- 90
2-Chlorophenol					50 25-102
1,4-Dichlorobenzene					27 28-104
N-Nitroso-di-n-prop. (1)					38 41-126
1,2,4-Trichlorobenzene					23 38-107
4-Chloro-3-methylphenol					33 26-103
Acenaphthene					19 31-137
4-Nitrophenol					50 11-114
2,4-Dinitrotoluene					47 28- 89
Pentachlorophenol					47 17-109
Pyrene					36 35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

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

COMMENTS: _____

QC CHECK
FORM 3

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

QCCKSTDD

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

0163

Matrix: (soil/water) SOIL

Lab Sample ID: 0060002STD

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5914.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

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

108-95-2-----	Phenol	1800	108
111-44-4-----	bis(2-Chloroethyl) ether	1700	102
95-57-8-----	2-Chlorophenol	1600	96
541-73-1-----	1,3-Dichlorobenzene	1600	96
106-46-7-----	1,4-Dichlorobenzene	1500	90
95-50-1-----	1,2-Dichlorobenzene	1500	90
95-48-7-----	2-Methylphenol	1900	114
108-60-1-----	2,2'-oxybis(1-Chloropropane)	1900	114
106-44-5-----	4-Methylphenol	1900	114
621-64-7-----	N-Nitroso-di-n-propylamine	1900	114
67-72-1-----	Hexachloroethane	1500	90
98-95-3-----	Nitrobenzene	1800	108
78-59-1-----	Isophorone	2100	126
88-75-5-----	2-Nitrophenol	1900	114
105-67-9-----	2,4-Dimethylphenol	1600	96
111-91-1-----	bis(2-Chloroethoxy)methane	1900	114
120-83-2-----	2,4-Dichlorophenol	1900	114
120-82-1-----	1,2,4-Trichlorobenzene	1600	96
91-20-3-----	Naphthalene	1700	102
106-47-8-----	4-Chloroaniline	4700	282
87-68-3-----	Hexachlorobutadiene	1500	90
59-50-7-----	4-Chloro-3-methylphenol	2400	144
91-57-6-----	2-Methylnaphthalene	1600	96
77-47-4-----	Hexachlorocyclopentadiene	1200	72
88-06-2-----	2,4,6-Trichlorophenol	2100	126
95-95-4-----	2,4,5-Trichlorophenol	1900	114
91-58-7-----	2-Chloronaphthalene	1700	102
88-74-4-----	2-Nitroaniline	2600	156
131-11-3-----	Dimethylphthalate	2100	126
208-96-8-----	Acenaphthylene	1800	108
606-20-2-----	2,6-Dinitrotoluene	1900	114
99-09-2-----	3-Nitroaniline	16000	960
83-32-9-----	Acenaphthene	1700	102

Gmc
2/12/93

QC CHECK
FORM 3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QC CHECK STD

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060002STD 0164

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5914.D

Level: (low/med) LOW

Date Received: 01/19/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 02/01/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2900	174
100-02-7	4-Nitrophenol	2700	162
132-64-9	Dibenzofuran	1700	107
121-14-2	2,4-Dinitrotoluene	2200	132
84-66-2	Diethylphthalate	1900	114
7005-72-3	4-Chlorophenyl-phenylether	1400	84
86-73-7	Fluorene	1700	102
100-01-6	4-Nitroaniline	5400	323
534-52-1	4,6-Dinitro-2-methylphenol	2700	162
86-30-6	N-Nitrosodiphenylamine (1)	2800	168
101-55-3	4-Bromophenyl-phenylether	2000	120
118-74-1	Hexachlorobenzene	2000	120
87-86-5	Pentachlorophenol	2600	156
85-01-8	Phenanthrene	2100	126
120-12-7	Anthracene	2000	120
86-74-8	Carbazole	6700	402
84-74-2	Di-n-butylphthalate	2100	126
206-44-0	Fluoranthene	2300	138
129-00-0	Pyrene	2200	132
85-68-7	Butylbenzylphthalate	2100	126
91-94-1	3,3'-Dichlorobenzidine	3300	198
56-55-3	Benzo(a)anthracene	2400	144
218-01-9	Chrysene	2000	120
117-81-7	bis(2-Ethylhexyl)phthalate	1700	102
117-84-0	Di-n-octylphthalate	2200	132
205-99-2	Benzo(b)fluoranthene	1200	72
207-08-9	Benzo(k)fluoranthene	1300	78
50-32-8	Benzo(a)pyrene	2700	162
193-39-5	Indeno(1,2,3-cd)pyrene	790	47
53-70-3	Dibenz(a,h)anthracene	1300	78
191-24-2	Benzo(g,h,i)perylene	1200	72

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK51

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: *Z0060*

SAS No.:

SDG No.: Z0060

Lab File ID: C5902.D

analyzed

Lab Sample ID: SBLK51

0165

Instrument ID: HP5970C

Date Extracted: 01/20/93

Matrix: (soil/water) SOIL

Date Analyzed: 01/29/93

Level: (low/med) LOW

Time Analyzed: 1206

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	S-102	0060004	C5908.D	01/29/93
02	2-100MSB	0060002MSB	C5913.D	02/01/93
03	QCCKECKSTD	0060002STD	C5914.D	02/01/93
04	S-100	0060002	C5920.D	02/01/93
05	S-101	0060003	C5921.D	02/01/93
06	S-102RE	0060004RE	C5922.D	02/01/93
07	s-99	0060001	C5931.D	02/02/93
08	S-100MS	0060002MS	C5932.D	02/02/93
09	S-100MSD	0060002MSD	C5933.D	02/02/93
10	S-101RE	0060003RE	C5934.D	02/02/93
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0 0553

SBLK51

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: Z0060 SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: SBLK51

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5902.D

Level: (low/med) LOW

Date Received: / /

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 01/29/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	330	U
111-44-4-----	bis(2-Chloroethyl) ether	330	U
95-57-8-----	2-Chlorophenol	330	U
541-73-1-----	1,3-Dichlorobenzene	330	U
106-46-7-----	1,4-Dichlorobenzene	330	U
95-50-1-----	1,2-Dichlorobenzene	330	U
95-48-7-----	2-Methylphenol	330	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5-----	4-Methylphenol	330	U
621-64-7-----	N-Nitroso-di-n-propylamine	330	U
67-72-1-----	Hexachloroethane	330	U
98-95-3-----	Nitrobenzene	330	U
78-59-1-----	Isophorone	330	U
88-75-5-----	2-Nitrophenol	330	U
105-67-9-----	2,4-Dimethylphenol	330	U
111-91-1-----	bis(2-Chloroethoxy)methane	330	U
120-83-2-----	2,4-Dichlorophenol	330	U
120-82-1-----	1,2,4-Trichlorobenzene	330	U
91-20-3-----	Naphthalene	330	U
106-47-8-----	4-Chloroaniline	330	U
87-68-3-----	Hexachlorobutadiene	330	U
59-50-7-----	4-Chloro-3-methylphenol	330	U
91-57-6-----	2-Methylnaphthalene	330	U
77-47-4-----	Hexachlorocyclopentadiene	330	U
88-06-2-----	2,4,6-Trichlorophenol	330	U
95-95-4-----	2,4,5-Trichlorophenol	800	U
91-58-7-----	2-Chloronaphthalene	330	U
88-74-4-----	2-Nitroaniline	800	U
131-11-3-----	Dimethylphthalate	330	U
208-96-8-----	Acenaphthylene	330	U
606-20-2-----	2,6-Dinitrotoluene	330	U
99-09-2-----	3-Nitroaniline	800	U
83-32-9-----	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0554

SBLK51

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 20060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

am 2/12/93

Lab Sample ID: SBLK51

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5902.D

Level: (low/med) LOW

Date Received: / /

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL)

Date Analyzed: 01/29/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

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

51-28-5-----	2,4-Dinitrophenol	800	U
100-02-7-----	4-Nitrophenol	800	U
132-64-9-----	Dibenzofuran	330	U
121-14-2-----	2,4-Dinitrotoluene	330	U
84-66-2-----	Diethylphthalate	320-28	J
7005-72-3-----	4-Chlorophenyl-phenylether	330	U
86-73-7-----	Fluorene	330	U
100-01-6-----	4-Nitroaniline	800	U
534-52-1-----	4,6-Dinitro-2-methylphenol	800	U
86-30-6-----	N-Nitrosodiphenylamine (1)	330	U
101-55-3-----	4-Bromophenyl-phenylether	330	U
118-74-1-----	Hexachlorobenzene	330	U
87-86-5-----	Pentachlorophenol	800	U
85-01-8-----	Phenanthrene	330	U
120-12-7-----	Anthracene	330	U
86-74-8-----	Carbazole	330	U
84-74-2-----	Di-n-butylphthalate	19	J
206-44-0-----	Fluoranthene	330	U
129-00-0-----	Pyrene	330	U
85-68-7-----	Butylbenzylphthalate	5	J
91-94-1-----	3,3'-Dichlorobenzidine	330	U
56-55-3-----	Benzo(a)anthracene	330	U
218-01-9-----	Chrysene	330	U
117-81-7-----	bis(2-Ethylhexyl)phthalate	28	J
117-84-0-----	Di-n-octylphthalate	330	U
205-99-2-----	Benzo(b)fluoranthene	330	U
207-08-9-----	Benzo(k)fluoranthene	330	U
50-32-8-----	Benzo(a)pyrene	330	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	330	U
53-70-3-----	Dibenz(a,h)anthracene	330	U
191-24-2-----	Benzo(g,h,i)perylene	330	U

amc 2/11/93

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK51

Lab Name: IEA/CT

Contract: 0555

Lab Code: IEACT

Case No.: 20060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: SBLK51

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: C5902.D

Level: (low/med) LOW

Date Received: / /

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL)

Date Analyzed: 01/29/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

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

Number TICs found: 20

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

Conc 2/11/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL CONDENSATION PRODUCT	8.64	13000	NA
2.	UNKNOWN	7.91	1200	U
3.	↓	8.14	910	U
4.	625865 FURAN, 2,5-DIMETHYL-	5.04	330	UN
5.	UNKNOWN	10.25	300	U
6.	UNKNOWN HYDROCARBON	8.33	390	U
7.	4436753 2-HEXENE, 2,5-DIONE	10.92	370	UN
8.	UNKNOWN ACID	20.81	360 370	U
9.	1108901 PYRIDINE	5.97	220	UN
10.	4127473 3-PENTEN-2-ONE, 4-METHYL-	7.40	200	UN
11.	3404382 2-HEXENE, 2,5-DIMETHYL-	7.50	140	UN
12.	UNKNOWN	35.30	140	U
13.	7116861 1-HEXENE, 5,5-DIMETHYL-	12.25	98	UN
14.	1-HEXENE, 5-UNKNOWN HYDROCARBON	12.96	94	U
15.	UNKNOWN ALKANE	9.04	84	
16.	UNKNOWN	10.13	84	
17.	UNKNOWN ALKANE	9.21	83	
18.	UNKNOWN	35.83	81	
19.	↓	7.108	77	
20.	↓	11.76	67	U
21.				
22.				
23.				
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30.				

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK53

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: ~~Z~~0060 SAS No.:

SDG No.: Z0060

Lab File ID: C5903.D

Cmc 2/12/93

Lab Sample ID: SBLK53

0166

Instrument ID: HP5970C

Date Extracted: 01/21/93

Matrix: (soil/water) WATER

Date Analyzed: 01/29/93

Level: (low/med) LOW

Time Analyzed: 1309

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	FIELDBLANK	0060006	C5915.D	02/01/93
02				
03				
04				
05				
06				
07				
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK53

Lab Name: IEA/CT Contract: _____

Lab Code: IEA CT Case No.: Z0060 SAS No.: _____ SDG No.: Z0060 0587

Matrix: (soil/water) WATER *cmc 2/12/93* Lab Sample ID: SBLK53

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C5903.D

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

% Moisture: _____ decanted: (Y/N) _____ Date Extracted: 01/21/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 01/29/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	0.5	J
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

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO
0589

SBLK53

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: ~~Z0060~~ *are 2/12/93* SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: SBLK53

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

Lab File ID: C5903.D

Level: (low/med) LOW

Date Received: / /

% Moisture: _____ decanted: (Y/N) _____

Date Extracted: 01/21/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 01/29/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

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

Number TICs found: *4*
cmc 2/11/93

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.89	12	J
2.	ALDOL CONDENSATION PRODUCT	8.47	6	J
3.	UNKNOWN	9.56	3	J
4.	↓	10.61	2	↓
5.				
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8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0174

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: ~~Z0060~~ *cmc2121m*

SAS No.:

SDG No.: Z0060

Lab File ID (Standard): C5900.D

Date Analyzed: 01/29/93

Instrument ID: HP5970C

Time Analyzed: 0928

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	153800	24.10	131326	31.52	104503	38.61
UPPER LIMIT	307600	24.60	262652	32.02	209006	39.11
LOWER LIMIT	76900	23.60	65663	31.02	52252	38.11
EPA SAMPLE No.						
01 SBLK51	150352	24.12	113972	31.51	86078	38.59
02 SBLK53	146754	24.10	87461	31.49	59973	38.55
03 S-102	95249	24.15	12601*	31.56	8811*	38.64
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22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0175

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: Z0060 SAS No.:

SDG No.: Z0060

Lab File ID (Standard): C5912.D

Om 2/12/93

Date Analyzed: 02/01/93

Instrument ID: HP5970C

Time Analyzed: 1216

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	30668	12.13	121572	15.38	71044	20.03
UPPER LIMIT	61336	12.63	243144	15.88	142088	20.53
LOWER LIMIT	15334	11.63	60786	14.88	35522	19.53
EPA SAMPLE No.						
01 2-100MSB	28727	12.13	119412	15.37	73719	20.03
02 QCCHECKSTD	30028	12.13	122436	15.39	80552	20.04
03 FIELDBLANK	29571	12.12	109792	15.37	72532	20.02
04 S-100	27910	12.17	110865	15.41	69230	20.07
05 S-101	25702	12.10	107963	15.35	62886	20.01
06 S-102RE	28059	12.12	117246	15.36	81765	20.01
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22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0176

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: ~~Z0060~~ SAS No.:

SDG No.: Z0060

Lab File ID (Standard): C5912.D

one 212/12/93

Date Analyzed: 02/01/93

Instrument ID: HP5970C

Time Analyzed: 1216

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	145774	23.92	112561	31.25	106859	38.10
UPPER LIMIT	291548	24.42	225122	31.75	213718	38.60
LOWER LIMIT	72887	23.42	56280	30.75	53430	37.60
EPA SAMPLE No.						
01 2-100MSB	139116	23.92	98779	31.22	76345	38.06
02 QCCHECKSTD	142838	23.94	112558	31.28	123548	38.11
03 FIELDBLANK	136329	23.90	117766	31.22	92878	38.06
04 S-100	131794	23.97	103107	31.40	49587*	38.24
05 S-101	129976	23.91	104060	31.30	44642*	38.15
06 S-102RE	109031	23.96	18592*	31.43	11299*	38.14
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21						
22						

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0177

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 70060

SAS No.:

SDG No.: Z0060

Lab File ID (Standard): C5924.D

Am 2/1/93

Date Analyzed: 02/02/93

Instrument ID: HP5970C

Time Analyzed: 1118

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	35902	12.17	136695	15.43	89550	20.10
UPPER LIMIT	71804	12.67	273390	15.93	179100	20.60
LOWER LIMIT	17951	11.67	68348	14.93	44775	19.60
EPA SAMPLE No.						
01 s-99	29828	12.18	124654	15.43	79049	20.08
02 S-100MS	24332	12.17	96083	15.43	59600	20.09
03 S-100MSD	23506	12.18	96227	15.43	67553	20.08
04 S-101RE	25959	12.19	107614	15.45	64059	20.11
05						
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16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0178

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: Z0060 SAS No.:

SDG No.: Z0060

Lab File ID (Standard): C5924.D

amz12(m)

Date Analyzed: 02/02/93

Instrument ID: HP5970C

Time Analyzed: 1118

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	162227	23.99	129748	31.34	100452	38.26
UPPER LIMIT	324454	24.49	259496	31.84	200904	38.76
LOWER LIMIT	81114	23.49	64874	30.84	50226	37.76
EPA SAMPLE No.						
01 S-99	140301	23.97	131032	31.32	95840	38.24
02 S-100MS	143980	23.99	100269	31.43	43694*	38.39
03 S-100MSD	149079	23.99	85664	31.46	29336*	38.35
04 S-101RE	143905	24.02	101370	31.45	37337*	38.43
05						
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22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S101DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060003DL

0687

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209214.D

% Moisture: 14 decanted: (Y/N) N

Date Received: 01/19/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/21/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/10/93

Injection Volume: 1.0(uL)

Dilution Factor: 1000.0

GPC Cleanup: (Y/N) Y pH: 7.3

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	38000	U
11104-28-2-----	Aroclor-1221	78000	U
11141-16-5-----	Aroclor-1232	38000	U
53469-21-9-----	Aroclor-1242	38000	U
12672-29-6-----	Aroclor-1248	38000	U
11097-69-1-----	Aroclor-1254	38000	U
11096-82-5-----	Aroclor-1260	71000	PD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB011893

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

0725

Matrix: (soil/water) WATER

Lab Sample ID: 0060006

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

Lab File ID: A1209225.D

% Moisture: _____ decanted: (Y/N) _____

Date Received: 01/19/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/19/93

Concentrated Extract Volume: 10000(uL)

Date Analyzed: 02/11/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

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

Sulfur Cleanup: (Y/N) N

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

CS75DL

0747

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060008DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209229.D

% Moisture: 10 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/11/93

Injection Volume: 1.0(uL)

Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 7.7

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	3700	U
11104-28-2-----	Aroclor-1221	7400	U
11141-16-5-----	Aroclor-1232	3700	U
53469-21-9-----	Aroclor-1242	3700	U
12672-29-6-----	Aroclor-1248	3700	U
11097-69-1-----	Aroclor-1254	3700	U
11096-82-5-----	Aroclor-1260	6900	PD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS51

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060010

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209273.D

% Moisture: 13 decanted: (Y/N) N

Date Received: 01/21/93

0770

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.4

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	38	U
11104-28-2-----	Aroclor-1221	77	U
11141-16-5-----	Aroclor-1232	38	U
53469-21-9-----	Aroclor-1242	38	U
12672-29-6-----	Aroclor-1248	38	U
11097-69-1-----	Aroclor-1254	38	U
11096-82-5-----	Aroclor-1260	1100	P

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS51DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060010DL

0781

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209267.D

% Moisture: 13 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 5.4

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	380	U
11104-28-2-----	Aroclor-1221	770	U
11141-16-5-----	Aroclor-1232	380	U
53469-21-9-----	Aroclor-1242	380	U
12672-29-6-----	Aroclor-1248	380	U
11097-69-1-----	Aroclor-1254	380	U
11096-82-5-----	Aroclor-1260	1100	PD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS50

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060011

0791

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209278.D

% Moisture: 13 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2-----	Aroclor-1016	38	U
11104-28-2-----	Aroclor-1221	77	U
11141-16-5-----	Aroclor-1232	38	U
53469-21-9-----	Aroclor-1242	38	U
12672-29-6-----	Aroclor-1248	38	U
11097-69-1-----	Aroclor-1254	38	U
11096-82-5-----	Aroclor-1260	250	P

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS50DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060011DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209277.D 0802

% Moisture: 13 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.6

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	380	U
11104-28-2-----	Aroclor-1221	770	U
11141-16-5-----	Aroclor-1232	380	U
53469-21-9-----	Aroclor-1242	380	U
12672-29-6-----	Aroclor-1248	380	U
11097-69-1-----	Aroclor-1254	380	U
11096-82-5-----	Aroclor-1260	270	JPD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S115

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060012

0811

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209286.D

% Moisture: 12 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	38	U
11104-28-2-----	Aroclor-1221	76	U
11141-16-5-----	Aroclor-1232	38	U
53469-21-9-----	Aroclor-1242	38	U
12672-29-6-----	Aroclor-1248	38	U
11097-69-1-----	Aroclor-1254	38	U
11096-82-5-----	Aroclor-1260	480	P

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S115DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060012DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209281.D

0822

% Moisture: 12 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/13/93

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.6

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	380	U
11104-28-2-----	Aroclor-1221	760	U
11141-16-5-----	Aroclor-1232	380	U
53469-21-9-----	Aroclor-1242	380	U
12672-29-6-----	Aroclor-1248	380	U
11097-69-1-----	Aroclor-1254	380	U
11096-82-5-----	Aroclor-1260	590	PD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S113DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060013DL **0840**

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209419.D

% Moisture: 12 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/20/93

Injection Volume: 1.0(uL)

Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 5.5

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	3800	U
11104-28-2-----	Aroclor-1221	7600	U
11141-16-5-----	Aroclor-1232	3800	U
53469-21-9-----	Aroclor-1242	3800	U
12672-29-6-----	Aroclor-1248	3800	U
11097-69-1-----	Aroclor-1254	3800	U
11096-82-5-----	Aroclor-1260	3400	JPD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S111

Lab Name: IEA/CT

Contract:

0 0847

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060014

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209293.D

% Moisture: 15 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/14/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	39	U
11104-28-2-----	Aroclor-1221	79	U
11141-16-5-----	Aroclor-1232	39	U
53469-21-9-----	Aroclor-1242	39	U
12672-29-6-----	Aroclor-1248	39	U
11097-69-1-----	Aroclor-1254	39	U
11096-82-5-----	Aroclor-1260	1300	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CS49

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060015

0865

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209295.D

% Moisture: 12 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/14/93

Injection Volume: 1.0(uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.2

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2-----	Aroclor-1016	380	U
11104-28-2-----	Aroclor-1221	760	U
11141-16-5-----	Aroclor-1232	380	U
53469-21-9-----	Aroclor-1242	380	U
12672-29-6-----	Aroclor-1248	380	U
11097-69-1-----	Aroclor-1254	380	U
11096-82-5-----	Aroclor-1260	2800	C P

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

0882

EPA SAMPLE NO.

CS49DL

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060015DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209420.D

% Moisture: 12 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/20/93

Injection Volume: 1.0(uL)

Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 7.2

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	3800	U
11104-28-2-----	Aroclor-1221	7600	U
11141-16-5-----	Aroclor-1232	3800	U
53469-21-9-----	Aroclor-1242	3800	U
12672-29-6-----	Aroclor-1248	3800	U
11097-69-1-----	Aroclor-1254	3800	U
11096-82-5-----	Aroclor-1260	3500	JPD

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB012093

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

0890

Matrix: (soil/water) WATER

Lab Sample ID: 0060016

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

Lab File ID: A1209227.D

% Moisture: _____ decanted: (Y/N) _____

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 10000(uL)

Date Analyzed: 02/11/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

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

Sulfur Cleanup: (Y/N) N

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

S114DL

0905

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0060017DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209319.D

% Moisture: 7 decanted: (Y/N) N

Date Received: 01/21/93

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/16/93

Injection Volume: 1.0(uL)

Dilution Factor: 1000.0

GPC Cleanup: (Y/N) Y pH: 7.2

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2-----	Aroclor-1016	35000	U
11104-28-2-----	Aroclor-1221	72000	U
11141-16-5-----	Aroclor-1232	35000	U
53469-21-9-----	Aroclor-1242	35000	U
12672-29-6-----	Aroclor-1248	35000	U
11097-69-1-----	Aroclor-1254	35000	U
11096-82-5-----	Aroclor-1260	90000	PD

2E
WATER PESTICIDE SURROGATE RECOVERY

0640

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

GC Column(1): RTX-35

ID: 0.53 (mm)

GC Column(2): DB-1701

ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	FB011893	80	78	19*	26*			2
02	PBLK53	78	74	68	46*			1
03	FB012093	89	86	42*	31*139			1
04	PBLK40	87	79	46*	52*			2
05								
06								
07								
08								
09								
10								
11								
12								
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27								
28								
29								
30								

*DN
3/5/93*

ADVISORY
QC LIMITS

TCX = Tetrachloro-m-xylene

(60-150)

DCB = Decachlorobiphenyl

(60-150)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: IEA/CT

Contract:

0641

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

GC Column(1): RTX-35

ID: 0.53 (mm)

GC Column(2): DB-1701

ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK44	88	58*	61	62			1
02	S100MSB	96	69	64	78			0
03	S99	86	59*	83	94			1
04	S100DL	0D	0D	0D	0D			0
05	S100	95	108	90	93			0
06	S101DL	0D	0D	0D	0D			0
07	S101	0D	0D	0D	0D			0
08	S102DL	0D	0D	0D	0D			0
09	S102	89	166D	0D	547D			0
10	CS43DL	0D	0D	0D	0D			0
11	CS43	92	234D	409D	0D			0
12	PBLK51	75	54*	82	52*			2
13	CS75DL	0D	0D	0D	0D			0
14	CS75	96	132	104	132			0
15	S103	0D	0D	0D	0D			0
16	QCCKSTD	118	72	70	48*			1
17	S100MS	124	161D	123	204D			0
18	S100MSD	115	200D	219D	414D			0
19	CS51DL	90	264D	302D	437D			0
20	CS51	87	83	262*	869*			2
21	CS50DL	151D	188D	0D	0D			0
22	CS50	132	107	0*	0*			2
23	S115DL	119	122	216D	309D			0
24	S115	103	73	62	120			0
25	S113	137	217D	163D	114			0
26	S111DL	99	155D	48D	250D			0
27	S111	90	71	62	137			0
28	CS49	108	215D	66	1102D			0
29	S103DL	0D	0D	0D	0D			0
30	S114DL	0D	0D	0D	0D			0

ADVISORY
QC LIMITS

TCX = Tetrachloro-m-xylene

(60-150)

DCB = Decachlorobiphenyl

(60-150)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

0642

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

GC Column(1): RTX-35

ID: 0.53 (mm)

GC Column(2): DB-1701

ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	S114	OD	OD	OD	OD			0
02	S112DL	106	202D	112	431D			0
03	S112	99	68	131	72			0
04	S113DL	OD	OD	OD	OD			0
05	CS49DL	OD	OD	OD	OD			0
06								
07								
08								
09								
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25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

TCX = Tetrachloro-m-xylene (60-150)
DCB = Decachlorobiphenyl (60-150)

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

IEA
 200 Monroe Turnpike
 Monroe, CT 06468 (203) 261-4458

0643

PCB Matrix Spike/~~Matrix Spike Duplicate Recovery~~
 Results Reported as ug/L mg/Kg ug/Kg

Lab Name: IEA

Contract: _____

Lab Code: IEA

Case No.: 0060

SAS No.: _____

SDG No.: 20060

Matrix Spike - EPA Sample No.:

S100 MSB

Compound	Spike Added	Sample Concentration	MSB Concentration	MS % Rec
Ar 1260	330	0	200	61

Compound	Spike Added	HSD Concentration	HSD % Rec	% RPD
 				

Comments: _____

IEA
 200 Monroe Turnpike
 Monroe, CT 06468 (203) 261-4458

0644

FULL
 PCB Matrix Spike / ~~Matrix Spike Duplicate Recovery~~
 Results Reported as ug/L mg/Kg ug/Kg

Lab Name: IEA

Contract: _____

Lab Code: IEA

Case No.: 0060

SAS No.: _____

SDG No.: 20060

Matrix Spike - EPA Sample No.:

QC CHECK STD

Compound	Spike Added	Sample Concentration	MS Concentration	MS % Rec
AK 1242	330.	0.	280.	85.
AK 1260	330.	0.	200.	61.

Compound	Spike Added	MSD Concentration	MSD % Rec	% RPD

Comments: _____

IEA
 200 Monroe Turnpike
 Monroe, CT 06468 (203) 261-4458

0645

PCB Matrix Spike/Matrix Spike Duplicate Recovery
 Results Reported as ug/L mg/Kg ug/Kg

Lab Name: IEA

Contract: _____

Lab Code: IEA

Case No.: 0060

SAS No.: _____

SDG No.: 20060

Matrix Spike - EPA Sample No.:

S100MS/MSD

Compound	Spike Added	Sample Concentration	MS Concentration	MS % Rec
AK 1260	380.	5400.	5300.	100 0.0

VR 3/4/85

Compound	Spike Added	HSD Concentration	HSD % Rec	% RPD
AK 1260	380.	5300.	100 0.0	<u>28.5%</u>

Comments: Impossible to calculate recovery due to the higher concentration in the sample

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK40

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Lab Sample ID: 0119-B05

Lab File ID: A1209262.D 0646

Matrix:(soil/water) WATER

Extraction:(SepF,Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N

Date Extracted: 01/19/93

Date Analyzed (1): 02/12/93

Date Analyzed (2): 02/22/93

Time Analyzed (1): 2107

Time Analyzed (2): 1011

Instrument ID (1): HP58901A

Instrument ID (2): HP58905B

GC Column (1):RTX-35

ID: 0.53(mm)

GC Column (2):DB-1701

ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	FB011893	0060006	02/11/93	02/22/93
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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14				
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16				
17				
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24				
25				
26				

COMMENTS: _____

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK44

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060 0647

Lab Sample ID: 0121-B01

Lab File ID: A1209208.D

Matrix: (soil/water) SOIL

Extraction: (SepF, Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N

Date Extracted: 01/21/93

Date Analyzed (1): 02/10/93

Date Analyzed (2): 02/23/93

Time Analyzed (1): 1414

Time Analyzed (2): 1614

Instrument ID (1): HP58901A

Instrument ID (2): HP58905B

GC Column (1): RTX-35

ID: 0.53(mm)

GC Column (2): DB-1701

ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	CS43	0060005	02/11/93	02/24/93
02	CS43DL	0060005DL	02/10/93	02/24/93
03	QCCKSTD	0060002STD	02/12/93	02/23/93
04	S100	0060002	02/10/93	02/24/93
05	S100DL	0060002DL	02/10/93	02/24/93
06	S100MS	0060002MS	02/12/93	02/24/93
07	S100MSB	0060002MSB	02/10/93	02/23/93
08	S100MSD	0060002MSD	02/13/93	02/24/93
09	S101	0060003	02/10/93	02/24/93
10	S101DL	0060003DL	02/10/93	02/24/93
11	S102	0060004	02/10/93	02/24/93
12	S102DL	0060004DL	02/10/93	02/24/93
13	S99	0060001	02/10/93	02/23/93
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15				
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25				
26				

COMMENTS: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK51

Lab Name: IEA/CT

Contract: 1250

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) SOIL

Lab Sample ID: 0122-B01

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: A1209228.D

% Moisture: 0 decanted: (Y/N) N

Date Received: - / /

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 5000(uL)

Date Analyzed: 02/11/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

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

Sulfur Cleanup: (Y/N) N

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

12674-11-2-----	Aroclor-1016	33	U
11104-28-2-----	Aroclor-1221	67	U
11141-16-5-----	Aroclor-1232	33	U
53469-21-9-----	Aroclor-1242	33	U
12672-29-6-----	Aroclor-1248	33	U
11097-69-1-----	Aroclor-1254	33	U
11096-82-5-----	Aroclor-1260	33	U

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK53	0649
--------	------

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Lab Sample ID: 0122-B05

Lab File ID: A1209226.D

Matrix:(soil/water) WATER

Extraction:(SepF,Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N

Date Extracted: 01/22/93

Date Analyzed (1): 02/11/93

Date Analyzed (2): 02/24/93

Time Analyzed (1): 0624

Time Analyzed (2): 1229

Instrument ID (1): HP58901A

Instrument ID (2): HP58905B

GC Column (1):RTX-35 ID: 0.53(mm) GC Column (2):DB-1701 ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	FB012093	0060016	02/11/93	02/24/93
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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16				
17				
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19				
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23				
24				
25				
26				

COMMENTS: _____

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0 1261

PBLK53

Lab Name: IEA/CT

Contract:

Lab Code: IIEACT

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix: (soil/water) WATER

Lab Sample ID: 0122-B05

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

Lab File ID: A1209226.D

% Moisture: _____ decanted: (Y/N)___

Date Received: / /

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 01/22/93

Concentrated Extract Volume: 10000(uL)

Date Analyzed: 02/11/93

Injection Volume: 1.0(uL)

Dilution Factor: 1.0

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

Sulfur Cleanup: (Y/N) N

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

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

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE 1376

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

SDW No.: ILM02.0

EPA Sample No.

Lab Sample ID.

Z06001
Z06002
Z06002D
Z06002S
Z06003
Z06004
Z06005
Z06006

S-99
S-100
S-100D
S-100S
S-101
S-102
CS-43
FIELDBLANK

Were ICP interelement corrections applied?

Yes/No YES

Were ICP background corrections applied?

Yes/No YES

If yes-were raw data generated before application of background corrections?

Yes/No NO

Comments:

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

Signature: J. Curran

Name: J. Curran

Date: Feb 24, 1993

Title: Laboratory manager

1
INORGANIC ANALYSIS DATA SHEET

S-99

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SOIL

Lab Sample ID: Z06001

Level (low/med): LOW

Date Received: 01/19/93

% Solids: 87.6

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

CAS No.	Analyte	Concentration	CI	Q	IM
7429-90-5	Aluminum	9370			IF
7440-36-0	Antimony	4.2	U		IF
7440-38-2	Arsenic	16.8	INS		IF
7440-39-3	Barium	50.6			IF
7440-41-7	Beryllium	0.22	B		IF
7440-43-9	Cadmium	0.40	U		IF
7440-70-2	Calcium	920	B		IF
7440-47-3	Chromium	18.8			IF
7440-48-4	Cobalt	7.5	B		IF
7440-50-8	Copper	90.7	IN		IF
7439-89-6	Iron	21300			IF
7439-92-1	Lead	61.9	X	ml	IF
7439-95-4	Magnesium	2180		2/17/93	IF
7439-96-5	Manganese	321			IF
7439-77-6	Mercury	0.20			ICV
7440-02-0	Nickel	13.8			IF
7440-09-7	Potassium	762	B		IF
7782-49-2	Selenium	0.40	UIN		IF
7440-22-4	Silver	0.60	U		IF
7440-23-5	Sodium	96.9	B		IF
7440-28-0	Thallium	0.40	U		IF
7440-62-2	Vanadium	30.6			IF
7440-66-6	Zinc	56.8			IF
	Cyanide				INR

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After: CLEAR

Artifacts: YES

Comments:

ROCKS

1
INORGANIC ANALYSIS DATA SHEET

S-100

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDS No.: Z0060

Matrix (soil/water): SOIL

Lab Sample ID: Z06002

Level (low/med): LDW

Date Received: 01/19/93

% Solids: 86.7

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

CAS No.	Analyte	Concentration	C	D	M
7429-90-5	Aluminum	8330			P
7440-36-0	Antimony	4.3	U		P
7440-38-2	Arsenic	7.7	IN		P
7440-39-3	Barium	84.8			P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	1.6			P
7440-70-2	Calcium	5900			P
7440-47-3	Chromium	23.2			P
7440-48-4	Cobalt	6.7	B		P
7440-50-8	Copper	132	IN		P
7439-89-6	Iron	21800			P
7439-92-1	Lead	251		<i>m</i>	P
7439-95-4	Magnesium	2510		<i>ulc</i>	P
7439-96-5	Manganese	318			P
7439-97-6	Mercury	0.49			CV
7440-02-0	Nickel	20.6			P
7440-09-7	Potassium	804	B		P
7782-49-2	Selenium	0.52	B	INW	P
7440-22-4	Silver	0.61	U		P
7440-23-5	Sodium	120	B		P
7440-28-0	Thallium	0.36	U		P
7440-62-2	Vanadium	38.0			P
7440-66-6	Zinc	275			P
	Cyanide				NR

Color Before: BROWN

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After: CLEAR

Artifacts: YES

Comments:
ROCKS

1379

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

S-101

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SDIL

Lab Sample ID: Z06003

Level (low/med): LOW

Date Received: 01/19/93

% Solids: 84.7

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

CAS No.	Analyte	Concentration	C	Q	IM
7429-90-5	Aluminum	4050			IF
7440-36-0	Antimony	4.3	U		IF
7440-38-2	Arsenic	25.0	N		IF
7440-39-3	Barium	154			IF
7440-41-7	Beryllium	0.21	U		IF
7440-43-9	Cadmium	9.2			IF
7440-70-2	Calcium	8680			IF
7440-47-3	Chromium	124			IF
7440-48-4	Cobalt	12.7			IF
7440-50-8	Copper	629	N		IF
7439-89-6	Iron	91800			IF
7439-92-1	Lead	1190		<i>U/L</i>	IF
7439-95-4	Magnesium	2370		<i>U/L</i>	IF
7439-96-5	Manganese	667			IF
7439-97-6	Mercury	1.3			ICV
7440-02-0	Nickel	168			IF
7440-09-7	Potassium	928	B		IF
7782-49-2	Selenium	0.78	B	N	IF
7440-22-4	Silver	0.62	U		IF
7440-23-5	Sodium	260	B		IF
7440-28-0	Thallium	0.45	U		IF
7440-62-2	Vanadium	41.8			IF
7440-66-6	Zinc	1310			IF
	Cyanide				NR

Color Before: BLACK

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After: CLEAR

Artifacts: YES

Comments:

ROCKS, ROOTS

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

8-102

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SOIL

Lab Sample ID: Z06004

Level (low/med): LOW

Date Received: 01/19/93

% Solids: 86.2

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

CAS No.	Analyte	Concentration	D	G	M
7429-90-5	Aluminum	3020			F
7440-36-0	Antimony	10.7	B		F
7440-38-2	Arsenic	21.2	IN		F
7440-39-3	Barium	74.5			F
7440-41-7	Beryllium	0.20	U		F
7440-43-9	Cadmium	1.4			F
7440-70-2	Calcium	1630			F
7440-47-3	Chromium	29.4			F
7440-48-4	Cobalt	6.5	B		F
7440-50-8	Copper	344	IN		F
7439-89-6	Iron	41800			F
7439-92-1	Lead	393		<i>X/one</i>	F
7439-95-4	Magnesium	1180		<i>2/2/93</i>	F
7439-96-5	Manganese	233			F
7439-97-6	Mercury	0.94			CV
7440-02-0	Nickel	26.1			F
7440-09-7	Potassium	616	B		F
7782-49-2	Selenium	1.4	IN		F
7440-22-4	Silver	0.59	U		F
7440-23-5	Sodium	144	B		F
7440-28-0	Thallium	0.40	U		F
7440-62-2	Vanadium	41.7			F
7440-66-6	Zinc	134			F
	Cyanide				NR

Color Before: BLACK

Clarity Before:

Texture: MEDIUM

Color After: YELLOW

Clarity After: CLEAR

Artifacts: YES

Comments:

ROCKS, ROOTS

1381

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

DS-43

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDS No.: Z0060

Matrix (soil/water): SOIL

Lab Sample ID: Z06005

Level (low/med): LOW

Date Received: 01/19/93

% Solids: 81.9

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

CAS No.	Analyte	Concentration	C	D	M
7429-90-5	Aluminum				NR
7440-36-0	Antimony				NR
7440-38-2	Arsenic				NR
7440-39-3	Barium				NR
7440-41-7	Beryllium				NR
7440-43-9	Cadmium				NR
7440-70-2	Calcium				NR
7440-47-3	Chromium				NR
7440-48-4	Cobalt				NR
7440-50-8	Copper				NR
7439-89-6	Iron				NR
7439-92-1	Lead				NR
7439-95-4	Magnesium				NR
7439-96-5	Manganese				NR
7439-97-6	Mercury	22.5	2.5	nr 4/2/93	CV
7440-02-0	Nickel				NR
7440-09-7	Potassium				NR
7782-49-2	Selenium				NR
7440-22-4	Silver				NR
7440-23-5	Sodium				NR
7440-28-0	Thallium				NR
7440-62-2	Vanadium				NR
7440-66-6	Zinc				NR
	Cyanide				NR

Color Before:

Clarity Before:

Texture:

Color After:

Clarity After:

Artifacts:

Comments:

1382

U.S. EPA - CLP

EPA SAMPLE NO.

1
INORGANIC ANALYSIS DATA SHEET

FIELDBLANK

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): WATER

Lab Sample ID: Z06006

Level (low/med): LOW

Date Received: 01/19/93

% 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	22.0	U		P
7440-36-0	Antimony	21.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	6.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	2.0	U		P
7440-70-2	Calcium	11.0	U		P
7440-47-3	Chromium	3.0	U		P
7440-48-4	Cobalt	3.0	U		P
7440-50-8	Copper	3.0	U		P
7439-89-6	Iron	82.0	U		P
7439-92-1	Lead	1.0	U	W	P
7439-95-4	Magnesium	23.1	B		P
7439-96-5	Manganese	1.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	21.0	U		P
7440-09-7	Potassium	626	U		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	29.0	U		P
7440-28-0	Thallium	2.0	U		P
7440-62-2	Vanadium	6.0	U		P
7440-66-6	Zinc	4.0	U		P
	Cyanide				NR

Color Before: COLORLESS

Clarity Before: CLEAR

Texture:

Color After: COLORLESS

Clarity After: CLEAR

Artifacts:

Comments:

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C			
Aluminum	22.0	U	22.9	B	22.0	U	22.0	U	22.0	U	P
Antimony	21.0	U	21.0	U	21.0	U	21.0	U	21.0	U	P
Arsenic	-1.0	B	-1.3	B	-1.0	B	-1.5	B	-1.200	B	F
Barium	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Calcium	11.0	U	11.0	U	11.0	U	18.3	B	11.000	U	P
Chromium	3.0	U	3.0	U	3.2	B	3.0	U	3.000	U	P
Cobalt	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Copper	3.0	U	3.0	U	7.0	B	3.0	U	-4.510	B	P
Iron	82.0	U	82.0	U	82.0	U	82.0	U	82.000	U	P
Lead	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	F
Magnesium	23.0	U	23.0	U	23.0	U	33.6	B	23.000	U	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	CV
Nickel	21.0	U	21.0	U	21.0	U	21.0	U	21.000	U	P
Potassium	626.0	U	626.0	U	626.0	U	626.0	U	626.000	U	P
Selenium	2.0	U	2.0	U	2.0	U			2.000	U	F
Silver	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Sodium	29.0	U	29.0	U	29.0	U	29.0	U	29.000	U	F
Thallium	2.0	U	2.0	U	2.0	U			2.000	U	F
Vanadium	6.0	U	6.0	U	6.0	U	6.0	U	6.000	U	P
Zinc	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

0 1395

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
		1	C	2	C	3	C			
Aluminum	22.0 U	22.0 U		22.0 U		47.6 B	4.400 U		F	
Antimony	21.0 U	21.0 U		21.0 U		-26.3 B	4.200 U		F	
Arsenic	1.0 U	1.0 U		1.0 U		1.0 U	0.200 U		F	
Barium	6.0 U	6.0 U		6.0 U		6.0 U	1.200 U		F	
Beryllium	1.0 U	1.0 U		1.0 U		1.0 U	0.200 U		F	
Cadmium	2.0 U	2.0 U		2.0 U		2.0 U	0.400 U		F	
Calcium	11.0 U	11.0 U		11.0 U		11.0 U	2.200 U		F	
Chromium	3.0 U	3.0 U		3.0 U		3.0 U	0.600 U		F	
Cobalt	3.0 U	3.0 U		3.0 U		3.0 U	0.600 U		F	
Copper	-3.9 B	-3.9 B		-7.2 B		-5.7 B	-0.614 B		F	
Iron	82.0 U	82.0 U		82.0 U		82.0 U	16.400 U		F	
Lead		1.0 U					0.200 U		F	
Magnesium	23.0 U	33.6 B		23.0 U		30.1 B	4.600 U		F	
Manganese	1.0 U	1.0 U		1.0 U		1.0 U	0.200 U		F	
Mercury	0.2 U	0.2 U		0.2 U		0.2 U	0.100 U		CV	
Nickel	21.0 U	21.0 U		21.0 U		21.0 U	4.200 U		F	
Potassium	626.0 U	626.0 U		626.0 U		626.0 U	125.200 U		F	
Selenium	2.0 U	2.0 U		2.0 U			0.400 U		F	
Silver	3.0 U	3.0 U		3.0 U		3.0 U	0.600 U		F	
Sodium	29.0 U	29.0 U		29.0 U		29.0 U	5.800 U		F	
Thallium	2.0 U	2.0 U		2.0 U		2.0 U	0.400 U		F	
Vanadium	6.0 U	6.0 U		6.0 U		6.0 U	1.200 U		F	
Zinc	4.0 U	4.0 U		4.0 U		4.0 U	0.800 U		F	
Cyanide									NR	

U.S. EPA - CLP

3
BLANKS

1396

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial	Continuing Calibration						Preparation	M
	Calib. Blank (ug/L)	Blank (ug/L)							
		1	2	3					
Aluminum								NR	
Antimony								NR	
Arsenic	1.0 U	1.0 U	1.0 U					F	
Barium								NR	
Beryllium								NR	
Cadmium								NR	
Calcium								NR	
Chromium								NR	
Cobalt								NR	
Copper								NR	
Iron								NR	
Lead	1.0 U	1.0 U	1.0 U	1.0 U				F	
Magnesium								NR	
Manganese								NR	
Mercury	0.2 U	0.2 U	0.2 U				0.100 U	CV	
Nickel								NR	
Potassium								NR	
Selenium	2.0 U	2.0 U	2.0 U					F	
Silver								NR	
Sodium								NR	
Thallium								NR	
Vanadium								NR	
Zinc								NR	
Cyanide								NR	

U.S. EPA - CLP

G 1397

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial	Continuing Calibration						Preparation	M
	Calib. Blank (ug/L)	Blank (ug/L)							
		1	2	3					
Aluminum								NR	
Antimony								NR	
Arsenic								NR	
Barium								NR	
Beryllium								NR	
Cadmium								NR	
Calcium								NR	
Chromium								NR	
Cobalt								NR	
Copper								NR	
Iron								NR	
Lead	1.0 U	1.0 U	1.0 U	1.0 U				F	
Magnesium								NR	
Manganese								NR	
Mercury								NR	
Nickel								NR	
Potassium								NR	
Selenium								NR	
Silver								NR	
Sodium								NR	
Thallium								NR	
Vanadium								NR	
Zinc								NR	
Cyanide								NR	

3
BLANKS

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Aluminum										NR	
Antimony										NR	
Arsenic										NR	
Barium										NR	
Beryllium										NR	
Cadmium										NR	
Calcium										NR	
Chromium										NR	
Cobalt										NR	
Copper										NR	
Iron										NR	
Lead	1.0	U	1.0	U	1.0	U				F	
Magnesium										NR	
Manganese										NR	
Mercury										NR	
Nickel										NR	
Potassium										NR	
Selenium										NR	
Silver										NR	
Sodium										NR	
Thallium										NR	
Vanadium										NR	
Zinc										NR	
Cyanide										NR	

SA
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

J-160J
Z006000
7/2/00

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SDIL

Level (low/med): LOW

% Solids for Sample: 86.7

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R	Q	M
Aluminum							NR
Antimony	75-125	79.0386	4.2870	98.58	80.2		F
Arsenic	75-125	13.1705	7.7430	7.89	68.8	N	F
Barium	75-125	455.6847	84.7986	394.33	94.1		F
Beryllium	75-125	10.0553	0.2041	9.86	102.0		F
Cadmium	75-125	9.3909	1.5841	9.86	79.2		F
Calcium							NR
Chromium	75-125	63.1493	23.1865	39.43	101.4		F
Cobalt	75-125	105.4466	6.6632	98.58	100.2		F
Copper	75-125	158.3829	131.5961	49.29	54.3	N	F
Iron							NR
Lead		321.3754	251.2450	3.94	1780.0		F
Magnesium							NR
Manganese	75-125	432.9361	318.0431	98.58	116.5		F
Mercury	75-125	1.0381	0.4902	0.55	99.6		CV
Nickel	75-125	120.4349	20.6102	98.58	101.3		F
Potassium							NR
Selenium	75-125	1.3999	0.5186	1.97	44.7	N	F
Silver	75-125	8.4524	0.6124	9.86	85.7		F
Sodium							NR
Thallium	75-125	10.0947	0.3576	9.86	102.4		F
Vanadium	75-125	135.4903	37.9725	98.58	98.9		F
Zinc	75-125	361.1609	275.0487	98.58	87.4		F
Cyanide							NR

Comments:

U.S. EPA - CLP

1402

SB
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

J-106A
Z06060A
10/2/03

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R	Q	M
Aluminum							NR
Antimony							NR
Arsenic							NR
Barium							NR
Beryllium							NR
Cadmium							NR
Calcium							NR
Chromium							NR
Cobalt							NR
Copper		2171.05	644.63	1300.0	117.4		P
Iron							NR
Lead							NR
Magnesium							NR
Manganese							NR
Mercury							NR
Nickel							NR
Potassium							NR
Selenium							NR
Silver							NR
Sodium							NR
Thallium							NR
Vanadium							NR
Zinc							NR
Cyanide							NR

Comments:

U.S. EPA - CLP

1403

6
DUPLICATES

EPA SAMPLE NO.

S-100 D
Z00600
on 2/2/87

Lab Name: IEA

Contract:

Lab Code: IEA

Case No.: 0060

SAS No.:

SDG No.: Z0060

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 86.7

% Solids for Duplicate: 87.3

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		8326.7008		7535.9089		10.0		F
Antimony		4.2870	U	4.0035	U			F
Arsenic	1.8	7.7430		6.9828		10.3		F
Barium	40.8	84.7986		94.9775		11.3		F
Beryllium		0.2041	U	0.1906	U			F
Cadmium	1.0	1.5841		1.6205		2.3		F
Calcium		5901.9751		5775.8434		2.2		F
Chromium		23.1865		24.1948		4.3		F
Cobalt		6.6632	B	6.9719	B	4.5		F
Copper		131.5961		130.2201		1.1		F
Iron		21809.5980		23000.0870		5.3		F
Lead		251.2450		229.6914 333.3315		28.1 9.0		F
Magnesium	1020.7	2510.9879		2488.9893		0.9		F
Manganese		318.0431		384.5025		18.9		F
Mercury		0.4902		0.5369		9.1		CV
Nickel	8.2	20.6102		19.4973		5.5		F
Potassium		803.9052	B	772.9437	B	3.9		F
Selenium		0.5186	B	0.4156	U	200.0		F
Silver		0.6124	U	0.5719	U			F
Sodium		119.5190	B	100.9180	B	16.9		F
Thallium		0.3576	U	0.4156	U			F
Vanadium	10.2	37.9725		36.5657		3.8		F
Zinc		275.0487		298.7656		8.3		F
Cyanide								NR

on 2/23/87