LPC# 1190400001 Madison County
Granite City Steel
ILD# 980606917
SF/HRS
vol. 2 of 2

EPA Region 5 Records Ctr.
321360

CERCLA

SITE TEAM EVALUATION PRIORITIZATION

ANALYTICAL RESULTS

Illinois Environmental Protection Agency
Bureau of Land
Remedial Project Management Section
Site Assessment Unit

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chlorde	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroehtene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl) Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis (2-Chloroisopropyl) Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate

1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3-3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Ideno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlordane
Heptachlor	gamma-Chlordane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobolt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on Dec 18, 1996

FROM: Stephen L. Ostrodka, Chief (HSRL-5J)
Superfund Technical Support Section

TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: Granite City Steel (IL)

CASE NUMBER: 24884 SDG NUMBER: EBHR0

Number and Type of Samples: 5 (Soil)

Sample Numbers: EBHW1-5

Laboratory: ATAS Hrs. for Review:

Following are our findings:

Unreviewed Data

RECEIVED
DEC 20 1996
IEPA/DLPC

cc: Regional TPO
Brian Freeman
HSMC-5J

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.
875 FEE FEE ROAD
MARYLAND HEIGHTS, MISSOURI 63043
(314) 434-4570

SDG NARRATIVE

CONTRACT: 68-D5-0018

CASE: 24884

SDG #: EBHRO

REGION: V

The samples listed below were received in good condition on July 24, 1996. While all procedures were followed during log-in five samples were inadvertently not logged in to our Laboratory Information System.

ATAS ID	EPA SAMPLE ID	MATRIX
16685.01	EBHW1	SOIL
16685.02	EBHW2	SOIL
16685.03	EBHW3	SOIL
16685.04	EBHW4	SOIL
16685.05	EBHW5	SOIL

SEMIVOLATILE SAMPLE ANALYSIS:

The samples were analyzed following CLP SOW (OLM03.2).

The column used for Semivolatile analyses is: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25 mm ID, 1.0 micron film thickness.

The following samples had alkane reports and these reports are at the back of this narrative: SBLKEH, EBHW1, EBHW1RE, EBHW2, EBHW3, EBHW3RE, EBHW4RE, EBHW5 and EBHW4.

Samples EBHW3 through EBHW5 required a re-extraction due to low surrogate recoveries. The re-extracts confirmed the low surrogate recoveries.

Sample EBHW1 required a re-inject to confirm low internal standard areas. Both runs are reported.

MISCELLANEOUS:

The CAS numbers on some of the TIC compounds may be 0-00-0. The NBS 75K library database does not have the correct CAS number for these compounds and it assigns "0-00-0" as the CAS number.

All manual integrations in this data package for Volatile, Semivolatile and Pesticide/PCB analysis have been performed for one of the following reasons.

a. Data system missed peak during acquisition.
b. Data system improperly integrated peak.

The manual integrations in this data package are placed behind their associated standards or samples.

ADDITIONAL BILLABLES:

VOLATILE ANALYSIS	SEMIVOLATILE ANALYSIS	PESTICIDE/PCB ANALYSIS
None	None	None

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

Robert Wilhelm
Laboratory Manager

September 25, 1996

UUUUU2
9-25-96

Alkane Report for Sample : SBLKEH Page: 1

Data file : EE7415.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
541-02-6	Cyclopentasiloxane, decamethyl-	7.693	79

Concentration Units: Water: UG/L Soil: UG/KG

9-17-96

JMM ~~000002~~
9-24-96 000003

Alkane Report for Sample : EBHW1 Page: 1

Data file : EE7418.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
1120-21-4	Undecane	7.349	180
541-02-6	Cyclopentasiloxane, decamethyl-	7.687	200
629-50-5	Tridecane	9.150	170
629-62-9	Pentadecane	10.73	240
544-76-3	Hexadecane	11.46	280
629-78-7	Heptadecane	12.15	370
593-45-3	Octadecane	12.80	270
112-95-8	Eicosane	14.01	400
629-94-7	Heneicosane	14.58	230
629-99-2	Pentacosane	18.64	520

Concentration Units: Water: UG/L Soil: UG/KG

Parke

Data file : EE7419.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
1120-21-4	Undecane	7.348	170
541-02-6	Cyclopentasiloxane, decamethyl-	7.686	200
629-50-5	Tridecane	9.148	180
629-62-9	Pentadecane	10.73	240
544-76-3	Hexadecane	11.46	300
629-78-7	Heptadecane	12.15	310
593-45-3	Octadecane	12.80	300
630-06-8	Hexatriacontane	13.43	250
112-95-8	Eicosane	14.02	440
629-94-7	Heneicosane	14.58	240

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHW2 Page: 1

Data file : EE7420.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
541-02-6	Cyclopentasiloxane, decamethyl-	7.687	110
629-62-9	Pentadecane	10.73	90
544-76-3	Hexadecane	11.46	120
629-78-7	Heptadecane	12.15	170
593-45-3	Octadecane	12.80	140
629-94-7	Heneicosane	14.58	110

Concentration Units: Water: UG/L Soil: UG/KG

9-24-96 ~~000005~~

000006

Alkane Report for Sample : EBHW3 Page: 1

Data file : EE7422.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
544-76-3	Hexadecane	11.46	88
629-78-7	Heptadecane	12.15	140
593-45-3	Octadecane	12.80	140
629-92-5	Nonadecane	13.42	110
112-95-8	Eicosane	14.02	140
17312-55-9	Decane, 3,8-dimethyl-	14.45	89
629-94-7	Heneicosane	14.58	130
	Unknown Alkane	14.79	120
	Unknown Alkane	15.13	100
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	15.32	350
55373-86-9	Docosane, 7-hexyl-	15.82	210
13475-76-8	Docosane, 11-butyl-	16.13	220
638-67-5	Tricosane	16.31	220
630-01-3	Hexacosane	16.61	210
1560-84-5	Eicosane, 2-methyl-	16.78	230
1560-88-9	Octadecane, 2-methyl-	17.22	230

Concentration Units: Water: UG/L Soil: UG/KG

9-17-96
KG

Alkane Report for Sample : EBHW3RE Page: 1

Data file : AA6325.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
541-02-6	Cyclopentasiloxane, decamethyl-	9.784	94
629-62-9	Pentadecane	13.15	110
544-76-3	Hexadecane	13.94	160
17301-23-4	Undecane, 2,6-dimethyl-	14.31	100
629-78-7	Heptadecane	14.69	200
54105-67-8	Heptadecane, 2,6-dimethyl-	14.74	140
17312-62-8	Decane, 5-propyl-	15.40	180
74645-98-0	Dodecane, 2,7,10-trimethyl-	15.48	110
112-95-8	Eicosane	16.07	180
638-67-5	Tricosane	16.71	200
	Unknown Alkane	17.19	130
629-94-7	Heneicosane	17.32	150
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	17.52	100
	Unknown Alkane	17.90	140
	Unknown Alkane	18.12	300
13287-24-6	Nonadecane, 9-methyl-	18.26	89
	Unknown Alkane	18.66	220
7098-21-7	Tritetracontane	19.01	150
629-99-2	Pentacosane	19.21	210
630-07-9	Pentatriacontane	19.80	270

Concentration Units: Water: UG/L Soil: UG/KG

9-23-92

Tarash

Alkane Report for Sample : EBHW4 Page: 1

Data file : EE7424.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
541-02-6	Cyclopentasiloxane, decamethyl-	7.667	670
112-95-8	Eicosane	14.01	73
629-94-7	Heneicosane	14.58	74
	Unknow Alkane	14.79	73
	Unknown Alkane	15.82	120

Concentration Units: Water: UG/L Soil: UG/KG

Data file : EE7489.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
	Unknown Alkane	10.69	78
629-78-7	Heptadecane	12.11	180
593-45-3	Octadecane	12.76	200
629-92-5	Nonadecane	13.39	180
112-95-8	Eicosane	13.97	210
	Unknown Alkane	14.54	170
	Unknown Alkane	14.75	160
7098-21-7	Tritetracontane	15.28	610
	Unknown Alkane	16.09	350
7098-22-8	Tetratetracontane	16.27	500
630-07-9	Pentatriacontane	16.57	540
630-06-8	Hexatriacontane	16.73	460
	Unknown Alkane	17.19	460

Concentration Units: Water: UG/L Soil: UG/KG

9-23-96

Alkane Report for Sample : EBHW5 Page: 1

Data file : EE7426.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
629-59-4	Tetradecane	14.02	81
544-76-3	Hexadecane	14.58	78
	Unknown Alkane	14.79	95
	Unknown Alkane	16.31	180

Concentration Units: Water: UG/L Soil: UG/KG

9.7/c

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

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	SBLKEH	76	78	100	70	66	93	67	68	0
02	EBHW1	80	95	119	71	65	92	68	66	0
03	EBHW1RE	77	89	105	73	68	93	70	68	0
04	EBHW2	74	82	84	72	68	90	69	67	0
05	EBHW3	31	69	80	44	0*	37	12*	41	2
06	EBHW4	83	68	91	44	0*	38	8*	42	2
07	EBHW5	27	48	89	26	0*	24	2*	21	2
08	SBLKEK	75	80	85	81	72	96	78	68	0
09	EBHW4RE	55	73	148*	2*	0*	4*	11*	65	5
10	EBHW3RE	80	84	121	58	10*	23	13*	60	2
11	EBHW5RE	75D	93D	102D	40D	0D	8D	6D	64D	0
12	SBLKAV	72	76	106	64	57	92	64	64	0
13										
14										
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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

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKAV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID: AA6338.D Lab Sample ID: 090496-01

Instrument ID: A Date Extracted: 09/04/96

Matrix: (soil/water) SOIL Date Analyzed: 09/12/96

Level:(low/med) LOW Time Analyzed: 1758

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EBHW3RE	16685.03	AA6325.D	09/11/96
02	EBHW5RE	16685.05	AA6326.D	09/11/96
03				
04				
05				
06				
07				
08				
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COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKEH

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID: EE7415.D Lab Sample ID: 083096-01

Instrument ID: E Date Extracted: 08/30/96

Matrix: (soil/water) SOIL Date Analyzed: 08/31/96

Level:(low/med) LOW Time Analyzed: 1511

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EBHW1	16685.01	EE7418.D	08/31/96
02	EBHW1RE	16685.01	EE7419.D	08/31/96
03	EBHW2	16685.02	EE7420.D	08/31/96
04	EBHW3	16685.03	EE7422.D	08/31/96
05	EBHW4	16685.04	EE7424.D	08/31/96
06	EBHW5	16685.05	EE7426.D	08/31/96
07				
08				
09				
10				
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COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKEK

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID: EE7481.D Lab Sample ID: 090496-01

Instrument ID: E Date Extracted: 09/04/96

Matrix: (soil/water) SOIL Date Analyzed: 09/09/96

Level:(low/med) LOW Time Analyzed: 1540

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EBHW4RE	16685.04	EE7489.D	09/09/96
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): AA6319.D Date Analyzed: 09/11/96

Instrument ID: A Time Analyzed: 1002

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	24333	8.66	72575	10.69	39221	13.57
	UPPER LIMIT	48666	9.16	145150	11.19	78442	14.07
	LOWER LIMIT	12166	8.16	36288	10.19	19610	13.07
	EPA SAMPLE No.						
01	EBHW3RE	22337	8.68	69364	10.69	40881	13.57
02	EBHW5RE	22412	8.67	73447	10.70	42537	13.57
03							
04							
05							
06							
07							
08							
09							
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): AA6319.D Date Analyzed: 09/11/96

Instrument ID: A Time Analyzed: 1002

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	56666	15.99	29818	20.63	26132	24.93
	UPPER LIMIT	113332	16.49	59636	21.13	52264	25.43
	LOWER LIMIT	28333	15.49	14909	20.13	13066	24.43
	EPA SAMPLE No.						
01	EBHW3RE	68115	15.99	31404	20.63	21936	24.95
02	EBHW5RE	67214	16.00	41345	20.64	34666	24.95
03							
04							
05							
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): AA6337.D Date Analyzed: 09/12/96

Instrument ID: A Time Analyzed: 1653

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	17162	8.53	50019	10.56	25592	13.43
	UPPER LIMIT	34324	9.03	100038	11.06	51184	13.93
	LOWER LIMIT	8581	8.03	25010	10.06	12796	12.93
	EPA SAMPLE No.						
01	SBLKAV	25144	8.54	76380	10.55	39616	13.43
02							
03							
04							
05							
06							
07							
08							
09							
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): AA6337.D Date Analyzed: 09/12/96

Instrument ID: A Time Analyzed: 1653

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	39698	15.85	25645	20.43	21501	24.60
	UPPER LIMIT	79396	16.35	51290	20.93	43002	25.10
	LOWER LIMIT	19849	15.35	12822	19.93	10750	24.10
	EPA SAMPLE No.						
01	SBLKAV	57757	15.85	34668	20.43	29957	24.60
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): EE7414.D Date Analyzed: 08/31/96

Instrument ID: E Time Analyzed: 1404

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	56799	6.67	157034	8.45	81178	11.05
	UPPER LIMIT	113598	7.17	314068	8.95	162356	11.55
	LOWER LIMIT	28400	6.17	78517	7.95	40589	10.55
	EPA SAMPLE No.						
01	SBLKEH	69339	6.67	188316	8.45	92934	11.05
02	EBHW1	45556	6.67	111702	8.45	44366	11.04
03	EBHW1RE	33629	6.67	85007	8.45	38250*	11.04
04	EBHW2	55751	6.67	152829	8.45	68584	11.04
05	EBHW3	59403	6.64	104389	8.44	85666	11.04
06	EBHW4	68355	6.64	90173	8.45	91693	11.04
07	EBHW5	63907	6.67	113888	8.45	84391	11.04
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): EE7414.D Date Analyzed: 08/31/96

Instrument ID: E Time Analyzed: 1404

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	117606	13.23	64258	17.18	54512	19.92
	UPPER LIMIT	235212	13.73	128516	17.68	109024	20.42
	LOWER LIMIT	58803	12.73	32129	16.68	27256	19.42
	EPA SAMPLE No.						
01	SBLKEH	109520	13.24	35374	17.18	30840	19.92
02	EBHW1	52967*	13.23	15385*	17.17	11859*	19.90
03	EBHW1RE	51312*	13.23	17108*	17.18	11403*	19.91
04	EBHW2	86341	13.23	36014	17.18	27584	19.92
05	EBHW3	180698	13.23	76134	17.18	42428	19.91
06	EBHW4	173400	13.23	82586	17.18	48762	19.91
07	EBHW5	142017	13.23	64253	17.18	32913	19.91
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): EE7478.D Date Analyzed: 09/09/96

Instrument ID: E Time Analyzed: 1340

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	37355	6.64	101670	8.42	47681	11.01
	UPPER LIMIT	74710	7.14	203340	8.92	95362	11.51
	LOWER LIMIT	18678	6.14	50835	7.92	23840	10.51
	EPA SAMPLE No.						
01	SBLKEK	19163	6.64	57298	8.42	30372	11.01
02	EBHW4RE	59188	6.59	55917	8.40	53098	11.00
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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

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID (Standard): EE7478.D Date Analyzed: 09/09/96

Instrument ID: E Time Analyzed: 1340

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	71432	13.20	27339	17.14	19508	19.84
	UPPER LIMIT	142864	13.70	54678	17.64	39016	20.34
	LOWER LIMIT	35716	12.70	13670	16.64	9754	19.34
	EPA SAMPLE No.						
01	SBLKEK	47944	13.20	27808	17.13	22950	19.84
02	EBHW4RE	76585	13.19	27320	17.14	11583	19.83
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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.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7418.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	440	
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
111-91-1	bis(-2-Chloroethoxy)methane	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U
91-57-6	2-Methylnaphthalene	190	J
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	49	J
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	26	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7418.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	120	J
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	660	
120-12-7	Anthracene	110	J
86-74-8	Carbazole	41	J
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	1000	
129-00-0	Pyrene	1700	
85-68-7	Butylbenzylphthalate	66	J
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	740	
218-01-9	Chrysene	830	
117-81-7	bis(2-Ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	780	
207-08-9	Benzo(k)fluoranthene	460	
50-32-8	Benzo(a)pyrene	710	
193-39-5	Indeno(1,2,3-cd)pyrene	590	
53-70-3	Dibenzo(a,h)anthracene	190	J
191-24-2	Benzo(g,h,i)perylene	420	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7418.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	4.656	6300	J
2. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.749	18000	A NJB
3.	Unknown	5.485	460	J
4. 110-13-4	2,5-Hexanedione	5.632	160	NJ
5.	Unknown	5.681	170	J
6.	Unknown	6.259	160	J
7.	Unknown	7.863	220	J
8.	Unknown	8.305	1000	J
9. 90-12-0	Naphthalene, 1-methyl-	9.632	190	NJ
10.	Unknown	10.458	170	J
11.	Unknown	11.810	220	J
12. 57-10-3	Hexadecanoic acid	13.805	480	NJ
13.	Unknown	16.613	480	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7420.D

Level: (low/med) LOW Date Received: 08/24/96

% Moisture: 21 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	420	U
111-44-4	bis(-2-Chloroethyl)Ether	420	U
95-57-8	2-Chlorophenol	420	U
541-73-1	1,3-Dichlorobenzene	420	U
106-46-7	1,4-Dichlorobenzene	420	U
95-50-1	1,2-Dichlorobenzene	420	U
95-48-7	2-Methylphenol	420	U
108-60-1	2,2'-oxybis(1-Chloropropane)	420	U
106-44-5	4-Methylphenol	420	U
621-64-7	N-Nitroso-di-n-propylamine	420	U
67-72-1	Hexachloroethane	420	U
98-95-3	Nitrobenzene	420	U
78-59-1	Isophorone	420	U
88-75-5	2-Nitrophenol	420	U
105-67-9	2,4-Dimethylphenol	420	U
120-83-2	2,4-Dichlorophenol	420	U
120-82-1	1,2,4-Trichlorobenzene	420	U
91-20-3	Naphthalene	77	J
106-47-8	4-Chloroaniline	420	U
87-68-3	Hexachlorobutadiene	420	U
111-91-1	bis(-2-Chloroethoxy)methane	420	U
59-50-7	4-Chloro-3-Methylphenol	420	U
91-57-6	2-Methylnaphthalene	37	J
77-47-4	Hexachlorocyclopentadiene	420	U
88-06-2	2,4,6-Trichlorophenol	420	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	420	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	420	U
208-96-8	Acenaphthylene	420	U
606-20-2	2,6-Dinitrotoluene	420	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	420	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7420.D

Level: (low/med) LOW Date Received: 08/24/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	28	J
121-14-2	2,4-Dinitrotoluene	420	U
84-66-2	Diethylphthalate	420	U
7005-72-3	4-Chlorophenyl-phenylether	420	U
86-73-7	Fluorene	420	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	420	U
101-55-3	4-Bromophenyl-phenylether	420	U
118-74-1	Hexachlorobenzene	420	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	160	J
120-12-7	Anthracene	28	J
86-74-8	Carbazole	420	U
84-74-2	Di-n-butylphthalate	30	JB
206-44-0	Fluoranthene	200	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	420	U
91-94-1	3,3'-Dichlorobenzidine	420	U
56-55-3	Benzo(a)anthracene	130	J
218-01-9	Chrysene	160	J
117-81-7	bis(2-Ethylhexyl)phthalate	420	U
117-84-0	Di-n-octylphthalate	420	U
205-99-2	Benzo(b)fluoranthene	140	J
207-08-9	Benzo(k)fluoranthene	140	J
50-32-8	Benzo(a)pyrene	150	J
193-39-5	Indeno(1,2,3-cd)pyrene	150	J
53-70-3	Dibenzo(a,h)anthracene	73	J
191-24-2	Benzo(g,h,i)perylene	120	J

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7420.D

Level: (low/med) LOW Date Received: 08/24/96

% Moisture: 21 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	4.615	5900	NJ
2. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.752	17000	A NJB
3.	Unknown	5.482	390	J
4. 110-13-4	2,5-Hexanedione	5.629	120	NJ
5.	Unknown	6.266	190	J
6.	Unknown	6.516	100	J
7.	Unknown	8.298	460	J
8. 334-48-5	Decanoic acid	12.962	200	NJ
9.	Unknown	13.766	110	J
10. 57-10-3	Hexadecanoic acid	13.805	300	NJ
11.	Unknown	14.018	150	J
12.	Unknown	16.612	150	J
13.	Unknown	17.543	210	J
14.	Unknown	18.639	500	J
15.	Unknown	20.055	320	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7422.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(-2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	980	
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
111-91-1	bis(-2-Chloroethoxy)methane	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7422.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	24	J
129-00-0	Pyrene	28	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	18	J
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7422.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.717	4500	A NJB
2.	Unknown	5.448	2600	J
3.	Unknown	5.756	2300	J
4.	Unknown	5.871	1200	J
5.	Unknown	7.023	110	J
6.	Unknown	7.213	100	J
7.	Unknown	7.601	1600	J
8.	Unknown	7.650	370	J
9.	Unknown	7.951	7900	J
10.	Unknown	8.345	10000	J
11.	Unknown	8.378	5900	J
12.	Unknown	16.187	180	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW3RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6325.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(-2-Chloroethyl)Ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethyphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
111-91-1	bis(-2-Chloroethoxy)methane	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW3RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6325.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	32	J
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	18	J
206-44-0	Fluoranthene	45	J
129-00-0	Pyrene	47	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	35	J
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	22	J
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW3RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6325.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.0

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	6.852	1800	A NJ
2.	Unknown	7.439	910	J
3.	Unknown	10.006	100	J
4.	Unknown	10.517	4100	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7424.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(-2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
111-91-1	bis(-2-Chloroethoxy)methane	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	890	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	890	U
83-32-9	Acenaphthene	350	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7424.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	U
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-methylphenol	890	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	890	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	20	JB
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) - Cannot be separated from Diphenylamine

TMM 9-24-96

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7424.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.734	13000	A J
2.	Unknown	5.454	670	J
3.	Unknown	5.768	1200	J
4.	Unknown	5.888	1700	J
5.	Unknown	6.335	76	J
6.	Unknown	7.219	100	J
7.	Unknown	7.323	160	J
8.	Unknown	7.372	120	J
9.	Unknown	8.039	9400	J
10.	Unknown	8.378	13000	J
11.	Unknown	15.328	140	J
12.	Unknown	16.137	100	J
13.	Unknown	16.187	100	J
14.	Unknown	16.315	140	J
15.	Unknown	16.615	140	J
16.	Unknown	16.781	140	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW4RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7489.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/09/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(-2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
111-91-1	bis(-2-Chloroethoxy)methane	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	890	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	890	U
83-32-9	Acenaphthene	350	U

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RB 09-24-96

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW4RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7489.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/09/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	U
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-methylphenol	890	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	890	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	29	J
117-84-0	Di-n-octylphthalate	24	J
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) - Cannot be separated from Diphenylamine

000305
RBG 2-4-96

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW4RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7489.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.2

Number TICs found: 13

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.680	14000	A NJB
2.		Unknown	5.866	2200	J
3.		Unknown	5.981	2800	J
4.		Unknown	6.084	150	J
5.		Unknown	6.226	1100	J
6.	54192-20-0	2-Butanol, 3-chloro-, acetat	6.340	180	NJ
7.		Unknown	7.181	130	J
8.		Unknown	7.548	400	J
9.		Unknown	7.767	3500	J
10.		Unknown	8.298	7400	J
11.		Unknown	9.695	160	J
12.		Unknown	15.090	140	J
13.		Unknown	16.147	370	J
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000306

NB 9-24-96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7426.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(-2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2'-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	840	
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
111-91-1	bis(-2-Chloroethoxy)methane	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	890	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	890	U
83-32-9	Acenaphthene	350	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7426.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	U
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-methylphenol	890	U
86-30-6	N-nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	890	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7426.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 11.1

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.751	78000	A JM
2.	Unknown	5.712	1900	J
3.	Unknown	5.826	1300	J
4.	Unknown	6.039	80	J
5.	Unknown	6.290	91	J
6.	Unknown	6.442	80	J
7.	Unknown	6.748	87	J
8.	Unknown	7.228	120	J
9.	Unknown	7.381	110	J
10.	Unknown	7.670	980	J
11.	Unknown	7.719	150	J
12.	Unknown	8.003	18000	J
13.	Unknown	8.380	19000	J
14.	Unknown	9.741	110	J
15.	Unknown	15.325	130	J
16. 7098-21-7	Unknown	15.828	120	NJ
17.	Unknown	16.138	150	J
18.	Unknown	16.188	120	J
19.	Unknown	16.493	130	J
20.	Unknown	16.616	140	J
21.	Unknown	16.777	190	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW5RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6326.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	U
111-44-4	bis(-2-Chloroethyl)Ether	1800	U
95-57-8	2-Chlorophenol	1800	U
541-73-1	1,3-Dichlorobenzene	1800	U
106-46-7	1,4-Dichlorobenzene	1800	U
95-50-1	1,2-Dichlorobenzene	1800	U
95-48-7	2-Methylphenol	1800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1800	U
106-44-5	4-Methylphenol	1800	U
621-64-7	N-Nitroso-di-n-propylamine	1800	U
67-72-1	Hexachloroethane	1800	U
98-95-3	Nitrobenzene	1800	U
78-59-1	Isophorone	1800	U
88-75-5	2-Nitrophenol	1800	U
105-67-9	2,4-Dimethyphenol	1800	U
120-83-2	2,4-Dichlorophenol	1800	U
120-82-1	1,2,4-Trichlorobenzene	1800	U
91-20-3	Naphthalene	1800	U
106-47-8	4-Chloroaniline	1800	U
87-68-3	Hexachlorobutadiene	1800	U
111-91-1	bis(-2-Chloroethoxy)methane	1800	U
59-50-7	4-Chloro-3-Methylphenol	1800	U
91-57-6	2-Methylnaphthalene	1800	U
77-47-4	Hexachlorocyclopentadiene	1800	U
88-06-2	2,4,6-Trichlorophenol	1800	U
95-95-4	2,4,5-Trichlorophenol	4500	U
91-58-7	2-Chloronaphthalene	1800	U
88-74-4	2-Nitroaniline	4500	U
131-11-3	Dimethylphthalate	1800	U
208-96-8	Acenaphthylene	1800	U
606-20-2	2,6-Dinitrotoluene	1800	U
99-09-2	3-Nitroaniline	4500	U
83-32-9	Acenaphthene	1800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW5RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6326.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 11.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4500	U
100-02-7	4-Nitrophenol	4500	U
132-64-9	Dibenzofuran	1800	U
121-14-2	2,4-Dinitrotoluene	1800	U
84-66-2	Diethylphthalate	1800	U
7005-72-3	4-Chlorophenyl-phenylether	1800	U
86-73-7	Fluorene	1800	U
100-01-6	4-Nitroaniline	4500	U
534-52-1	4,6-Dinitro-2-methylphenol	4500	U
86-30-6	N-nitrosodiphenylamine (1)	1800	U
101-55-3	4-Bromophenyl-phenylether	1800	U
118-74-1	Hexachlorobenzene	1800	U
87-86-5	Pentachlorophenol	4500	U
85-01-8	Phenanthrene	1800	U
120-12-7	Anthracene	1800	U
86-74-8	Carbazole	1800	U
84-74-2	Di-n-butylphthalate	1800	U
206-44-0	Fluoranthene	1800	U
129-00-0	Pyrene	1800	U
85-68-7	Butylbenzylphthalate	1800	U
91-94-1	3,3'-Dichlorobenzidine	1800	U
56-55-3	Benzo(a)anthracene	1800	U
218-01-9	Chrysene	1800	U
117-81-7	bis(2-Ethylhexyl)phthalate	1800	U
117-84-0	Di-n-octylphthalate	1800	U
205-99-2	Benzo(b)fluoranthene	1800	U
207-08-9	Benzo(k)fluoranthene	1800	U
50-32-8	Benzo(a)pyrene	1800	U
193-39-5	Indeno(1,2,3-cd)pyrene	1800	U
53-70-3	Dibenzo(a,h)anthracene	1800	U
191-24-2	Benzo(g,h,i)perylene	1800	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW5RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16685.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6326.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 7 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/11/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 11.1

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	6.343	230000	A NJ
2.		Unknown	7.285	1900	J
3.		Unknown	7.513	5800	J
4.		Unknown	9.293	500	J
5.		Unknown	10.346	21000	J
6.		Unknown	10.543	39000	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKAV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6338.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/12/96

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	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-Dimethyphenol	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
111-91-1	bis(-2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKAV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6338.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/12/96

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	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKAV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AA6338.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/04/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	6.200	1800	ANJ
2.				
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000538

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEH

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 083096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7415.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

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	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
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
111-91-1	bis(-2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEH

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 083096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7415.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/31/96

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	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	20	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	17	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	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKEH

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 083096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7415.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:08/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/31/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.713	2000	NJ
2.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEK

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7481.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/09/96

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	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
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
111-91-1	bis(-2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEK

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7481.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/04/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 09/09/96

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	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKEK

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 090496-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7481.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted:09/04/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 09/09/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 1

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.679	2600	ANJ
2.					
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10-01-96

SUBJECT: Review of Region V CLP Data Received for Review on Aug 29, 1996

FROM: Stephen L. Ostrodka, Chief (HSRL-5J) Superfund Technical Support Section L. Finkelberg

TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: Granite City Steel (IL)

CASE NUMBER: 24884 SDG NUMBER: MEAQA5

Number and Type of Samples: 15 (Soil)

Sample Numbers: MEAQA5-9 MEAQB0-9

Laboratory: AATS Hrs. for Review: 10+1.5

Following are our findings:

All data are usable with the qualifications described in the attached narrative.

L. Finkelberg
10-01-96

RECEIVED
OCT 10 1996
IEPA/DLPC

cc: Regional TPO
Brian Freeman
HSMC-5J

NARRATIVE

SITE : GRANITE CITY STEEL (IL) CASE: 24884
CONTRACTOR: AATS SDG : MEAQA5

The laboratory's portion of this case contains fifteen low level soil samples analyzed for total metals and cyanide. Below is a summary of the out of control audits and their possible effects on the data for this case.

EVIDENTIAL AUDIT: The airbill is not included in the case. All raw data, forms, traffic report / chain of custody sheet, DC-1 form (log-in sheet) and DC-2 form (inventory sheet) are originals and are present in the order indicated on the DC-2 form. All original sample tag are included in the case.

ICP ANALYSES: The duplicate audits for Al (22.9% RPD) and Ca (20.9% RPD) were flagged by the laboratory; however, the technical criterion (35% RPD) for soil samples was not exceed. All Al and Ca results are acceptable.

The matrix spike recovery for Sb (50.4%) is out of control. The Sb result for MEAQB0 is estimated (UJ) due to a possible elevated detection limit. All of the remaining Sb results are estimated (J) due to low bias.

The matrix spike recovery for Se (131.1%) is out of control. The Se results for MEAQA8, MEAQB1, MEAQB3, MEAQB7, MEAQB8 and MEAQB9 are estimated (J) due to high bias. All of the remaining Se results are less than the IDL and are acceptable.

The matrix spike recoveries for Pb (-602.9%) Mn (125.2%) and Zn (55.9%) were not flagged by the laboratory because the sample concentrations are greater than the spike added. All Pb, Mn and Zn results are acceptable.

The LCS for Co (124.9 mg/Kg) is outside the control limits (125.0-162.0 mg/Kg). All Co results are estimated (J) due to low bias.

OTHER QUALIFIERS: The duplicate audit for Hg (200.0% RPD) was flagged by the laboratory; however, the technical criterion (+/-2xCRDL) for soil samples are not exceeded. All Hg results are acceptable.

Reviewed by: [illegible] for B.Y. Lockheed/ESAT
Date: 9/26/96

The preparation blank was found to contain CN (0.237 mg/Kg). The CN results for MEAQA6, MEAQA7, MEAQA9, MEAQB0, MEAQB1, MEAQB2, MEAQB3, MEAQB4, MEAQB6, MEAQB8 and MEAQB9 are estimated (J) due to L.F. contamination.

Reviewed by: [illegible] for RX Lockheed/ESAT
Date: 4/26-96

ESAT-5-041.1

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 24884
SITE:
MATRIX: Soil
WATER SAMPLE SPK:
DATA SET:
LAB: AATS
CONC: Low
WATER SAMPLE DUP:
LAB QC # MEAQA5
REVIEWED BY: Bai Yuan
SOIL SAMPLE SPK:
DATE: 9-26-96
SOIL SAMPLE DUP:

FORM #		FORM 1	FORM 2	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD	COMMENTS
ELEMENT	HOLD TIME	INITIAL CALIB	CONTIN CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS SB	SOIL SPIKE SB	SOIL DUP RPD	ICS AQ	ICS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP SB	AQ SPIKE SB	BLANK	DUP RPD	BLANK	DUP RPD	
ALUMINUM																				
ANTIMONY								50.4												
ARSENIC																				
BARIUM																				
BERYLLIUM																				
CADMIUM																				
CALCIUM																				
CHROMIUM																				
COBALT											124.9									
COPPER																				
IRON																				
LEAD																				
MAGNESIUM																				
MANGANESE																				
MERCURY																				
NICKEL																				
POTASSIUM																				
SELENIUM								131.1												
SILVER																				
SODIUM																				
THALLIUM																				
TIN																				
VANADIUM																				
ZINC																				
CYANIDE						0.237														

DATA QUALIFIER DEFINITIONS

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

U Indicates the material was analyzed, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

J Indicates the associated value is an estimated quantity.

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

UJ Indicates the material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

E Indicates the reported value is estimated because of the presence of interferences. An explanatory note shall be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-IN (if it is an isolated problem).

M Indicates duplicate injection precision is not met.

N Indictaes the spike sample recovery is not within control limits.

S Indicates the reported value was determined by the Method of Standard Addition (MSA).

W Indicates the post-digestion spike for furnace AA analysis is out of control limits (85%-115%), while sample absorbance is less than 50% of the spike absorbance.

+ Indicates the correlation coefficient for the MSA is less than 0.995.

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

<u>Note:</u> Entering "S", "W" or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884 SAS No.: _____ SDG No.:MEAQA5

SOW No.: ILM04.0

EPA Sample No.	Lab Sample ID
MEAQA5	26396.01
MEAQA5D	26396.01D
MEAQA5S	26396.01S
MEAQA6	26396.02
MEAQA7	26396.03
MEAQA8	26396.04
MEAQA9	26396.05
MEAQB0	26396.06
MEAQB1	26396.07
MEAQB2	26396.08
MEAQB3	26396.09
MEAQB4	26396.10
MEAQB5	26396.11
MEAQB6	26396.12
MEAQB7	26396.13
MEAQB8	26396.14
MEAQB9	26396.15

RECEIVED
AUG 29 1996
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO_

Comments:

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

Signature: _____ Name: Deborah J. Beree for... Jason D. Ruckman

Date: August 27, 1996 Title: Inorganic Program Manager

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQA5

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.01

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _80.4

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	8230		*	P
7440-36-0	Antimony_	1.3	B	N	P
7440-38-2	Arsenic__	10.3			P
7440-39-3	Barium___	207			P
7440-41-7	Beryllium	0.82	B		P
7440-43-9	Cadmium__	3.2			P
7440-70-2	Calcium__	10600		*	P
7440-47-3	Chromium_	57.6			P
7440-48-4	Cobalt___	8.5	B		P
7440-50-8	Copper___	48.7			P
7439-89-6	Iron_____	24800			P
7439-92-1	Lead_____	224			P
7439-95-4	Magnesium	3890			P
7439-96-5	Manganese	1260			P
7439-97-6	Mercury__	0.12	U	*	CV
7440-02-0	Nickel___	21.2			P
7440-09-7	Potassium	2370			P
7782-49-2	Selenium_	1.00	U	N	P
7440-22-4	Silver___	0.25	U		P
7440-23-5	Sodium___	230	B		P
7440-28-0	Thallium_	3.7			P
7440-62-2	Vanadium_	68.3			P
7440-66-6	Zinc_____	516			P
_____	Cyanide__	2.1			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQA6

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.02

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _72.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	9700		*	P
7440-36-0	Antimony_	1.7	B	N	P
7440-38-2	Arsenic__	8.9			P
7440-39-3	Barium___	233			P
7440-41-7	Beryllium	0.84	B		P
7440-43-9	Cadmium__	1.9			P
7440-70-2	Calcium__	13600		*	P
7440-47-3	Chromium_	53.6			P
7440-48-4	Cobalt___	8.5	B		P
7440-50-8	Copper___	32.1			P
7439-89-6	Iron_____	23100			P
7439-92-1	Lead_____	146			P
7439-95-4	Magnesium	4690			P
7439-96-5	Manganese	1300			P
7439-97-6	Mercury__	0.14	U	*	CV
7440-02-0	Nickel___	26.6			P
7440-09-7	Potassium	2590			P
7782-49-2	Selenium_	1.1	U	N	P
7440-22-4	Silver___	0.28	U		P
7440-23-5	Sodium___	254	B		P
7440-28-0	Thallium_	4.0			P
7440-62-2	Vanadium_	61.7			P
7440-66-6	Zinc_____	357			P
	Cyanide__	0.78			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQA7

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.03

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _80.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	6550		*	P
7440-36-0	Antimony_	0.96	B	N	P
7440-38-2	Arsenic__	7.6			P
7440-39-3	Barium___	130			P
7440-41-7	Beryllium	0.61	B		P
7440-43-9	Cadmium__	1.5			P
7440-70-2	Calcium__	23800		*	P
7440-47-3	Chromium_	50.7			P
7440-48-4	Cobalt___	6.9	B		P
7440-50-8	Copper___	26.9			P
7439-89-6	Iron_____	19900			P
7439-92-1	Lead_____	78.9			P
7439-95-4	Magnesium	11000			P
7439-96-5	Manganese	1140			P
7439-97-6	Mercury__	0.12	U	*	CV
7440-02-0	Nickel___	17.9			P
7440-09-7	Potassium	1760			P
7782-49-2	Selenium_	1.00	U	N	P
7440-22-4	Silver___	0.25	U		P
7440-23-5	Sodium___	248	B		P
7440-28-0	Thallium_	3.0			P
7440-62-2	Vanadium_	59.4			P
7440-66-6	Zinc_____	253			P
	Cyanide__	0.56	B		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQA8

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.04

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _84.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	8050		*	P
7440-36-0	Antimony_	2.2	B	N	P
7440-38-2	Arsenic__	13.0			P
7440-39-3	Barium___	295			P
7440-41-7	Beryllium	1.3			P
7440-43-9	Cadmium__	6.9			P
7440-70-2	Calcium__	32200		*	P
7440-47-3	Chromium_	46.4			P
7440-48-4	Cobalt___	7.0	B		P
7440-50-8	Copper___	79.7			P
7439-89-6	Iron_____	27700			P
7439-92-1	Lead_____	1110			P
7439-95-4	Magnesium	3930			P
7439-96-5	Manganese	1050			P
7439-97-6	Mercury__	0.21		*	CV
7440-02-0	Nickel___	26.4			P
7440-09-7	Potassium	1970			P
7782-49-2	Selenium_	1.6		N	P
7440-22-4	Silver___	0.40	B		P
7440-23-5	Sodium___	461	B		P
7440-28-0	Thallium_	2.8			P
7440-62-2	Vanadium_	44.6			P
7440-66-6	Zinc_____	962			P
_____	Cyanide__	2.1			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQA9

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.05

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _83.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7000		*	P
7440-36-0	Antimony	0.83	B	N	P
7440-38-2	Arsenic	10.4			P
7440-39-3	Barium	95.9			P
7440-41-7	Beryllium	0.78	B		P
7440-43-9	Cadmium	1.3			P
7440-70-2	Calcium	13600		*	P
7440-47-3	Chromium	23.9			P
7440-48-4	Cobalt	6.9	B		P
7440-50-8	Copper	27.5			P
7439-89-6	Iron	17000			P
7439-92-1	Lead	107			P
7439-95-4	Magnesium	6320			P
7439-96-5	Manganese	629			P
7439-97-6	Mercury	0.13		*	CV
7440-02-0	Nickel	17.9			P
7440-09-7	Potassium	1640			P
7782-49-2	Selenium	0.96	U	N	P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	261	B		P
7440-28-0	Thallium	1.7	B		P
7440-62-2	Vanadium	36.5			P
7440-66-6	Zinc	253			P
	Cyanide	0.66			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB0

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.06

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _78.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	4460		*	P
7440-36-0	Antimony_	0.76	U	N	P
7440-38-2	Arsenic__	4.9			P
7440-39-3	Barium___	78.0			P
7440-41-7	Beryllium	0.43	B		P
7440-43-9	Cadmium__	0.31	B		P
7440-70-2	Calcium__	32000		*	P
7440-47-3	Chromium_	12.4			P
7440-48-4	Cobalt___	5.3	B		P
7440-50-8	Copper___	14.3			P
7439-89-6	Iron____	11500			P
7439-92-1	Lead____	22.9			P
7439-95-4	Magnesium	19100			P
7439-96-5	Manganese	391			P
7439-97-6	Mercury__	0.13	U	*	CV
7440-02-0	Nickel___	12.6			P
7440-09-7	Potassium	1000	B		P
7782-49-2	Selenium_	1.0	U	N	P
7440-22-4	Silver___	0.25	U		P
7440-23-5	Sodium___	251	B		P
7440-28-0	Thallium_	1.0	U		P
7440-62-2	Vanadium_	19.3			P
7440-66-6	Zinc____	84.0			P
	Cyanide__	0.45	B		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB1

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.07

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _85.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7590		*	P
7440-36-0	Antimony	3.1	B	N	P
7440-38-2	Arsenic	8.3			P
7440-39-3	Barium	191			P
7440-41-7	Beryllium	0.86	B		P
7440-43-9	Cadmium	5.7			P
7440-70-2	Calcium	77900		*	P
7440-47-3	Chromium	142			P
7440-48-4	Cobalt	6.0	B		P
7440-50-8	Copper	94.5			P
7439-89-6	Iron	39800			P
7439-92-1	Lead	421			P
7439-95-4	Magnesium	24700			P
7439-96-5	Manganese	2790			P
7439-97-6	Mercury	0.25		*	CV
7440-02-0	Nickel	25.6			P
7440-09-7	Potassium	2040			P
7782-49-2	Selenium	1.4		N	P
7440-22-4	Silver	0.36	B		P
7440-23-5	Sodium	489	B		P
7440-28-0	Thallium	6.6			P
7440-62-2	Vanadium	178			P
7440-66-6	Zinc	1110			P
	Cyanide	1.0			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB2

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG_No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.08

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _82.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	5770		*	P
7440-36-0	Antimony_	1.3	B	N	P
7440-38-2	Arsenic__	8.5			P
7440-39-3	Barium__	161			P
7440-41-7	Beryllium	0.66	B		P
7440-43-9	Cadmium__	4.0			P
7440-70-2	Calcium__	12800		*	P
7440-47-3	Chromium_	31.3			P
7440-48-4	Cobalt___	6.3	B		P
7440-50-8	Copper___	37.4			P
7439-89-6	Iron____	18000			P
7439-92-1	Lead____	315			P
7439-95-4	Magnesium	3270			P
7439-96-5	Manganese	796			P
7439-97-6	Mercury__	0.14		*	CV
7440-02-0	Nickel___	18.6			P
7440-09-7	Potassium	1620			P
7782-49-2	Selenium_	0.97	U	N	P
7440-22-4	Silver___	0.24	U		P
7440-23-5	Sodium___	244	B		P
7440-28-0	Thallium_	2.1	B		P
7440-62-2	Vanadium_	32.2			P
7440-66-6	Zinc____	795			P
	Cyanide__	0.57	B		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB3

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.09

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _82.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6130		*	P
7440-36-0	Antimony	1.1	B	N	P
7440-38-2	Arsenic	7.7			P
7440-39-3	Barium	210			P
7440-41-7	Beryllium	0.62	B		P
7440-43-9	Cadmium	2.5			P
7440-70-2	Calcium	8310		*	P
7440-47-3	Chromium	33.2			P
7440-48-4	Cobalt	6.7	B		P
7440-50-8	Copper	35.8			P
7439-89-6	Iron	17700			P
7439-92-1	Lead	266			P
7439-95-4	Magnesium	2820			P
7439-96-5	Manganese	737			P
7439-97-6	Mercury	0.15		*	CV
7440-02-0	Nickel	18.2			P
7440-09-7	Potassium	1670			P
7782-49-2	Selenium	1.2	B	N	P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	242	B		P
7440-28-0	Thallium	2.4	B		P
7440-62-2	Vanadium	32.3			P
7440-66-6	Zinc	600			P
	Cyanide	0.62			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB4

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.10

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _85.3

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7510		*	P
7440-36-0	Antimony	0.88	B	N	P
7440-38-2	Arsenic	7.3			P
7440-39-3	Barium	136			P
7440-41-7	Beryllium	0.64	B		P
7440-43-9	Cadmium	1.1	B		P
7440-70-2	Calcium	7620		*	P
7440-47-3	Chromium	38.8			P
7440-48-4	Cobalt	6.8	B		P
7440-50-8	Copper	23.0			P
7439-89-6	Iron	19000			P
7439-92-1	Lead	76.7			P
7439-95-4	Magnesium	3700			P
7439-96-5	Manganese	907			P
7439-97-6	Mercury	0.12	U	*	CV
7440-02-0	Nickel	18.0			P
7440-09-7	Potassium	1590			P
7782-49-2	Selenium	0.94	U	N	P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	205	B		P
7440-28-0	Thallium	2.7			P
7440-62-2	Vanadium	50.5			P
7440-66-6	Zinc	211			P
	Cyanide	0.56	B		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB5

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.11

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _82.2

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6510		*	P
7440-36-0	Antimony	1.0	B	N	P
7440-38-2	Arsenic	7.0			P
7440-39-3	Barium	126			P
7440-41-7	Beryllium	0.60	B		P
7440-43-9	Cadmium	0.97	B		P
7440-70-2	Calcium	6980		*	P
7440-47-3	Chromium	35.0			P
7440-48-4	Cobalt	6.4	B		P
7440-50-8	Copper	22.8			P
7439-89-6	Iron	17000			P
7439-92-1	Lead	77.9			P
7439-95-4	Magnesium	3410			P
7439-96-5	Manganese	830			P
7439-97-6	Mercury	0.12	U	*	CV
7440-02-0	Nickel	16.8			P
7440-09-7	Potassium	1430			P
7782-49-2	Selenium	0.97	U	N	P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	193	B		P
7440-28-0	Thallium	2.2	B		P
7440-62-2	Vanadium	45.6			P
7440-66-6	Zinc	207			P
	Cyanide	0.18	U		CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSES DATA SHEET

014

EPA SAMPLE NO.

MEAQB6

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG-No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.12

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _83.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6230		*	P
7440-36-0	Antimony	1.1	B	N	P
7440-38-2	Arsenic	7.0			P
7440-39-3	Barium	165			P
7440-41-7	Beryllium	0.62	B		P
7440-43-9	Cadmium	2.4			P
7440-70-2	Calcium	12800		*	P
7440-47-3	Chromium	67.0			P
7440-48-4	Cobalt	6.3	B		P
7440-50-8	Copper	32.1			P
7439-89-6	Iron	20600			P
7439-92-1	Lead	193			P
7439-95-4	Magnesium	3900			P
7439-96-5	Manganese	1290			P
7439-97-6	Mercury	0.12		*	CV
7440-02-0	Nickel	18.4			P
7440-09-7	Potassium	1600			P
7782-49-2	Selenium	0.95	U	N	P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	235	B		P
7440-28-0	Thallium	3.6			P
7440-62-2	Vanadium	67.1			P
7440-66-6	Zinc	388			P
	Cyanide	0.71			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB7

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.13

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _90.1

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	14100		*	P
7440-36-0	Antimony_	5.0	B	N	P
7440-38-2	Arsenic__	1.2	B		P
7440-39-3	Barium___	33.4	B		P
7440-41-7	Beryllium	0.45	B		P
7440-43-9	Cadmium__	0.22	U		P
7440-70-2	Calcium__	222000		*	P
7440-47-3	Chromium_	906			P
7440-48-4	Cobalt___	8.8	B		P
7440-50-8	Copper___	18.0			P
7439-89-6	Iron_____	187000			P
7439-92-1	Lead_____	8.9			P
7439-95-4	Magnesium	66300			P
7439-96-5	Manganese	21500			P
7439-97-6	Mercury__	0.11	U	*	CV
7440-02-0	Nickel___	11.9			P
7440-09-7	Potassium	105	B		P
7782-49-2	Selenium_	2.4		N	P
7440-22-4	Silver___	0.22	U		P
7440-23-5	Sodium___	424	B		P
7440-28-0	Thallium_	32.3			P
7440-62-2	Vanadium_	1280			P
7440-66-6	Zinc_____	154			P
_____	Cyanide__	1.3			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

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1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB8

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.14

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _92.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	35200		*	P
7440-36-0	Antimony_	4.5	B	N	P
7440-38-2	Arsenic__	1.1	B		P
7440-39-3	Barium__	27.8	B		P
7440-41-7	Beryllium	0.46	B		P
7440-43-9	Cadmium__	0.22	U		P
7440-70-2	Calcium__	269000		*	P
7440-47-3	Chromium_	960			P
7440-48-4	Cobalt___	7.6	B		P
7440-50-8	Copper___	11.5			P
7439-89-6	Iron____	147000			P
7439-92-1	Lead____	2.9			P
7439-95-4	Magnesium	67700			P
7439-96-5	Manganese	20200			P
7439-97-6	Mercury__	0.11	U	*	CV
7440-02-0	Nickel___	5.8	B		P
7440-09-7	Potassium	93.9	B		P
7782-49-2	Selenium_	2.2		N	P
7440-22-4	Silver___	0.22	U		P
7440-23-5	Sodium___	331	B		P
7440-28-0	Thallium_	31.2			P
7440-62-2	Vanadium_	864			P
7440-66-6	Zinc____	31.5			P
	Cyanide__	1.1			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEAQB9

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Lab Sample ID: 26396.15

Level (low/med): LOW__ Date Received: 07/24/96

% Solids: _92.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	16900		*	P
7440-36-0	Antimony_	4.3	B	N	P
7440-38-2	Arsenic__	4.1			P
7440-39-3	Barium___	22.7	B		P
7440-41-7	Beryllium	0.31	B		P
7440-43-9	Cadmium__	0.22	U		P
7440-70-2	Calcium__	209000		*	P
7440-47-3	Chromium_	693			P
7440-48-4	Cobalt___	8.5	B		P
7440-50-8	Copper___	20.1			P
7439-89-6	Iron_____	231000			P
7439-92-1	Lead_____	3.0			P
7439-95-4	Magnesium	57800			P
7439-96-5	Manganese	17900			P
7439-97-6	Mercury__	0.11	U	*	CV
7440-02-0	Nickel___	10.9			P
7440-09-7	Potassium	83.3	B		P
7782-49-2	Selenium_	2.8		N	P
7440-22-4	Silver___	0.22	U		P
7440-23-5	Sodium___	372	B		P
7440-28-0	Thallium_	27.9			P
7440-62-2	Vanadium_	685			P
7440-66-6	Zinc_____	80.7			P
_____	Cyanide__	0.80			CA

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141 -

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Preparation Blank Matrix (soil/water): SOIL_

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-5.5	B	7.4	B	5.0	U	5.0	U	1.000	U	P
Antimony	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Arsenic	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Barium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Chromium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Copper	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Iron	8.0	U	8.0	U	8.0	U	8.0	U	1.600	U	P
Lead	1.0	U	1.0	U	1.0	U	1.0	U	0.280	B	P
Magnesium	7.0	U	10.3	B	7.0	U	7.0	U	2.365	B	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Potassium	16.0	U	16.0	U	16.0	U	16.0	U	3.200	U	P
Selenium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	31.0	U	31.0	U	31.0	U	31.0	U	6.200	U	P
Thallium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	0.563	B	P
Cyanide	3.0	U	3.0	U	3.0	U	3.0	U	0.237	B	CA

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			-5.6	B	5.0	U					P
Antimony			3.0	U	3.0	U					P
Arsenic			4.0	U	4.0	U					P
Barium			1.0	U	1.0	U					P
Beryllium			1.0	U	1.0	U					P
Cadmium			1.0	U	1.0	U					P
Calcium			10.0	U	10.0	U					P
Chromium			1.0	U	1.0	U					P
Cobalt			1.0	U	1.0	U					P
Copper			1.0	U	1.0	U					P
Iron			8.0	U	8.0	U					P
Lead			1.0	U	1.0	U					P
Magnesium			7.0	U	7.0	U					P
Manganese			1.0	U	1.0	U					P
Mercury			0.2	U							CV
Nickel			1.0	U	1.0	U					P
Potassium			16.0	U	16.0	U					P
Selenium			4.0	U	4.0	U					P
Silver			1.0	U	1.0	U					P
Sodium			31.0	U	31.0	U					P
Thallium			4.0	U	4.0	U					P
Vanadium			1.0	U	1.0	U					P
Zinc			1.0	U	1.0	U					P
Cyanide			3.0	U							CA

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEAQA5S

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL__ Level (low/med): LOW___

% Solids for Sample: _80.4

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	63.9428		1.2806	B	124.38	50.4	N	P
Arsenic	75-125	19.2037		10.3010		9.95	89.5		P
Barium	75-125	653.3080		206.8664		497.51	89.7		P
Beryllium	75-125	12.4828		0.8199	B	12.44	93.8		P
Cadmium	75-125	14.4104		3.1550		12.44	90.5		P
Calcium									NR
Chromium	75-125	106.1037		57.5545		49.75	97.6		P
Cobalt	75-125	121.8107		8.5266	B	124.38	91.1		P
Copper	75-125	103.9119		48.7306		62.19	88.7		P
Iron									NR
Lead		194.3816		224.4062		4.98	-602.9		P
Magnesium									NR
Manganese		1418.7286		1262.9913		124.38	125.2		P
Mercury	75-125	0.6965		0.1244	U	0.62	112.3		CV
Nickel	75-125	136.8858		21.2042		124.38	93.0		P
Potassium									NR
Selenium	75-125	3.2649		0.9950	U	2.49	131.1	N	P
Silver	75-125	12.0109		0.2488	U	12.44	96.6		P
Sodium									NR
Thallium	75-125	14.6898		3.6726		12.44	88.6		P
Vanadium	75-125	183.2458		68.2595		124.38	92.4		P
Zinc		585.1438		515.6430		124.38	55.9		P
Cyanide	75-125	7.1580		2.1038		6.22	81.3		CA

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEAQA5A

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water) : SOIL__ Level (low/med): LOW___

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony		127.39		5.15	B	120.0	101.9		P
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium		14.40		4.00	U	10.0	144.0		P
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEAQA5D

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

Matrix (soil/water): SOIL_ Level (low/med): _LOW__

% Solids for Sample: _80.4 % Solids for Duplicate: __80.4

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		8228.6351		6540.2129		22.9	*	P
Antimony		1.2806	B	1.0415	B	20.6		P
Arsenic	2.4876	10.3010		8.4652		19.6		P
Barium	49.7512	206.8664		182.8505		12.3		P
Beryllium		0.8199	B	0.6803	B	18.6		P
Cadmium	1.2438	3.1550		2.6134		18.8		P
Calcium		10620.7517		13095.8274		20.9	*	P
Chromium		57.5545		52.1030		9.9		P
Cobalt		8.5266	B	6.8701	B	21.5		P
Copper		48.7306		40.2284		19.1		P
Iron		24842.9144		20593.9172		18.7		P
Lead		224.4062		184.4231		19.6		P
Magnesium	1243.781	3889.9794		3435.7010		12.4		P
Manganese		1262.9913		1155.1607		8.9		P
Mercury	0.1244	0.1244	U	0.1300		200.0	*	CV
Nickel	9.9502	21.2042		18.6510		12.8		P
Potassium	1243.781	2374.3455		2014.0144		16.4		P
Selenium		0.9950	U	0.9950	U			P
Silver		0.2488	U	0.2488	U			P
Sodium		229.9388	B	234.2249	B	1.8		P
Thallium	2.4876	3.6726		3.5938		2.2		P
Vanadium	12.4378	68.2595		60.8724		11.4		P
Zinc		515.6430		444.9910		14.7		P
Cyanide	0.6219	2.1038		1.5225		32.1		CA

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10
Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

ICP ID Number: TJA_ET2_____ Date: 07/10/96

Flame AA ID Number : _____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	5.0	P
Antimony	206.83		60	3.0	P
Arsenic	189.04		10	4.0	P
Barium	493.41		200	1.0	P
Beryllium	313.04		5	1.0	P
Cadmium	226.50		5	1.0	P
Calcium	317.93		5000	10.0	P
Chromium	267.72		10	1.0	P
Cobalt	228.61		50	1.0	P
Copper	324.75		25	1.0	P
Iron	271.44		100	8.0	P
Lead	220.35		3	1.0	P
Magnesium	279.08		5000	7.0	P
Manganese	257.61		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	16.0	P
Selenium	196.02		5	4.0	P
Silver	328.07		10	1.0	P
Sodium	588.99		5000	31.0	P
Thallium	190.68		10	4.0	P
Vanadium	292.40		50	1.0	P
Zinc	213.86		20	1.0	P
Cyanide			10		NR

Comments:

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10
Instrument Detection Limits (Quarterly)

Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

ICP ID Number: _____ Date: 07/03/96

Flame AA ID Number : PS200B_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.30		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR
Cyanide			10		NR

Comments:

10
Instrument Detection Limits (Quarterly)

Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24884_ SAS No.: _____ SDG No.: MEAQA5

ICP ID Number: _____ Date: 07/15/96

Flame AA ID Number : LACHAT_____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury			0.2		NR
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR
Cyanide	578.00		10	3.0	CA

Comments:

13
PREPARATION LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.:_24884_ SAS No.: _____ SDG No.:MEAQA5

Method: P_

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	08/03/96	1.00	200
MEAQA5	08/03/96	1.00	200
MEAQA5D	08/03/96	1.00	200
MEAQA5S	08/03/96	1.00	200
MEAQA6	08/03/96	1.00	200
MEAQA7	08/03/96	1.00	200
MEAQA8	08/03/96	1.00	200
MEAQA9	08/03/96	1.00	200
MEAQB0	08/03/96	1.00	200
MEAQB1	08/03/96	1.00	200
MEAQB2	08/03/96	1.00	200
MEAQB3	08/03/96	1.00	200
MEAQB4	08/03/96	1.00	200
MEAQB5	08/03/96	1.00	200
MEAQB6	08/03/96	1.00	200
MEAQB7	08/03/96	1.00	200
MEAQB8	08/03/96	1.00	200
MEAQB9	08/03/96	1.00	200
PBS	08/03/96	1.00	200

13
PREPARATION LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.:_24884_ SAS No.: _____ SDG No.:MEAQA5

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	07/31/96	0.20	100
MEAQA5	07/31/96	0.20	100
MEAQA5D	07/31/96	0.20	100
MEAQA5S	07/31/96	0.20	100
MEAQA6	07/31/96	0.20	100
MEAQA7	07/31/96	0.20	100
MEAQA8	07/31/96	0.20	100
MEAQA9	07/31/96	0.20	100
MEAQB0	07/31/96	0.20	100
MEAQB1	07/31/96	0.20	100
MEAQB2	07/31/96	0.20	100
MEAQB3	07/31/96	0.20	100
MEAQB4	07/31/96	0.20	100
MEAQB5	07/31/96	0.20	100
MEAQB6	07/31/96	0.20	100
MEAQB7	07/31/96	0.20	100
MEAQB8	07/31/96	0.20	100
MEAQB9	07/31/96	0.20	100
PBS	07/31/96	0.20	100

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.:_24884_ SAS No.: _____ SDG No.:MEAQA5

Method: CA

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSS	07/29/96	1.00	50
MEAQA5	07/29/96	1.00	50
MEAQA5D	07/29/96	1.00	50
MEAQA5S	07/29/96	1.00	50
MEAQA6	07/29/96	1.00	50
MEAQA7	07/29/96	1.00	50
MEAQA8	07/29/96	1.00	50
MEAQA9	07/29/96	1.00	50
MEAQB0	07/29/96	1.00	50
MEAQB1	07/29/96	1.00	50
MEAQB2	07/29/96	1.00	50
MEAQB3	07/29/96	1.00	50
MEAQB4	07/29/96	1.00	50
MEAQB5	07/29/96	1.00	50
MEAQB6	07/29/96	1.00	50
MEAQB7	07/29/96	1.00	50
MEAQB8	07/29/96	1.00	50
MEAQB9	07/29/96	1.00	50
PBS	07/29/96	1.00	50

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (If applicable):
Case No.: 24884

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

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

2. Region No.: 5
Sampling Co.: IEPA
Sampler (Name): Brad Taylor
Sampler Signature: Brad Taylor

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

4. Date Shipped: 7/23/96
Carrier: Fed Ex
Airbill Number: 9676561425

5. Ship To
ATTN: Harry Borg

6. Date Received – Received by: [signature] 7/24/96
Laboratory Contract Number: 68-D5-0136 41
Unit Price: $78.90 86.50
7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
MEAQA9	5	L	G	6		✓	✓					~~5-163334~~ MW 5-163352	X111	7/23/96 0915	EBHW1	BT			
MEAQB0	5	L	G	6		✓	✓					5-163354	X112	7/23/96 0926	EBHW2	BT			
MEAQB7	5	L	G	6		✓	✓					~~5-163355~~ MW 5-16358	X321	7/23/96 1000	EBHW3	BT			
MEAQB8	5	L	G	6		✓	✓					5-163359	X322	7/23/96 1015	EBHW4	BT			
MEAQB9	5	L	G	6		✓	✓					5-163360	X303	7/23/96 1040	EBHW5	BT			

*last sample read in SDG DDD 8-6-96

Shipment for Case Complete? (Y/N): Y
Page: 2 of 2
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 48474/48475

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Brad Taylor	7/23/96 1200				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Is custody seal intact? Y/N/none	
		[signature]	7/24/96 10:00	intact	

MEAQA5

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

EPA Form 9110-1

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

A21-012-6 REV. 3/93

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3 70

EPA United States Environmental Protection Agency Contract Laboratory Program

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

SAS No. (If applicable):

Case No.: 24884

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

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

2. Region No.: 5

Sampling Co.: IEPA

4. Date Shipped: 7/23/96

Carrier: Fed Ex

6. Date Received – Received by: [signature] 7/24/96

Sampler (Name): Brad Taylor

Airbill Number: 9676561425

Laboratory Contract Number: 68-D5-0136 41

Unit Price: $78.96 86.80

Sampler Signature: Brad Taylor

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

5. Ship To: American Analytical + Technical, 1700 West Albany, Suite C, Broken Arrow, OK 74012

ATTN: Harry Borg

7. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
MEAQB1	5	L	G	6		✓	✓					5-163327	X101	7/22/96 1245	EBHR0	B.T.			
MEAQB2	5	L	G	6		✓	✓					5-163328	X102	7/22/96 1330	EBHR1	B.T.			
MEAQB3	5	L	G	6		✓	✓					5-163329	X103	7/22/96 1400	EBHR2	B.T.			
MEAQB4	5	L	G	6		✓	✓					5-163330	X104	7/22/96 1430	EBHR3	B.T.			
MEAQB5	5	L	G	6		✓	✓					5-163331	X105	7/22/96 1430	EBHR4	B.T.			
MEAQB6	5	L	G	6		✓	✓					5-163332	X106	7/22/96 1445	EBHR5	B.T.			
MEAQA5	5	L	G	6		✓	✓					5-163335	X107	7/22/96 1500	EBHR6	B.T.			
MEAQA6	5	L	G	6		✓	✓					5-163336	X108	7/22/96 1515	EBHR7	B.T.			
MEAQA7	5	L	G	6		✓	✓					5-163337	X109	7/22/96 1545	EBHT9	B.T.			
MEAQA8	5	L	G	6		✓	✓					5-163338	X110	7/23/96 0845	EBHW0	B.T.			

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

Page: 1 of 2

Sample(s) to be Used for Laboratory QC:

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 48474 / 48475

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Brad Taylor	7/23/96 1200				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [signature]	Date / Time: 7/24/96 10:00	Remarks: Is custody seal intact? (Y)/N/none: intact	

MEAQA5

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

EPA Form 9110-1

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

A21-012-6 REV. 3/93

125

3027

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IL

Case No: 24884 Site Name Location: Granite City Steel

Contractor or EPA Lab: AATS Data User: IEPA

No. of Samples: 15 Date Sampled or Data Received: 8-29-96

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed: 15 No. of samples received: 15

Received by: Lynette Burnett Date: 8-29-96

Received by LSSS: Lynette Burnett Date: 8-29-96

Review started: 9-26-96 Reviewer Signature: B. Yuen

Total time spent on review: 10+1.5 , Date review completed: 9-26-96

Copied by: Lynette Burnett Date: 10-8-96

Mailed to user by: Lynette Burnett Date: 10-8-96

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on Aug 29, 1996

FROM: Stephen L. Ostrodka, Chief (HSRL-5J) for Steve Ostrodka
Superfund Technical Support Section Richard L Byrnes
9/24/96

TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: Granite City Steel (IL)

CASE NUMBER: 24884 SDG NUMBER: EBHR0

Number and Type of Samples: ~~13~~ 10 (soil) ABNs only

Sample Numbers: EBHR0-7 EBHT9 EBHW0 ~~[illegible]~~ ach

Laboratory: ATAS Hrs. for Review: ~~7+1=~~ 6+1=7 ach

Following are our findings:

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

Richard L Byrnes
9/24/96

cc: Regional TPO
Brian Freeman
HSMC-5J

Laboratory: **ATAS** **Case:** **24884**
Site: **GRANITE CITY STEEL (IL)** **SDG:** **EBHR0**

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

Ten (10) soil samples numbered EBHR0 through EBHR7, EBHT9 and EBHW0 were collected on 07-22-96 and 07-23-96. American Technical & Analytical Services, Inc. (ATAS) of Maryland Heights, MO received the samples on 07-24-96. All samples were analyzed for semivolatile organic analytes (SVs) only according to CLP SOW OLMO3.2.

Soil sample EBHR0 was used as the low level MS/MSD sample for the SV fraction.

The Chain of Custody Record did not identify any samples as trip blanks, field blanks, or field duplicates.

All SV extractions were performed within the technical holding time of fourteen (14) days after sample collection for soil samples and analyzed within forty (40) days; therefore the results are acceptable.

Reviewed by: Allison C. Harvey ____ Lockheed-Martin/ESAT
Date: September 5, 1996

Laboratory: **ATAS** **Case:** **24884**
Site: **GRANITE CITY STEEL (IL)** **SDG:** **EBHR0**

1. HOLDING TIME

Ten (1) soil samples numbered EBHR0 through EBHR7, EBHT9 and EBHW0 were collected on 07-22-96 and 07-23-96. American Technical & Analytical Services, Inc. (ATAS) of Maryland Heights, MO received the samples on 07-24-96. All samples were analyzed for semivolatile organic analytes (SVs) only according to CLP SOW OLMO3.2.

All SV extractions were performed within the technical holding time of fourteen (14) days after sample collection for soil samples and analyzed within forty (40) days; therefore the results are acceptable.

2. GC/MS TUNING AND GC INSTRUMENT PROCEDURE

SV: All GC/MS tuning complied with the mass list and ion abundance criteria for DFTPP, and all samples were analyzed within the twelve (12) hour periods for instrument performance checks.

3. CALIBRATION

Initial and continuing calibrations of the semivolatile standards were evaluated for the target compounds list and outliers were recorded on the outlier forms included as a part of this narrative.

4. BLANKS

SV: SBLKEV is the low level soil method blank. Method blank SBLKEV contained Di-n-butylphthalate at 20 μg/Kg, Di-n-octylphthalate at 37 μg/Kg and three (3) TICs. The presence of Di-n-butylphthalate and/or Di-n-octylphthalate, common laboratory contaminants, in the samples associated with the method blank, SBLKEV, is qualified as undetected "U", when the sample result is less than ten (10) times the blank result. The presence of any of the TICs in the samples associated with the method blank, SBLKEV, is qualified as undetected "U", when the sample result is less than five (5) times the blank result. The semivolatile method blank summary (FORM IV SV) lists the samples associated with the blank.

Reviewed by: Allison C. Harvey ____ Lockheed-Martin/ESAT
Date: September 5, 1996

Laboratory: **ATAS** **Case:** **24884**
Site: **GRANITE CITY STEEL (IL)** **SDG:** **EBHR0**

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

SV: The recoveries of all semivolatile surrogates were within QC limits for all low level soil samples; therefore, the results are acceptable.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Soil sample EBHR0 was used as the low level MS/MSD sample for the SV fraction.

SV: The % recovery of Pyrene was reported above the upper QC limit for soil sample EBHR0MSD. The % RPD for Pyrene was above the QC limit. The presence of Pyrene in the unspiked sample, EBHR0, should be qualified as estimated, "J" and non-detects as "UJ".

7. FIELD BLANK AND FIELD DUPLICATE

The Chain of Custody Record did not identify any samples as trip blanks, field blanks, or field duplicates.

8. INTERNAL STANDARDS

SV: The area counts for IS1 (DCB), 1,4-Dichlorobenzene-d4; IS2 (NPT), Naphthalene-d8; and IS3 (ANT), Acenaphthene, were above the upper QC limits for soil samples EBHW0 and EBHW0DL. The area counts for IS5 (CRY), Chrysene-d12, were below the lower QC limits for soil samples EBHR0MS, EBHR0MSD and EBHW0. The area counts for IS6 (PRY), Perylene-d12, were below the lower QC limits for soil samples EBHR0, EBHR0MS, EBHR0MSD, EBHR1, EBHR1RE and EBHW0. Detected target analytes quantitated on IS1, IS2 and IS3 in soil samples EBHW0 and EBHW0DL should be qualified as estimated "J". Non-detected analytes in soil samples EBHW0 and EBHW0DL do not require any qualification. Detected target analytes quantitated on IS5 in soil samples EBHR0MS, EBHR0MSD and EBHW0 should be qualified as estimated "J" and non-detects as "UJ". Detected target analytes quantitated on IS6 in soil samples EBHR0, EBHR0MS, EBHR0MSD, EBHR1, EBHR1RE and EBHW0 should be qualified as estimated "J" and non-detects as "UJ.

Reviewed by: Allison C. Harvey ____ Lockheed-Martin/ESAT
Date: September 5, 1996

Laboratory: **ATAS** **Case:** **24884**
Site: **GRANITE CITY STEEL (IL)** **SDG:** **EBHR0**

9. COMPOUND IDENTIFICATION:

After reviewing the mass spectra and chromatograms it appears that all SV compounds were correctly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

Soils - All CRQLs were properly adjusted for percent moisture and dilution; therefore, all SV target CRQLs were properly reported. All target compound quantitations were properly reported.

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

SV: Soil samples EBHR0, EBHR1 and EBHW0 reported at least one internal standard area count outside the QC limits. Samples EBHR0 and EBHW0 each required dilutions for proper quantitation of target analytes and the original extracts were therefore not reanalyzed. Sample EBHR1 was reanalyzed as per SOW OLM03.2. The area count for the reanalyzed sample was also outside the QC limits; therefore the data was qualified using the results of the original analysis.

The concentration of Chrysene exceeded the calibration range for soil sample EBHR0. The concentrations of Phenanthrene, Fluoranthene, Pyrene, Benzo(a)antyhracene, Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, and Benzo(a)Pyrene exceeded the calibration range for soil sample EBHW0. Sample EBHR0 was reanalyzed at a 2.0 dilution factor and sample EBHW0 at a 5.0 dilution factor. For the analytes that exceeded the calibration range in the original analyses; the results of the diluted analyses, EBHR0DL and EBHW0DL, should be considered the samples' analyte concentrations.

Reviewed by: Allison C. Harvey ____ Lockheed-Martin/ESAT
Date: September 5, 1996

CALIBRATION OUTLIER
Semivolatile TCL
(Page 1 of 2)

CASE/SAS #: 24884
COLUMN:

LABORATORY: ATAS
SITE NAME: Granite City Steel (IL)

Instrument ID: E		Initial Cal. 08/13/96			Cont. Cal. 08/14/96			Cont. Cal. 08/15/96			Cont. Cal. 08/16/96			Cont. Cal. 08/19/96		
Date:																
Time:		1024			1115			1224			1340			1244		
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
henol	0.800	1.703			1.924			2.030			1.942			2.245	31.8	J
is(2-Chloroethyl)ether	0.700															
2-Chlorophenol	0.800															
,3-Dichlorobenzene	0.600															
,4-Dichlorobenzene	0.500															
1,2-Dichlorobenzene	0.400															
-Methylphenol	0.700															
2-oxybis(1-Chloropropane)	0.010	1.572			1.966	25.1	J	2.776	76.6	J	3.109	97.8	J	3.476	121.1	J
4-Methylphenol	0.600															
-Nitroso-di-n-propylamine	0.500															
exachloroethane	0.300															
Nitrobenzene	0.200															
sophorone	0.400															
-Nitrophenol	0.100															
2,4-Dimethylphenol	0.200															
is(2-Chloroethoxy)methane	0.300															
,4-Dichlorophenol	0.200															
1,2,4-Trichlorobenzene	0.200															
Naphthalene	0.700															
-Chloroaniline	0.010															
Hexachlorobutadiene	0.010															
4-Chloro-3-methylphenol	0.200															
-Methylnaphthalene	0.400															
Hexachlorocyclopentadiene	0.010	0.304			0.277			0.279			0.310			0.225	26.0	J
2,4,6-Trichlorophenol	0.200															
,4,5-Trichlorophenol	0.200															
-Chloronaphthalene	0.800															
2-Nitroaniline	0.010															
imethylphthalate	0.010															
Acenaphthylene	0.900															
2,6-Dinitrotoluene	0.200															
-Nitroaniline	0.010															
Acenaphthene	0.900															
2,4-Dinitrophenol	0.010															

Affected Samples:

	SBLKEV	EBHRØ-2	EBHT9	EBHWØDL
	EBHRØMS	EBHRØDL	EBHWØ	
	EBHRØMSD		EBHRIRE	
			EBHR3-7	

Minimum Relative Response Factor.
* These flags should be applied to the analytes on the sample data sheets.
J/R = All positive results are estimated "J" and non-detected results are unusable "R".

Reviewer's Init/Date: aOH / 9-5-96

CALIBRATION OUTLIER
Semivolatile TCL
(Page 2 of 2)

CASE/SAS #: 24884
COLUMN:

LABORATORY: ATAS
SITE NAME: Granite City Steel (IL)

Instrument ID:		E														
Date:		Initial Cal. 08/13/96			Cont. Cal. 08/14/96			Cont. Cal. 08/15/96			Cont. Cal. 08/16/96			Cont. Cal. 08/19/96		
Time:		1024			1115			1224			1340			1244		
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
4,6-Nitrophenol	0.010	0.193			0.148			0.139	28.0	J	0.120	37.8	J	0.098	49.2	J
Dibenzofuran	0.800															
2,4-Dinitrotoluene	0.200															
Diethylphthalate	0.010															
4-Chlorophenyl-phenylether	0.400															
Fluorene	0.900															
4-Nitroaniline	0.010															
4,6-Dinitro-2-methylphenol	0.010															
N-nitrosodiphenylamine	0.010															
4-Bromophenyl-phenylether	0.100															
Hexachlorobenzene	0.100	0.268			0.264			0.262			0.356	328	J	0.329		
Pentachlorophenol	0.050	0.136			0.130			0.130			0.173	27.2	J	0.125		
Phenanthrene	0.700															
Anthracene	0.700															
Carbazole	0.010															
Di-n-butylphthalate	0.010															
Fluoranthene	0.600															
Pyrene	0.600															
Butylbenzylphthalate	0.010	1.484			1.412			1.358			0.959	35.4	J	1.058	28.7	J
3-3'-Dichlorobenzidine	0.010															
Benzo(a)anthracene	0.800															
Chrysene	0.700															
bis(2-Ethylhexyl)phthalate	0.010	1.785			1.663			1.835			1.841	36.1	J	1.408		
Di-n-octylphthalate	0.010	3.362			3.462			3.298			2.102	37.5	J	2.697		
Benzo(b)fluoranthene	0.700															
Benzo(k)fluoranthene	0.700															
Benzo(a)pyrene	0.700															
Indeno(1,2,3-cd)pyrene	0.500															
Dibenz(a,h)anthracene	0.400															
Benzo(g,h,i)perylene	0.500															
Nitrobenzene-d_5	0.200															
2-Flurobiphenyl	0.700															
Terphenyl-d_{14}	0.500															
Phenol-d_6	0.800	1.696			1.891			1.955			1.897			2.191	29.2	J
2-Fluorophenol	0.600															
2,4,6-Tribromophenol	0.010	0.129			0.130			0.120			0.172	33.3	J	0.147		
2-Chlorophenol-d_4	0.800															
1,2-Dichlorobenzene-d_4	0.400															

Minimum Relative Response Factor.
*These flags should be applied to the analytes on the sample data sheets.
J/R = All positive results are estimated "J" and non-detected results are unusable "R".

Reviewer's Init/Date: ACH/9-5-96

ORGANIC DATA QUALIFIER DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

TABLE 4

(For Multi-Media, Multi-Concentration Analysis)

VOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

Bromochloromethane	1,4-Difluorobenzene	Chlorobenzene-d_5
Chloromethane	Bromoform	2-Hexanone
Bromomethane	1,1,1-Trichloroethane	4-Methyl-2-pentanone
Vinyl chloride	Carbon tetrachloride	Tetrachloroethene
Chloroethane	Bromodichloromethane	1,1,2,2-Tetrachloroethane
Methylene chloride	1,2-Dichloropropane	Toluene
Acetone	trans-1,3-Dichloropropene	Chlorobenzene
Carbon disulfide	Trichloroethene	Ethylbenzene
1,1-Dichloroethene	Dibromochloromethane	Styrene
1,1-Dichloroethane	1,1,2-Trichloroethane	Xylene(total)
1,2-Dichloroethene(total)	Benzene	Bromofluorobenzene(surr,smc)
Chloroform	cis-1,3-Dichloropropene	Toluene-d_8(surr,smc)
1,2-Dichloroethane		
1,2-Dichloroethane-d_4(surr,smc)		
2-Butanone		

SEMIVOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

1,4-Dichlorobenzene-d_4	Naphthalene-d_8	Acenaphthene-d_{10}	Phenanthrene-d_{10}	Chrysene-d_{12}	Perylene-d_{12}
Phenol	Nitrobenzene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl phthalate
bis(2-chloroethyl)ether	Isophorone	2,4,6-Trichlorophenol	N-nitroso-di-phenylamine	butylbenzyl phthalate	Benzo(b)fluoranthene
2-Chlorophenol	2-Nitrophenol	2,4,5-Trichlorophenol	Carbazole	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
1,3-Dichlorobenzene	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl phenyl ether	Benzo(a)anthracene	Benzo(a)pyrene
1,4-Dichlorobenzene	Naphthalene	2-Nitroaniline	Hexachlorobenzene	bis(2-Ethylhexyl)phthalate	Indeno(1,2,3-cd)pyrene
2,2'-Oxybis-(1-chloropropane)	bis(2-Chloroethoxy)methane	Dimethylphthalate	Pentachlorophenol	Chrysene	Dibenzo(a,h)anthracene
1,2-Dichlorobenzene	2,4-Dichlorophenol	Acenaphthylene	Phenanthrene	Terphenyl-d_{14}(surr)	Benzo(g,h,i)perylene
2-Methylphenol	1,2,4-Trichlorobenzene	3-Nitroaniline	Anthracene		
bis(2-Chloroisopropyl)ether	4-Chloroaniline	Acenaphthene	Di-n-butyl phthalate		
4-Methylphenol	Hexachlorobutadiene	2,4-Dinitrophenol	Fluoranthene		
N-nitroso-di-n-propylamine	4-Chloro-3-methylphenol	4-Nitrophenol			
Hexachloroethane	2-Methylnaphthalene	Dibenzofuran			
2-Fluorophenol(surr)	Nitrobenzene-d_5(surr)	2,4-Dinitrotoluene			
Phenol-d_6(surr)		2,6-Dinitrotoluene			
2-Chlorobenzene-d_4(surr)		Diethyl phthalate			
1,2-Dichlorobenzene-d_4(surr)		4-Chlorophenyl phenyl ether			
		Fluorene			
		4-Nitroaniline			
		2-Fluorobiphenyl(surr)			
		2,4,6-Tribromophenol(surr)			

(surr) - surrogate
(smc) - system monitoring compound

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

Case No. 24884

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

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

2. Region No.: 5
Sampling Co.: IEPA
Sampler (Name): Brad Taylor
Sampler Signature: Brad Taylor
3. Purpose*
Lead: SF, PRP, ST, FED
Early Action: CLEM, PA, REM, RI, SI, ESI
Long-Term Action: FS, RD, RA, O&M, NPLD

4. Date Shipped: 7/23/96
Carrier: Fed Ex
Airbill Number: 9676561436
5. Ship To: American Technical + Analytical, 875 Fee Fee Rd., Maryland Heights, MO 63043-3211
ATTN: Virginia Jones

6. Date Received -- Received by: 7/24/96 WALTER DOTSON
Laboratory Contract Number: 68-D5-0018
Unit Price: $616.95
7. Transfer to:
Date Received: 8/2/96
Received by:
Contract Number:
Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
EBHR0	5	L	G	5		✓			5-163340	X101	7/22/96 1245	MEAQB1	B.T.	-	-	
EBHR1	5	L	G	5		✓			5-163341	X102	7/22/96 1330	MEAQB2	B.T.			
EBHR2	5	L	G	5		✓			5-163342	X103	7/22/96 1400	MEAQB3	B.T.			
EBHR3	5	L	G	5		✓			5-163343	X104	7/22/96 1430	MEAQB4	B.T.	-		
EBHR4	5	L	G	5		✓			5-163344	X105	7/22/96 1430	MEAQB5	B.T.			
EBHR5	5	L	G	5		✓			5-163345	X106	7/22/96 1445	MEAQB6	B.T.	-		
EBHR6	5	L	G	5		✓			5-163346	X107	7/22/96 1520	MEAQA5	B.T.			
EBHR7	5	L	G	5		✓			5-163347	X108	7/22/96 1515	MEAQA6	B.T.	-	-	-
EBHT9	5	L	G	5		✓			5-163348	X109	7/22/96 1545	MEAQA7	B.T.	-	-	-
EBHW0	5	L	G	5		✓			5-163349	X110	7/23/96 0845	MEAQA8	B.T.	-	-	

Shipment for Case Complete? (Y/N) Y
Page 1 of 2
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 48472/48473

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Brad Taylor	7/23/96 1200				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		[signature]	7/24/96 0847	8°C	

A21-012-16 REV.

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

EPA Form 9110-2

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

EBHR0

359794

EPA United States Environmental Protection Agency Contract Laboratory Program

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

Case No. 24884

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

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

2. Region No.: 5
Sampling Co.: IEPA
4. Date Shipped: 7/23/96
Carrier: Fed Ex
6. Date Received -- Received by: 7/24/96 WALTER DOTSON
Sampler (Name): Brad Taylor
Airbill Number: 9676561436
Laboratory Contract Number: 68-D5-0018
Unit Price: $616.95
Sampler Signature: Brad Taylor
5. Ship To
7. Transfer to:
Date Received
Received by
Contract Number
Price

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

ATTN: Virginia Jones

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp. Grab	D Preservative (from Box 2) Other:	E RAS Analysis VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K High Phases Solids	Water-Miscible Liq.	Water-Immis. Liq.
EBHW1	S	L	G	S		✓			~~S-163350~~ HW S-163351	X111	7/23/96 0915	MEAQA9	B.T.			
EBHW2	S	L	G	S		✓			S-163353 HW	X112	7/23/96 0925	MEAQB0	B.T.			
EBHW3	S	L	G	S		✓			~~S-163354~~ HW S-163355	HW ~~X113~~ X301	7/23/96 1000	MEAQB7	B.T.			
EBHW4	S	L	G	S		✓			~~S-163356~~ HW S-163356	HW ~~X114~~ X302	7/23/96 1015	MEAQB8	B.T.			
*EBHW5	S	L	G	S		✓			~~S-163360~~ HW S-163357	HW ~~X115~~ X303	7/23/96 1040	MEAQB9	B.T.			

Shipment for Case Complete? (Y/N): Y
Page 2 of 2
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 48472 / 48473

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Brad Taylor	7/23/96 1200				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Is custody seal intact? Y/N/none	
		[signature]	7/24/96 0847	8°C	

A21-012-16 REV.

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

EPA Form 9110-2

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

*SDG-- FINAL SAMPLE

EBHR0

369796

AMERICAN TECHNICAL & ANALYTICAL SERVICES, INC.
875 FEE FEE ROAD
MARYLAND HEIGHTS, MISSOURI 63043
(314) 434-4570

SDG NARRATIVE

RECEIVED
AUG 29 1996
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

CONTRACT: 68-D5-0018

CASE: 24884

SDG #: EBHR0

REGION: V

The samples listed below were received in good condition on July 24, 1996. Traffic report did not have a sample listed for the MS/MSD. See phone log page 955.

ATAS ID	EPA SAMPLE ID	MATRIX
16316.01	EBHR0	SOIL
16316.02	EBHR0MS	SOIL
16316.03	EBHR0MSD	SOIL
16316.04	EBHR1	SOIL
16316.05	EBHR2	SOIL
16316.06	EBHR3	SOIL
16316.07	EBHR4	SOIL
16316.08	EBHR5	SOIL
16316.09	EBHR6	SOIL
16316.10	EBHR7	SOIL
16316.11	EBHT9	SOIL
16316.12	EBHW0	SOIL

SEMIVOLATILE SAMPLE ANALYSIS:

The samples were analyzed following CLP SOW (OLM03.2).

The column used for Semivolatile analyses is: Restek XTI-5 (bonded 5% phenyl-95% dimethyl polysiloxane), 30m, 0.25 mm ID, 1.0 micron film thickness.
The following samples had alkane reports and these reports are at the back of this narrative: EBHR0, EBHR0DL, EBHR1, EBHR1RE, EBHR2, EBHR3, EBHR4, EBHR5, EBHR6, EBHR7, EBHT9, EBHW0 and EBHW0DL.

Sample EBHW0 had high internal standard areas. The dilution confirmed the high internal standard areas obtained in the original analysis.

Sample EBHR1 had low internal standard areas. The sample was reinjected to confirm low internal standard areas. Both runs are reported and billable.

Samples EBHR0 and EBHW0 required a dilution for target compounds. Both runs are reported and billable.

Sample EBHR0 required a reinject for internal standard areas and this run is reported in the miscellaneous section as supporting data.

MISCELLANEOUS:

The CAS numbers on some of the TIC compounds may be 0-00-0. The NBS 75K library database does not have the correct CAS number for these compounds and it assigns "0-00-0" as the CAS number.

All manual integrations in this data package for Volatile, Semivolatile and Pesticide/PCB analysis have been performed for one of the following reasons.

a. Data system missed peak during acquisition.
b. Data system improperly integrated peak.

The manual integrations in this data package are placed behind their associated standards or samples.

ADDITIONAL BILLABLES:

VOLATILE ANALYSIS	SEMIVOLATILE ANALYSIS	PESTICIDE/PCB ANALYSIS
None	EBHR1RE(Reinject) EBHR0DL(Dilution) EBHW0DL(Dilution)	None

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

Robert Wilhelm

Robert Wilhelm
Laboratory Manager

August 27, 1996

000002

RB 8-27-96

Alkane Report for Sample : EBHR0 Page: 1

Data file : EE7271.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.182	190
2213-23-2	Heptane, 2,4-dimethyl-	5.242	700
2216-33-3	Octane, 3-methyl-	5.334	460
544-76-3	Hexadecane	16.96	230
55045-10-8	Tridecane, 6-propyl-	17.94	230
544-85-4	Dotriacontane	19.16	760
0-00-0	2-Methyloctadecane	20.74	590

Concentration Units: Water: UG/L Soil: UG/KG

8-26-96

000003

NB 8-27-96

Alkane Report for Sample : EBHR0DL

Data file : EE7272.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.181	230
2213-23-2	Heptane, 2,4-dimethyl-	5.241	760
2216-33-3	Octane, 3-methyl-	5.328	490
112-95-8	Eicosane	17.94	610
295-65-8	Cyclohexadecane	18.00	460
646-31-1	Tetracosane	19.16	2800
593-49-7	Heptacosane	20.73	2400

Concentration Units: Water: UG/L Soil: UG/KG

8.26.96
RO

0000054
MB
8.27.96

Alkane Report for Sample : EBHR1 Page: 1

Data file : EE7273.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
2213-23-2	Heptane, 2,4-dimethyl-	5.236	690
2216-33-3	Octane, 3-methyl-	5.329	420
593-45-3	Octadecane	16.95	420
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	17.94	670
593-49-7	Heptacosane	19.15	870
112-95-8	Eicosane	20.74	1200

Concentration Units: Water: UG/L Soil: UG/KG

8-26-96

000005

NB
8-27-96

Data file : EE7290.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.162	210
2213-23-2	Heptane, 2,4-dimethyl-	5.228	730
2216-33-3	Octane, 3-methyl-	5.311	460
74645-98-0	Dodecane, 2,7,10-trimethyl-	12.52	260
54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	17.92	320
629-97-0	Docosane	19.13	420
112-95-8	Eicosane	20.70	570

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHR2 Page: 1

Data file : EE7274.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.187	190
2213-23-2	Heptane, 2,4-dimethyl-	5.247	680
2216-33-3	Octane, 3-methyl-	5.333	440
638-68-6	Triacontane	16.96	680
593-45-3	Octadecane	17.94	340
112-95-8	Eicosane	19.16	550
630-06-8	Hexatriacontane	20.74	860

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHR3 Page: 1

Data file : EE7291.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
2213-23-2	Heptane, 2,4-dimethyl-	5.220	400
2216-33-3	Octane, 3-methyl-	5.307	250
1120-21-4	Undecane	7.658	210
541-02-6	Cyclopentasiloxane, decamethyl-	7.991	120
2801-87-8	Pentadecane, 4-methyl-	12.52	110
629-97-0	Docosane	17.92	690
646-31-1	Tetracosane	19.13	1300
629-92-5	Nonadecane	20.70	2300

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHR4 Page: 1

Data file : EE7292.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.161	250
2213-23-2	Heptane, 2,4-dimethyl-	5.226	900
2216-33-3	Octane, 3-methyl-	5.313	570
1120-21-4	Undecane	7.659	530
112-95-8	Eicosane	19.12	1200
629-99-2	Pentacosane	20.70	2200

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHR5 Page: 1

Data file : EE7293.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.163	230
2213-23-2	Heptane, 2,4-dimethyl-	5.228	890
2216-33-3	Octane, 3-methyl-	5.315	570
7225-66-3	Tridecane, 7-hexyl-	16.94	810
629-94-7	Heneicosane	17.92	410
55282-14-9	Docosane, 9-butyl-	19.13	900
297-03-0	Cyclotetracosane	19.23	640
7225-64-1	Heptadecane, 9-octyl-	20.70	910

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHR6 Page: 1

Data file : EE7294.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.167	190
2213-23-2	Heptane, 2,4-dimethyl-	5.226	720
2216-33-3	Octane, 3-methyl-	5.314	440
74645-98-0	Dodecane, 2,7,10-trimethyl-	12.52	230
1560-89-0	Heptadecane, 2-methyl-	16.94	360
55282-14-9	Docosane, 9-butyl-	17.92	560
7225-64-1	Heptadecane, 9-octyl-	19.13	1200
629-92-5	Nonadecane	20.71	1200

Concentration Units: Water: UG/L Soil: UG/KG

Remk

8-26-96
Re

Data file : EE7295.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.161	240
17453-93-9	Dodecane, 5-methyl-	5.226	810
2216-33-3	Octane, 3-methyl-	5.314	520
629-99-2	Pentacosane	16.94	260
593-45-3	Octadecane	17.92	300
629-92-5	Nonadecane	19.13	1500
0-00-0	2-Methyloctadecane	20.70	2300
630-06-8	Hexatriacontane	22.85	820

Concentration Units: Water: UG/L Soil: UG/KG

Alkane Report for Sample : EBHT9 Page: 1

Data file : EE7288.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3074-71-3	Heptane, 2,3-dimethyl-	5.166	160
2213-23-2	Heptane, 2,4-dimethyl-	5.226	590
2216-33-3	Octane, 3-methyl-	5.318	370
544-76-3	Hexadecane	15.97	180
629-99-2	Pentacosane	16.94	270
593-45-3	Octadecane	17.92	390
0-00-0	2-Methyloctadecane	19.12	1900
630-07-9	Pentatriacontane	20.70	1500

Concentration Units: Water: UG/L Soil: UG/KG

Data file : EE7289.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
2213-23-2	Heptane, 2,4-dimethyl-	5.226	610
2216-33-3	Octane, 3-methyl-	5.313	380
629-62-9	Pentadecane	11.06	230
544-76-3	Hexadecane	11.78	200
629-50-5	Tridecane	12.48	230
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-	12.52	520
629-97-0	Docosane	16.94	310
593-49-7	Heptacosane	17.92	250
7098-22-8	Tetratetracontane	19.12	540

Concentration Units: Water: UG/L Soil: UG/KG

8-26-92

Data file : EE7306.d Matrix : SOIL

CAS #	Compound	R.T.	Estimated Conc.
3221-61-2	Octane, 2-methyl-	5.206	720
2216-33-3	Octane, 3-methyl-	5.293	440
55045-07-3	Dodecane, 2-methyl-8-propyl-	12.49	720
630-06-8	Hexatriacontane	17.88	2800
112-95-8	Eicosane	19.07	6200
629-92-5	Nonadecane	20.63	3300

Concentration Units: Water: UG/L Soil: UG/KG

Contract Laboratory Analytical Services Support (CLASS) Record of Communication

Name: Mistie Llewellyn

Contact Recv'd Via: X Phone _ Fax _ Vmail _ Memo _ Other

Date/Time of Contact 7/24/96 10:00 AM

Initiated By: X Lab _ CLASS _ Region _ Other

Contact/Org./Phone#: Rich Mannz/ American Technical & Analytical Services/ (314) 434-4570

Lab: ATAS Contract#: 68-D5-0018 Case#: 24884 SDG: Region: 5

SOW: Affected Samples: BNA samples Invoice#:

Discussion/Issue:

07/24/96, 10:00 AM: Rich Mannz, ATAS, called CLASS and stated the traffic report did not have a sample listed for the matrix spike/matrix spike duplicate (MS/MSD). How should the lab proceed?

Resolution

07/24/96, 10:05 AM: CLASS called Bob Casper, sampler, and informed him of the problem. Bob stated that the lab should choose one of the samples to use for the MS/MSD.

07/24/96, 10:10 AM: CLASS called Rich Mannz and stated the lab should choose a sample for the MS/MSD analyses.

000955

CLPAS OPS: 0 Completed Date/Time: 7/26/96 9:00 AM

Routed: 0 Referred To Date/Time W.A.#: ST&R

Distribution: ◉ Lab ◉ Region ◉ CLASS ◯ AOC ◯ Work Assign. Man.

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

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	SBLKEV	76	72	86	68	62	54	63	65	0
02	EBHR0MS	77	80	105	74	71	75	71	66	0
03	EBHR0MSD	71	76	95	64	57	74	60	56	0
04	EBHR0	72	77	92	65	59	72	62	60	0
05	EBHR0DL	74	78	95	71	64	70	67	66	0
06	EBHR1	73	78	88	67	55	62	61	61	0
07	EBHR2	64	67	79	62	53	58	56	55	0
08	EBHT9	50	52	81	48	45	54	46	44	0
09	EBHW0	63	68	120	64	57	78	60	53	0
10	EBHR1RE	74	78	114	64	55	50	59	60	0
11	EBHR3	67	73	112	68	58	74	64	51	0
12	EBHR4	78	75	106	70	65	61	67	67	0
13	EBHR5	79	80	133	71	64	64	67	68	0
14	EBHR6	66	67	109	66	60	71	62	57	0
15	EBHR7	61	63	95	61	58	62	59	56	0
16	EBHW0DL	51	67	86	51	48	54	53	49	0
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

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

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

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix Spike - EPA Sample No.: EBHR0 Level(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2900	0	2300	79	26- 90
2-Chlorophenol	2900	0	2200	76	25-102
1,4-Dichlorobenzene	1900	0	1300	68	28-104
N-Nitroso-di-n-prop.(1)	1900	0	1600	84	41-126
1,2,4-Trichlorobenzene	1900	0	1500	79	38-107
4-Chloro-3-Methylphenol	2900	0	2300	79	26-103
Acenaphthene	1900	0	1600	84	31-137
4-Nitrophenol	2900	0	1900	66	11-114
2,4-Dinitrotoluene	1900	0	1500	79	28- 89
Pentachlorophenol	2900	0	1800	62	17-109
Pyrene	1900	1100	3500	126	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2900	1900	66	18	35	26- 90
2-Chlorophenol	2900	1800	62	20	50	25-102
1,4-Dichlorobenzene	1900	1100	58	16	27	28-104
N-Nitroso-di-n-prop.(1)	1900	1400	74	13	38	41-126
1,2,4-Trichlorobenzene	1900	1300	68	15	23	38-107
4-Chloro-3-Methylphenol	2900	1900	66	18	33	26-103
Acenaphthene	1900	1600	84	0	19	31-137
4-Nitrophenol	2900	1800	62	6	50	11-114
2,4-Dinitrotoluene	1900	1400	74	6	47	28- 89
Pentachlorophenol	2900	1500	52	18	47	17-109
Pyrene	1900	5000	205*	48*	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: 1 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKEV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Lab File ID: EE7248.D Lab Sample ID: 073096-01

Instrument ID: E Date Extracted: 07/30/96

Matrix: (soil/water) SOIL Date Analyzed: 08/14/96

Level:(low/med) LOW Time Analyzed: 1157

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EBHR0MS	16316.02	EE7263.D	08/14/96
02	EBHR0MSD	16316.03	EE7264.D	08/14/96
03	EBHR0	16316.01	EE7271.D	08/15/96
04	EBHR0DL	16316.01	EE7272.D	08/15/96
05	EBHR1	16316.04	EE7273.D	08/15/96
06	EBHR2	16316.05	EE7274.D	08/15/96
07	EBHT9	16316.11	EE7288.D	08/16/96
08	EBHW0	16316.12	EE7289.D	08/16/96
09	EBHR1RE	16316.04	EE7290.D	08/16/96
10	EBHR3	16316.06	EE7291.D	08/16/96
11	EBHR4	16316.07	EE7292.D	08/16/96
12	EBHR5	16316.08	EE7293.D	08/16/96
13	EBHR6	16316.09	EE7294.D	08/16/96
14	EBHR7	16316.10	EE7295.D	08/16/96
15	EBHW0DL	16316.12	EE7306.D	08/19/96
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COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 073096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7248.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/14/96

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	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
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
111-91-1	bis(-2-Chloroethoxy)methane	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 073096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7248.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/14/96

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	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	20	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	37	J
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKEV

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 073096-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7248.D

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/14/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.025	1100	ANJ
2.	Unknown	6.154	170	J
3. 142-62-1	Hexanoic acid	6.290	68	NJ
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7271.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

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	U	
120-83-2	2,4-Dichlorophenol	380	U	
120-82-1	1,2,4-Trichlorobenzene	380	U	
91-20-3	Naphthalene	24	J	•
106-47-8	4-Chloroaniline	380	U	
87-68-3	Hexachlorobutadiene	380	U	
111-91-1	bis(-2-Chloroethoxy)methane	380	U	
59-50-7	4-Chloro-3-Methylphenol	380	U	
91-57-6	2-Methylnaphthalene	20	J	•
77-47-4	Hexachlorocyclopentadiene	380	U	
88-06-2	2,4,6-Trichlorophenol	380	U	
95-95-4	2,4,5-Trichlorophenol	960	U	
91-58-7	2-Chloronaphthalene	380	U	
88-74-4	2-Nitroaniline	960	U	
131-11-3	Dimethylphthalate	380	U	
208-96-8	Acenaphthylene	47	J	•
606-20-2	2,6-Dinitrotoluene	380	U	
99-09-2	3-Nitroaniline	960	U	
83-32-9	Acenaphthene	380	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7271.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	960	U	
100-02-7	4-Nitrophenol	960	U	
132-64-9	Dibenzofuran	23	J	•
121-14-2	2,4-Dinitrotoluene	380	U	
84-66-2	Diethylphthalate	380	U	
7005-72-3	4-Chlorophenyl-phenylether	380	U	
86-73-7	Fluorene	35	J	•
100-01-6	4-Nitroaniline	960	U	
534-52-1	4,6-Dinitro-2-methylphenol	960	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	960	U	
85-01-8	Phenanthrene	560		•
120-12-7	Anthracene	420		•
86-74-8	Carbazole	140	J	•
84-74-2	Di-n-butylphthalate	380 ~~56~~	uJB	ack 9-5-96
206-44-0	Fluoranthene	860		•
129-00-0	Pyrene	1100		•
85-68-7	Butylbenzylphthalate	280	J	•
91-94-1	3,3'-Dichlorobenzidine	380	U	
56-55-3	Benzo(a)anthracene	950		•
218-01-9	Chrysene	3800	E	•
117-81-7	bis(2-Ethylhexyl)phthalate	280	J	•
117-84-0	Di-n-octylphthalate	380 ~~110~~	uJB	
205-99-2	Benzo(b)fluoranthene	950		•
207-08-9	Benzo(k)fluoranthene	980		•
50-32-8	Benzo(a)pyrene	730		•
193-39-5	Indeno(1,2,3-cd)pyrene	560		•
53-70-3	Dibenzo(a,h)anthracene	270	J	•
191-24-2	Benzo(g,h,i)perylene	140	J	•

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7271.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	4.933	170	J
2. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.025	1300	A NJB
3.	Unknown	5.079	380	J
4.	Unknown	5.743	170	J
5.	Unknown	5.797	230	J
6. 110-13-4	2,5-Hexanedione	5.950	200	NJ
7.	Unknown	6.004	920	J
8.	Unknown	6.151	320	JB
9. 142-62-1	Hexanoic acid	6.308	220	NJB
10.	Unknown	6.591	620	J
11. 57-10-3	Hexadecanoic acid	14.148	290	NJ
12. 238-84-6	11H-Benzo[a]fluorene	16.262	280	NJ
13. 243-17-4	11H-Benzo[b]fluorene	16.350	340	NJ
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ACY 9-5-96

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7272.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	770	U
111-44-4	bis(-2-Chloroethyl)Ether	770	U
95-57-8	2-Chlorophenol	770	U
541-73-1	1,3-Dichlorobenzene	770	U
106-46-7	1,4-Dichlorobenzene	770	U
95-50-1	1,2-Dichlorobenzene	770	U
95-48-7	2-Methylphenol	770	U
108-60-1	2,2'-oxybis(1-Chloropropane)	770	U
106-44-5	4-Methylphenol	770	U
621-64-7	N-Nitroso-di-n-propylamine	770	U
67-72-1	Hexachloroethane	770	U
98-95-3	Nitrobenzene	770	U
78-59-1	Isophorone	770	U
88-75-5	2-Nitrophenol	770	U
105-67-9	2,4-Dimethylphenol	770	U
120-83-2	2,4-Dichlorophenol	770	U
120-82-1	1,2,4-Trichlorobenzene	770	U
91-20-3	Naphthalene	770	U
106-47-8	4-Chloroaniline	770	U
87-68-3	Hexachlorobutadiene	770	U
111-91-1	bis(-2-Chloroethoxy)methane	770	U
59-50-7	4-Chloro-3-Methylphenol	770	U
91-57-6	2-Methylnaphthalene	770	U
77-47-4	Hexachlorocyclopentadiene	770	U
88-06-2	2,4,6-Trichlorophenol	770	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	770	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethylphthalate	770	U
208-96-8	Acenaphthylene	51	JD
606-20-2	2,6-Dinitrotoluene	770	U
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	770	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7272.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1900	U	
100-02-7	4-Nitrophenol	1900	U	
132-64-9	Dibenzofuran	770	U	
121-14-2	2,4-Dinitrotoluene	770	U	
84-66-2	Diethylphthalate	770	U	
7005-72-3	4-Chlorophenyl-phenylether	770	U	
86-73-7	Fluorene	770	U	
100-01-6	4-Nitroaniline	1900	U	
534-52-1	4,6-Dinitro-2-methylphenol	1900	U	
86-30-6	N-nitrosodiphenylamine (1)	770	U	
101-55-3	4-Bromophenyl-phenylether	770	U	
118-74-1	Hexachlorobenzene	770	U	
87-86-5	Pentachlorophenol	1900	U	
85-01-8	Phenanthrene	570	JD	•
120-12-7	Anthracene	430	JD	•
86-74-8	Carbazole	140	JD	•
84-74-2	Di-n-butylphthalate	770 ~~58~~	u JBD	
206-44-0	Fluoranthene	940	D	•
129-00-0	Pyrene	1100	D	•
85-68-7	Butylbenzylphthalate	280	JD	•
91-94-1	3,3'-Dichlorobenzidine	770	U	
56-55-3	Benzo(a)anthracene	1000	D	•
218-01-9	Chrysene	3700	D	•
117-81-7	bis(2-Ethylhexyl)phthalate	280	JD	•
117-84-0	Di-n-octylphthalate	770 ~~100~~	u JBD	
205-99-2	Benzo(b)fluoranthene	920	D	•
207-08-9	Benzo(k)fluoranthene	1100	D	•
50-32-8	Benzo(a)pyrene	760	JD	•
193-39-5	Indeno(1,2,3-cd)pyrene	530	JD	•
53-70-3	Dibenzo(a,h)anthracene	240	JD	•
191-24-2	Benzo(g,h,i)perylene	140	JD	•

ACH 9-5-96

(1) - Cannot be separated from Diphenylamine

000093

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7272.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 14 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.8

Number TICs found: 14

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.018	1400	A NJB
2.	Unknown	5.078	420	JD
3.	Unknown	5.741	200	JD
4. 110-13-4	2,5-Hexanedione	5.942	200	NJD
5.	Unknown	6.002	970	JD
6. 4436-75-3	3-Hexene-2,5-dione	6.149	370	NJD
7.	Unknown	6.584	740	JD
8. 57-10-3	Hexadecanoic acid	14.147	250	NJD
9.	Unknown	14.343	200	JD
10. 3442-78-2	Pyrene, 2-methyl-	16.262	610	NJD
11. 243-17-4	11H-Benzo[b]fluorene	16.350	850	NJD
12. 243-51-6	11H-Indeno(1,2-B)quinoline	17.874	430	NJD
13. 629-96-9	1-Eicosanol	19.261	820	NJD
14. 192-97-2	Benzo[e]pyrene	20.359	1300	NJD
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9-5-96

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7273.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(-2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
111-91-1	bis(-2-Chloroethoxy)methane	410	U
59-50-7	4-Chloro-3-Methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7273.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1000	U	
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	410	U	
121-14-2	2,4-Dinitrotoluene	410	U	
84-66-2	Diethylphthalate	410	U	
7005-72-3	4-Chlorophenyl-phenylether	410	U	
86-73-7	Fluorene	410	U	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-methylphenol	1000	U	
86-30-6	N-nitrosodiphenylamine (1)	410	U	
101-55-3	4-Bromophenyl-phenylether	410	U	
118-74-1	Hexachlorobenzene	410	U	
87-86-5	Pentachlorophenol	1000	U	
85-01-8	Phenanthrene	260	J	
120-12-7	Anthracene	34	J	
86-74-8	Carbazole	31	J	
84-74-2	Di-n-butylphthalate	410 ~~55~~	~~J~~ JB	ack 9-5-96
206-44-0	Fluoranthene	510		
129-00-0	Pyrene	460		
85-68-7	Butylbenzylphthalate	75	J	
91-94-1	3,3'-Dichlorobenzidine	410	U	
56-55-3	Benzo(a)anthracene	250	J	
218-01-9	Chrysene	360	J	
117-81-7	bis(2-Ethylhexyl)phthalate	190	J	
117-84-0	Di-n-octylphthalate	940	B	
205-99-2	Benzo(b)fluoranthene	330	J	
207-08-9	Benzo(k)fluoranthene	400	J	
50-32-8	Benzo(a)pyrene	190	J	
193-39-5	Indeno(1,2,3-cd)pyrene	140	J	
53-70-3	Dibenzo(a,h)anthracene	410	U	
191-24-2	Benzo(g,h,i)perylene	410	U	

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR1

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7273.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 15

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.019	1400	A NJB
2.		Unknown	5.074	490	J
3.		Unknown	6.003	590	J
4.	4436-75-3	3-Hexene-2,5-dione	6.145	480	NJ
5.		Unknown	6.585	600	J
6.	74381-40-1	Propanoic acid, 2-methyl-, 1	11.933	290	NJ
7.	109-29-5	Oxacycloheptadecan-2-one	14.118	420	NJ
8.	57-10-3	Hexadecanoic acid	14.151	780	NJ
9.	103-23-1	Hexanedioic acid, bis(2-ethy	16.541	570	NJ
10.		Unknown	17.190	620	J
11.	89-19-0	1,2-Benzenedicarboxylic acid	17.323	370	NJ
12.		Unknown	18.001	420	J
13.	629-80-1	Hexadecanal	18.849	810	NJ
14.	1599-67-3	1-Docosene	19.257	690	NJ
15.		Unknown	19.708	1200	J
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ACH 9-5-96

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR1RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7290.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410	U
111-44-4	bis(-2-Chloroethyl)Ether	410	U
95-57-8	2-Chlorophenol	410	U
541-73-1	1,3-Dichlorobenzene	410	U
106-46-7	1,4-Dichlorobenzene	410	U
95-50-1	1,2-Dichlorobenzene	410	U
95-48-7	2-Methylphenol	410	U
108-60-1	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5	4-Methylphenol	410	U
621-64-7	N-Nitroso-di-n-propylamine	410	U
67-72-1	Hexachloroethane	410	U
98-95-3	Nitrobenzene	410	U
78-59-1	Isophorone	410	U
88-75-5	2-Nitrophenol	410	U
105-67-9	2,4-Dimethylphenol	410	U
120-83-2	2,4-Dichlorophenol	410	U
120-82-1	1,2,4-Trichlorobenzene	410	U
91-20-3	Naphthalene	410	U
106-47-8	4-Chloroaniline	410	U
87-68-3	Hexachlorobutadiene	410	U
111-91-1	bis(-2-Chloroethoxy)methane	410	U
59-50-7	4-Chloro-3-Methylphenol	410	U
91-57-6	2-Methylnaphthalene	410	U
77-47-4	Hexachlorocyclopentadiene	410	U
88-06-2	2,4,6-Trichlorophenol	410	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	410	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	410	U
208-96-8	Acenaphthylene	410	U
606-20-2	2,6-Dinitrotoluene	410	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	410	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR1RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7290.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1000	U	
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	410	U	
121-14-2	2,4-Dinitrotoluene	410	U	
84-66-2	Diethylphthalate	410	U	
7005-72-3	4-Chlorophenyl-phenylether	410	U	
86-73-7	Fluorene	410	U	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-methylphenol	1000	U	
86-30-6	N-nitrosodiphenylamine (1)	410	U	
101-55-3	4-Bromophenyl-phenylether	410	U	
118-74-1	Hexachlorobenzene	410	U	
87-86-5	Pentachlorophenol	1000	U	
85-01-8	Phenanthrene	260	J	
120-12-7	Anthracene	28	J	ACH 9-5-96
86-74-8	Carbazole	28	J	
84-74-2	Di-n-butylphthalate	410 ~~51~~	u JB	
206-44-0	Fluoranthene	430		
129-00-0	Pyrene	530		
85-68-7	Butylbenzylphthalate	86	J	
91-94-1	3,3'-Dichlorobenzidine	410	U	
56-55-3	Benzo(a)anthracene	270	J	
218-01-9	Chrysene	380	J	
117-81-7	bis(2-Ethylhexyl)phthalate	1100		
117-84-0	Di-n-octylphthalate	1200	B	
205-99-2	Benzo(b)fluoranthene	380	J	
207-08-9	Benzo(k)fluoranthene	470		
50-32-8	Benzo(a)pyrene	320	J	
193-39-5	Indeno(1,2,3-cd)pyrene	390	J	
53-70-3	Dibenzo(a,h)anthracene	180	J	
191-24-2	Benzo(g,h,i)perylene	97	J	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR1RE

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7290.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 19 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.008	1400	A NJB
2.	Unknown	5.063	510	J
3.	Unknown	5.725	370	J
4.	Unknown	5.984	660	J
5.	Unknown	6.133	490	JB
6. 142-62-1	Hexanoic acid	6.288	280	NJB
7.	Unknown	6.570	610	J
8.	Unknown	11.918	280	J
9. 57-10-3	Hexadecanoic acid	14.130	510	NJ
10. 103-23-1	Hexanedioic acid, bis(2-ethy	16.523	330	NJ
11.	Unknown	17.174	270	J
12. 56554-87-1	16-Octadecenal	18.824	360	NJ
13. 629-96-9	1-Eicosanol	19.226	320	NJ
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ACH 9-5-96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7274.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
111-91-1	bis(-2-Chloroethoxy)methane	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7274.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1000	U	
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	400	U	
121-14-2	2,4-Dinitrotoluene	400	U	
84-66-2	Diethylphthalate	400	U	
7005-72-3	4-Chlorophenyl-phenylether	400	U	
86-73-7	Fluorene	400	U	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-methylphenol	1000	U	
86-30-6	N-nitrosodiphenylamine (1)	400	U	
101-55-3	4-Bromophenyl-phenylether	400	U	
118-74-1	Hexachlorobenzene	400	U	
87-86-5	Pentachlorophenol	1000	U	
85-01-8	Phenanthrene	140	J	•
120-12-7	Anthracene	21	J	•
86-74-8	Carbazole	400	U	
84-74-2	Di-n-butylphthalate	400 ~~37~~	u JB	
206-44-0	Fluoranthene	300	J	•
129-00-0	Pyrene	310	J	•
85-68-7	Butylbenzylphthalate	400	U	
91-94-1	3,3'-Dichlorobenzidine	400	U	
56-55-3	Benzo(a)anthracene	150	J	•
218-01-9	Chrysene	220	J	•
117-81-7	bis(2-Ethylhexyl)phthalate	400	U	
117-84-0	Di-n-octylphthalate	400 ~~340~~	u JB	
205-99-2	Benzo(b)fluoranthene	230	J	•
207-08-9	Benzo(k)fluoranthene	190	J	•
50-32-8	Benzo(a)pyrene	160	J	•
193-39-5	Indeno(1,2,3-cd)pyrene	110	J	•
53-70-3	Dibenzo(a,h)anthracene	400	U	
191-24-2	Benzo(g,h,i)perylene	26	J	•

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR2

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7274.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 15

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

ack 9-5-96

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.024	1400	A NJB	u
2.		Unknown	5.084	240	J	
3.		Unknown	5.742	190	J	
4.		Unknown	5.802	240	J	
5.		Unknown	6.003	430	J	
6.		Unknown	6.155	320	JB	u
7.	142-62-1	Hexanoic acid	6.313	320	NJB	u
8.		Unknown	6.591	280	J	
9.	74381-40-1	Propanoic acid, 2-methyl-, 1	11.938	240	NJ	
10.		Unknown	14.124	440	J	
11.	57-10-3	Hexadecanoic acid	14.157	1200	NJ	
12.	112-80-1	Oleic Acid	15.212	610	NJ	
13.	57-11-4	Octadecanoic acid	15.300	400	NJ	
14.	629-80-1	Hexadecanal	18.852	310	NJ	
15.	661-19-8	1-Docosanol	19.259	280	NJ	
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7291.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(-2-Chloroethyl)Ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
111-91-1	bis(-2-Chloroethoxy)methane	390	U
59-50-7	4-Chloro-3-Methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	980	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	980	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	980	U
83-32-9	Acenaphthene	390	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7291.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	980	U	
100-02-7	4-Nitrophenol	980	U	
132-64-9	Dibenzofuran	390	U	
121-14-2	2,4-Dinitrotoluene	390	U	
84-66-2	Diethylphthalate	390	U	
7005-72-3	4-Chlorophenyl-phenylether	390	U	
86-73-7	Fluorene	390	U	
100-01-6	4-Nitroaniline	980	U	
534-52-1	4,6-Dinitro-2-methylphenol	980	U	
86-30-6	N-nitrosodiphenylamine (1)	390	U	
101-55-3	4-Bromophenyl-phenylether	390	U	
118-74-1	Hexachlorobenzene	390	U	
87-86-5	Pentachlorophenol	980	U	
85-01-8	Phenanthrene	94	J	•
120-12-7	Anthracene	390	U	
86-74-8	Carbazole	390	U	
84-74-2	Di-n-butylphthalate	390 ~~48~~	u JB	ack 9.5.96
206-44-0	Fluoranthene	220	J	•
129-00-0	Pyrene	270	J	•
85-68-7	Butylbenzylphthalate	49	J	•
91-94-1	3,3'-Dichlorobenzidine	390	U	
56-55-3	Benzo(a)anthracene	130	J	•
218-01-9	Chrysene	190	J	•
117-81-7	bis(2-Ethylhexyl)phthalate	120	J	•
117-84-0	Di-n-octylphthalate	390 ~~340~~	u JB	
205-99-2	Benzo(b)fluoranthene	160	J	•
207-08-9	Benzo(k)fluoranthene	160	J	•
50-32-8	Benzo(a)pyrene	160	J	•
193-39-5	Indeno(1,2,3-cd)pyrene	170	J	•
53-70-3	Dibenzo(a,h)anthracene	70	J	•
191-24-2	Benzo(g,h,i)perylene	50	J	•

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR3

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7291.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 15

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.002	1400	A NJB	act 9-5-96
2.		Unknown	5.057	230	J	
3.		Unknown	5.984	440	J	
4.		Unknown	6.131	510	JB	u
5.	142-62-1	Hexanoic acid	6.289	290	NJB	u
6.		Unknown	6.567	390	J	
7.		Unknown	7.124	150	J	
8.	593-08-8	2-Tridecanone	11.082	260	NJ	
9.		Unknown	11.914	310	J	
10.	2091-29-4	9-Hexadecenoic acid	14.100	110	NJ	
11.	57-10-3	Hexadecanoic acid	14.128	360	NJ	
12.		Unknown	15.187	110	J	
13.	661-19-8	1-Docosanol	16.965	1400	NJ	
14.	77899-10-6	(Z)14-Tricosenyl formate	18.820	2300	NJ	
15.	1599-67-3	1-Docosene	19.227	3000	NJ	
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7292.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(-2-Chloroethyl)Ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
111-91-1	bis(-2-Chloroethoxy)methane	390	U
59-50-7	4-Chloro-3-Methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	990	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	990	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	990	U
83-32-9	Acenaphthene	390	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7292.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	990	U	
100-02-7	4-Nitrophenol	990	U	
132-64-9	Dibenzofuran	390	U	
121-14-2	2,4-Dinitrotoluene	390	U	
84-66-2	Diethylphthalate	390	U	
7005-72-3	4-Chlorophenyl-phenylether	390	U	
86-73-7	Fluorene	390	U	
100-01-6	4-Nitroaniline	990	U	
534-52-1	4,6-Dinitro-2-methylphenol	990	U	
86-30-6	N-nitrosodiphenylamine (1)	390	U	
101-55-3	4-Bromophenyl-phenylether	390	U	
118-74-1	Hexachlorobenzene	390	U	
87-86-5	Pentachlorophenol	990	U	
85-01-8	Phenanthrene	96	J	•
120-12-7	Anthracene	390	U	
86-74-8	Carbazole	390	U	
84-74-2	Di-n-butylphthalate	390 ~~36~~	u JB	
206-44-0	Fluoranthene	220	J	•
129-00-0	Pyrene	300	J	•
85-68-7	Butylbenzylphthalate	37	J	•
91-94-1	3,3'-Dichlorobenzidine	390	U	
56-55-3	Benzo(a)anthracene	130	J	•
218-01-9	Chrysene	180	J	•
117-81-7	bis(2-Ethylhexyl)phthalate	120	J	•
117-84-0	Di-n-octylphthalate	390 ~~370~~	u JB	
205-99-2	Benzo(b)fluoranthene	200	J	•
207-08-9	Benzo(k)fluoranthene	180	J	•
50-32-8	Benzo(a)pyrene	140	J	•
193-39-5	Indeno(1,2,3-cd)pyrene	150	J	•
53-70-3	Dibenzo(a,h)anthracene	390	U	
191-24-2	Benzo(g,h,i)perylene	53	J	•

acH 9-5-96

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR4

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7292.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 16 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.003	1700	A NJB
2.		Unknown	5.063	260	J
3.		Unknown	5.723	250	J
4.		Unknown	5.777	250	J
5.		Unknown	5.984	430	J
6.	4436-75-3	3-Hexene-2,5-dione	6.132	230	NJ
7.	109-52-4	Pentanoic acid	6.290	280	NJ
8.		Unknown	6.541	240	J
9.	593-08-8	2-Tridecanone	11.084	260	NJ
10.		Unknown	11.915	270	J
11.	638-53-9	Tridecanoic acid	14.132	360	NJ
12.	1599-67-3	1-Docosene	16.964	1400	NJ
13.	77899-10-6	(Z)14-Tricosenyl formate	18.823	2600	NJ
14.	629-96-9	1-Eicosanol	19.229	3000	NJ
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QC 9-5-96

000340

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7293.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(-2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	38	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
111-91-1	bis(-2-Chloroethoxy)methane	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	28	J
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	20	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7293.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	920	U	
100-02-7	4-Nitrophenol	920	U	
132-64-9	Dibenzofuran	34	J	•
121-14-2	2,4-Dinitrotoluene	370	U	
84-66-2	Diethylphthalate	370	U	
7005-72-3	4-Chlorophenyl-phenylether	370	U	
86-73-7	Fluorene	24	J	•
100-01-6	4-Nitroaniline	920	U	
534-52-1	4,6-Dinitro-2-methylphenol	920	U	
86-30-6	N-nitrosodiphenylamine (1)	370	U	
101-55-3	4-Bromophenyl-phenylether	370	U	
118-74-1	Hexachlorobenzene	370	U	
87-86-5	Pentachlorophenol	920	U	
85-01-8	Phenanthrene	490		•
120-12-7	Anthracene	59	J	•
86-74-8	Carbazole	42	J	•
84-74-2	Di-n-butylphthalate	370 ~~53~~	u JB	
206-44-0	Fluoranthene	700		•
129-00-0	Pyrene	1100		•
85-68-7	Butylbenzylphthalate	360	J	•
91-94-1	3,3'-Dichlorobenzidine	370	U	
56-55-3	Benzo(a)anthracene	410		•
218-01-9	Chrysene	590		•
117-81-7	bis(2-Ethylhexyl)phthalate	1900		•
117-84-0	Di-n-octylphthalate	670	B	•
205-99-2	Benzo(b)fluoranthene	560		•
207-08-9	Benzo(k)fluoranthene	450		•
50-32-8	Benzo(a)pyrene	400		•
193-39-5	Indeno(1,2,3-cd)pyrene	400		•
53-70-3	Dibenzo(a,h)anthracene	200	J	•
191-24-2	Benzo(g,h,i)perylene	120	J	•

9-5-96

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR5

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7293.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 10 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.005	1500	A NJB
2.	Unknown	5.065	350	J
3.	Unknown	5.725	220	J
4.	Unknown	5.987	410	J
5.	Unknown	6.134	220	JB
6. 142-62-1	Hexanoic acid	6.292	230	NJB
7.	Unknown	6.543	220	J
8.	Unknown	6.570	250	J
9.	Unknown	11.916	260	J
10. 57-10-3	Hexadecanoic acid	14.130	260	NJ
11. 77899-10-6	(Z)14-Tricosenyl formate	18.818	600	NJ
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OCK 9-5-96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR6

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7294.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	24	J
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
111-91-1	bis(-2-Chloroethoxy)methane	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U
91-57-6	2-Methylnaphthalene	21	J
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR6

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7294.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	180	J
120-12-7	Anthracene	25	J
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400 ~~41~~	m JB
206-44-0	Fluoranthene	330	J
129-00-0	Pyrene	520	
85-68-7	Butylbenzylphthalate	52	J
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	210	J
218-01-9	Chrysene	320	J
117-81-7	bis(2-Ethylhexyl)phthalate	140	J
117-84-0	Di-n-octylphthalate	520	B
205-99-2	Benzo(b)fluoranthene	300	J
207-08-9	Benzo(k)fluoranthene	320	J
50-32-8	Benzo(a)pyrene	220	J
193-39-5	Indeno(1,2,3-cd)pyrene	230	J
53-70-3	Dibenzo(a,h)anthracene	120	J
191-24-2	Benzo(g,h,i)perylene	66	J

(1) - Cannot be separated from Diphenylamine

000438

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR6

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7294.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 17 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	4170-30-3	2-Butenal	4.377	200	NJ
2.		Unknown	4.916	160	J
3.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.009	1400	A NJB
4.		Unknown	5.063	350	J
5.		Unknown	5.729	270	J
6.		Unknown	5.783	200	J
7.		Unknown	5.985	440	J
8.	4436-75-3	3-Hexene-2,5-dione	6.137	290	NJ
9.	142-62-1	Hexanoic acid	6.296	270	NJB
10.		Unknown	6.574	490	J
11.	464-48-2	Bicyclo[2.2.1]heptan-2-one,	8.403	2400	NJ
12.	74381-40-1	Propanoic acid, 2-methyl-, 1	11.919	250	NJ
13.	57-10-3	Hexadecanoic acid	14.134	230	NJ
14.		Unknown	17.985	340	J
15.					
16.					
17.					
18.					
19.					
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22.					
23.					
24.					
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26.					
27.					
28.					
29.					
30.					

ACK 9-5-96

000439
NB 8.27.96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR7

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7295.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3

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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHR7

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7295.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	1100	U	
100-02-7	4-Nitrophenol	1100	U	
132-64-9	Dibenzofuran	430	U	
121-14-2	2,4-Dinitrotoluene	430	U	
84-66-2	Diethylphthalate	430	U	
7005-72-3	4-Chlorophenyl-phenylether	430	U	
86-73-7	Fluorene	430	U	
100-01-6	4-Nitroaniline	1100	U	
534-52-1	4,6-Dinitro-2-methylphenol	1100	U	
86-30-6	N-nitrosodiphenylamine (1)	430	U	
101-55-3	4-Bromophenyl-phenylether	430	U	
118-74-1	Hexachlorobenzene	430	U	
87-86-5	Pentachlorophenol	1100	U	
85-01-8	Phenanthrene	94	J	•
120-12-7	Anthracene	430	U	
86-74-8	Carbazole	430	U	
84-74-2	Di-n-butylphthalate	430 ~~42~~	u JB	
206-44-0	Fluoranthene	190	J	•
129-00-0	Pyrene	210	J	•
85-68-7	Butylbenzylphthalate	430	U	
91-94-1	3,3'-Dichlorobenzidine	430	U	
56-55-3	Benzo(a)anthracene	100	J	•
218-01-9	Chrysene	150	J	•
117-81-7	bis(2-Ethylhexyl)phthalate	360	J	•
117-84-0	Di-n-octylphthalate	430 ~~340~~	u JB	
205-99-2	Benzo(b)fluoranthene	160	J	•
207-08-9	Benzo(k)fluoranthene	160	J	•
50-32-8	Benzo(a)pyrene	100	J	•
193-39-5	Indeno(1,2,3-cd)pyrene	110	J	•
53-70-3	Dibenzo(a,h)anthracene	430	U	
191-24-2	Benzo(g,h,i)perylene	430	U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHR7

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.10

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7295.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3

Number TICs found: 15

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

ACH 9-5-96

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.003	1600	A NJB	u
2.		Unknown	5.058	270	J	
3.		Unknown	5.985	360	J	
4.	4436-75-3	3-Hexene-2,5-dione	6.132	540	NJ	
5.	142-62-1	Hexanoic acid	6.279	260	NJB	u
6.		Unknown	11.916	240	J	
7.	638-53-9	Tridecanoic acid	14.130	330	NJ	
8.		Unknown	15.141	170	J	
9.		Unknown	15.705	1200	J	
10.		Unknown	16.216	270	J	
11.		Unknown	17.165	290	J	
12.	112-88-9	1-Octadecene	17.984	350	NJ	
13.	638-66-4	Octadecanal	18.824	1300	NJ	
14.	6624-79-9	1-Dotriacontanol	19.230	3600	NJ	
15.		Unknown	19.680	1000	J	
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHT9

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7288.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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	400	U
111-44-4	bis(-2-Chloroethyl)Ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
111-91-1	bis(-2-Chloroethoxy)methane	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHT9

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7288.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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	1000	U	
100-02-7	4-Nitrophenol	1000	U	
132-64-9	Dibenzofuran	400	U	
121-14-2	2,4-Dinitrotoluene	400	U	
84-66-2	Diethylphthalate	400	U	
7005-72-3	4-Chlorophenyl-phenylether	400	U	
86-73-7	Fluorene	400	U	
100-01-6	4-Nitroaniline	1000	U	
534-52-1	4,6-Dinitro-2-methylphenol	1000	U	
86-30-6	N-nitrosodiphenylamine (1)	400	U	
101-55-3	4-Bromophenyl-phenylether	400	U	
118-74-1	Hexachlorobenzene	400	U	
87-86-5	Pentachlorophenol	1000	U	
85-01-8	Phenanthrene	110	J	•
120-12-7	Anthracene	400	U	
86-74-8	Carbazole	400	U	
84-74-2	Di-n-butylphthalate	400 ~~49~~	u JB	
206-44-0	Fluoranthene	260	J	•
129-00-0	Pyrene	200	J	•
85-68-7	Butylbenzylphthalate	400	U	
91-94-1	3,3'-Dichlorobenzidine	400	U	
56-55-3	Benzo(a)anthracene	120	J	•
218-01-9	Chrysene	180	J	•
117-81-7	bis(2-Ethylhexyl)phthalate	74	J	•
117-84-0	Di-n-octylphthalate	400 ~~170~~	u JB	
205-99-2	Benzo(b)fluoranthene	180	J	•
207-08-9	Benzo(k)fluoranthene	230	J	•
50-32-8	Benzo(a)pyrene	95	J	•
193-39-5	Indeno(1,2,3-cd)pyrene	83	J	•
53-70-3	Dibenzo(a,h)anthracene	400	U	
191-24-2	Benzo(g,h,i)perylene	400	U	

aot 9-5-96

(1) - Cannot be separated from Diphenylamine

000538

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHT9

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.11

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7288.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 18 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.003	1100	A NJB
2.		Unknown	5.063	230	J
3.		Unknown	5.727	160	J
4.		Unknown	5.782	140	J
5.		Unknown	5.989	160	J
6.	4436-75-3	3-Hexene-2,5-dione	6.130	260	NJ
7.	142-62-1	Hexanoic acid	6.283	200	NJB
8.		Unknown	6.544	200	J
9.		Unknown	6.571	180	J
10.		Unknown	11.919	250	J
11.	57-10-3	Hexadecanoic acid	14.136	170	NJ
12.		Unknown	15.524	99	J
13.		Unknown	18.846	230	J
14.	6624-79-9	1-Dotriacontanol	20.882	410	NJ
15.					
16.					
17.					
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26.					
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29.					
30.					

ACL 9-5-96

000539 RB 8.27.96

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7289.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(-2-Chloroethyl)Ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	280	J
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
111-91-1	bis(-2-Chloroethoxy)methane	390	U
59-50-7	4-Chloro-3-Methylphenol	390	U
91-57-6	2-Methylnaphthalene	150	J
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	980	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	980	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	22	J
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	980	U
83-32-9	Acenaphthene	1100	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7289.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
51-28-5	2,4-Dinitrophenol	980	U	
100-02-7	4-Nitrophenol	980	U	
132-64-9	Dibenzofuran	360	J	•
121-14-2	2,4-Dinitrotoluene	390	U	
84-66-2	Diethylphthalate	390	U	
7005-72-3	4-Chlorophenyl-phenylether	390	U	
86-73-7	Fluorene	740		•
100-01-6	4-Nitroaniline	980	U	
534-52-1	4,6-Dinitro-2-methylphenol	980	U	
86-30-6	N-nitrosodiphenylamine (1)	390	U	
101-55-3	4-Bromophenyl-phenylether	390	U	
118-74-1	Hexachlorobenzene	390	U	
87-86-5	Pentachlorophenol	980	U	
85-01-8	Phenanthrene	3700	E	•
120-12-7	Anthracene	1900		•
86-74-8	Carbazole	1200		•
84-74-2	Di-n-butylphthalate	390 ~~160~~	u JB	
206-44-0	Fluoranthene	4900	E	•
129-00-0	Pyrene	10000	E	•
85-68-7	Butylbenzylphthalate	110	J	•
91-94-1	3,3'-Dichlorobenzidine	390	U	
56-55-3	Benzo(a)anthracene	4600	E	•
218-01-9	Chrysene	5900	E	•
117-81-7	bis(2-Ethylhexyl)phthalate	440		•
117-84-0	Di-n-octylphthalate	390 ~~360~~	u JB	
205-99-2	Benzo(b)fluoranthene	3900	E	•
207-08-9	Benzo(k)fluoranthene	5100	E	•
50-32-8	Benzo(a)pyrene	4600	E	•
193-39-5	Indeno(1,2,3-cd)pyrene	2900		•
53-70-3	Dibenzo(a,h)anthracene	1300		•
191-24-2	Benzo(g,h,i)perylene	780		•

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW0

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7289.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 14

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

ACF 9-5-96

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	5.008	1300	A NJB
2.	Unknown	5.063	680	J
3. 142-62-1	Hexanoic acid	6.300	400	NJB
4.	Unknown	6.571	560	J
5.	Unknown	11.911	220	J
6. 132-65-0	Dibenzothiophene	13.449	370	NJ
7.	Unknown	13.753	240	J
8. 613-12-7	Anthracene, 2-methyl-	14.325	400	NJ
9. 832-71-3	Phenanthrene, 3-methyl-	14.375	310	NJ
10.	Unknown	14.542	720	J
11. 238-84-6	11H-Benzo[a]fluorene	16.241	280	NJ
12. 243-17-4	11H-Benzo[b]fluorene	16.330	250	NJ
13. 629-96-9	1-Eicosanol	19.230	260	NJ
14. 198-55-0	Perylene	20.327	300	NJ
15.				
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7306.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/19/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q	
108-95-2	Phenol	1900	U	
111-44-4	bis(-2-Chloroethyl)Ether	1900	U	
95-57-8	2-Chlorophenol	1900	U	
541-73-1	1,3-Dichlorobenzene	1900	U	
106-46-7	1,4-Dichlorobenzene	1900	U	
95-50-1	1,2-Dichlorobenzene	1900	U	
95-48-7	2-Methylphenol	1900	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	1900	U	
106-44-5	4-Methylphenol	1900	U	
621-64-7	N-Nitroso-di-n-propylamine	1900	U	
67-72-1	Hexachloroethane	1900	U	
98-95-3	Nitrobenzene	1900	U	
78-59-1	Isophorone	1900	U	
88-75-5	2-Nitrophenol	1900	U	
105-67-9	2,4-Dimethylphenol	1900	U	
120-83-2	2,4-Dichlorophenol	1900	U	
120-82-1	1,2,4-Trichlorobenzene	1900	U	
91-20-3	Naphthalene	240	JD	•
106-47-8	4-Chloroaniline	1900	U	
87-68-3	Hexachlorobutadiene	1900	U	
111-91-1	bis(-2-Chloroethoxy)methane	1900	U	
59-50-7	4-Chloro-3-Methylphenol	1900	U	
91-57-6	2-Methylnaphthalene	120	JD	•
77-47-4	Hexachlorocyclopentadiene	1900	U	
88-06-2	2,4,6-Trichlorophenol	1900	U	
95-95-4	2,4,5-Trichlorophenol	4900	U	
91-58-7	2-Chloronaphthalene	1900	U	
88-74-4	2-Nitroaniline	4900	U	
131-11-3	Dimethylphthalate	1900	U	
208-96-8	Acenaphthylene	310	JD	•
606-20-2	2,6-Dinitrotoluene	1900	U	
99-09-2	3-Nitroaniline	4900	U	
83-32-9	Acenaphthene	1100	JD	•

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EBHW0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7306.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(UL) Date Analyzed: 08/19/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	4900	U
100-02-7	4-Nitrophenol	4900	U
132-64-9	Dibenzofuran	320	JD
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	700	JD
100-01-6	4-Nitroaniline	4900	U
534-52-1	4,6-Dinitro-2-methylphenol	4900	U
86-30-6	N-nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	4900	U
85-01-8	Phenanthrene	8900	D
120-12-7	Anthracene	2000	D
86-74-8	Carbazole	1100	JD
84-74-2	Di-n-butylphthalate	1900	U
206-44-0	Fluoranthene	9400	D
129-00-0	Pyrene	11000	D
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	1900	U
56-55-3	Benzo(a)anthracene	4900	D
218-01-9	Chrysene	5300	D
117-81-7	bis(2-Ethylhexyl)phthalate	1900	U
117-84-0	Di-n-octylphthalate	1900 ~~200~~	u JBD
205-99-2	Benzo(b)fluoranthene	4500	D
207-08-9	Benzo(k)fluoranthene	2900	D
50-32-8	Benzo(a)pyrene	3700	D
193-39-5	Indeno(1,2,3-cd)pyrene	2500	D
53-70-3	Dibenzo(a,h)anthracene	1700	JD
191-24-2	Benzo(g,h,i)perylene	840	JD

acf 9-5-96

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EBHW0DL

Lab Name: ATAS, INC. Contract: 68-D5-0018

Lab Code: ATAS Case No.: 24884 SAS No.: SDG No.: EBHR0

Matrix: (soil/water) SOIL Lab Sample ID: 16316.12

Sample wt/vol: 30.0 (g/mL) G Lab File ID: EE7306.D

Level: (low/med) LOW Date Received: 07/24/96

% Moisture: 15 decanted: (Y/N) N Date Extracted: 07/30/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 08/19/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.1

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-Pentanone, 4-hydroxy-4-met	4.983	1200	A NJB
2.	Unknown	5.038	570	JD
3. 132-65-0	Dibenzothiophene	13.417	600	NJD
4.	Unknown	13.724	420	JD
5. 779-02-2	Anthracene, 9-methyl-	14.292	800	NJD
6. 613-12-7	Anthracene, 2-methyl-	14.347	630	NJD
7.	Unknown	14.511	1500	JD
8. 3442-78-2	Pyrene, 2-methyl-	16.212	720	NJD
9. 243-17-4	11H-Benzo[b]fluorene	16.300	700	NJD
10. 239-35-0	Benzo[b]naphtho[2,1-d]thioph	17.149	1400	NJD
11.	Unknown	17.243	1200	JD
12. 243-46-9	Benzo[b]naphtho[2,3-d]thioph	17.387	1000	NJD
13.	Unknown	17.746	1200	JD
14.	Unknown	19.194	1600	JD
15. 205-82-3	Benzo[j]fluoranthene	20.254	3400	NJD
16.				
17.				
18.				
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ACM 9-5-96

000641

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IL

Case No: 24884 Site Name Location: Granite City Steel

Contractor or EPA Lab: ATAS Data User: IEPA

No. of Samples: 15 Date Sampled or Data Received: 8-29-96

Have Chain-of-Custody records been received? Yes ✓ No ___
Have traffic reports or packing lists been received? Yes ✓ No ___
If no, are traffic report or packing list numbers written on the chain-of-custody record? Yes ✓ No ___
If no, which traffic report or packing list numbers are missing?

_____ _____ _____ _____

_____ _____ _____ _____

Are basic data forms in? Yes ✓ No ___
No of samples claimed: 15 No. of samples received: 15

Received by: Lynette Burnett Date: 8-29-96

Received by LSSS: Lynette Burnett Date: 8-29-96

Review started: 9-5-96 Reviewer Signature: Allison C Harvey

Total time spent on review: 6.0 hrs Date review completed: 9-5-96

Copied by: Lynette Burnett Date: 9-30-96

Mailed to user by: Lynette Burnett Date: 9-30-96

DATA USER:
Please fill in the blanks below and return this form to:
Sylvia Griffen, Data mgmt. Coordinator, Region V, 5SCRL

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

Inorganic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Organic Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
Dioxin Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK
SAS Data Complete [ ] Suitable for Intended Purpose [ ] ✓ if OK

PROBLEMS: Please indicate reasons why data are not suitable for your uses.

_____

_____

Received by Data Mgmt. Coordinator for Files. Data: _____

SDG NARRATIVE

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
825 N. RUTLEDGE
SPRINGFIELD, ILLINOIS 62702
(217)-782-9873

Case: Granite City Steel

Sample Identification		IEPA Sample Number	pH
G101		D609164	1.0
G102		D609165	1.0
G103		D609166	1.0
G104		D609167	7.0
G105		D609168	1.0
VBLKTB		D609169	2.0
X201		D609158	
X202		D609159	
X203		D609160	
X204		D609161	
X205		D609162	
X206		D609163	
G102MS	(1)	D609165MS	
G102MSD	(1)	D609165MSD	
X201MS	(1)	D609158MS	
X201MSD	(1)	D609158MSD	
G103MS	(2)	D609166	
G103MSD	(2)	D609166R	
X201MS	(2)	D609219	
X201MSD	(2)	D609219R	
G103MS	(3)	D609166	
G103MSD	(3)	D609166R	
X203MS	(3)	D609382	
X203MSD	(3)	D609382R	
VBLKW		072696BLK	
VBLKSL		072996BLK	
SBLKW		D609216	
SBLKSL		D609220	
GPCBLK		GPCBLANK	
PBLKW1		D609215	
PBLKS1		D609383	

RECEIVED
AUG 26 1996
IEPA LABORATORIES
Manager's Office

(1) Volatile sample
(2) Semivolatile sample
(3) Pesticide sample

Note: Samples G103 and G102 and X204 and X203 are duplicate samples. Only X203 and G102 were analyzed for semivolatiles or pesticides.

G103

This sample was run as a matrix spike/matrix spike duplicate only. The data on the Form III had to be manually edited so that the recoveries reflected what was actually seen. The sample concentrations on Form III are from sample G102 (duplicate of G103).

VOLATILE FRACTION

No problems to report.

SEMIVOLATILE FRACTION

G102

TIC #9 should read Benzene, 1,1'-sulfonylbis[4-chloro]-. There is insufficient room on Form I for the name.

The spectral disagreement for the following compounds is more than the 20% allowed when compared to the standard spectrum:

G101

Phenol coelutes with a TIC.

G104

Bis(2-ethylhexyl)phthalate coelutes with a TIC.

X203

Pyrene coelutes with a TIC.

PESTICIDE FRACTION

There were no problems to report in the analysis of these samples.

Celeste M Crowley 8/23/96

Celeste Crowley
Pesticide Supervisor

Date

8/23/96

Gary Germann
GC/MS Supervisor

Date

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609166

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609166

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKTB

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609169

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK04

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKTB

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609169

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C0726BK04

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. Date Analyzed: 07/26/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK04

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 80 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	50	U
67-64-1	Acetone	50	U
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	50	U
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylene (total)	50	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK04

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 80 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 77 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 77 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

ab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

ample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK06

evel: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 76 Date Analyzed: 07/29/96

C Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	42	U
74-83-9	Bromomethane	42	U
75-01-4	Vinyl Chloride	42	U
75-00-3	Chloroethane	42	U
75-09-2	Methylene Chloride	42	U
67-64-1	Acetone	210	
75-15-0	Carbon Disulfide	42	U
75-35-4	1,1-Dichloroethene	42	U
75-34-3	1,1-Dichloroethane	42	U
540-59-0	1,2-Dichloroethene (total)	42	U
67-66-3	Chloroform	42	U
107-06-2	1,2-Dichloroethane	42	U
78-93-3	2-Butanone	36	J
71-55-6	1,1,1-Trichloroethane	42	U
56-23-5	Carbon Tetrachloride	42	U
75-27-4	Bromodichloromethane	42	U
78-87-5	1,2-Dichloropropane	42	U
10061-01-5	cis-1,3-Dichloropropene	42	U
79-01-6	Trichloroethene	42	U
124-48-1	Dibromochloromethane	42	U
79-00-5	1,1,2-Trichloroethane	42	U
71-43-2	Benzene	42	U
10061-02-6	trans-1,3-Dichloropropene	42	U
75-25-2	Bromoform	42	U
108-10-1	4-Methyl-2-Pentanone	42	U
591-78-6	2-Hexanone	42	U
127-18-4	Tetrachloroethene	42	U
79-34-5	1,1,2,2-Tetrachloroethane	42	U
108-88-3	Toluene	42	U
108-90-7	Chlorobenzene	42	U
100-41-4	Ethylbenzene	42	U
100-42-5	Styrene	42	U
1330-20-7	Xylene (total)	42	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 76 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1190400001

ab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609161

ample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK07

evel: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 76 Date Analyzed: 07/29/96

C Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	42	U
74-83-9	Bromomethane	42	U
75-01-4	Vinyl Chloride	42	U
75-00-3	Chloroethane	42	U
75-09-2	Methylene Chloride	42	U
67-64-1	Acetone	90	
75-15-0	Carbon Disulfide	42	U
75-35-4	1,1-Dichloroethene	42	U
75-34-3	1,1-Dichloroethane	42	U
540-59-0	1,2-Dichloroethene (total)	42	U
67-66-3	Chloroform	42	U
107-06-2	1,2-Dichloroethane	42	U
78-93-3	2-Butanone	19	J
71-55-6	1,1,1-Trichloroethane	42	U
56-23-5	Carbon Tetrachloride	42	U
75-27-4	Bromodichloromethane	42	U
78-87-5	1,2-Dichloropropane	42	U
10061-01-5	cis-1,3-Dichloropropene	42	U
79-01-6	Trichloroethene	42	U
124-48-1	Dibromochloromethane	42	U
79-00-5	1,1,2-Trichloroethane	42	U
71-43-2	Benzene	42	U
10061-02-6	trans-1,3-Dichloropropene	42	U
75-25-2	Bromoform	42	U
108-10-1	4-Methyl-2-Pentanone	42	U
591-78-6	2-Hexanone	42	U
127-18-4	Tetrachloroethene	42	U
79-34-5	1,1,2,2-Tetrachloroethane	42	U
108-88-3	Toluene	42	U
108-90-7	Chlorobenzene	42	U
100-41-4	Ethylbenzene	42	U
100-42-5	Styrene	42	U
1330-20-7	Xylene (total)	42	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X204

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609161

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 76 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 74 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	38	U
74-83-9	Bromomethane	38	U
75-01-4	Vinyl Chloride	38	U
75-00-3	Chloroethane	38	U
75-09-2	Methylene Chloride	38	U
67-64-1	Acetone	80	
75-15-0	Carbon Disulfide	38	U
75-35-4	1,1-Dichloroethene	38	U
75-34-3	1,1-Dichloroethane	38	U
540-59-0	1,2-Dichloroethene (total)	38	U
67-66-3	Chloroform	38	U
107-06-2	1,2-Dichloroethane	38	U
78-93-3	2-Butanone	38	U
71-55-6	1,1,1-Trichloroethane	38	U
56-23-5	Carbon Tetrachloride	38	U
75-27-4	Bromodichloromethane	38	U
78-87-5	1,2-Dichloropropane	38	U
10061-01-5	cis-1,3-Dichloropropene	38	U
79-01-6	Trichloroethene	38	U
124-48-1	Dibromochloromethane	38	U
79-00-5	1,1,2-Trichloroethane	38	U
71-43-2	Benzene	38	U
10061-02-6	trans-1,3-Dichloropropene	38	U
75-25-2	Bromoform	38	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	38	U
79-34-5	1,1,2,2-Tetrachloroethane	38	U
108-88-3	Toluene	38	U
108-90-7	Chlorobenzene	38	U
100-41-4	Ethylbenzene	38	U
100-42-5	Styrene	38	U
1330-20-7	Xylene (total)	38	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

ab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

ample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK08

evel: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 74 Date Analyzed: 07/29/96

C Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 67 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	30	U
74-83-9	Bromomethane	30	U
75-01-4	Vinyl Chloride	30	U
75-00-3	Chloroethane	30	U
75-09-2	Methylene Chloride	30	U
67-64-1	Acetone	39	
75-15-0	Carbon Disulfide	30	U
75-35-4	1,1-Dichloroethene	30	U
75-34-3	1,1-Dichloroethane	30	U
540-59-0	1,2-Dichloroethene (total)	30	U
67-66-3	Chloroform	30	U
107-06-2	1,2-Dichloroethane	30	U
78-93-3	2-Butanone	30	U
71-55-6	1,1,1-Trichloroethane	30	U
56-23-5	Carbon Tetrachloride	30	U
75-27-4	Bromodichloromethane	30	U
78-87-5	1,2-Dichloropropane	30	U
10061-01-5	cis-1,3-Dichloropropene	30	U
79-01-6	Trichloroethene	30	U
124-48-1	Dibromochloromethane	30	U
79-00-5	1,1,2-Trichloroethane	30	U
71-43-2	Benzene	30	U
10061-02-6	trans-1,3-Dichloropropene	30	U
75-25-2	Bromoform	30	U
108-10-1	4-Methyl-2-Pentanone	30	U
591-78-6	2-Hexanone	30	U
127-18-4	Tetrachloroethene	30	U
79-34-5	1,1,2,2-Tetrachloroethane	30	U
108-88-3	Toluene	30	U
108-90-7	Chlorobenzene	30	U
100-41-4	Ethylbenzene	30	U
100-42-5	Styrene	30	U
1330-20-7	Xylene (total)	30	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 5.0 (g/mL) G Lab File ID: C0729BK09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: not dec. 67 Date Analyzed: 07/29/96

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
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	53	
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	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	3	J
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	17	
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2PENTANONE, 4HYDROXY-4METHYL	8.37	10	JNA
2.	UNKNOWN	8.80	39	BJ
3.	UNKNOWN ALIP. ALCOHOL	9.47	10	BJ
4. 2441-97-6	CYCLOHEXENE, 3-CHLORO-	9.94	3	JN
5.	UNKNOWN TRICHLORO PROPENE	10.77	26	BJ
6. 872-50-4	2-PYRROLIDINONE, 1-METHYL-	12.59	13	JN
7.	UNKNOWN ALIP. ACID	13.85	4	J
8.	UNKNOWN	14.55	28	BJ
9. 105-60-2	CAPROLACTAM	16.27	8	JN
10. 134-62-3	DEET	20.95	4	JN
11.	UNKNOWN	27.11	23	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	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
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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
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	6	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN TRICHLORO PROPENE	8.20	6	BJ
2.	UNKNOWN	8.80	27	BJ
3.	UNKNOWN TRICHLORO PROPENE	9.10	7	BJ
4.	UNKNOWN ALIP. ALCOHOL	9.47	6	BJ
5.	UNKNOWN TRICHLORO PROPENE	10.77	62	BJ
6.	UNKNOWN	14.55	39	BJ
7.	UNKNOWN	14.64	4	BJ
8.	UNKNOWN	18.04	5	BJ
9. 80-07-9	BENZENE, 1,1'-SULFONYLBIS[4-	28.41	55	JN
10. 791-28-6	PHOSPHINE OXIDE, TRIPHENYL	31.19	78	JN

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E10

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
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

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E10

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
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	6	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	7	J
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E10

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.80	6	BJ
2.	UNKNOWN TRICHLORO PROPENE	10.77	18	BJ
3.	UNKNOWN	14.55	23	BJ
4. 134-62-3	DEET	20.94	5	JN

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E11

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E11

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
83-32-9	Acenaphthene	10	U
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	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 1000 (g/mL) ML Lab File ID: C0731E11

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 07/25/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 07/31/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 8

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2PENTANONE, 4HYDROXY-4METHYL	8.35	10	JNA
2.	UNKNOWN	8.79	9	BJ
3.	UNKNOWN TRICHLORO PROPENE	9.09	4	BJ
4.	UNKNOWN ALIP. ALCOHOL	9.47	2	BJ
5.	UNKNOWN TRICHLORO PROPENE	10.75	28	BJ
6.	UNKNOWN	14.54	38	BJ
7.	UNKNOWN	14.64	4	BJ
8.	UNKNOWN	16.64	3	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 80 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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	1600	U
111-44-4	bis(2-Chloroethyl)Ether	1600	U
95-57-8	2-Chlorophenol	1600	U
541-73-1	1,3-Dichlorobenzene	1600	U
106-46-7	1,4-Dichlorobenzene	1600	U
95-50-1	1,2-Dichlorobenzene	1600	U
95-48-7	2-Methylphenol	1600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1600	U
106-44-5	4-Methylphenol	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
621-64-7	N-Nitroso-Di-n-Propylamine	1600	U
67-72-1	Hexachloroethane	1600	U
98-95-3	Nitrobenzene	1600	U
78-59-1	Isophorone	1600	U
88-75-5	2-Nitrophenol	1600	U
105-67-9	2,4-Dimethylphenol	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	1600	U
120-83-2	2,4-Dichlorophenol	1600	U
120-82-1	1,2,4-Trichlorobenzene	1600	U
91-20-3	Naphthalene	1600	U
106-47-8	4-Chloroaniline	1600	U
87-68-3	Hexachlorobutadiene	1600	U
59-50-7	4-Chloro-3-Methylphenol	1600	U
91-57-6	2-Methylnaphthalene	1600	U
77-47-4	Hexachlorocyclopentadiene	1600	U
88-06-2	2,4,6-Trichlorophenol	1600	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	1600	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethylphthalate	1600	U
208-96-8	Acenaphthylene	1600	U
606-20-2	2,6-Dinitrotoluene	1600	U
99-09-2	3-Nitroaniline	4000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 80 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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
83-32-9	Acenaphthene	1600	U
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	1600	U
121-14-2	2,4-Dinitrotoluene	1600	U
84-66-2	Diethylphthalate	1600 ~~1300~~	~~B~~JU
7005-72-3	4-Chlorophenyl-phenylether	1600	U
86-73-7	Fluorene	1600	U
100-10-6	4-Nitroaniline	4000	UJ
534-52-1	4,6-Dinitro-2-methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	1600	U
101-55-3	4-Bromophenyl-phenylether	1600	U
118-74-1	Hexachlorobenzene	1600	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	1600	U
120-12-7	Anthracene	1600	U
86-74-8	Carbazole	1600	U
84-74-2	Di-n-Butylphthalate	3100	~~B~~U
206-44-0	Fluoranthene	1600	U
129-00-0	Pyrene	1600	U
85-68-7	Butylbenzylphthalate	1600	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	1600	U
218-01-9	Chrysene	1600	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1600	U
117-84-0	Di-n-Octyl Phthalate	1600	U
205-99-2	Benzo(b)Fluoranthene	1600	U
207-08-9	Benzo(k)Fluoranthene	1600	U
50-32-8	Benzo(a)Pyrene	1600	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1600	U
53-70-3	Dibenz(a,h)Anthracene	1600	U
191-24-2	Benzo(g,h,i)Perylene	1600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E05

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 80 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIP. KETONE	7.30	9300	BAJ
2.	UNKNOWN	7.77	16000	BJ
3. 123-42-2	2PENTANONE, 4HYDROXY-4METHYL	8.37	22000	JNBAU
4.	UNKNOWN ALIP. HYDROCARBON	9.07	3000	BJ
5.	UNKNOWN	10.07	13000	BJ
6.	UNKNOWN ALIP. KETONE	10.65	4300	BAJ
7.	UNKNOWN	11.54	6300	J
8.	UNKNOWN	12.70	4300	J
9.	UNKNOWN	32.72	28000	J
10.	UNKNOWN	33.19	40000	J
11.	UNKNOWN	34.07	21000	J
12.	UNKNOWN	34.64	33000	J
13.	UNKNOWN	35.06	29000	J
14.	UNKNOWN	35.74	91000	J
15.	UNKNOWN	36.32	36000	J
16.	UNKNOWN	36.47	83000	J
17.	UNKNOWN	37.66	23000	J
18.	UNKNOWN	38.51	33000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 77 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	U
111-44-4	bis(2-Chloroethyl)Ether	1400	U
95-57-8	2-Chlorophenol	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
95-48-7	2-Methylphenol	1400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	U
106-44-5	4-Methylphenol	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
67-72-1	Hexachloroethane	1400	U
98-95-3	Nitrobenzene	1400	U
78-59-1	Isophorone	1400	U
88-75-5	2-Nitrophenol	1400	U
105-67-9	2,4-Dimethylphenol	1400	U
111-91-1	bis(2-Chloroethoxy)Methane	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
120-82-1	1,2,4-Trichlorobenzene	1400	U
91-20-3	Naphthalene	1400	U
106-47-8	4-Chloroaniline	1400	U
87-68-3	Hexachlorobutadiene	1400	U
59-50-7	4-Chloro-3-Methylphenol	1400	U
91-57-6	2-Methylnaphthalene	1400	U
77-47-4	Hexachlorocyclopentadiene	1400	U
88-06-2	2,4,6-Trichlorophenol	1400	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethylphthalate	1400	U
208-96-8	Acenaphthylene	1400	U
606-20-2	2,6-Dinitrotoluene	1400	U
99-09-2	3-Nitroaniline	3500	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 77 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1400	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	1400	U
121-14-2	2,4-Dinitrotoluene	1400	U
84-66-2	Diethylphthalate	1400 ~~1100~~	~~B~~JU
7005-72-3	4-Chlorophenyl-phenylether	1400	U
86-73-7	Fluorene	1400	U
100-10-6	4-Nitroaniline	3500	UJ
534-52-1	4,6-Dinitro-2-methylphenol	3500	U
86-30-6	N-Nitrosodiphenylamine (1)	1400	U
101-55-3	4-Bromophenyl-phenylether	1400	U
118-74-1	Hexachlorobenzene	1400	U
87-86-5	Pentachlorophenol	3500	U
85-01-8	Phenanthrene	1400	U
120-12-7	Anthracene	1400	U
86-74-8	Carbazole	1400	U
84-74-2	Di-n-Butylphthalate	2300	~~B~~U
206-44-0	Fluoranthene	1400	U
129-00-0	Pyrene	1400	U
85-68-7	Butylbenzylphthalate	1400	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)Anthracene	1400	U
218-01-9	Chrysene	1400	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1400	U
117-84-0	Di-n-Octyl Phthalate	1400	U
205-99-2	Benzo(b)Fluoranthene	1400	U
207-08-9	Benzo(k)Fluoranthene	1400	U
50-32-8	Benzo(a)Pyrene	1400	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1400	U
53-70-3	Dibenz(a,h)Anthracene	1400	U
191-24-2	Benzo(g,h,i)Perylene	1400	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E06

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 77 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIP. KETONE	7.32	7300	BAJ
2.	UNKNOWN	10.07	11000	BJ
3.	UNKNOWN	32.76	40000	J
4.	UNKNOWN	33.16	1900	J
5.	UNKNOWN	33.24	60000	J
6.	UNKNOWN	34.11	33000	J
7.	UNKNOWN	34.71	55000	J
8.	UNKNOWN	35.11	32000	J
9.	UNKNOWN	35.64	13000	J
10.	UNKNOWN	35.82	60000	J
11.	UNKNOWN	36.52	110000	J
12.	UNKNOWN	37.74	38000	J
13.	UNKNOWN	38.61	57000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C0801E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 76 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	U
111-44-4	bis(2-Chloroethyl)Ether	1400	U
95-57-8	2-Chlorophenol	1400	U
541-73-1	1,3-Dichlorobenzene	1400	U
106-46-7	1,4-Dichlorobenzene	1400	U
95-50-1	1,2-Dichlorobenzene	1400	U
95-48-7	2-Methylphenol	1400	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1400	U
106-44-5	4-Methylphenol	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
621-64-7	N-Nitroso-Di-n-Propylamine	1400	U
67-72-1	Hexachloroethane	1400	U
98-95-3	Nitrobenzene	1400	U
78-59-1	Isophorone	1400	U
88-75-5	2-Nitrophenol	1400	U
105-67-9	2,4-Dimethylphenol	1400	U
111-91-1	bis(2-Chloroethoxy)Methane	1400	U
120-83-2	2,4-Dichlorophenol	1400	U
120-82-1	1,2,4-Trichlorobenzene	1400	U
91-20-3	Naphthalene	1400	U
106-47-8	4-Chloroaniline	1400	U
87-68-3	Hexachlorobutadiene	1400	U
59-50-7	4-Chloro-3-Methylphenol	1400	U
91-57-6	2-Methylnaphthalene	1400	U
77-47-4	Hexachlorocyclopentadiene	1400	U
88-06-2	2,4,6-Trichlorophenol	1400	U
95-95-4	2,4,5-Trichlorophenol	3300	U
91-58-7	2-Chloronaphthalene	1400	U
88-74-4	2-Nitroaniline	3300	U
131-11-3	Dimethylphthalate	1400	U
208-96-8	Acenaphthylene	1400	U
606-20-2	2,6-Dinitrotoluene	1400	U
99-09-2	3-Nitroaniline	3300	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C0801E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 76 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
83-32-9	Acenaphthene	1400	U
51-28-5	2,4-Dinitrophenol	3300	U
100-02-7	4-Nitrophenol	3300	U
132-64-9	Dibenzofuran	1400	U
121-14-2	2,4-Dinitrotoluene	1400	U
84-66-2	Diethylphthalate	1400 ~~1100~~	~~B~~ JU
7005-72-3	4-Chlorophenyl-phenylether	1400	U
86-73-7	Fluorene	1400	U
100-10-6	4-Nitroaniline	3300	U J
534-52-1	4,6-Dinitro-2-methylphenol	3300	U
86-30-6	N-Nitrosodiphenylamine (1)	1400	U
101-55-3	4-Bromophenyl-phenylether	1400	U
118-74-1	Hexachlorobenzene	1400	U
87-86-5	Pentachlorophenol	3300	U
85-01-8	Phenanthrene	310	J
120-12-7	Anthracene	1400	U
86-74-8	Carbazole	1400	U
84-74-2	Di-n-Butylphthalate	2400	~~B~~ U
206-44-0	Fluoranthene	820	J
129-00-0	Pyrene	670	J
85-68-7	Butylbenzylphthalate	1400	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)Anthracene	1400	U
218-01-9	Chrysene	1400	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1400	U
117-84-0	Di-n-Octyl Phthalate	1400	U
205-99-2	Benzo(b)Fluoranthene	1400	U
207-08-9	Benzo(k)Fluoranthene	1400	U
50-32-8	Benzo(a)Pyrene	1400	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1400	U
53-70-3	Dibenz(a,h)Anthracene	1400	U
191-24-2	Benzo(g,h,i)Perylene	1400	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C0801E09

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 76 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 13

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIP. KETONE	7.33	7500	BAJ
2.	UNKNOWN	7.78	14000	BJ
3.	UNKNOWN	10.07	11000	BJ
4.	UNKNOWN	32.31	22000	J
5.	UNKNOWN	32.79	55000	J
6.	UNKNOWN	33.27	68000	J
7.	UNKNOWN	34.14	42000	J
8.	UNKNOWN	34.72	62000	J
9.	UNKNOWN	35.16	57000	J
10.	UNKNOWN	35.86	100000	J
11.	UNKNOWN	36.57	170000	J
12.	UNKNOWN	37.77	41000	J
13.	UNKNOWN	38.66	56000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 74 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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	1300	U
111-44-4	bis(2-Chloroethyl)Ether	1300	U
95-57-8	2-Chlorophenol	1300	U
541-73-1	1,3-Dichlorobenzene	1300	U
106-46-7	1,4-Dichlorobenzene	1300	U
95-50-1	1,2-Dichlorobenzene	1300	U
95-48-7	2-Methylphenol	1300	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1300	U
106-44-5	4-Methylphenol	1300	U
621-64-7	N-Nitroso-Di-n-Propylamine	1300	U
621-64-7	N-Nitroso-Di-n-Propylamine	1300	U
67-72-1	Hexachloroethane	1300	U
98-95-3	Nitrobenzene	1300	U
78-59-1	Isophorone	1300	U
88-75-5	2-Nitrophenol	1300	U
105-67-9	2,4-Dimethylphenol	1300	U
111-91-1	bis(2-Chloroethoxy)Methane	1300	U
120-83-2	2,4-Dichlorophenol	1300	U
120-82-1	1,2,4-Trichlorobenzene	1300	U
91-20-3	Naphthalene	1300	U
106-47-8	4-Chloroaniline	1300	U
87-68-3	Hexachlorobutadiene	1300	U
59-50-7	4-Chloro-3-Methylphenol	1300	U
91-57-6	2-Methylnaphthalene	1300	U
77-47-4	Hexachlorocyclopentadiene	1300	U
88-06-2	2,4,6-Trichlorophenol	1300	U
95-95-4	2,4,5-Trichlorophenol	3100	U
91-58-7	2-Chloronaphthalene	1300	U
88-74-4	2-Nitroaniline	3100	U
131-11-3	Dimethylphthalate	1300	U
208-96-8	Acenaphthylene	1300	U
606-20-2	2,6-Dinitrotoluene	1300	U
99-09-2	3-Nitroaniline	3100	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 74 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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
83-32-9	Acenaphthene	1300	U
51-28-5	2,4-Dinitrophenol	3100	U
100-02-7	4-Nitrophenol	3100	U
132-64-9	Dibenzofuran	1300	U
121-14-2	2,4-Dinitrotoluene	1300	U
84-66-2	Diethylphthalate	1300 ~~1000~~	~~B~~JU
7005-72-3	4-Chlorophenyl-phenylether	1300	U
86-73-7	Fluorene	1300	U
100-10-6	4-Nitroaniline	3100	UJ
534-52-1	4,6-Dinitro-2-methylphenol	3100	U
86-30-6	N-Nitrosodiphenylamine (1)	1300	U
101-55-3	4-Bromophenyl-phenylether	1300	U
118-74-1	Hexachlorobenzene	1300	U
87-86-5	Pentachlorophenol	3100	U
85-01-8	Phenanthrene	1300	U
120-12-7	Anthracene	1300	U
86-74-8	Carbazole	1300	U
84-74-2	Di-n-Butylphthalate	2200	~~B~~U
206-44-0	Fluoranthene	1300	U
129-00-0	Pyrene	1300	U
85-68-7	Butylbenzylphthalate	1300	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	1300	U
218-01-9	Chrysene	1300	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1300	U
117-84-0	Di-n-Octyl Phthalate	1300	U
205-99-2	Benzo(b)Fluoranthene	1300	U
207-08-9	Benzo(k)Fluoranthene	1300	U
50-32-8	Benzo(a)Pyrene	1300	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1300	U
53-70-3	Dibenz(a,h)Anthracene	1300	U
191-24-2	Benzo(g,h,i)Perylene	1300	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E07

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 74 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

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

Number TICs found: 17

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIP. KETONE	7.30	6300	BAJ
2.	UNKNOWN	7.77	10000	BJ
3.	UNKNOWN	8.00	11000	BJ
4. 123-42-2	2PENTANONE, 4HYDROXY-4METHYL	8.37	16000	JNBAU
5.	UNKNOWN ALIP. HYDROCARBON	9.07	2600	BJ
6.	UNKNOWN	10.05	9700	BJ
7.	UNKNOWN ALIP. KETONE	10.65	3100	BJ
8.	UNKNOWN	11.54	4300	J
9.	UNKNOWN	12.70	2900	J
10.	UNKNOWN	32.72	21000	J
11.	UNKNOWN	33.21	27000	J
12.	UNKNOWN	34.07	15000	J
13.	UNKNOWN	34.64	21000	J
14.	UNKNOWN	35.06	20000	J
15.	UNKNOWN	35.62	14000	J
16.	UNKNOWN	35.76	43000	J
17.	UNKNOWN	36.46	80000	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 67 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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	1000	U
111-44-4	bis(2-Chloroethyl)Ether	1000	U
95-57-8	2-Chlorophenol	1000	U
541-73-1	1,3-Dichlorobenzene	1000	U
106-46-7	1,4-Dichlorobenzene	1000	U
95-50-1	1,2-Dichlorobenzene	1000	U
95-48-7	2-Methylphenol	1000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	1000	U
106-44-5	4-Methylphenol	1000	U
621-64-7	N-Nitroso-Di-n-Propylamine	1000	U
621-64-7	N-Nitroso-Di-n-Propylamine	1000	U
67-72-1	Hexachloroethane	1000	U
98-95-3	Nitrobenzene	1000	U
78-59-1	Isophorone	1000	U
88-75-5	2-Nitrophenol	1000	U
105-67-9	2,4-Dimethylphenol	1000	U
111-91-1	bis(2-Chloroethoxy)Methane	1000	U
120-83-2	2,4-Dichlorophenol	1000	U
120-82-1	1,2,4-Trichlorobenzene	1000	U
91-20-3	Naphthalene	1000	U
106-47-8	4-Chloroaniline	1000	U
87-68-3	Hexachlorobutadiene	1000	U
59-50-7	4-Chloro-3-Methylphenol	1000	U
91-57-6	2-Methylnaphthalene	1000	U
77-47-4	Hexachlorocyclopentadiene	1000	U
88-06-2	2,4,6-Trichlorophenol	1000	U
95-95-4	2,4,5-Trichlorophenol	2400	U
91-58-7	2-Chloronaphthalene	1000	U
88-74-4	2-Nitroaniline	2400	U
131-11-3	Dimethylphthalate	1000	U
208-96-8	Acenaphthylene	1000	U
606-20-2	2,6-Dinitrotoluene	1000	U
99-09-2	3-Nitroaniline	2400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 67 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

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
83-32-9	Acenaphthene	1000	U
51-28-5	2,4-Dinitrophenol	2400	U
100-02-7	4-Nitrophenol	2400	U
132-64-9	Dibenzofuran	1000	U
121-14-2	2,4-Dinitrotoluene	1000	U
84-66-2	Diethylphthalate	1000 ~~790~~	~~B~~JU
7005-72-3	4-Chlorophenyl-phenylether	1000	U
86-73-7	Fluorene	1000	U
100-10-6	4-Nitroaniline	2400	UJ
534-52-1	4,6-Dinitro-2-methylphenol	2400	U
86-30-6	N-Nitrosodiphenylamine (1)	1000	U
101-55-3	4-Bromophenyl-phenylether	1000	U
118-74-1	Hexachlorobenzene	1000	U
87-86-5	Pentachlorophenol	2400	U
85-01-8	Phenanthrene	1000	U
120-12-7	Anthracene	1000	U
86-74-8	Carbazole	1000	U
84-74-2	Di-n-Butylphthalate	1700	~~B~~U
206-44-0	Fluoranthene	1000	U
129-00-0	Pyrene	1000	U
85-68-7	Butylbenzylphthalate	1000	U
91-94-1	3,3'-Dichlorobenzidine	1000	U
56-55-3	Benzo(a)Anthracene	1000	U
218-01-9	Chrysene	1000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1000	U
117-84-0	Di-n-Octyl Phthalate	1000	U
205-99-2	Benzo(b)Fluoranthene	1000	U
207-08-9	Benzo(k)Fluoranthene	1000	U
50-32-8	Benzo(a)Pyrene	1000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1000	U
53-70-3	Dibenz(a,h)Anthracene	1000	U
191-24-2	Benzo(g,h,i)Perylene	1000	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 30.1 (g/mL) G Lab File ID: C0801E08

Level: (low/med) LOW Date Received: 07/25/96

% Moisture: 67 decanted: (Y/N) N Date Extracted: 07/25/96

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 08/01/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIP. KETONE	7.32	5100	BAJ
2.	UNKNOWN	10.07	7500	BJ
3.	UNKNOWN	32.76	35000	J
4.	UNKNOWN	33.26	43000	J
5.	UNKNOWN	34.09	38000	J
6.	UNKNOWN	34.69	50000	J
7.	UNKNOWN	35.11	38000	J
8.	UNKNOWN	35.64	17000	J
9.	UNKNOWN	35.82	74000	J
10.	UNKNOWN	36.54	79000	J
11.	UNKNOWN	36.61	69000	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609164

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/25/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.0088	JP
319-86-8	delta-BHC	0.0065	JP
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.0048	JP
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.0053	JP
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.0049	J
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609165

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/25/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.0049	J
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609167

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/25/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) WATER Lab Sample ID: D609168

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) ___ Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 07/25/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 07/31/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

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

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.0023	JP
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X201

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609158

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 80 decanted: (Y/N) N Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/30/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/08/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.5	U
319-85-7	beta-BHC	8.5	U
319-86-8	delta-BHC	8.5	U
58-89-9	gamma-BHC (Lindane)	8.5	U
76-44-8	Heptachlor	8.5	U
309-00-2	Aldrin	8.5	U
1024-57-3	Heptachlor epoxide	8.5	U
959-98-8	Endosulfan I	8.5	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	1.3	JP
72-20-8	Endrin	1.3	JP
33213-65-9	Endosulfan II	0.78	JP
72-54-8	4,4'-DDD	1.6	JP
1031-07-8	Endosulfan sulfate	16	U
50-29-3	4,4'-DDT	1.2	JP
72-43-5	Methoxychlor	4.5	JP
53494-70-5	Endrin ketone	2.8	~~B~~J
7421-36-3	Endrin aldehyde	1.0	JP
5103-71-9	alpha-Chlordane	0.79	JP
5103-74-2	gamma-Chlordane	8.5	U
8001-35-2	Toxaphene	850	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	330	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	14	JP
11096-82-5	Aroclor-1260	14 ~~15~~	JP

MCN
8/12/96

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X202

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609159

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 77 decanted: (Y/N) N Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/30/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/08/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	7.3	U
319-85-7	beta-BHC	7.3	U
319-86-8	delta-BHC	7.3	U
58-89-9	gamma-BHC (Lindane)	7.3	U
76-44-8	Heptachlor	7.3	U
309-00-2	Aldrin	7.3	U
1024-57-3	Heptachlor epoxide	7.3	U
959-98-8	Endosulfan I	7.3	U
60-57-1	Dieldrin	0.62	JP
72-55-9	4,4'-DDE	14	U
72-20-8	Endrin	4.2	J
33213-65-9	Endosulfan II	1.6	JP
72-54-8	4,4'-DDD	2.7	JP
1031-07-8	Endosulfan sulfate	14	U
50-29-3	4,4'-DDT	0.64	JP
72-43-5	Methoxychlor	5.2	JP
53494-70-5	Endrin ketone	3.5	~~B~~J
7421-36-3	Endrin aldehyde	2.3	JP
5103-71-9	alpha-Chlordane	2.1	JP
5103-74-2	gamma-Chlordane	7.3	U
8001-35-2	Toxaphene	730	U
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	290	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	50	JP
11096-82-5	Aroclor-1260	27	JP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X203

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609160

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 76 decanted: (Y/N) N Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/30/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/08/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	7.1	U
319-85-7	beta-BHC	7.1	U
319-86-8	delta-BHC	7.1	U
58-89-9	gamma-BHC (Lindane)	7.1	U
76-44-8	Heptachlor	7.1	U
309-00-2	Aldrin	0.60	JP
1024-57-3	Heptachlor epoxide	7.1	U
959-98-8	Endosulfan I	7.1	U
60-57-1	Dieldrin	1.0	JP
72-55-9	4,4'-DDE	4.0	JP
72-20-8	Endrin	3.0	JP
33213-65-9	Endosulfan II	1.6	JP
72-54-8	4,4'-DDD	3.2	JP
1031-07-8	Endosulfan sulfate	14	U
50-29-3	4,4'-DDT	1.4	JP
72-43-5	Methoxychlor	9.4	JP
53494-70-5	Endrin ketone	4.9	BJ
7421-36-3	Endrin aldehyde	14	U
5103-71-9	alpha-Chlordane	2.7	JP
5103-74-2	gamma-Chlordane	2.9	JP
8001-35-2	Toxaphene	710	U
12674-11-2	Aroclor-1016	140	U
11104-28-2	Aroclor-1221	280	U
11141-16-5	Aroclor-1232	140	U
53469-21-9	Aroclor-1242	140	U
12672-29-6	Aroclor-1248	140	U
11097-69-1	Aroclor-1254	31	JP
11096-82-5	Aroclor-1260	35	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X205

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609162

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

% Moisture: 74 decanted: (Y/N) N Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/30/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/08/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	6.5	U
319-85-7	beta-BHC	6.5	U
319-86-8	delta-BHC	6.5	U
58-89-9	gamma-BHC (Lindane)	6.5	U
76-44-8	Heptachlor	6.5	U
309-00-2	Aldrin	0.67	JP
1024-57-3	Heptachlor epoxide	6.5	U
959-98-8	Endosulfan I	6.5	U
60-57-1	Dieldrin	1.3	JP
72-55-9	4,4'-DDE	2.9	JP
72-20-8	Endrin	0.60	JP
33213-65-9	Endosulfan II	13	U
72-54-8	4,4'-DDD	1.7	JP
1031-07-8	Endosulfan sulfate	13	U
50-29-3	4,4'-DDT	0.63	JP
72-43-5	Methoxychlor	65	U
53494-70-5	Endrin ketone	2.2	~~B~~JP
7421-36-3	Endrin aldehyde	0.59	JP
5103-71-9	alpha-Chlordane	1.4	JP
5103-74-2	gamma-Chlordane	0.79	JP
8001-35-2	Toxaphene	650	U
12674-11-2	Aroclor-1016	130	U
11104-28-2	Aroclor-1221	260	U
11141-16-5	Aroclor-1232	130	U
53469-21-9	Aroclor-1242	130	U
12672-29-6	Aroclor-1248	130	U
11097-69-1	Aroclor-1254	12	JP
11096-82-5	Aroclor-1260	17	JP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X206

Lab Name: ILLINOIS EPA Contract: 1190400001

Lab Code: SPFLD Case No.: GRANIT SAS No.: _____ SDG No.: 609158

Matrix: (soil/water) SOIL Lab Sample ID: D609163

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

% Moisture: 67 decanted: (Y/N) N Date Received: 07/25/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/30/96

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 08/08/96

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.1	U
319-85-7	beta-BHC	5.1	U
319-86-8	delta-BHC	5.1	U
58-89-9	gamma-BHC (Lindane)	5.1	U
76-44-8	Heptachlor	5.1	U
309-00-2	Aldrin	0.54	JP
1024-57-3	Heptachlor epoxide	5.1	U
959-98-8	Endosulfan I	5.1	U
60-57-1	Dieldrin	0.87	JP
72-55-9	4,4'-DDE	3.3	JP
72-20-8	Endrin	10	U
33213-65-9	Endosulfan II	10	U
72-54-8	4,4'-DDD	3.3	JP
1031-07-8	Endosulfan sulfate	10	U
50-29-3	4,4'-DDT	1.2	JP
72-43-5	Methoxychlor	51	U
53494-70-5	Endrin ketone	1.7	BJP
7421-36-3	Endrin aldehyde	10	U
5103-71-9	alpha-Chlordane	1.5	JP
5103-74-2	gamma-Chlordane	0.89	J
8001-35-2	Toxaphene	510	U
12674-11-2	Aroclor-1016	100	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	100	U
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	13	JP
11096-82-5	Aroclor-1260	17	JP

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609158
Laboratory: TCPN
Page 1 of 45

PRELIMINARY REVIEW

1. Chain-of-Custody

	YES	NO	
a.	[✓]	[ ]	Check chain-of-custody documentation for date/time sampled, date/time received in laboratory.
b.	[✓]	[ ]	Check chain-of-custody documentation for proper documentation of transfers and signoffs.
c.	[✓]	[ ]	Check chain-of-custody documentation for any inconsistencies or anomalies.

Comments:

2. Case Narrative

	Yes	No	
a.	[✓]	[ ]	Review entire case narrative.
b.	[✓]	[ ]	Check case narrative for completeness.
c.	[✓]	[ ]	Check for proper authorization signature.

Comments:

Data Validation Checklist
Site Name: Gran. City SOD
SDG No.: 109158
Laboratory: IEPD
Page 2 of _____

I. Holding Times

YES NO
[✓] [ ] Check that all technical and/or contractual holding times were met, as required, for all fractions.

EPA Number	Lab Number	1996 Date Coll.	96 Date Rec'd.	96 VOA Date Anal.	96 Semi-VOA Date Extr	96 Semi-VOA Date Anal.	96 Pesticide Date Extr	96 Pesticide Date Anal.
G101	D109164	7/23	7/25	7/26	7/25	7/31	~~7/25~~ 7/25	~~7/31~~ 7/31
G102	-165	7/24			7/25	7/31	7/25	7/31
G103	-166				—	—	~~7/25~~	—
G104	-167				7/25	7/31	7/25	7/31
G105	-168				7/25	7/31	7/25	7/31
NBIKTB	-169				—	—	—	—
X201	-158	7/24		7/29	7/25	7/31	7/30	8/8
X202	-159				7/25	8/1	7/30	8/8
X203	-160				7/25	8/1	7/30	8/8
X204	-161				—	—	—	—
X205	-162				7/25	8/1	7/30	8/8
X206	-163				7/25	8/1	7/30	8/8

List below all samples (by sample number and fraction) qualified due to holding times.

Data Validation Checklist
Site Name: Grand City Stl
SDG No.: 609155
Laboratory: CSPA
Page 3 of _____

II. GC/MS Instrument Performance Check

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Forms V and Raw Data***

YES	NO	
a. [✓]	[ ]	Check that Forms V are present and completed for each 12 hour time period.
b. [✓]	[ ]	Check for transcription errors between raw data and Forms V.
c. [✓]	[ ]	Check that the appropriate number of significant figures has been reported and that rounding errors have not occurred.
d. [✓]	[ ]	Check for calculation errors.

2. ***Verify Raw Data Format***

YES	NO	
[✓]	[ ]	Check mass spectral listing to determine that the mass assignment is correct and that the mass listing is normalize to the specified ion (m/z 95 for VOA, m/z 198 for SemiVOA).

3. ***Verify Ion Abundance Criteria***

YES	NO	
[✓]	[ ]	Check that all ion abundance criteria has been met.

4. ***Verify Background Correction***

YES	NO	
[✓]	[ ]	Check that tuning compound spectra were generated using appropriate background correction.

Comments:

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609158
Laboratory: EPA
Page 4 of _____

III. Initial Calibration

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Verify that the Correct Standard Concentrations Were Used.***

   YES NO
   [✓] [ ] Check the Forms VI and the raw data to verify that the correct standard concentrations were used to calibrate the GC/MS instrument(s).

2. ***Verify that the Correct Initial Calibration was Used for Water and Low Level Soils.***

   YES NO N/A
   [✓] [ ] [ ] Check that initial calibrations were performed as required for water/med. level soil and low level soil.

3. ***Verify Use of Correct Standards.***

   YES NO N/A
   [✓] [ ] [ ] Check that the correct standard was used for quantitation of samples, if samples were analyzed immediately subsequent to initial calibration.

4. ***Evaluate Initial Calibration RRFs and mean RRFs.***

   YES NO
   a. [✓] [ ] Check and recalculate the RRFs and mean RRFs for several target compounds (at least one associated with each internal standard).

   b. [✓] [ ] Check that, for all target compounds and surrogates, the mean RRFs meet the applicable criteria. Note any "outliers" on the Calibration Outliers Form.

5. ***Evaluate Initial Calibration %RSDs.***

   YES NO
   a. [✓] [ ] Check and recalculate the *%RSD* for several target compounds.

   b. [✓] [ ] Check that the applicable *%RSD* criteria have been met. Note any "outliers" on the Calibration Outliers Form.

Comments:
See Outliers Form.

Data Validation Checklist
Site Name: Cornwite Gates
SDG No.: 609158
Laboratory: IERA
Page 5 of _____

IV. Continuing Calibration

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. *Verify Continuing Calibration Frequency.*

YES NO

a. [✓] [ ] Check the continuing calibration raw data and Forms VII to verify that continuing calibration standards were analyzed at the proper frequency and that each continuing calibration was compared to the appropriate initial calibration.

2. *Evaluate Continuing Calibration RRFs.*

YES NO

a. [✓] [ ] Check and recalculate the continuing calibration *RRFs* for several compounds.

b. [✓] [ ] Check that all target compound and surrogate *RRFs* meet the criteria.

3. *Evaluate Continuing Calibration %Ds.*

YES NO

a. [✓] [ ] Check and recalculate the continuing calibration *%Ds* for several compounds.

b. [✓] [ ] Check that all target compound and surrogate *%Ds* meet the applicable criteria.

Comments:

See outlier Form

VOLATILE CALIBRATION OUTLIERS

3/90 SOW

Lab Name: _____ Case: Grant Cty. St.

Instrument # XL2 DATE/TIME: Water	Minimum RRF	Initial Cal. 7/19/96 RF	%RSD	Q	Contin. Cal. 7/26 RF	%RSD	Q	Contin. Cal. RF	%RSD	Q	Contin. Cal. RF	%RSD	Q	Contin. Cal. RF	%RSD	Q
Chloromethane	0.010															
Bromomethane	0.100															
Vinyl Chloride	0.100															
Chloroethane	0.010															
Methylene Chloride	0.010															
Acetone	0.010					-39.5										
Carbon Disulfide	0.010															
1,1-Dichloroethene	0.100															
1,1-Dichloroethane	0.200															
1,2-Dichloroethene (total)	0.010															
Chloroform	0.200															
1,2-Dichloroethane	0.100															
2-Butanone	0.010															
1,1,1-Trichloroethane	0.100															
Carbon Tetrachloride	0.100															
Bromodichloromethane	0.200															
1,2-Dichloropropane	0.010															
cis-1,3-Dichloropropene	0.200															
Trichloroethene	0.200															
Dibromochloromethane	0.100															
1,1,2-Trichloroethane	0.100															
Benzene	0.500															
trans-1,3-Dichloropropene	0.100															
Bromoform	0.100															
4-Methyl-2-Pentanone	0.010															
2-Hexanone	0.010															
Tetrachloroethene	0.200															
1,1,2,2-Tetrachloroethane	0.500															
Toluene	0.400															
Chlorobenzene	0.500															
Ethylbenzene	0.100															
Styrene	0.300															
Xylene (total)	0.300															
Bromofluorobenzene	0.300															

Voids

AFFECTED SAMPLES:

VBLKTB			
G101			
G102			
G103			
G104			
G105			
G102MS			
G102MSD			

Reviewer's Initials/Date

3/92

Q - This column of flags should be applied to the analytes on the sample data sheets.

PAGE __ OF __

VOLATILE CALIBRATION OUTLIERS

3/90 SCW

Lab Name: _____ Case: Grand Cal

Instrument # XL2 DATE/TIME Soils	Minimum RRF	Initial Cal. 7/22/96			Contin. Cal. 7/29/96			Contin. Cal.			Contin. Cal.			Contin. Cal.		
		RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
Chloromethane	0.010															
Bromomethane	0.100															
Vinyl Chloride	0.100															
Chloroethane	0.010															
Methylene Chloride	0.010															
Acetone	0.010															
Carbon Disulfide	0.010															
1,1-Dichloroethene	0.100															
1,1-Dichloroethane	0.200															
1,2-Dichloroethene (total)	0.010															
Chloroform	0.200															
1,2-Dichloroethane	0.100															
2-Butanone	0.010															
1,1,1-Trichloroethane	0.100															
Carbon Tetrachloride	0.100															
Bromodichloromethane	0.200															
1,2-Dichloropropane	0.010															
cis-1,3-Dichloropropene	0.200															
Trichloroethene	0.300															
Dibromochloromethane	0.100															
1,1,2-Trichloroethane	0.100															
Benzene	0.500															
trans-1,3-Dichloropropene	0.100															
Bromoform	0.100															
4-Methyl-2-Pentanone	0.010															
2-Hexanone	0.010															
Tetrachloroethene	0.200															
1,1,2,2-Tetrachloroethane	0.500															
Toluene	0.400															
Chlorobenzene	0.500															
Ethylbenzene	0.100															
Styrene	0.300															
Xylene(total)	0.300															
Bromofluorobenzene	0.300															

AFFECTED SAMPLES:

	VBLKS1			
	X201			
	X202			
	X203			
	X204			
	X205			
	X206			
	X201MS			
	X201MSD			

Reviewer's Initials/Date

3/92

C - This column of flags should be applied to the analytes on the sample data sheets.

Data Validation Checklist
Site Name: Granite City Site
SDG No.: 609158
Laboratory: IEPA
Page 9 of _____

V. Blanks

Fraction: (VOA) SemiVOA Pest. *(circle one)*

1. ***Review Blank Results.***

YES NO
[✓] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. ***Verify Blank Frequency.***

YES NO
[✓] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	VBLKW	VBLKSL	VBLKTB	
Date Anal. or Extr.	7/26/96	7/29/96	7/26/96	
Instrument	XL2	XL2	XL2	

TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount

TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609158
Laboratory: IEPA
Page 9 of _____

VI. Surrogate Spikes

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. Review Raw Data.

YES NO
[✓] [ ] Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. Evaluate Surrogate Recovery Calculations.

YES NO
[✓] [ ] Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3 Evaluate Surrogate Recoveries.

YES NO
a. [✓] [ ] Check that reanalyses were performed as required.

b. [✓] [ ] Check that surrogate recoveries in blanks met criteria.

4. Evaluate Reanalyses.

YES NO
[✓] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the internal standard area response criteria. List below the results of the reviewers determinations.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory:
Page 10 of

VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: VOA SemiVOA Pesticide (*circle one*)

1. *Verify Frequency*

YES NO
[ ] [ ] Check that MS and MSD samples were analyzed at the correct frequency.

2. *Evaluate MS/MSD Criteria.*

YES NO
[ ] [ ] Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. *Verify MS/MSD Calculations.*

YES NO
a. [ ] [ ] Check raw data and verify that results are calculated correctly and are free from transcription errors.

b. [ ] [ ] Check that *%Rs* and *RPDs* were calculated correctly.

4. *Evaluate Sample Precision.*

YES NO
[ ] [ ] Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

Compound	Orig. Result	MS Result	MSD Result	%RSD

Comments:
G102 1,1-Dichloroethene MS & MSD Rec. high.
X201 1,1-Dichloroethene MS & MSD Rec. high

Data Validation Checklist
Site Name: Covanta City
SDG No.: 609158
Laboratory:
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VIII. Laboratory Control Samples

N/A

IX. Project Specific QA/QC

Evaluation Procedures must follow the project QAPjP.

Data Validation Checklist
Site Name: Coconut Creek Site
SDG No.: 609158
Laboratory: EFPN
Page 12 of _____

X. Internal Standards

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Raw Data.***

YES NO
[✓] [ ] Check raw data and verify that the internal standard retention times and areas reported on the Forms VIII are correct.

2. ***Verify RT and IS Area Criteria.***

YES NO
[✓] [ ] Check that retention times and internal standard area meet the appropriate criteria.

3. ***Evaluate Reanalyses.***

YES NO
[✓] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the surrogate spike recovery criteria. List the results of the reviewers determinations in Section VI., Surrogate Spikes.

Comments:

Data Validation Checklist
Site Name: Granite City Site
SDG No.: 609158
Laboratory: _____
Page 13 of _____

XI. Target Compound Identification

GC/MS

Fraction: (VOA) SemiVOA (*circle one*)

1. ***Verify Relative Retention Time (RRT) Criteria.***

   YES NO
   [✓] [ ] Check that the RRT of reported compounds is within the criteria.

2. ***Evaluate Target Compound Spectra.***

   YES NO
   [✓] [ ] Check the sample target compound spectra against the laboratory standard spectra; verify that the specified criteria are met.

3. ***Evaluate Possible Carryover.***

   YES NO
   [✓] [ ] Check the raw data of the samples as related to the samples analyzed previously to verify that sample carryover has not adversely affected results.

4. ***Evaluate Chromatograms.***

   YES NO
   [✓] [ ] Check the sample chromatograms to verify that peaks are accounted for.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory:
Page 14 of

XII. Compound Quantitation and Reported CRQLs

Fraction: (VOA) SemiVOA Pesticide (*circle one*)

1. ***Evaluate Quantitation of Sample Results.***

YES NO
[✓] [ ] Check raw data to verify calculation of sample results.

2. ***Evaluate Quantitation Parameters.***

YES NO N/A
[✓] [ ] [ ] For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. ***Evaluate CRQLs.***

YES NO
[✓] [ ] Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments:

Data Validation Checklist
Site Name: Grants Gate
SDG No.: 609158
Laboratory: _____
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XIII. Tentatively Identified Compounds

GC/MS Only

Fraction: VOA SemiVOA *(circle one)*

1. ***Evaluate Tentative Identifications.***

YES NO
[ ] [ ] Check that all TICs reported meet the identification guidelines.

2. ***Evaluate Raw Data.***

YES NO
[ ] [ ] Check raw data to verify that the laboratory has generated a library search for all required peaks in the chromatograms for samples and blanks.

3. ***Evaluate Blanks.***

YES NO
[ ] [ ] Check blank sample chromatograms to verify that TIC peaks present in samples are not found in blanks.

4. ***Examine Mass Spectra.***

YES NO
[ ] [ ] Check all mass spectra for every sample.

5. ***Evaluate TIC Identifications.***

YES NO
[ ] [ ] Since TIC library searches often yield several candidate compounds, all reasonable choices must be considered.

6. ***Evaluate Laboratory Artifacts and Contaminants.***

YES NO
[ ] [ ] Check sample results and raw data to verify that common laboratory artifacts and contaminants are not reported as sample contaminants.

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609158
Laboratory: _____
Page 16 of _____

XIII. TICs continued

7. *Evaluate Possibility of False Negatives.*

	YES	NO	N/A	
a	[ ]	[ ]	[ ]	Check to determine if target compounds have been identified and quantitated as TICs.
b	[ ]	[ ]	[ ]	If target compounds have been identified and quantitated as TICs, check to determine whether the false negative is an isolated occurrence or whether additional data may be affected. Comment on all such false negatives below.

8. *Determine That Results Are From Proper Fraction.*

YES	NO	N/A	
[ ]	[ ]	[ ]	Target compounds could be identified in more than one fraction; if this occurs, check that quantitation is from the proper fraction.

9. *Verify that internal standards and surrogates are not searched.*

YES	NO	
[ ]	[ ]	Check that library searches were not performed on internal standards or surrogates.

10. *Verify Estimated Quantitation of TICs.*

YES	NO	
[ ]	[ ]	Check that the estimated concentration of the TICs was made using an assumed *RRF* of one.

Comments:

Data Validation Checklist
Site Name: Coramity City Site
SDG No.: 609158
Laboratory: _____
Page 17 of _____

XIV. GC/MS System Performance

Fraction: VOA SemiVOA (*circle one*)

1. Evaluate Overall System Performance.

	YES	NO	
a.	[ ]	[ ]	Check for high RIC background levels or shifts in absolute retention times of internal standards.
b.	[ ]	[ ]	Check for excessive baseline rise at elevated temperature.
c.	[ ]	[ ]	Check for extraneous peaks.
d.	[ ]	[ ]	Check for loss of resolution.
e.	[ ]	[ ]	Check for peak tailing or peak splitting that may result in inaccurate quantitation.

Comments:

Case : Granite City Steel

VOA SV PEST 1 of 100

Water sample surrogate %R

Sample # (and column # for PEST) : G101
Surrogate : TOL d8
Concentration added (ug/L) : 50
Calculated %R : 97
Reported %R : 97

(141500)(250)(1) / (121575)(1.203)(5) = ~~41.8~~ 48.37

48.4 / 50.0 x 100 = 97

Comment :

Soil sample surrogate %R

Sample # (and column # for PEST) : X202
Surrogate : BFB
Concentration added (ug/Kg) : 217
Calculated %R : 96
Reported %R : 96

(56737)(250) / (77774)(0.763)(5)(.23) = 208

~~100~~ added 50/.23 = 217

208 / 217 x 100 96

Comment :

Water sample MS/MSD

Sample # (and column # for PEST) : G102MS
Compound : Benzene
Calculated concentration (ug/L) : 57.8
Reported concentration : 57.8
%R calculated correctly? yes

(91167)(250)(1) / (110156)(.716)(5) = 57.8

Comment :

Soil sample MS/MSD

Sample # (and column # for PEST) : X201MS
Compound : Toluene
Calculated concentration (ug/Kg) : 254
Reported concentration : 254
%R calculated correctly? yes

(75223)(250) / (73715)(1.005)(5)(0.2) = 254

Comment :

Data Validation Checklist
Site Name: Coramito City Sub
SDG No.: 609158
Laboratory: ISPN
Page 19 of _____

II. GC/MS Instrument Performance Check

Fraction: VOA SemiVOA *(circle one)*

1. *Evaluate Forms V and Raw Data*

YES	NO	
a. [✓]	[ ]	Check that Forms V are present and completed for each 12 hour time period.
b. [✓]	[ ]	Check for transcription errors between raw data and Forms V.
c. [✓]	[ ]	Check that the appropriate number of significant figures has been reported and that rounding errors have not occurred.
d. [✓]	[ ]	Check for calculation errors.

2. *Verify Raw Data Format*

YES	NO	
[✓]	[ ]	Check mass spectral listing to determine that the mass assignment is correct and that the mass listing is normalize to the specified ion (m/z 95 for VOA, m/z 198 for SemiVOA).

3. *Verify Ion Abundance Criteria*

YES	NO	
[✓]	[ ]	Check that all ion abundance criteria has been met.

4. *Verify Background Correction*

YES	NO	
[✓]	[ ]	Check that tuning compound spectra were generated using appropriate background correction.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory: _____
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III. Initial Calibration

GC/MS

Fraction: VOA SemiVOA (circle one)

1. *Verify that the Correct Standard Concentrations Were Used.*

YES NO
[✓] [ ] Check the Forms VI and the raw data to verify that the correct standard concentrations were used to calibrate the GC/MS instrument(s).

2. *Verify that the Correct Initial Calibration was Used for Water and Low Level Soils.*

YES NO N/A
[✓] [ ] [ ] Check that initial calibrations were performed as required for water/med. level soil and low level soil.

3. *Verify Use of Correct Standards.*

YES NO N/A
[✓] [ ] [ ] Check that the correct standard was used for quantitation of samples, if samples were analyzed immediately subsequent to initial calibration.

4. *Evaluate Initial Calibration RRFs and mean RRFs.*

YES NO
a. [✓] [ ] Check and recalculate the RRFs and mean RRFs for several target compounds (at least one associated with each internal standard).

b. [✓] [ ] Check that, for all target compounds and surrogates, the mean RRFs meet the applicable criteria. Note any "outliers" on the Calibration Outliers Form.

5. *Evaluate Initial Calibration %RSDs.*

YES NO
a. [✓] [ ] Check and recalculate the *%RSD* for several target compounds.

b. [✓] [ ] Check that the applicable *%RSD* criteria have been met. Note any "outliers" on the Calibration Outliers Form.

Comments:
See Outliers Form

Data Validation Checklist
Site Name: Ceramic City
SDG No.: 609158
Laboratory: _____
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IV. Continuing Calibration

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. Verify Continuing Calibration Frequency.

YES NO

a. [✓] [ ] Check the continuing calibration raw data and Forms VII to verify that continuing calibration standards were analyzed at the proper frequency and that each continuing calibration was compared to the appropriate initial calibration.

2. Evaluate Continuing Calibration RRFs.

YES NO

a. [✓] [ ] Check and recalculate the continuing calibration *RRFs* for several compounds.

b. [✓] [ ] Check that all target compound and surrogate *RRFs* meet the criteria.

3. Evaluate Continuing Calibration %Ds.

YES NO

a. [✓] [ ] Check and recalculate the continuing calibration *%Ds* for several compounds.

b. [✓] [ ] Check that all target compound and surrogate *%Ds* meet the applicable criteria.

Comments: See Outlier Form

SEMIVOLATILE CALIBRATION OUTLIERS
Page 2

at Name: _____ Case: _____

nstrument #	Minimum	Initial Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.			Contin. Cal.		
A ETIME.	RRF	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q	RF	%RSD	Q
		7/31/96			8/1/96											
...ylphthalate	0.010															
-Chlorophenyl-phenylether	0.400															
...rene	0.900															
-N...ophiline	0.010					25.8										
6-Dinitro-2-methylphenol	0.010															
-Nitrosodiphenylamine (1)	0.010															
-B...mophenyl-ethylether	0.100															
e...chlorobenzene	0.100															
entachlorophenol	0.050															
henanthrene	0.700															
...racene	0.700															
a...azole	0.010															
...-butylphthalate	0.010															
...ranthene	0.600															
...e	0.600															
...lbenzylphthalate	0.010															
3'-Dichlorobenzidine	0.010		40.6													
e...o(a)anthracene	0.800															
...sene	0.700															
s(2-Ethylhexyl)phthalate	0.010															
...-n-octylphthalate	0.010															
e...o(b)fluoranthene	0.700															
e...o(k)fluoranthene	0.700															
enzo(a)pyrene	0.700															
...dno(1,2,3-cd)pyrene	0.500															
...z(a,h)anthracene	0.400															
e...zo(g,h,i)perylene	0.500															
...trobenzene-d5	0.200															
...oropiphenol	0.700															
e...enyl-d14	0.500															
henol-d6	0.800															
...orophenol	0.600															
...orophenol-d4	0.800															
2 ...ichlorobenzene-d4	0.400															

3/92

- ...his column of flags should be applied to the analytes on the sample data sheets.

E PAGE 1 FOR AFFECTED SAMPLES

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory: ISPA
Page 23 of _____

V. Blanks

Fraction: VOA SemiVOA Pest. (*circle one*)

1. ***Review Blank Results.***

YES NO
[✓] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. ***Verify Blank Frequency.***

YES NO
[✓] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	SBLKW	SBLKSC		
Date Anal. or Extr.	7/31/96	8/1/96		
Instrument	YL	YL		

TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount
		Diethyl phthalate	210				
		Di-n-butyl phthalate	690				

TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount
		2 Pentanone 4-Hydroxy 4-methyl	5300				

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609158
Laboratory: _____
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VI. Surrogate Spikes

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. *Review Raw Data.*

YES NO
[X] [ ] Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. *Evaluate Surrogate Recovery Calculations.*

YES NO
[X] [ ] Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3 *Evaluate Surrogate Recoveries.*

YES NO
a. [X] [ ] Check that reanalyses were performed as required.

b. [X] [ ] Check that surrogate recoveries in blanks met criteria.

4. *Evaluate Reanalyses.*

YES NO
[X] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the internal standard area response criteria. List below the results of the reviewers determinations.

Comments:
6103MSD NBZ Rec high
V201 FBP Rec high
V202 " " "
V203 " " "
V201MS NBZ Rec high
V201MSD NBZ & FBP Rec high

Data Validation Checklist
Site Name: Coremite City
SDG No.: 609156
Laboratory: _____
Page 25 of _____

VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: VOA SemiVOA Pesticide (*circle one*)

1. *Verify Frequency*

YES NO
[✓] [ ] Check that MS and MSD samples were analyzed at the correct frequency.

2. *Evaluate MS/MSD Criteria.*

YES NO
[✓] [ ] Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. *Verify MS/MSD Calculations.*

YES NO
a. [✓] [ ] Check raw data and verify that results are calculated correctly and are free from transcription errors.

b. [✓] [ ] Check that *%Rs* and *RPDs* were calculated correctly.

4. *Evaluate Sample Precision.*

YES NO
[✓] [ ] Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

Compound	Orig. Result	MS Result	MSD Result	%RSD

Comments:
C6103 MS & MSD 4-Nitrophenol & Pentachlorophenol Rec high
X201 MS Pentachlorophenol Rec high
X201 MSD 1,2,4-Trichlorobenzene, 4-Nitrophenol, 2,4-Dinitrotoluene & Pentachlorophenol %R's high

Data Validation Checklist
Site Name: Granite City
SDG No.: 609159
Laboratory:
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VIII. Laboratory Control Samples

N/A

IX. Project Specific QA/QC

Evaluation Procedures must follow the project QAPjP.

Data Validation Checklist
Site Name: Granite City Site
SDG No.: 609158
Laboratory:
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X. Internal Standards

GC/MS

Fraction: VOA SemiVOA (*circle one*)

1. *Evaluate Raw Data.*

YES NO
[ ] [ ] Check raw data and verify that the internal standard retention times and areas reported on the Forms VIII are correct.

2. *Verify RT and IS Area Criteria.*

YES NO
[ ] [ ] Check that retention times and internal standard area meet the appropriate criteria.

3. *Evaluate Reanalyses.*

YES NO
[ ] [ ] Whenever there are two or more analyses for a particular sample, determine which are the best analyses to use. This determination must be performed in conjunction with the evaluation of the surrogate spike recovery criteria. List the results of the reviewers determinations in Section VI., Surrogate Spikes.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory: EPA
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XI. Target Compound Identification

GC/MS

Fraction: VOA SemiVOA (circle one)

1. *Verify Relative Retention Time (RRT) Criteria.*

   YES NO
   [X] [ ] Check that the RRT of reported compounds is within the criteria.

2. *Evaluate Target Compound Spectra.*

   YES NO
   [X] [ ] Check the sample target compound spectra against the laboratory standard spectra; verify that the specified criteria are met.

3. *Evaluate Possible Carryover.*

   YES NO
   [X] [ ] Check the raw data of the samples as related to the samples analyzed previously to verify that sample carryover has not adversely affected results.

4. *Evaluate Chromatograms.*

   YES NO
   [X] [ ] Check the sample chromatograms to verify that peaks are accounted for.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: L09158
Laboratory: _____
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XII. Compound Quantitation and Reported CRQLs

Fraction: VOA ~~SemiVOA~~ Pesticide *(circle one)*

1. *Evaluate Quantitation of Sample Results.*

YES NO
[X] [ ] Check raw data to verify calculation of sample results.

2. *Evaluate Quantitation Parameters.*

YES NO N/A
[X] [ ] [ ] For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. *Evaluate CRQLs.*

YES NO
[X] [ ] Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory: IEPA
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XIII. Tentatively Identified Compounds

GC/MS Only

Fraction: VOA SemiVOA (*circle one*)

1. ***Evaluate Tentative Identifications.***

   YES NO
   [X] [ ] Check that all TICs reported meet the identification guidelines.

2. ***Evaluate Raw Data.***

   YES NO
   [X] [ ] Check raw data to verify that the laboratory has generated a library search for all required peaks in the chromatograms for samples and blanks.

3. ***Evaluate Blanks.***

   YES NO
   [X] [ ] Check blank sample chromatograms to verify that TIC peaks present in samples are not found in blanks.

4. ***Examine Mass Spectra.***

   YES NO
   [X] [ ] Check all mass spectra for every sample.

5. ***Evaluate TIC Identifications.***

   YES NO
   [X] [ ] Since TIC library searches often yield several candidate compounds, all reasonable choices must be considered.

6. ***Evaluate Laboratory Artifacts and Contaminants.***

   YES NO
   [X] [ ] Check sample results and raw data to verify that common laboratory artifacts and contaminants are not reported as sample contaminants.

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory:
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XIII. TICs continued

7. *Evaluate Possibility of False Negatives.*

	YES	NO	N/A	
a.	[✓]	[ ]	[ ]	Check to determine if target compounds have been identified and quantitated as TICs.
b.	[✓]	[ ]	[ ]	If target compounds have been identified and quantitated as TICs, check to determine whether the false negative is an isolated occurrence or whether additional data may be affected. Comment on all such false negatives below.

8. *Determine That Results Are From Proper Fraction.*

YES	NO	N/A	
[✓]	[ ]	[ ]	Target compounds could be identified in more than one fraction; if this occurs, check that quantitation is from the proper fraction.

9. *Verify that internal standards and surrogates are not searched.*

YES	NO	
[✓]	[ ]	Check that library searches were not performed on internal standards or surrogates.

10. *Verify Estimated Quantitation of TICs.*

YES	NO	
[✓]	[ ]	Check that the estimated concentration of the TICs was made using an assumed *RRF* of one.

Comments:

Data Validation Checklist
Site Name: Granite Pits
SDG No.: 609158
Laboratory: ESPA
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XIV. GC/MS System Performance

Fraction: VOA SemiVOA *(circle one)*

1. Evaluate Overall System Performance.

	YES	NO	
a.	[✓]	[ ]	Check for high RIC background levels or shifts in absolute retention times of internal standards.
b.	[✓]	[ ]	Check for excessive baseline rise at elevated temperature.
c.	[✓]	[ ]	Check for extraneous peaks.
d.	[✓]	[ ]	Check for loss of resolution.
e.	[✓]	[ ]	Check for peak tailing or peak splitting that may result in inaccurate quantitation.

Comments:

Case : Granite City Steel VOA (SV) PEST

Water sample surrogate %R

Sample # (and column # for PEST) : ~~X201~~ G101
Surrogate : NB2
Concentration added (ug/L) : 50.0
Calculated %R : 95
Reported %R : 95

(121836)(40)(1000)(1) / (199140)(.343)(1000)(2) = 47.6

47.6/50 x 100 = 95%

Comment :

Soil sample surrogate %R

Sample # (and column # for PEST) : X201
Surrogate : TPH
Concentration added (ug/Kg) : 8306
Calculated %R : 94
Reported %R : 94

(206430)(40)(500)(1)(2) / (57464)(1.531)(2)(30.1)(.2) = 779

(100)(.5)(1000) / (30.1)(.2) = 8306

7795/8306 x 100 = 94

Comment :

Water sample MS/MSD

Sample # (and column # for PEST) : G103 MS
Compound : Phenol
Calculated concentration (ug/L) : 46.5
Reported concentration : 46.5
%R calculated correctly? yes

(150834)(40)(1000)(1) / (43006)(1.509)(1000)(2) = 46.5

Comment :

Soil sample MS/MSD

Sample # (and column # for PEST) : X201MS
Compound : 2-Chlorophenol
Calculated concentration (ug/Kg) : 7993
Reported concentration : 7985
%R calculated correctly? yes

(152155)(40)(500)(1)(2) / (64598)(0.979)(2)(30.1)(.2) = 7993

Comment : OK

Data Validation Checklist
Site Name: Commerce City Soils
SDG No.: 609158
Laboratory: LEPA
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II. Pesticide Instrument Performance Check

1. Resolution Check Mixture

YES NO

a. [X] [ ] Check the Form VIII PEST. to determine that the resolution check mixture(s) was analyzed in the proper sequence.

b. [ ] [ ] Check the resolution check mixture data and the Form VI PEST.-4 to verify that the resolution criterion was met.

2. Performance Evaluation Mixture

YES NO

a. [ ] [ ] Check the Form VII PEST. to determine that the PEM(s) was analyzed at the proper frequency and position in the initial calibration sequence.

b. [ ] [ ] Check the PEM data from the initial and continuing calibrations to verify that the resolution criterion was met.

c. [ ] [ ] Check the PEM data from the initial and continuing calibrations and Form VII PEST.-1 to verify that the retention times are within the retention time windows.

d. [ ] [ ] Check that the *RPDs* meet the criterion.

e. [ ] [ ] Check that the breakdowns for 4,4'-DDT and Endrin meet the criteria.

Comments:

Data Validation Checklist
Site Name: Granite City Stl
SDG No.:
Laboratory: IEPA
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III. Initial Calibration
PESTICIDES

1. *Individual Standard Mixtures.*

	YES	NO	
a.	[✓]	[ ]	Check the Form VIII PEST to verify that the Individual Standard Mixtures were analyzed at the proper frequency for each GC column and instrument. Check that the proper concentrations were used.
b.	[✓]	[ ]	Check the raw data to determine that the midpoint standard is at the proper concentration and verify that the resolution criterion has been met for each midpoint concentration standard.
c.	[✓]	[ ]	Check the Individual Standard Mixture data and Form VI PEST.-1 and review the calculated retention time windows for calculation and transcription errors.
d.	[✓]	[ ]	Check the Individual Standard Mixture data and Form VI PEST.-2 to verify that the *%RSDs* for the calibration factors meet the criterion. Check and recalculate several *%RSDs* for errors.

2. *Multi Component Compounds.*

a.	[✓]	[ ]	Check the raw data and the Form VIII PEST. to verify that the Multi-component Standards were analyzed at the proper concentration and frequency for each GC column and instrument.
b.	[✓]	[ ]	Check the raw data and Form VI PEST.-3 to verify that at least three peaks were used for calibration and that retention time and calibration factor data are available for each peak.

Comments:

Data Validation Checklist
Site Name: Coronado City
SDG No.: 609158
Laboratory: _____
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IV. Continuing Calibration
PESTICIDES

1. *Evaluate Continuing Calibration Standards.*

YES NO
[✓] [ ] Check the Form VIII PEST to verify that the Instrument Blanks, PEMs, and Individual Standard Mixtures were analyzed at the proper frequency and that no more than 12:00 hours elapsed between calibration brackets in an ongoing analytical sequence.

2. *Individual Standard Mixtures Resolution.*

YES NO
[✓] [ ] Check the data for the midpoint concentration of the Individual Standard Mixtures to verify that the resolution criteria was met.

3. *Individual Standard Mixtures Retention Times*

YES NO
[✓] [ ] Check the data for each of the single component pesticides and surrogates in the midpoint concentration of the Individual Standard Mixtures to verify that the retention times are within the appropriate windows.

4. *Evaluate Continuing Calibration RPDs.*

YES NO
[✓] [ ] Check the data for the midpoint concentration of the Individual Standard Mixtures and Form VII PEST.-2 to verify that the *RPDs* between the calculated amount and the true amount for each of the pesticides and surrogates meet the criterion.

Comments:

Data Validation Checklist
Site Name: Bramb City
SDG No.: 609158
Laboratory: IEPA
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V. Blanks

Fraction: VOA SemiVOA Pest. (circle one)

1. ***Review Blank Results.***

YES NO
[✓] [ ] Check all associated blanks for the presence of TCL compounds or TICs. Note all contaminated blanks and associated samples below.

2. ***Verify Blank Frequency.***

YES NO
[✓] [ ] Check that blank analyses have been performed at the required frequency.

Blank Summary

Blank Sample No.	PBLK11	PBLK51	CPCB21101	
Date Anal. or Extr.	7/31/96	8/9	8/6	
Instrument	HP1 HP2	HP1 HP2	HP1 HP2	

TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount	TCL Comp'd	Amount
		Endrin Ketone	0.091				

TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount	TIC Comp'd	Amount

Data Validation Checklist
Site Name: Coronado City Steel
SDG No.: 609159
Laboratory: _____
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VI. Surrogate Spikes

Pesticides

1. *Review Raw Data.*

YES NO
[✓] [ ] Check raw data to verify that the recoveries on the Form II are accurate and within the limits.

2. *Evaluate Surrogate Recovery Calculations.*

YES NO
[✓] [ ] Check that the surrogate spike recoveries were calculated correctly and are free from transcription errors.

3. *Evaluate Possible Interferences.*

YES NO N/A
[✓] [ ] [ ] If surrogate spike recoveries are not acceptable, check the raw data for possible interferences which may have effected surrogate recoveries.

4. *Evaluate Retention Times.*

YES NO N/A
[✓] [ ] [ ] If retention time limits are not met, check the raw data for possible misidentification of GC peaks.

5. *Evaluate Any Low Recoveries.*

YES NO N/A
[✓] [ ] [ ] If low surrogate recoveries are observed, check whether low recoveries are due to sample dilution.

6. *Evaluate Surrogate Analyses in Blanks.*

YES NO
[✓] [ ] Check that all surrogate analysis criteria (retention time and advisory recovery criteria) were met in all blank samples.

Comments:
X203MS DCB on 608 Rec high
X203MS & MSD - DCB on 608 & 1201 Rec hig

Data Validation Checklist
Site Name: Cromite City
SDG No.: 609158
Laboratory: ESPA
Page 39 of _____

VII. Matrix Spikes/Matrix Spike Duplicates

Fraction: VOA SemiVOA (Pesticide) *(circle one)*

1. *Verify Frequency*

YES NO
[✓] [ ] Check that MS and MSD samples were analyzed at the correct frequency.

2. *Evaluate MS/MSD Criteria.*

YES NO
[✓] [ ] Check MS/MSD results for *%R* and *RPD* are within the advisory limits.

3. *Verify MS/MSD Calculations.*

YES NO
a. [✓] [ ] Check raw data and verify that results are calculated correctly and are free from transcription errors.

b. [✓] [ ] Check that *%Rs* and *RPDs* were calculated correctly.

4. *Evaluate Sample Precision.*

YES NO
[✓] [ ] Compare *%RSD* results of non-spiked compounds between the original result, MS and MSD.

Compound	Orig. Result	MS Result	MSD Result	%RSD

Comments:

Data Validation Checklist
Site Name: Granite City
SDG No.: 609156
Laboratory:
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VIII. Laboratory Control Samples

N/A

IX. Project Specific QA/QC

Evaluation Procedures must follow the project QAPjP.

Data Validation Checklist
Site Name: Granite City
SDG No.: 609158
Laboratory: _____
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X. Pesticide Cleanup Checks

1. Florisil Cartridge Check.

	YES	NO	
a.	[✓]	[ ]	Check the data from the Florisil cartridge solution analyses and the Form IX PEST.-1 and check some of the *%R* calculations; verify that there are no calculation or transcription errors.
b.	[ ]	[ ]	Check all criteria have been met.

2. Gel Permeation Chromatography.

	YES	NO	
a.	[✓]	[ ]	Check the data from the GPC calibration check analyses and the Form IX PEST.-2 and recalculate some of the *%R* results; verify that there are no calculation or transcription errors.
b.	[✓]	[ ]	Check all criteria have been met and that Arochlor patterns are similar to those of previous standards.

Comments:

Data Validation Checklist
Site Name: Granite City Site
SDG No.: 609158
Laboratory: ISPA
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XI. Target Compound Identification

Pesticides

1. *Evaluate Reported Results.*

	YES	NO	
a	[✓]	[ ]	Check the Form I PEST., the associated raw data, and Form X PEST.-1 and Form X PEST.-2 to confirm reported detected analytes.
b.	[✓]	[ ]	Check the Form I PEST., the associated raw data, and Form X PEST.-1 and Form X PEST.-2 to confirm reported non-detects.
c.	[ ]	[ ]	Check the associated blank data for potential interferences to evaluate sample data for false positives.
d.	[ ]	[ ]	Check the calibration data for adequate retention time windows to evaluate the sample data for false positives and false negatives.

2. *Evaluate Multi-Component Analyte Results.*

YES	NO	
[✓]	[ ]	Compare the retention times and relative peak height ratios of major multi-component analyte peaks against appropriate standard chromatograms.

3. *Verify GC/MS Confirmations if Applicable.*

YES	NO	N/A	
[ ]	[ ]	[ ]	Check that GC/MS confirmation was performed for pesticide concentrations in the final sample extract which exceeded 10 ng/ul.

Comments:

Data Validation Checklist
Site Name: _____
SDG No.: 609158
Laboratory: _____
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XII. Compound Quantitation and Reported CRQLs

Fraction: VOA SemiVOA Pesticide (*circle one*)

1. ***Evaluate Quantitation of Sample Results.***

   YES NO
   [✓] [ ] Check raw data to verify calculation of sample results.

2. ***Evaluate Quantitation Parameters.***

   YES NO N/A
   [ ] [ ] [✓] For GC/MS analyses, check that the correct internal standard, quantitation ion, and *RRF* were used to quantitate results. Verify that the same internal standard, quantitation ion, and *RRF* are used throughout, in both the calibration and as well as the quantitation process.

3. ***Evaluate CRQLs.***

   YES NO
   [✓] [ ] Check that the CRQLs have been adjusted to reflect all sample dilutions, concentrations, splits, cleanup activities, and dry weight factors.

Comments:

Data Validation Checklist
Site Name: Granite City Steel
SDG No.: 609156
Laboratory:
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XV. Overall Assessment of Data

Evaluate the Overall Quality of the Data.

YES	NO	
[✓]	[ ]	Evaluate any technical problems which have not been previously addressed.
[✓]	[ ]	Review all available materials to assess the overall quality of the dada, keeping in mind the additive nature of analytical problems.
[ ]	[ ]	If appropriate information is available, assess the usability of the data to assist the data user in avoiding inappropriate use of the data. Review all available information, including the QAPjP, SAP, and communications with the data user that concerns the intended use of the data.

Provide a brief narrative to give the data user an indication of the analytical limitations of the data. Include any details from the above checks. Any inconsistency of the data with the Case Narrative should be noted. If sufficient information is available, the reviewer should give an assessment of the usability of the data within the given context.

The data are valid as qualified

Case : _____ VOA SV PEST

Water sample TCL

Sample # (and column # for PEST) : 6102(608)
Compound : 4,4-DDT
Calculated concentration (ug/L) : .0048
Reported concentration : .0049

(934)(10000)(1) / (1960000)(1000)(1) = 0.0048

Comment : _____

Soil sample TCL

Sample # (and column # for PEST) : x201 (1701)
Compound : Endosulfan II
Calculated concentration (ug/Kg) : .779
Reported concentration : .779

(1178)(5000)(1)(2) / (2510000)(1)(30.1)(1.2) = .779

Comment : _____

Multicomponent analyte (PEST only)

Sample and column # : x205 (1701)
Compound : Aroclor 1260
Calculated concentration : 17
Reported concentration : 17

(1) (3356)(5000)(1)(2) / (261000)(1)(30)(.26) = 16.5

(2) (4149)(5000)(1)(2) / (298000)(1)(30)(.26) = 17.8 $\bar{X} = 17$

(5) (3425)(5000)(1)(2) / (271000)(1)(30)(.26) = 16.2

Comment : _____

TICs

Water sample # : _____
TIC # : _____
Calculated concentration (ug/L) : _____
Reported concentration : _____

N/A

Comment : _____

Soil sample # : _____
TIC # : _____
Calculated concentration (ug/Kg) : _____
Reported concentration : _____

N/A

Comment : _____

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Date: 1/13/97

Subject: Review/Validation of CLP Data

From: Jim Shaw
Contract Laboratories Administrator
Division of Laboratories

To: Data User Bruce Everetts

The Quality Assurance Section has reviewed the following data package(s):

SITE NAME: Granite City Steel CASE/SDG No: 609158 151

Date(s) Received for Review: 26-Aug-96 27-Aug-96 No. Of Samples: 12

Laboratory: IEPA Hours for Review: 37.5 + 15 = 52.5

Reviewer(s): Chris Bridges

The following narrative represents our findings:

The data is valid as qualified on the forms.

- ☐ Data are acceptable for use.
- ☒ Data are acceptable for use with qualifications noted above.
- ☐ Data are preliminary - pending verification by laboratory.
- ☐ Data are acceptable.

cc: Tom Crause

I:\WPWIN\WPFIL\PAS197\SUMMARY.WPD

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

Memorandum

Date: January 13, 1997

To: Bruce Everetts

From: Chris Bridges

Re: Data validation on Granite City Steel

Data validation has been completed for the above referenced site. Below is a list of the compounds or analytes which were qualified in each sample, the reasons they were qualified, and the resulting bias for the compound or analyte. Also attached are the organic and inorganic sample results (Forms 1) and the organic and inorganic data validation checklist.. If you have any questions please free to call me at 4-3873.

Organic Qualifiers and Resulting Bias

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
G101	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Phenol Di-n-butylphthalate beta-BHC delta-BHC Heptachlor 4,4'-DDT Endrin Ketone	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
G102	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethylphthalate 4,4'-DDT	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
G103	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
G104	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethylphthalate bis(2-Ethylhexyl) Phthalate	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
G105	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate alpha-Chlordane	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
VBLKTB	Acetone	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
X201	4-Nitroaniline	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate 4,4- DDE Endrin Endosulfan II 4,4'-DDD 4,4'-DDT Methoxychlor Endrin Ketone Endrin Aldehyde alpha-Chlordane Aroclor 1254 Aroclor 1260	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
X202	4-Nitroaniline	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate Dieldrin Endrin Endosulfan II 4,4'-DDD 4,4'-DDT Methoxychlor Endrin Ketone Endrin Aldehyde alpha-Chlordane Aroclor 1254 Aroclor 1260	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X203	4-Nitroaniline	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate Phenanthrene Fluoranthene Pyrene Aldrin Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD 4,4'-DDT Methoxychlor Endrin Ketone alpha-Chlordane gamma-Chlordane Aroclor 1254 Aroclor 1260	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
X205	4-Nitroaniline	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate Aldrin Dieldrin 4,4'-DDE Endrin 4,4'-DDD 4,4'-DDT Endrin Ketone Endrin Aldehyde alpha-Chlordane gamma-Chlordane Aroclor 1254 Aroclor 1260	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown
X206	4-Nitroaniline	J	%D between the RRF50 and the mean RRF from the initial calibration is out of limits.	Unknown
	Diethlyphthalate Aldrin Dieldrin 4,4'-DDE 4,4'-DDD 4,4'-DDT Endrin Ketone alpha-Chlordane gamma-Chlordane Aroclor 1254 Aroclor 1260	J	The result is greater than zero but less than the CRQL and the compound meets the identification criteria.	Unknown

Inorganic Qualifiers and Resulting Bias

Sample Number	Compound	Qualifier	Reasons Qualified	Overall Bias
G101	Cyanide	J	Low matrix spike recovery.	Low
G102	Cyanide	R	Matrix spike recovery less than 30%	No Bias - Result Rejected
G103	Cyanide	R	Matrix spike recovery less than 30%	No Bias - Result Rejected
G104	Cyanide	R	Matrix spike recovery less than 30%	No Bias - Result Rejected
G105	Cyanide	R	Matrix spike recovery less than 30%	No Bias - Result Rejected
X201	Antimony Cyanide	J	Low matrix spike recovery.	Low
	Selenium	J	(1) Low matrix spike recovery. (2) Low analytical spike recovery	Low
X202	Antimony Selenium Cyanide	J	Low matrix spike recovery.	Low
X203	Antimony Cyanide	J	Low matrix spike recovery.	Low
	Selenium	J	(1) Low matrix spike recovery. (2) Low analytical spike recovery	Low
X205	Antimony Cyanide	J	Low matrix spike recovery.	Low
	Selenium	J	(1) Low matrix spike recovery. (2) Low analytical spike recovery	Low
X206	Antimony Cyanide	J	Low matrix spike recovery.	Low
	Selenium	J	(1) Low matrix spike recovery. (2) Low analytical spike recovery	Low

IEPA DIVISION OF LABORATORIES
QUALITY ASSURANCE SECTION
INORGANIC DATA VALIDATION
CHECKLIST

Site: Granite City Steel
Laboratory: IEPA
SDG: 151
Analytical Protocol: ILMO 3.0
Date: 1/13/97
Reviewer: Chris Bradford
Reviewer Signature:

I. PRELIMINARY REVIEW

Number Aqueous Samples: 5 Analytes:
Number Solid/Soil Samples: 5 Analytes:

	YES	NO	N/A
A. Chain - of - Custody(ies) Present?	X		
Signed ?	X		
Dated?			
B. Cover Page- Present?	X		
Do sample numbers agree with sample numbers on:			
a. Chain - of - Custody Forms?	X		
b. Form 1s?	X		
C. Form 1- Final Data			
Are all Form 1s present and complete?	X		
Are correct units indicated on Form 1s (ug/l-waters & mg/kg-soils)	X		
Are soil sample results corrected for percent solids (dry weight)?	X		
Are sample results < IDL reported as the IDL (U)?	X		

ACTIONS:

II. HOLDING TIMES & PRESERVATION

			YES	NO	N/A
A. Technical					
Mercury (28 Days)	pH < 2	exceeded?		X	
Cyanide (14 Days)	pH > 12	exceeded?		X	
other Metals (6months)	pH < 2	exceeded?		X	
B. Contractual Holding Times		exceeded?		X	
C. Data Package Turnaround Time		exceeded?		X	

ACTIONS:

III. CALIBRATIONS

A. Initial Calibration Procedures:

	YES	NO	N/A
Are acceptable 2 point calibrations present for ICP ?	X		
Is the CRI analyzed at the proper frequency and concentration?	X		
Are acceptable 4 point calibrations present for AA?	X		
Correlation Coefficient > 0.995?	X		
Is the CRA analyzed at the proper frequency and concentration?	X		
Are acceptable 4 point calibrations present for Cyanide?	X		
Mid-Range standard distilled?	X		
Are acceptable 4 point calibrations present for Mercury?	X		
Correlation Coefficient > 0.995?	X		
Is the CRA analyzed at the proper frequency and concentration?	X		
Are acceptable calibrations present for other parameters?	X		

ACTIONS:

B. Form 2 - Initial and Continuing Calibration Verification:

All necessary Form 2s present and complete?	X		
ICVs and CCVs analyzed at the correct frequency?	X		
Are results reported in the correct units (ug/l)?	X		
All calibration verification % Recoveries meet criteria?	X		
ICV and CCV concentrations different?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected and Qualifications)

IV. BLANKS

	YES	NO	N/A
All necessary Form 3s present and complete?	✓		
A. Initial and Continuing Calibration Blanks			
Analyzed at correct frequency?	✓		
Are results reported in the correct units (ug/l)?	✓		
Were transcription errors corrected?	✓		
All ICBs and CCBs meet no contamination criteria?	✓		

ACTIONS: (ICB or CCB/IDL) Sample(s) affected, qualifications

Water

ICB Co: (4.1/3.0) 6101, qualified (U)
ICB Cu (4.0/3.0) 6101 " "
ICB V (3.0/3.0) 6101 " "

Soil

CCB3 As: (-1.1/1.0) - No Data affected

B. Preparation Blanks

	YES	NO	N/A
Was one preparation blank prepared for:			
each 20 samples?	✓		
each batch?	✓		
each matrix type?	✓		
Were prep blanks analyzed at the correct frequency?	✓		
Were prep blanks reported in the correct concentration units?	✓		
Were all transcription errors corrected?	✓		
All prep blanks meet no contamination criteria?	✓		

ACTIONS: (Analyte, (PB/IDL), Sample(s) affected, Qualifications)

Water
Cr (3.140 / 3.0) 15.7 6101, 6102, 6103 6105 qualified "U"
Cu (3.83 / 3.0) 19.15 6101 6102, 6103 6105 " "
Zn (7.35 / 6.0) 36.9 6101 6102, 6103 6105 " "

IDL
Al (25.75 / 24) No data affected
Mn (1.35 / 1.0) " " "

V. ICP INTERFERENCE CHECK SAMPLE:

	YES	NO	N/A
Form 4 present and complete?	X		
Were ICS ran at the correct frequency?	X		
Were all transcription errors corrected?	X		
All % Recoveries of ICSAB Solution +/- 20 % of True Value?		X	
For elements not present in ICSA, is the absolute value of the ICSA result greater than the IDL?	X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

~~Water (Ag; 309%R): G101, G102, G103, G105 qualified as unusable (R)~~

Soil

VI. SPIKE SAMPLE RECOVERY:

		YES	NO	N/A
Form 5 present and complete for:	each 20 samples?	X		
	each matrix type?	X		
Were all transcription errors corrected?		X		
Were field blanks used for spike sample analysis?		X		
Were all Matrix Spike % Recoveries within criteria?		X		

ACTIONS: (Analyte, % Recovery, Sample(s) affected, Qualifications)

Water

CN⁻ 22%R G102, G103 G104, G105 qualified unusable (R)

CN 22%R G101 qualified as estimated (J)

Soil

Sb (57.1%R) X201, X202, X203 (204), X205, X206 are qualified as estimated (J)

Se (41.7%R) X201, X202, X203, X205, X206 are qualified as estimated (J)

CN⁻ (51.1%R) X201, X202, X203, X205, X206 are qualified as estimated (J)

VII. DUPLICATE SAMPLE ANALYSIS:

		YES	NO	N/A
Form 6 present and complete for:	each 20 samples?	X		
	each matrix type?	X		
Were all transcription errors corrected?		X		
Were field blanks used for duplicate analysis?		X		
For both AA and ICP when both are used for the same analyte?		X		
Were all duplicate analyses differences within criteria?		X		

ACTIONS: (Element, Differences, Sample(s) affected, Qualifications)

VIII. LABORATORY CONTROL SAMPLE:

(Note: LCS not required for aqueous Hg.)

	YES	NO	N/A
Form 7 Present and Complete?	X		
Was one LCS prepared and analyzed for:			
every 20 or fewer water samples?	X		
every digestion batch of water samples?	X		
every 20 or fewer solid samples?	X		
every digestion batch of solid samples?	X		
Were all transcription errors corrected?	X		
Were all of the Aqueous LCS % Recoveries within criteria?	X		
Were all of the Solid LCS % Recoveries within criteria?	X		

ACTIONS: (Element, % Recovery, Sample(s) affected, Qualifications)

IX. FURNACE ATOMIC ABSORPTION (AA) QC:

	YES	NO	N/A
Did the laboratory utilize duplicate injections for all non-MSAanalyses?	✓		
Does the GFAA fow chart appear to have been followed for all analyses?	✓		
Did the laboratory properly flag all GFAA results on Form 1s?	✓		

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

See results flagged W, + or E or qualified as estimated (J)

X. ICP SERIAL DILUTION:

Form 9 present and complete?	✓		
Was Serial Dilution analysis performed for:			
each 20 or fewer samples	✓		
each matrix type?	✓		
Were all transcription errors corrected?	✓		
Were all serial dilution results within criteria?	✓		
Were field blanks used for serial dilution analysis?	✓		

ACTIONS: (Analyte, Sample(s) affected, Qualifications)

XI. RAW DATA:

	YES	NO	N/A
Digestion Log for flame AA/ICP present?	X		
Digestion Log for furnace AA present?	X		
Digestion Log for mercury present?	X		
Digestion Log for cyanide present?	X		
Inventory Sheet present?	X		
Weights, dilutions, and volumes used to obtain values present?	X		
Percent solids calculation present for soils (sediments)?	X		
Are preparation dates present on Digestion Logs?	X		
Are standards preparation logs present and dated?	X		
Measurement read out records present for:			
ICP?	X		
Flame AA?	X		X
Furnace AA?	X		
Mercury?	X		
Cyanide?	X		
other Inorganics?	X		
Are all results with the ICP linear ranges?			
Are all Mercury results within the calibrated range?	X		
Are all Cyanide results within the calibrated range?	X		
Are all other inorganics within the calibrated range?	X		
Sulfate, Sulfide, _____			
Are all raw data to support all sample analyses an QC operations present?	X		
Legible?	X		
Properly labeled?	X		
Are the Instrument Detection Limits (IDLs) less than 3 months old?	X		
Are the ICP Linear Ranges less than three months old?	X		
Are the ICP Interelement correction factors less than one year old?	X		

ACTIONS:

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

SOW No.: ILM03.0

EPA Sample No.	Lab Sample ID.
G101	B613209
G101S	B613209S
G101D	B613209D
G102	B613210
G103	B613211
G104	B613212
G105	B613213
X201	B613242
X201S	B613242S
X201D	B613242D
X202	B613243
X203/X204	B613244
X205	B613245
X206	B613246

Were ICP interelement corrections applied? Yes ____

Were ICP backgrounds corrections applied? Yes ____

If yes-were raw data generated before application of background corrections? 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: Roy Frazier Name: ROY FRAZIER

Date: 8/26/96 Title: LAB MGR

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.: G101

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (water): _____ Lab Sample ID: B613209

Level (low/med): _____ Date Received: 07/26/96

Concentration Units (ug/L): _____

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26.0	U		PM
7440-36-0	Antimony	33.0	U		PM
7440-38-2	Arsenic	3.0	B		FM
7440-39-3	Barium	56.1	B		PM
7440-41-7	Beryllium	1.8	B		PM
7440-43-9	Cadmium	4.0	U		PM
7440-70-2	Calcium	116000			PM
7440-47-3	Chromium	3.2	BU		PM
7440-48-4	Cobalt	12.0	U		PM
7440-50-8	Copper	5.5	BU		PM
7439-89-6	Iron	345			PM
7439-92-1	Lead	1.0	U		FM
7439-95-4	Magnesium	26900			PM
7439-96-5	Manganese	327			PM
7439-97-6	Mercury	0.05	U		AV
7440-02-0	Nickel	18.0	U		PM
7440-09-7	Potassium	6180			PM
7782-49-2	Selenium	5.0	U		FM
7440-22-4	Silver	6.0	U		PM
7440-23-5	Sodium	6440			PM
7440-28-0	Thallium	1.0	U		FM
7440-62-2	Vanadium	3.0	U		PM
7440-66-6	Zinc	6.0	U		PM
	Cyanide	75.0			CA J
	Sulfide	1000	U		T
	Sulfate	189300			AS

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: SULFIDE SW846 METHODOLOGY
SULFATE IEPA METHODOLOGY

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
G102

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (water): _____ Lab Sample ID: B613210

Level (low/med): _____ Date Received: 07/26/96

Concentration Units (ug/L): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	134	B		PM	
7440-36-0	Antimony	33.0	U		PM	
7440-38-2	Arsenic	1.0	U		FM	
7440-39-3	Barium	116	B		PM	
7440-41-7	Beryllium	1.7	B		PM	
7440-43-9	Cadmium	4.0	U		PM	
7440-70-2	Calcium	123000			PM	
7440-47-3	Chromium	4.3	BU		PM	
7440-48-4	Cobalt	12.0	U		PM	
7440-50-8	Copper	3.3	BU		PM	
7439-89-6	Iron	533			PM	
7439-92-1	Lead	1.0	U		FM	
7439-95-4	Magnesium	26900			PM	
7439-96-5	Manganese	gm ~~42.9~~ 62.9			PM	
7439-97-6	Mercury	0.05	U		AV	
7440-02-0	Nickel	19.6	B		PM	
7440-09-7	Potassium	3800	B		PM	
7782-49-2	Selenium	1.0	U	W	FM	J
7440-22-4	Silver	6.0	U		PM	
7440-23-5	Sodium	11400			PM	
7440-28-0	Thallium	1.0	U		FM	
7440-62-2	Vanadium	3.0	U		PM	
7440-66-6	Zinc	9.2	BU		PM	
	Cyanide	10.0	U		CA	R
	Sulfide	1000	U		T	
	Sulfate	106100			AS	

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: SULFIDE SW846 METHODOLOGY
SULFATE IEPA METHODOLOGY

U.S. EPA - CLP
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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
G103

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (water): _____ Lab Sample ID: B613211

Level (low/med): _____ Date Received: 07/26/96

Concentration Units (ug/L): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	48.4	B		PM	
7440-36-0	Antimony	33.0	U		PM	
7440-38-2	Arsenic	1.0	U		FM	
7440-39-3	Barium	117	B		PM	
7440-41-7	Beryllium	1.3	B		PM	
7440-43-9	Cadmium	4.0	U		PM	
7440-70-2	Calcium	123000			PM	
7440-47-3	Chromium	3.0	~~B~~U		PM	
7440-48-4	Cobalt	12.0	U		PM	
7440-50-8	Copper	3.0	U		PM	
7439-89-6	Iron	458			PM	
7439-92-1	Lead	1.0	U		FM	
7439-95-4	Magnesium	27200			PM	
7439-96-5	Manganese	85.8			PM	
7439-97-6	Mercury	0.05	U		AV	
7440-02-0	Nickel	21.7	B		PM	
7440-09-7	Potassium	3120	B		PM	
7782-49-2	Selenium	1.0	U	W	FM	J
7440-22-4	Silver	6.0	U		PM	
7440-23-5	Sodium	11600			PM	
7440-28-0	Thallium	1.0	U		FM	
7440-62-2	Vanadium	3.0	U		PM	
7440-66-6	Zinc	6.0	U		PM	
	Cyanide	10.0	U		CA	R
	Sulfide	1000	U		T	
	Sulfate	106400			AS	

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: SULFIDE SW846 METHODOLOGY
SULFATE IEPA METHODOLOGY

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
G104

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (water): _____ Lab Sample ID: B613212

Level (low/med): _____ Date Received: 07/26/96

Concentration Units (ug/L): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum				PM	
7440-36-0	Antimony				PM	
7440-38-2	Arsenic				FM	
7440-39-3	Barium				PM	
7440-41-7	Beryllium				PM	
7440-43-9	Cadmium				PM	
7440-70-2	Calcium				PM	
7440-47-3	Chromium				PM	
7440-48-4	Cobalt				PM	
7440-50-8	Copper				PM	
7439-89-6	Iron				PM	
7439-92-1	Lead				FM	
7439-95-4	Magnesium				PM	
7439-96-5	Manganese				PM	
7439-97-6	Mercury				AV	
7440-02-0	Nickel				PM	
7440-09-7	Potassium				PM	
7782-49-2	Selenium				FM	
7440-22-4	Silver				PM	
7440-23-5	Sodium				PM	
7440-28-0	Thallium				FM	
7440-62-2	Vanadium				PM	
7440-66-6	Zinc				PM	
	Cyanide	10.0	U		CA	R
	Sulfide	1000	U		T	
	Sulfate	22600			AS	

Color Before: Clarity Before: Texture:
Color After: Clarity After: Artifacts:

Comments: SULFIDE SW846 METHODOLOGY NO METALS BOTTLE RECEIVED
SULFATE IEPA METHODOLOGY

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
6 B105
OS

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (water): _____ Lab Sample ID: B613213

Level (low/med): _____ Date Received: 07/26/96

Concentration Units (ug/L): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6390			PM	
7440-36-0	Antimony	33.0	U		PM	
7440-38-2	Arsenic	3.6	B		FM	
7440-39-3	Barium	SM ~~9.0~~ 308.	~~U~~		PM	
7440-41-7	Beryllium	1.7	B		PM	
7440-43-9	Cadmium	4.0	U		PM	
7440-70-2	Calcium	79200			PM	
7440-47-3	Chromium	8.4	BU		PM	
7440-48-4	Cobalt	12.0	U		PM	
7440-50-8	Copper	3.0	U		PM	
7439-89-6	Iron	6820			PM	
7439-92-1	Lead	3.0	B		FM	
7439-95-4	Magnesium	21300			PM	
7439-96-5	Manganese	344			PM	
7439-97-6	Mercury	0.05	U		AV	
7440-02-0	Nickel	18.0	U		PM	
7440-09-7	Potassium	3950	B		PM	
7782-49-2	Selenium	1.0	U	W	FM	J
7440-22-4	Silver	6.0	U		PM	
7440-23-5	Sodium	3780	B		PM	
7440-28-0	Thallium	1.0	U		FM	
7440-62-2	Vanadium	14.9	B		PM	
7440-66-6	Zinc	21.9	U		PM	
	Cyanide	10.0	U		CA	R
	Sulfide	1000	U		T	
	Sulfate	55400			AS	

Color Before: COLORLESS Clarity Before: CLEAR Texture:
Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: SULFIDE SW846 METHODOLOGY
SULFATE IEPA METHODOLOGY

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
X201

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (soil): _____ Lab Sample ID: B613242

Level (low/med): _____ Date Received: 07/26/96

% Solids: 22.4 D

Concentration Units (mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	17600			P	
7440-36-0	Antimony	27.3	U	N	P	J
7440-38-2	Arsenic	8.7	B		FM	
7440-39-3	Barium	241			P	
7440-41-7	Beryllium	0.91	U		P	
7440-43-9	Cadmium	5.8			P	
7440-70-2	Calcium	128000			P	
7440-47-3	Chromium	32.1			P	
7440-48-4	Cobalt	10.0	U		P	
7440-50-8	Copper	50.1			P	
7439-89-6	Iron	33400			P	
7439-92-1	Lead	241			P	
7439-95-4	Magnesium	7290			P	
7439-96-5	Manganese	1040			P	
7439-97-6	Mercury	0.11	U		AV	
7440-02-0	Nickel	29.1	B		P	
7440-09-7	Potassium	2440	B		P	
7782-49-2	Selenium	1.8	B	W,N	FM	J
7440-22-4	Silver	4.6	U		P	
7440-23-5	Sodium	581	B		P	
7440-28-0	Thallium	2.1	B		FM	
7440-62-2	Vanadium	41.2	B		P	
7440-66-6	Zinc	2860			P	
	Cyanide	2.3	U		CA	J

Color Before: BLACK Clarity Before: OPAQUE Texture: FINE
Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
X202

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (soil): _____ Lab Sample ID: B613243

Level (low/med): _____ Date Received: 07/26/96

% Solids: 23.6

Concentration Units (mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	13500			P	
7440-36-0	Antimony	21.5	U	N	P	J
7440-38-2	Arsenic	16.3			FM	
7440-39-3	Barium	203			P	
7440-41-7	Beryllium	1.0	B		P	
7440-43-9	Cadmium	2.2	B		P	
7440-70-2	Calcium	110000			P	
7440-47-3	Chromium	50.9			P	
7440-48-4	Cobalt	10.2	B		P	
7440-50-8	Copper	49.3			P	
7439-89-6	Iron	39700			P	
7439-92-1	Lead	203			P	
7439-95-4	Magnesium	6620			P	
7439-96-5	Manganese	1740			P	
7439-97-6	Mercury	0.11	B		AV	
7440-02-0	Nickel	47.5			P	
7440-09-7	Potassium	1900	B		P	
7782-49-2	Selenium	MK ~~1.3~~ 10.3		S,N	FM	J
7440-22-4	Silver	3.6	U		P	
7440-23-5	Sodium	534	B		P	
7440-28-0	Thallium	4.2	B		FM	
7440-62-2	Vanadium	41.6			P	
7440-66-6	Zinc	2270			P	
	Cyanide	2.1	U		CA	J

Color Before: BLACK Clarity Before: OPAQUE Texture: FINE
Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments: _____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
X203/X204

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (soil): _____ Lab Sample ID: B613244

Level (low/med): _____ Date Received: 07/26/96

% Solids: 25.1

Concentration Units (mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	20400			P	
7440-36-0	Antimony	21.9	U	N	P	J
7440-38-2	Arsenic	11.2			FM	
7440-39-3	Barium	312			P	
7440-41-7	Beryllium	1.1	B		P	
7440-43-9	Cadmium	5.51			P	
7440-70-2	Calcium	75200			P	
7440-47-3	Chromium	34.8			P	
7440-48-4	Cobalt	8.0	U		P	
7440-50-8	Copper	48.8			P	
7439-89-6	Iron	36000			P	
7439-92-1	Lead	219			P	
7439-95-4	Magnesium	7170			P	
7439-96-5	Manganese	1090			P	
7439-97-6	Mercury	0.10	U		AV	
7440-02-0	Nickel	29.7			P	
7440-09-7	Potassium	3220	B		P	
7782-49-2	Selenium	1.6	B	W,N	FM	J
7440-22-4	Silver	3.6	U		P	
7440-23-5	Sodium	424	B		P	
7440-28-0	Thallium	3.0	B		FM	
7440-62-2	Vanadium	48.8			P	
7440-66-6	Zinc	2840			P	
	Cyanide	2.0	U		CA	J

Color Before: BLACK Clarity Before: OPAQUE Texture: FINE
Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments: _____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
X205

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (soil): _____ Lab Sample ID: B613245

Level (low/med): _____ Date Received: 07/26/96

% Solids: 27.8

Concentration Units (mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	19700			P	
7440-36-0	Antimony	17.0	U	N	P	J
7440-38-2	Arsenic	7.9			FM	
7440-39-3	Barium	295			P	
7440-41-7	Beryllium	0.95	B		P	
7440-43-9	Cadmium	1.7	U		P	
7440-70-2	Calcium	63500			P	
7440-47-3	Chromium	27.8			P	
7440-48-4	Cobalt	10.9	B		P	
7440-50-8	Copper	35.5			P	
7439-89-6	Iron	31700			P	
7439-92-1	Lead	94.2			FM	
7439-95-4	Magnesium	7760			P	
7439-96-5	Manganese	973			P	
7439-97-6	Mercury	0.13	B		AV	
7440-02-0	Nickel	25.3			P	
7440-09-7	Potassium	2940			P	
7782-49-2	Selenium	0.68	U	W,N	FM	J
7440-22-4	Silver	2.8	U		P	
7440-23-5	Sodium	405	B		P	
7440-28-0	Thallium	1.2	B		FM	
7440-62-2	Vanadium	46.5			P	
7440-66-6	Zinc	960			P	
	Cyanide	1.8	U		CA	J

Color Before: BLACK Clarity Before: OPAQUE Texture: FINE
Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments: _____

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
X206

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: GRANITE CITY STEEL

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 151

Matrix (soil): _____ Lab Sample ID: B613246

Level (low/med): _____ Date Received: 07/26/96

% Solids: 36.3

Concentration Units (mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15500			P	
7440-36-0	Antimony	13.5	U	N	P	J
7440-38-2	Arsenic	5.8			FM	
7440-39-3	Barium	281			P	
7440-41-7	Beryllium	0.70	B		P	
7440-43-9	Cadmium	1.9	B		P	
7440-70-2	Calcium	43400			P	
7440-47-3	Chromium	21.9			P	
7440-48-4	Cobalt	5.7	B		P	
7440-50-8	Copper	27.1			P	
7439-89-6	Iron	25600			P	
7439-92-1	Lead	85.2			P	
7439-95-4	Magnesium	6480			P	
7439-96-5	Manganese	717			P	
7439-97-6	Mercury	0.07	U		AV	
7440-02-0	Nickel	28.8			P	
7440-09-7	Potassium	1970	B		P	
7782-49-2	Selenium	0.55	U	W,N	FM	J
7440-22-4	Silver	2.2	U		P	
7440-23-5	Sodium	286	B		P	
7440-28-0	Thallium	0.88	B		FM	
7440-62-2	Vanadium	34.0			P	
7440-66-6	Zinc	585			P	
	Cyanide	1.4	U		CA	J

Color Before: BLACK Clarity Before: OPAQUE Texture: FINE
Color After: GRAY Clarity After: CLOUDY Artifacts:

Comments: _____