EARTH TECH

First Quarter Results for Lemon Lane Monitoring Wells December 1995 Samples Lemon Lane Landfill Bloomington, Indiana

Prepared for:
U.S. Environmental Protection Agency
Region 5
Chicago, Illinois

Prepared by:
EARTH TECH
5010 Stone Mill Road
Bloomington, Indiana 47408-9320

U.S. EPA Contract No. 68-W8-0079
U.S. EPA Work Assignment No. 23-5BZZ

March 1996

EARTH TECH
5010 Stone Mill Road
Bloomington, IN 47408-9320
Phone: 812/336-0972 Fax: 812/336-3991

T E C H N I C A L M E M O R A N D U M

Date: March 6, 1996

To: Dan Hopkins
U.S. EPA, Region 5

From: Robert Aten
Earth Tech

Subject: **First Quarter Results for Lemon Lane Landfill Monitoring Wells**

The monitoring wells at Lemon Lane Landfill were sampled by Westinghouse on December 17 through December 19, 1995. Earth Tech conducted oversight of sampling efforts and collected split samples for analyses of total and dissolved inorganics, volatile organics, semivolatile organics, and pesticides/PCBs. The monitoring wells for which split samples were obtained are MW-1, MW-2, MW-4I, MW-4D, MW-6, MW-7, and MW-8D. Monitoring wells MW-1 and MW-2 did not produce enough water for all of the analyses planned. Only the volatile organic compounds were run for these two wells.

The analytical results are summarized on the following tables.

Table 1	Inorganics (total)
Table 2	Inorganics (dissolved)
Table 3	Volatile Organic Compounds
Table 4	Semivolatile Organic Compounds
Table 5	Pesticides/PCBs

The complete data packages from the analytical laboratories are included in the Attachment. The tentatively identified compounds for the volatile and semivolatile organic analyses are included in the laboratory data packages.

Table 1
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Total Inorganics (ug/L)

Monitoring Well / Sample Date / Time / EPA Sample #	MW-4I 12/18/95 1210 MEACH8	MW-4D 12/18/95 1106 MEACJ0	MW-6 12/18/95 1605 MEACJ2	MW-6 Duplicate 12/18/95 1605 MEACJ4	MW-7 12/18/95 1450 MEACJ6	MW-8D 12/19/95 0930 MEACJ8
Parameter						
Aluminum	210	218	21.3	13.3	164	8.0 U
Antimony	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Arsenic	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Barium	89.7	70.1	83.0	80.2	26.5	7.8
Beryllium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium	118000	125000	91300	87800	22900	385000
Chromium	1.1	1.0 U	1.2	1.0 U	1.0 U	1.2
Cobalt	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.8
Copper	2.5 J	1.8 J	1.7 J	1.0 U	1.3 J	1.5 J
Iron	356	316	67.3	47.4	217	83.0
Lead	2.0 U	2.0 U	2.0 U	2.4	2.0 U	2.0 U
Magnesium	31700	109000	17500	16900	6410	236000
Manganese	12.6	504	2.6	2.2	11.1	24.5
Mercury	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	2.6	1.1	1.0 U	1.0 U	1.0 U	9.9
Potassium	2160	10000	965	810	887	5050
Selenium	5.1	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	7150 J	15000 J	2960 J	2840 J	669 J	16300 J
Thallium	4.0 J	4.3 J	4.8 J	3.3 J	3.0 U	5.4 J
Vanadium	1.0 U	2.9	1.0 U	1.0 U	1.0 U	1.0 U
Zinc	6.4 J	6.4 J	4.0 J	3.7 J	3.1 J	45.1
Cyanide	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U

U = Indicates analyte not detected at the listed detection limit.

J = Indicates an estimated value.

Table 2
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Dissolved Inorganics (ug/L)

Monitoring Well	MW-4I	MW-4D	MW-6	MW-6	MW-7	MW-8D
Sample Date	12/18/95	12/19/95	12/18/95	Duplicate 12/18/95	12/18/95	12/19/95
Time	1210	0910	1605	1605	1450	0930
EPA Sample #	MEACH7	MEACH9	MEACJ1	MEACJ3	MEACJ5	MEACJ7
Parameter						
Aluminum	14.5 U	14.5 U	14.5 U	14.5 U	53.0	14.5 U
Antimony	26.6 U	26.6 U	26.6 U	26.6 U	26.6 U	26.6 U
Arsenic	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U	2.7 U
Barium	79.6	63.6	76.6	74.8	23.9	9.9
Beryllium	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U
Cadmium	3.0 UJ	3.0 UJ	3.0 UJ	3.0 UJ	3.0 UJ	3.0 UJ
alcium	114000	124000	88200	85800	21300	408000
Chromium	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cobalt	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U	6.8 J
Copper	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U	4.6 U
Iron	5.7 J	4.8 U	7.6 J	4.8 U	36.2 J	794
Lead	1.1 U	1.1 UJ	1.1 U	2.5	1.1 U	1.1 UJ
Magnesium	29500	104000	16500	16200	5740	230000
Manganese	0.70 U	256	0.70 U	0.70 U	3.0 J	117
Mercury	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Nickel	17.7 U	17.7 U	17.7 U	17.7 U	17.7 U	17.7 U
Potassium	862	9040	796 U	796 U	796 U	3550
Selenium	2.5	2.0 UJ	2.0 U	2.0 U	2.0 U	2.0 UJ
Silver	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Sodium	6610	14700	2550	2490	606	16500
Thallium	1.5 UJ	1.5 U	1.5 UJ	1.5 UJ	1.5 UJ	1.5 U
anadium	2.3 U	9.0	2.3 U	2.3 U	2.3 U	2.5
Zinc	22.5	25.1	19.3 J	16.8 J	19.5 J	64.6

U = Indicates analyte not detected at the listed detection limit.
J = Indicates an estimated value.

Table 3
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Volatile Organic Compounds (ug/L)

Monitoring Well	MW-1	MW-2	MW-4I	MW-4D	MW-6	MW-6
Sample Date	12/17/95	12/17/95	12/18/95	12/18/95	12/18/95	12/18/95
Time	2345	2350	1210	1100	1605	1605
EPA Sample #	EANW7	EANW8	EANW1	EANW2	EANW3	EANW4
Parameter						Duplicate
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (Total)	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	94	91
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (Total)	10 U	10 U	10 U	10 U	10 U	10 U

U = Indicates analyte not detected at the listed detection limit.
J = Indicates an estimated value.

Table 3 cont.
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Volatile Organic Compounds (ug/L)

Monitoring Well	MW-7	MW-8D
Sample Date	12/18/95	12/19/95
Time	1450	0930
EPA Sample #	EANW5	EANW6
Parameter		
Chloromethane	10 U	10 U
Bromomethane	10 U	10 U
Vinyl Chloride	10 U	10 U
Chloroethane	10 U	10 U
Methylene Chloride	10 U	10 U
Acetone	10 U	10 U
Carbon Disulfide	10 U	10 U
1,1-Dichloroethene	10 U	10 U
1,1-Dichloroethane	10 U	10 U
1,2-Dichloroethene (Total)	10 U	10 U
Chloroform	10 U	10 U
1,2-Dichloroethane	10 U	10 U
2-Butanone	10 U	10 U
1,1,1-Trichloroethane	10 U	10 U
Carbon Tetrachloride	10 U	10 U
Bromodichloromethane	10 U	10 U
1,2-Dichloropropane	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U
Trichloroethene	4 J	10 U
Dibromochloromethane	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U
Benzene	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U
Bromoform	10 U	10 U
4-Methyl-2-Pentanone	10 U	10 U
2-Hexanone	10 U	10 U
Tetrachloroethene	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U
Toluene	10 U	10 U
Chlorobenzene	10 U	10 U
Ethylbenzene	10 U	10 U
Styrene	10 U	10 U
Xylene (Total)	10 U	10 U

Table 4
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Semivolatile Organic Compounds (ug/L)

Monitoring Well	MW-4I	MW-4D	MW-6	MW-6 Duplicate	MW-7	MW-8D
Sample Date	12/18/95	12/18/95	12/18/95	12/18/95	12/18/95	12/18/95
Time	1210	1100	1605	1605	1450	1005
EPA Sample #	EANW1	EANW2	EANW3	EANW4	EANW5	EANW6
Parameter						
Phenol	10 U	10 U	10 U	10 U	10 U	0.6 J
bis (-2-Chloroethyl) Ether	10 U	10 U	10 U	10 U	10 U	10 U
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
1,3-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,4-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2,2'-oxybis (1-Chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U
4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U
bis (-2-Chloroethoxy) methane	10 U	10 U	10 U	10 U	10 U	10 U
Chloro-3-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrophenol	25 U	25 U	25 U	25 U	25 U	25 U
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	25 U
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U

Table 4 cont.
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Semivolatile Organic Compounds (ug/L)

Monitoring Well	MW-4I	MW-4D	MW-6	MW-6 Duplicate	MW-7	MW-8D
Sample Date	12/18/95	12/18/95	12/18/95	12/18/95	12/18/95	12/18/95
Time	1210	1100	1605	1605	1450	1005
EPA Sample #	EANW1	EANW2	EANW3	EANW4	EANW5	EANW6
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U
Diethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U
N-nitrosodiphenylamine (1)	10 U	10 U	10 U	10 U	10 U	10 U
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U
Pentachlorophenol	25 U	25 U	25 U	25 U	25 U	25 U
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U
Di-n-butylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Butylbenzylphthalate	10 U	10 U	10 U	10 U	10 U	10 U
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U
Benzo (a) anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U
bis (2-Ethylhexyl) phthalate	10 U	10 U	10 U	10 U	26	30
Di-n-octylphthalate	6 J	3 J	10	4 J	4 J	6 J
Benzo (b) fluoranthene	10 U	10 U	10 U	10 U	10 U	10
Benzo (k) fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo (a) pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Indeno (1,2,3-cd) pyrene	10 U	10 U	10 U	10 U	10 U	10 U
Dibenzo (a,h) anthracene	10 U	10 U	10 U	10 U	10 U	10 U
Benzo (g,h,i) perylene	10 U	10 U	10 U	10 U	10 U	10 U

U = Indicates analyte not detected at the listed detection limit.
J = Indicates an estimated value.

Table 5
Lemon Lane Landfill
Monitoring Well Water Samples
December 1995
Pesticides/PCBs (ug/L)

Monitoring Well	MW-4I	MW-4D	MW-6	MW-6	MW-7	MW-8D
Sample Date	12/18/95	12/18/95	12/18/95	Duplicate 12/18/95	12/18/95	12/18/95
Time	1210	1100	1605	1605	1450	1005
EPA Sample #	EANW1	EANW2	EANW3	EANW4	EANW5	EANW6
Parameter						
alpha-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
beta-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
delta-BHC	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0064 JP
gamma-BHC (Lindane)	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Heptachlor	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Aldrin	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
ptachlor epoxide	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Endosulfan I	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Dieldrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDE	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan II	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDD	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endosulfan sulfate	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
4,4'-DDT	0.10 U	0.0065 JP	0.10 U	0.10 U	0.10 U	0.0045 JP
Methoxychlor	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Endrin ketone	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Endrin aldehyde	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.0058 JP
alpha-chlordane	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
gamma-chlordane	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Toxaphene	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
oclor - 1016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor - 1221	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Aroclor - 1232	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor - 1242	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor - 1248	0.35 JP	1.0 U	0.32 JP	0.74 J	0.23 JP	1.0 U
Aroclor - 1254	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Aroclor - 1260	1.0 U	1.0 U	1.0 U	18	1.0 U	1.0 U

U = Indicates analyte not detected at the listed detection limit.

J = Indicates an estimated value.

P = Indicates an Aroclor or pesticide target analyte when there is >25% difference for the detected concentrations between the two GC columns. The lower of the two results is reported.

1st Q '96 - Monitoring Wells
Inorganics (Total)
Received 2/13/96

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 02-01-96

SUBJECT: **Review of Region V CLP Data**
Received for Review on 1-22-96

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

TO: **Data User:** Earth Tech

We have reviewed the data for the following case:

SITE NAME: Lemon Lane LF

CASE NUMBER: 24331 **SDG NUMBER:** MEQCH8

Number and Type of Samples: 6 Water samples

Sample Numbers: MEQCH8, MEQCJ0, MEQCJ2, MEQCJ4, MEQCJ6 and MEQCJ8

Laboratory: ATS **Hrs. for Review:** 5.5 +0.5

Following are our findings:

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

L. Finkelberg
02-01-96

cc: **Regional TPO**
Brian Freeman
HSMC-5J

NARRATIVE

SITE : Lemon Lane Landfill CASE: 24331
LABORATORY: AATS SDG : MEACH8

The laboratory's portion of this case contains six low level water samples analyzed for total metals and total cyanide. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT:

The DC-2 forms, DC-1 form, sample tags, airbill, and chain of custody forms are originals. The original mercury raw data for pages 112-117 are with case 24323, SDG: MAHM47.

All forms are present and in the order indicated on the DC-1 form(s) [inventory sheet].

WATER SAMPLES (MEACH8, MEACJ0, MEACJ2, MEACJ4, MEACJ6, and MEACJ8)

ICP ANALYSES:

The duplicate audit of aluminum (26.9 RPD), chromium (200 RPD), iron (22.7 RPD), potassium (21.4 RPD), and thallium (200 RPD) were not flagged by the laboratory because the technical criterion for water samples (+/- CRDL) was not exceeded. Aluminum, chromium, iron, and potassium data are not qualified based on this audit and are acceptable. Thallium data are not qualified based on this audit and are qualified below.

The CCB was found to contain copper (1.4 ug/L). The preparation blank was found to contain thallium (3.943 ug/L) and zinc (2.35 ug/L). Copper data for samples MEACH8, MEACJ0, MEACJ2, MEACJ6, and MEACJ8, thallium data for samples MEACH8, MEACJ0, MEACJ2, MEACJ4, and MEACJ8, and zinc data for samples MEACH8, MEACJ0, MEACJ2, MEACJ4, and MEACJ6 are estimated (J) due to contamination.

The ICP serial dilution of sodium (15.1%) is out of control. All sodium data are estimated (J) due to interference.

OTHER QUALIFIERS:

All mercury and cyanide data are acceptable.

Samples MEACJ2/MEACJ4 are field duplicates which showed good correlation.

Reviewed by: M. Fletcher M. Fletcher
Date: 1/23/96

INORGANIC DATA QUALIFIER DEFINITIONS

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

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

J Indicates the associated value is an estimated quantity.

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

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

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

M Indicates duplicate injection precision is not met.

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

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

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

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

* Indicates the duplicate analysis is not within control limits.

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

CASE\SAS#: 24331 **SITE:** Lemon Lane LDFL **MATRIX:** Water **WATER SAMPLE SPK:**

DATA SET: MQCH8 **LAB:** AATS **CONC** LOW **WATER SAMPLE DUP:**

LAB QC # **REVIEWED BY:** M. Fletcher **SOIL SAMPLE SPK:**

DATE: 1/22/96 **SOIL SAMPLE DUP:**

FORM #		FORM 3	FORM 3	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 7	FORM 9	FORM 9	FORM 6	FORM 5	FIELD	FIELD	FIELD	FIELD		
ELEMENT	HOLD TIME	INITIAL CALIB	CONTIN CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	LCS AQ	LCS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP RPD	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	GFAA DUP	GFAA ANALYT SPIKE
ALUMINUM																					
ANTIMONY																					
ARSENIC																					
BARIUM																					
BERYLLIUM																					
CADMIUM																					
CALCIUM																					
CHROMIUM																					
COBALT																					
COPPER				1.4																	
IRON																					
LEAD																					
MAGNESIUM																					
MANGANESE																					
MERCURY																					
NICKEL																					
POTASSIUM																					
SELENIUM																					
SILVER																					
SODIUM												15.1									
THALLIUM					2.943																
TIN																					
VANADIUM																					
ZINC					2.352																
CYANIDE																					

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.:MEACH8

SOW No.: ILM04

EPA Sample No.			Lab Sample ID
MEACH8	MW 4I	Total	2437101
MEACJ0	MW 4D	"	2437102
MEACJ2	MW 6	"	2437103
MEACJ4	MW 6	" Dup.	2437104
MEACJ6	MW 7	"	2437105
MEACJ6D			2437105D
MEACJ6S			2437105S
MEACJ8	MW 8D	"	2437106

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: _Jason_D._Ruckman_____

Date: _January_18,_1996_____ Title: _Inorganic_Program_Manager_

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 003

MEACH8

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8

Matrix (soil/water): WATER Lab Sample ID: 2437101___

Level (low/med): LOW__ Date Received: 12/20/95

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	210			P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	89.7	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	118000			P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	2.5	B	J	P
7439-89-6	Iron	356			P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	31700			P
7439-96-5	Manganese	12.6	B		P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	2160	B		P
7782-49-2	Selenium	5.1			P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	7150		J E	P
7440-28-0	Thallium	4.0	B	J	P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	6.4	B	J	P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: ____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: ____

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO. 004

INORGANIC ANALYSES DATA SHEET

MEACJ0

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix (soil/water): WATER Lab Sample ID: 2437102___
Level (low/med): LOW__ Date Received: 12/20/95
% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	218			P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	70.1	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	125000			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.8	B	J	P
7439-89-6	Iron	316			P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	109000			P
7439-96-5	Manganese	504			P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	1.1	B		P
7440-09-7	Potassium	10000			P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	15000		J E	P
7440-28-0	Thallium	4.3	B	J	P
7440-62-2	Vanadium	2.9	B		P
7440-66-6	Zinc	6.4	B	J	P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____
Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

ILM04.0

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MEACJ2

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix (soil/water): WATER Lab Sample ID: 2437103___
Level (low/med): LOW__ Date Received: 12/20/95
% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21.3	B		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	83.0	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	91300			P
7440-47-3	Chromium	1.2	B		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.7	B	J	P
7439-89-6	Iron	67.3	B		P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	17500			P
7439-96-5	Manganese	2.6	B		P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	965	B		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	2960	B	J E	P
7440-28-0	Thallium	4.8	B	J	P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	4.0	B	J	P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____
Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. 006

MEACJ4

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix (soil/water): WATER Lab Sample ID: 2437104___
Level (low/med): LOW__ Date Received: 12/20/95
% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	13.3	B		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	80.2	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	87800			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	47.4	B		P
7439-92-1	Lead	2.4	B		P
7439-95-4	Magnesium	16900			P
7439-96-5	Manganese	2.2	B		P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	810	B		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	2840	B	J E	P
7440-28-0	Thallium	3.3	B	J	P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	3.7	B	J	P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____
Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACJ6

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix (soil/water): WATER Lab Sample ID: 2437105___
Level (low/med): LOW__ Date Received: 12/20/95
% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	164	B		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	26.5	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	22900			P
7440-47-3	Chromium	1.0	U		P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.3	B	J	P
7439-89-6	Iron	217			P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	6410			P
7439-96-5	Manganese	11.1	B		P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	887	B		P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	669	B	JE	P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	3.1	B	J	P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____
Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
MEACJ8

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix (soil/water): WATER Lab Sample ID: 2437106___
Level (low/med): LOW__ Date Received: 12/20/95
% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8.0	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	4.0	U		P
7440-39-3	Barium	7.8	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	385000			P
7440-47-3	Chromium	1.2	B		P
7440-48-4	Cobalt	5.8	B		P
7440-50-8	Copper	1.5	B	J	P
7439-89-6	Iron	83.0	B		P
7439-92-1	Lead	2.0	U		P
7439-95-4	Magnesium	236000			P
7439-96-5	Manganese	24.5			P
7439-97-6	Mercury	0.20	U		AV
7440-02-0	Nickel	9.9	B		P
7440-09-7	Potassium	5050			P
7782-49-2	Selenium	2.0	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	16300		J E	P
7440-28-0	Thallium	5.4	B	J	P
7440-62-2	Vanadium	1.0	U		P
7440-66-6	Zinc	45.1			P
	Cyanide	2.0	U		CA

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____
Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	-53.0	B	-48.7	B	-50.1	B	-47.5	B	-48.451	B	P
Antimony	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Arsenic	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Barium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Calcium	-56.7	B	-55.9	B	-58.7	B	-55.8	B	-52.918	B	P
Chromium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
obalt	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
opper	1.0	U	1.0	U	1.1	B	1.4	B	1.000	U	P
Iron	-15.5	B	-17.4	B	13.0	U	13.0	U	13.000	U	P
Lead	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Magnesium	-59.5	B	-55.6	B	-58.0	B	-55.1	B	-58.502	B	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.200	U	A
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Potassium	317.0	U	317.0	U	317.0	U	317.0	U	317.000		P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Silver	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Sodium	10.0	U	10.0	U	10.0	U	10.0	U	28.491	B	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	3.943	B	P
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U	2.354	B	P
Cyanide	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	C

3
BLANKS

015

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8

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	Prep-aration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury			0.2	U	0.2	U	0.2	U			AV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

3
BLANKS

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH

Preparation Blank Matrix (soil/water): _____

Preparaticn 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	
Aluminum											NI
Antimony											NI
Arsenic											NI
Barium											NI
Beryllium											NI
Cadmium											NI
Calcium											NI
Chromium											NI
ɔbalt											NI
ɔopper											NI
Iron											NI
Lead											NI
Magnesium											NI
Manganese											NI
Mercury			0.2	U							A
Nickel											N
Potassium											N
Selenium											N
Silver											N
Sodium											N
Thallium											N
Vanadium											N
Zinc											N
Cyanide											N

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

019
EPA SAMPLE NO.

MEACJ6S

Lab Name: AMERICAN_ANALYTICAL_____ Contract:68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
Matrix: __WATER_____ Level (low/med): _LOW____
Solids for Sample: __0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2225.0190		164.0740	B	2000.00	103.0		P
Antimony	75-125	509.0170		2.0000	U	500.00	101.8		P
Arsenic	75-125	42.8430		4.0000	U	40.00	107.1		P
Barium	75-125	1940.6620		26.5420	B	2000.00	95.7		P
Beryllium	75-125	50.3460		1.0000	U	50.00	100.7		P
Cadmium	75-125	48.9690		1.0000	U	50.00	97.9		P
Calcium									NR
Chromium	75-125	196.9370		1.0000	U	200.00	98.5		P
Cobalt	75-125	486.4580		1.0000	U	500.00	97.3		P
Copper	75-125	247.1120		1.2520	B	250.00	98.3		P
Iron	75-125	1336.6450		216.6660		1000.00	112.0		P
Lead	75-125	19.2530		2.0000	U	20.00	96.3		P
Magnesium									NR
Manganese	75-125	503.1160		11.0520	B	500.00	98.4		P
Mercury	75-125	0.8530		0.2000	U	1.00	85.3		AV
Nickel	75-125	493.3400		1.0000	U	500.00	98.7		P
Potassium									NR
Selenium	75-125	9.2360		2.0000	U	10.00	92.4		P
Silver	75-125	50.0840		2.0000	U	50.00	100.2		P
Sodium									NR
Thallium	75-125	51.0940		3.0000	U	50.00	102.2		P
Vanadium	75-125	485.3310		1.0000	U	500.00	97.1		P
Zinc	75-125	499.6600		3.1380	B	500.00	99.3		P
Cyanide	75-125	92.9160		2.0000	U	100.00	92.9		CA

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO. 020

MEACJ6D

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8

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

% Solids for Sample: __0.0 % Solids for Duplicate: ___0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	164.0740	B	215.1680		26.9		P
Antimony		2.0000	U	2.0000	U			P
Arsenic		4.0000	U	4.0000	U			P
Barium		26.5420	B	26.8990	B	1.3		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		1.0000	U	1.0000	U			P
Calcium	5000.0	22865.0660		23162.9940		1.3		P
Chromium		1.0000	U	1.1930	B	200.0		P
Cobalt		1.0000	U	1.0000	U			P
Copper		1.2520	B	1.5020	B	18.2		P
Iron	100.0	216.6660		272.1440		22.7		P
Lead		2.0000	U	2.0000	U			P
Magnesium	5000.0	6405.0310		6510.3350		1.6		P
Manganese		11.0520	B	12.2920	B	10.6		P
Mercury		0.2000	U	0.2000	U			AV
Nickel		1.0000	U	1.0000	U			P
Potassium		887.0200	B	715.5060	B	21.4		
Selenium		2.0000	U	2.0000	U			P
Silver		2.0000	U	2.0000	U			P
Sodium		668.7770	B	668.4760	B	0.0		P
Thallium		3.0000	U	4.5540	B	200.0		P
Vanadium		1.0000	U	1.0000	U			P
Zinc		3.1380	B	3.5900	B	13.4		P
Cyanide		2.0000	U	2.0000	U			CA

10

Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
ICP ID Number: TJA#2_____ Date: 10/03/95
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	8.0	P
Antimony	206.83		60	2.0	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	5.0	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	13.0	P
Lead	220.35		3	2.0	P
Magnesium	279.08		5000	8.0	P
Manganese	257.61		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium			5000		NR
Selenium	196.02		5	2.0	P
Silver	328.07		10	2.0	P
Sodium	588.99		5000	10.0	P
Thallium	190.68		10	3.0	P
Vanadium	292.40		50	1.0	P
Zinc	213.86		20	1.0	P
Cyanide			10		NR

Comments:

10

Instrument Detection Limits (Quarterly)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
ICP ID Number: TJA61_____ Date: 01/02/96
Flame AA ID Number : _____
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	776.49		5000	317.0	P
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)

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 24331 SAS No.: _____ SDG No.: MEACH8
ICP ID Number: _____ Date: 10/06/95
Flame AA ID Number : PS200A_____
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	AV
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)

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141
Lab Code: AATS Case No.: 24331 SAS No.: SDG No.: MEACH8
ICP ID Number: Date: 11/06/95
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	2.0	CA

Comments:

14
ANALYSIS RUN LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331_ SAS No.: _____ SDG No.:MEACH8

Instrument ID Number: TJA#2_____ Method: P_

Start Date: 12/30/95 End Date: 12/30/95

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
SC_____	1.00	0259		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
S_____	1.00	0305		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ICV_____	1.00	0311		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ICB_____	1.00	0317		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CRI_____	1.00	0323			X	X		X	X		X	X	X		X		X	_	X	_	X	X		X	X	X	_
ICSA_____	1.00	0329		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ICSAB____	1.00	0335		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CCV_____	1.00	0341		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CCB_____	1.00	0347		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
SW_____	1.00	0353		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
_CSW____	1.00	0359		X	X		X	X		X	X	X	X	X		X	X	_	X	_			X		X	X	_
LCSW____	1.00	0405				X			X						X			_		_	X	X		X			_
MEACH8__	1.00	0411		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
MEACJ0__	1.00	0418		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
MEACJ2__	1.00	0425		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
MEACJ4__	1.00	0431		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ME_CJ6__	1.00	0437		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ME_CJ6L_	5.00	0443		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ZZZZZZ__	1.00	0449																									_
CCV_____	1.00	0455		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CCB_____	1.00	0501		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
MEACJ6D_	1.00	0506		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
MEACJ6S_	1.00	0512		X	X	X	X	X	X		X	X	X	X	X		X	_	X	_	X	X		X	X	X	_
MEACJ8__	1.00	0518		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ZZZZZZ__	1.00	0524																									_
ZZZZZZ__	1.00	0530																									_
CRI_____	1.00	0536			X	X		X	X		X	X	X		X		X	_	X	_	X	X		X	X	X	_
ICSA_____	1.00	0542		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
ICSAB____	1.00	0548		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CCV_____	1.00	0555		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
CCB_____	1.00	0601		X	X	X	X	X	X	X	X	X	X	X	X	X	X	_	X	_	X	X	X	X	X	X	_
_____																											_
_____																											_

14
ANALYSIS RUN LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331_ SAS No.: _____ SDG No.:MEACH8

Instrument ID Number: TJA61_____ Method: P_

Start Date: 01/02/96 End Date: 01/02/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	1217																	X							
S	1.00	1222																	X							
ICV	1.00	1228																	X							
ICB	1.00	1233																	X							
CRI	1.00	1238																								
ICSA	1.00	1243																	X							
ICSAB	1.00	1248																	X							
CCV	1.00	1253																	X							
CCB	1.00	1258																	X							
BW	1.00	1303																	X							
LCSW	1.00	1309																								
LCSW	1.00	1314																	X							
MEACH8	1.00	1319																	X							
MEACJ0	1.00	1324																	X							
MEACJ2	1.00	1329																	X							
MEACJ4	1.00	1334																	X							
MEACJ6	1.00	1339																	X							
MEACJ6L	5.00	1344																	X							
ZZZZZZ	1.00	1349																								
CCV	1.00	1355																	X							
CCB	1.00	1400																	X							
MEACJ6D	1.00	1405																	X							
MEACJ6S	1.00	1410																								
MEACJ8	1.00	1415																	X							
ZZZZZZ	1.00	1420																								
CRI	1.00	1430																								
ICSA	1.00	1435																	X							
ICSAB	1.00	1440																	X							
CCV	1.00	1445																	X							
CCB	1.00	1450																	X							

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331_ SAS No.: _____ SDG No.:MEACH8

Instrument ID Number: PS200A_____ Method: AV

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S_____	1.00	1234																X									
S0.2____	1.00	1237																X									
S0.5____	1.00	1241																X									
S1_____	1.00	1244																X									
S5_____	1.00	1248																X									
S10_____	1.00	1251																X									
ICV_____	1.00	1255																X									
ICB_____	1.00	1258																X									
CRA_____	1.00	1302																X									
CV_____	1.00	1305																X									
CB_____	1.00	1309																X									
ZZZZZZ__	1.00	1311																										
ZZZZZZ__	1.00	1314																										
ZZZZZZ__	1.00	1316																										
ZZZZZZ__	1.00	1319																										
ZZZZZZ__	1.00	1322																										
Z ZZZ__	1.00	1324																										
ZZZZZZ__	1.00	1327																										
ZZZZZZ__	1.00	1330																										
ZZZZZZ__	1.00	1332																										
ZZZZZZ__	1.00	1335																										
CCV_____	1.00	1338																X									
CCB_____	1.00	1340																X									
ZZZZZZ__	1.00	1343																										
ZZZZZZ__	1.00	1346																										
ZZZZZZ__	1.00	1348																										
ZZZZZZ__	1.00	1351																										
ZZZZZZ__	1.00	1353																										
ZZZZZZ__	1.00	1356																										
CCV_____	1.00	1359																X									
CCB_____	1.00	1401																X									
CCV_____	1.00	1415																X									
_____	_____	_____	_____																									

14

042

ANALYSIS RUN LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331_ SAS No.: _____ SDG No.:MEACH8

Instrument ID Number: PS200A_____ Method: AV

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																				
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V
CCB	1.00	1417																X						
ZZZZZZ	1.00	1420																						
CCV	1.00	1423																X						
CCB	1.00	1425																X						
PBW	1.00	1428																X						
MEACH8	1.00	1431																X						
MEACJ0	1.00	1433																X						
MEACJ2	1.00	1436																X						
MEACJ4	1.00	1438																X						
MEACJ6	1.00	1441																X						
MEACJ6D	1.00	1444																X						
MEACJ6S	1.00	1446																						
MEACJ8	1.00	1449																X						
CCV	1.00	1452																X						
CCB	1.00	1454																X						
MEACJ6S	1.00	1457																X						
CCV	1.00	1500																X						
CCB	1.00	1503																X						

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141

Lab Code: AATS__ Case No.: 24331_ SAS No.: _____ SDG No.:MEACH8

Instrument ID Number: LACHAT_____ Method: CA

Start Date: 12/29/95 End Date: 12/29/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S_0	1.00	1457																								X
S100	1.00	1458																								X
S50	1.00	1459																								X
S10	1.00	1500																								X
S0	1.00	1501																								X
ICV	1.00	1504																								X
ICB	1.00	1505																								X
CCV	1.00	1506																								X
CCB	1.00	1506																								X
BW	1.00	1509																								X
MEACH8	1.00	1509																								X
MEACJ0	1.00	1510																								X
MEACJ2	1.00	1511																								X
MEACJ4	1.00	1511																								X
MEACJ6	1.00	1512																								X
CCV	1.00	1513																								X
C	1.00	1514																								X
MEACJ6D	1.00	1516																								X
MEACJ6S	1.00	1517																								X
MEACJ8	1.00	1517																								X
CCV	1.00	1518																								X
CCB	1.00	1519																								X

(For Inorganic ...)

2. Region No.	Sampling Co.	4. Date Shipped	Carrier	6. Date Received
5	Ecoll. Tch	12/19/95	Federal Express	12-20-95

Sampler (Name): Bettie J. Conway

Airbill Number: 7359267926

Laboratory Contract Number: 68-D5-014L

Unit Price: $86.50

Sampler Signature: Bettie Conway

5. Ship To: American Analytical & Technical Services, 1700 West Albany, Broken Arrow OK 74012

ATTN: Sample Custodian

7. Transfer to:

Date Received

Received by

Contract Number

Price

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

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

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other	E – RAS Analysis: Diss. Metals	Total Metals	Cyanide	Low only: NO_2/NO_3	Fluoride	High only: pH	Conduct.	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
MEACH8	2	L	G	3			X					5-153121	U-S-MW-4E-1	12/19/95/1210	EANW1	BJC	* field sample recd in SDG BM 12/28/95		
↓	↓	↓	↓	2		X						5-153120 [illegible]	↓	↓	↓	↓			
MEACJØ	2	L	G	3			X					5-153131	U-S-MW-4D-1	12/19/95/1110	EANW2	BJC			
↓	↓	↓	↓	2		X						5-153130 [illegible]	↓	12/19/95/1110	↓	↓			
MEACJ8	2	L	G	2		X						5-153137 [illegible]	U-S-MW-3D-1	12/19/95/0930	EANW6	BJC			
↓	↓	↓	↓	3			X					5-153173	↓	↓	↓	↓			

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
	2 of 2	MEACJ6 - MS/MSD		46755, 46756

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bettie Conway	12/19/95 1500				
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
		D. Williams	12/20/95 1545	intact

140

A21-012-6 REV. 3/93

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

EPA Form 9110-1

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

MEACH8

359288

EPA United States Environmental Protection Agency Contract Laboratory Program

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

SAS No. (if applicable): X

Case No: 24331

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.: EarthTech

Sampler (Name): Bette J. Conway

Sampler Signature: Bette Conway

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

4. Date Shipped: 12/19/95
Carrier: Federal Express

Airbill Number: 7359267926

5. Ship To: American Analytical & Technical Services, 1700 West Albany, Broken Arrow OK 74012

ATTN: Sample Custodian

6. Date Received -- Received by: [signature] 12-20-95

Laboratory Contract Number: 68-D5-0141

Unit Price: $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	Low only: Fluoride	High only: pH	High only: 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-Immisc. Liq.
MEACJ4	2	L	G	3			X					5-153159	LL-D-MW-6-1	12/18/95/1605	EANW4	BJC			
↓	↓	↓	↓	2		X						5-153158	↓	↓	↓	↓			
MEACJ2	2	L	G	3			X					5-153142	LL-S-MW-6-1	12/18/95/1605	EANW3	BJC			
↓	↓	↓	↓	2		X						5-153141	↓	↓	↓	↓			
MEACJ6	2	L	G	2		X						5-153191	LL-S-MW-7-1	12/18/95/1450	EANW5	BJC			
				2		X						5-153192							
				2		X						5-153200							
				3			X					5-153177							
				3			X					5-153178							
↓	↓	↓	↓	3			X					5-153190	↓	↓	↓	↓			

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

Page 1 of 2

Sample(s) to be Used for Laboratory QC: MEACJ6 - MS/MSD

Additional Sampler Signatures

Chain of Custody Seal Number(s): 46755, 46756

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bette J Conway	12/19/95 1300				
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 12/20/95 1545	Remarks Is custody seal intact? Y/N/none (Y) intact	

DISTRIBUTION: Green - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO MEACH8

EPA Form 9110-1

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

A21-012-6 REV. 3/93

37

1st G.L. Received 2/13/96
Monitoring well
Inorganics

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IN

Case No: 24331 Site Name Location: Lemon Lan-LO

Contractor or EPA Lab: AATS Data User: Earthtech

No. of Samples: 6 Date Sampled or Data Received: _____

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 chai
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: 6 No. of samples received: 6

Received by: M. Griffen Date: 1-22-96

Received by LSSS: _____ Date: _____

Review started: 1/22/96 Reviewer Signature: M. Griffen

Total time spent on review: 5.5 Date review completed: 1/23/9

Copied by: Lynette Burnett Date: 2-5-96

Mailed to user by: Lynette Burnett Date: 2-5-96

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

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

_____

_____

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

1st Q ... Inorganics (Dissolved) Reviewed 2/29/96

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data Received for Review on Feb 27, 1996

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

TO: Data User: Earth-Tech

We have reviewed the data for the following case:

SITE NAME: Lemon Lane (IN)

CASE NUMBER: 24331 SDG NUMBER: MEACH7

Number and Type of Samples: 6 (water)

Sample Numbers: MEACH7, 9 MEACJ1, 5, 7 MEACT3

Laboratory: Chester Labnet Hrs. for Review:

Following are our findings:

cc: Regional TPO
Brian Freeman
HSMC-5J

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IN

Case No: 24331 Site Name Location: Lemon Lane

Contractor or EPA Lab: Chester Data User: Earth Tech

No. of Samples: 6 Date Sampled or Data Received: 1-25-96

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 cha
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: 6 No. of samples received: 6

Received by: Lynette Burnett Date: 2-27-96

Received by LSSB: _____ Date: _____

Review started: _____ Reviewer Signature: _____

Total time spent on review: _____ Date review completed: _____

Copied by: _____ Date: _____

Mailed to user by: _____ Date: _____

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

Data received by: _____ Date: _____

Data review received by: _____ Date: _____

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

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

_____

_____

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

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 24931 SDG No. MEACA7 SDG Nos. To Follow _____ _____ _____ SAS No. _____ Date Rcvd 2/27/96

EPA Lab ID: Chester

Lab Location: Houston, TX

Region: ___ Audit No.: _____

Re-Submitted CSF? Yes ___ No ___

Box No(s): _____

COMMENTS:

1 & 2 Custody seals were present

Over for additional comments

ORIGINALS	YES	NO	N/A
CUSTODY SEALS			
1. Present on package?	✓		
2. Intact upon receipt?	✓		
FORM DC-2			
3. Numbering scheme accurate?			
4. Are enclosed documents listed?			
5. Are listed documents enclosed?			
FORM DC-1			
6. Present?			
7. Complete?			
8. Accurate?			
CHAIN-OF-CUSTODY RECORD(s)			
9. Signed?			
10. Dated?			
TRAFFIC REPORT(s) PACKING LIST(s)			
11. Signed?			
12. Dated?			
AIRBILLS/AIRBILL STICKER			
13. Present?			
14. Signed?			
15. Dated?			
SAMPLE TAGS			
16. Does DC-1 list tags as being included?			
17. Present?			
OTHER DOCUMENTS			
18. Complete?			
19. Legible?			
20. Original?			
20a. If "NO," does the copy indicate where original documents are located?			

Received by: Lynette Burnett Lynette Burnett/DATA Coord Date 2/26/96

Audited by: _____ _____ Date __/__/__

Audited by: _____ _____ Date __/__/__

Signature Printed Name/Title

TO BE COMPLETED BY CEAT

Date Rcvd by CEAT: ___/___/___ Date Entered: ___/___/___ Date Reviewed: ___/___/___

Entered by: _____ _____

Reviewed by: _____ _____

Signature Printed Name/Title

Received 2/12/96

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 02-01-96

SUBJECT: Review of Region V CLP Data
Received for Review on 1-25-96

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

TO: Data User: CDM

We have reviewed the data for the following case:

SITE NAME: Continental Steel

CASE NUMBER: 24231(3) SDG NUMBER: MEQCH7

Number and Type of Samples: 6 (Water)

Sample Numbers: MEQCH7 MEQCH9, MEQCJ1, MEQCJ3, MEQCJ5, and MEQCJ7

Laboratory: Chester Labnet Hrs. for Review: 6.2 +0.6 R.N

Following are our findings:

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

L. Finkelberg
02-01-96

cc: Regional TPO
Brian Freeman
HSMC-5J

NARRATIVE

SITE : Continental Steel CASE: 24231
LABORATORY: Chester Labnet SDG : MEACH7

The laboratory's portion of this case contains six low level water samples analyzed for filtered metals. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT:

The DC-2 forms, DC-1 form, sample tags, all raw data, airbill, and chain of custody forms are originals. The IDL of lead in the raw data is not consistent with the IDL listed on all forms.

WATER SAMPLES (MEACH7, MEACJ1, MEACJ3, MEACJ5, MEACJ7, and MEACH9)

ICP ANALYSES:

The matrix spike recovery of cadmium (65.2%) is out of control. All cadmium data are estimated ~~(J)~~ (UJ) due to possible elevated detection limits.

The CCBs were found to contain cobalt (4.6 ug/L), iron (31.6 ug/L), manganese (1.2 ug/L), and zinc (4.4 ug/L). Cobalt data for samples MEACJ7, manganese data for sample MEACJ5, iron data for samples MEACH7, MEACJ1, and MEACHJ5, and zinc data for samples MEACJ1, MEACJ3, and MEACJ5 are estimated (J) due to contamination.

GFAA ANALYSES:

Thallium data for samples MEACH7, MEACJ1, MEACJ3, and MEACJ5 were flagged "W" by the laboratory and are estimated (UJ) due to interference.

Selenium data for sample MEACH9 was flagged "W" and sample MEACJ7 was flagged "E" by the laboratory and are estimated (UJ) due to interference.

Lead data for samples MEACH9 and MEACJ7 were flagged "W" by the laboratory and are estimated (UJ) due to interference.

OTHER QUALIFIERS:

All mercury data are acceptable.

Reviewed by: M. Fletcher M. Fletcher
Date: 1/26/96

OTHER QUALIFIERS:

Samples MEACJ1/MEACJ3 are field duplicates which showed good correlation.

Reviewed by: M. Fletcher M. Fletcher
Date: 1/26/96

INORGANIC 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 explanator note shall be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-IN (if it is an isolated problem).

M Indicates duplicate injection precision is not met.

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

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

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

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

* Indicates the duplicate analysis is not within control limits.

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

QC EXCEPTION SUMMARY REPORT

CASE\SAS#: 24231 SITE: Continental Steel MATRIX: Water WATER SAMPLE SPK: _____

DATA SET: MEACH7 LAB: Western Labnet CONC: Low WATER SAMPLE DUP: _____

LAB QC # _____ REVIEWED BY: M Sellmer SOIL SAMPLE SPK: _____

DATE: 1/26/96 SOIL SAMPLE DUP: _____

FORM #		FORM 2	FORM 3	FORM 3	FORM 3	FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 1	FORM 8	FORM 9	FORM 4	FORM 5	FIELD	FIELD	FIELD	FIELD		
ELEMENT	HOLD TIME	INITIAL CALI	CONTI N CALIB	CALIB BLANK	PREP WATER BLANK	PREP SOIL BLANK	ICS %R	SOIL SPIKE %R	SOIL DUP RPD	LCS AQ	LCS SOIL	SERIAL DILUTION AQUEOUS	SERIAL DILUTION SOIL	AQ DUP RPD	AQ SPIKE %R	BLANK	DUP RPD	BLANK	DUP RPD	GFAA DUP	GFAA ANALYT SPIKE
ALUMINUM																					
ANTIMONY																					
ARSENIC																					
BARIUM																					
BERYLLIUM																					
CADMIUM																					
CALCIUM																					
CHROMIUM																					
COBALT																					
COPPER																					
IRON																					
LEAD																					
MAGNESIUM																					
MANGANESE																					
MERCURY																					
NICKEL																					
POTASSIUM																					
SELENIUM																					
SILVER																					
SODIUM																					
THALLIUM																					
TIN																					
VANADIUM																					
ZINC																					
CYANIDE																					

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: _____ SDG No.:MEACH7

SOW No.: ILM04.0

EPA Sample No.			Lab Sample ID
MEACH7	MW 4I	Dissolved	H5030902
MEACH9	MW 4D	"	H5030903
MEACJ1	MW 6	"	H5030904
MEACJ3	MW 6	" Dup.	H5030905
MEACJ5	MW 7	"	H5030906
MEACJ5D			H5030907
MEACJ5S			H5030908
MEACJ7	MW 8D	"	H5030909

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: Mary F. Cruz Name: Mary F. Cruz

Date: January 22, 1996 Title: CLP Project Manager

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACH7

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030902

Level (low/med): LOW Date Received: 12/20/95

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	26.6	U		P
7440-38-2	Arsenic	2.7	U		F
7440-39-3	Barium	79.6	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	3.0	U	J N	P
7440-70-2	Calcium	114000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	3.4	U		P
7440-50-8	Copper	4.6	U		P
7439-89-6	Iron	5.7	B	J	P
7439-92-1	Lead	1.1	U		F
7439-95-4	Magnesium	29500			P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	17.7	U		P
7440-09-7	Potassium	862	B		P
7782-49-2	Selenium	2.5	B		F
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	6610			P
7440-28-0	Thallium	1.5	U	J W	F
7440-62-2	Vanadium	2.3	U		P
7440-66-6	Zinc	22.5			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACH9

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030903

Level (low/med): LOW__ Date Received: 12/20/95

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	14.5	U		P
7440-36-0	Antimony_	26.6	U		P
7440-38-2	Arsenic__	2.7	U		F
7440-39-3	Barium___	63.6	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium__	3.0	U	J N	P
7440-70-2	Calcium__	124000			P
7440-47-3	Chromium_	5.0	U		P
7440-48-4	Cobalt___	3.4	U		P
7440-50-8	Copper___	4.6	U		P
7439-89-6	Iron_____	4.8	U		P
7439-92-1	Lead_____	1.1	U	J W	F
7439-95-4	Magnesium	104000			P
7439-96-5	Manganese	256			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	17.7	U		P
7440-09-7	Potassium	9040			P
7782-49-2	Selenium_	2.0	U	J W	F
7440-22-4	Silver___	2.0	U		P
7440-23-5	Sodium___	14700			P
7440-28-0	Thallium_	1.5	U		F
7440-62-2	Vanadium_	9.0	B		P
7440-66-6	Zinc_____	25.1			P
_____	Cyanide__	_____			NR
_____	_____	_____			

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACJ1

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030904

Level (low/med): LOW Date Received: 12/20/95

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	26.6	U		P
7440-38-2	Arsenic	2.7	U		F
7440-39-3	Barium	76.6	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	3.0	U	J N	P
7440-70-2	Calcium	88200			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	3.4	U		P
7440-50-8	Copper	4.6	U		P
7439-89-6	Iron	7.6	B	J	P
7439-92-1	Lead	1.1	U		F
7439-95-4	Magnesium	16500			P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	17.7	U		P
7440-09-7	Potassium	796	U		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	2550	B		P
7440-28-0	Thallium	1.5	U	J W	F
7440-62-2	Vanadium	2.3	U		P
7440-66-6	Zinc	19.3	B	J	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN ILM04.0

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACJ3

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030905

Level (low/med): LOW Date Received: 12/20/95

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	14.5	U		P
7440-36-0	Antimony	26.6	U		P
7440-38-2	Arsenic	2.7	U		F
7440-39-3	Barium	74.8	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	3.0	U	J N	P
7440-70-2	Calcium	85800			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	3.4	U		P
7440-50-8	Copper	4.6	U		P
7439-89-6	Iron	4.8	U		P
7439-92-1	Lead	2.5	B		F
7439-95-4	Magnesium	16200			P
7439-96-5	Manganese	0.70	U		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	17.7	U		P
7440-09-7	Potassium	796	U		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	2490	B		P
7440-28-0	Thallium	1.5	U	J W	F
7440-62-2	Vanadium	2.3	U		P
7440-66-6	Zinc	16.8	B	J	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACJ5

Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030906

Level (low/med): LOW__ Date Received: 12/20/95

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	53.0	B		P
7440-36-0	Antimony	26.6	U		P
7440-38-2	Arsenic	2.7	U		F
7440-39-3	Barium	23.9	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	3.0	U	J N	P
7440-70-2	Calcium	21300			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	3.4	U		P
7440-50-8	Copper	4.6	U		P
7439-89-6	Iron	36.2	B	J	P
7439-92-1	Lead	1.1	U		F
7439-95-4	Magnesium	5740			P
7439-96-5	Manganese	3.0	B	J	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	17.7	U		P
7440-09-7	Potassium	796	U		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	606	B		P
7440-28-0	Thallium	1.5	U	J W	F
7440-62-2	Vanadium	2.3	U		P
7440-66-6	Zinc	19.5	B	J	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEACJ7

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

Matrix (soil/water): WATER Lab Sample ID: H5030909

Level (low/med): LOW__ Date Received: 12/20/95

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	14.5	U		P_
7440-36-0	Antimony_	26.6	U		P_
7440-38-2	Arsenic__	2.7	U		F_
7440-39-3	Barium___	9.9	B		P_
7440-41-7	Beryllium	0.30	U		P_
7440-43-9	Cadmium__	3.0	U	J N	P_
7440-70-2	Calcium__	408000			P_
7440-47-3	Chromium_	5.0	U		P_
7440-48-4	Cobalt___	6.8	B	J	P_
7440-50-8	Copper___	4.6	U		P_
7439-89-6	Iron_____	794			P_
7439-92-1	Lead_____	1.1	U	J W	F_
7439-95-4	Magnesium	230000			P_
7439-96-5	Manganese	117			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	17.7	U		P_
7440-09-7	Potassium	3550	B		P_
7782-49-2	Selenium_	2.0	U	J E	F_
7440-22-4	Silver___	2.0	U		P_
7440-23-5	Sodium___	16500			P_
7440-28-0	Thallium_	1.5	U		F_
7440-62-2	Vanadium_	2.5	B		P_
7440-66-6	Zinc_____	64.6			P_
_____	Cyanide__	_____			NR
_____	_____	_____			

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

_____

_____

_____

_____

3
BLANKS

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHEST Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	14.5	U	14.5	U	14.5	U	14.5	U	14.500	U	P
Antimony	26.6	U	26.6	U	26.6	U	26.6	U	26.600	U	P
Arsenic	2.7	U	2.7	U	2.7	U	2.7	U	2.700	U	F
Barium	-0.5	B	0.7	B	1.0	B	0.6	B	0.400	U	P
Beryllium	0.3	U	1.0	B	0.9	B	1.0	B	0.380	B	P
Cadmium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Calcium	3.0	U	30.4	B	3.0	U	19.2	B	3.000	U	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Cobalt	3.4	U	3.4	U	3.9	B	4.6	B	3.400	U	P
Copper	4.6	U	4.6	U	4.6	U	4.6	U	4.600	U	P
Iron	4.8	U	28.2	B	4.8	U	31.1	B	15.820	B	P
Lead	1.1	U	1.1	U	-1.4	B	-1.6	B	1.100	U	F
Magnesium	27.2	U	45.0	B	27.2	U	44.0	B	27.200	U	P
Manganese	0.7	U	1.2	B	0.7	U	1.2	B	0.700	U	P
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV
Nickel	17.7	U	17.7	U	17.7	U	17.7	U	17.700	U	P
Potassium	-976.7	B	-1116.2	B	-1255.7	B	-925.9	B	-900.550	B	P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	F
Silver	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Sodium	21.5	U	21.5	U	24.4	B	25.8	B	21.500	U	P
Thallium	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	F
Vanadium	2.3	U	2.3	U	2.3	U	2.3	U	2.300	U	P
Zinc	1.6	U	3.4	B	4.0	B	4.4	B	1.600	U	P
Cyanide											NR

3
BLANKS

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

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			14.5	U							P
Antimony			26.6	U							P
Arsenic			2.7	U							F
Barium			0.5	B							P
Beryllium			0.9	B							P
Cadmium			3.0	U							P
Calcium			17.3	B							P
Chromium			5.0	U							P
Cobalt			3.4	U							P
Copper			4.6	U							P
Iron			31.6	B							P
Lead			-1.5	B	-2.1	B	1.1	U			F
Magnesium			38.6	B							P
Manganese			0.8	B							P
Mercury											NR
Nickel			17.7	U							P
Potassium			-1940.6	B							P
Selenium			2.0	U							F
Silver			2.0	U							P
Sodium			21.5	U							P
Thallium			1.5	U							F
Vanadium			2.3	U							P
Zinc			4.3	B							P
Cyanide											NR

U.S. EPA - CLP

3
BLANKS

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHEST Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

Preparation Blank Matrix (soil/water): _____

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

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead			1.1	U	-1.4	B	1.1	U			F
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEACJ5S

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

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

% Solids for Sample: 0.0

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2070.8100		52.9700	B	2000.00	100.9		P
Antimony	75-125	542.0600		26.6000	U	500.00	108.4		P
Arsenic	75-125	42.2500		2.7000	U	40.00	105.6		F
Barium	75-125	2142.3300		23.8800	B	2000.00	105.9		P
Beryllium	75-125	51.1600		0.3000	U	50.00	102.3		P
Cadmium	75-125	3.2600	B	3.0000	U	5.00	65.2	N	P
Calcium									NR
Chromium	75-125	210.8300		5.0000	U	200.00	105.4		P
Cobalt	75-125	516.9500		3.4000	U	500.00	103.4		P
Copper	75-125	249.1400		4.6000	U	250.00	99.7		P
Iron	75-125	1048.9700		36.2000	B	1000.00	101.3		P
Lead	75-125	18.5500		1.1000	U	20.00	92.8		F
Magnesium									NR
Manganese	75-125	521.6900		3.0100	B	500.00	103.7		P
Mercury	75-125	1.0300		0.1000	U	1.00	103.0		CV
Nickel	75-125	523.3500		17.7000	U	500.00	104.7		P
Potassium									NR
Selenium	75-125	11.1000		2.0000	U	10.00	111.0		F
Silver	75-125	51.2400		2.0000	U	50.00	102.5		P
Sodium									NR
Thallium	75-125	55.3000		1.5000	U	50.00	110.6		F
Vanadium	75-125	519.7200		2.3000	U	500.00	103.9		P
Zinc	75-125	545.5500		19.4600	B	500.00	105.2		P
Cyanide									NR

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
MEACJ5A

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

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

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium		10.41		3.00	U	10.0	104.1		P
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

6
DUPLICATES

EPA SAMPLE NO.
MEACJ5D

Lab Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

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

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

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		52.9700	B	51.3200	B	3.2		P
Antimony		26.6000	U	26.6000	U			
Arsenic		2.7000	U	2.7000	U			F
Barium		23.8800	B	24.0700	B	0.8		P
Beryllium		0.3000	U	0.3000	U			P
Cadmium		3.0000	U	3.0000	U			P
Calcium	5000.0	21345.6600		21442.3400		0.5		P
Chromium		5.0000	U	5.0000	U			P
Cobalt		3.4000	U	3.4000	U			P
Copper		4.6000	U	4.6000	U			P
Iron		36.2000	B	37.4400	B	3.4		P
Lead		1.1000	U	1.1000	U			F
Magnesium	5000.0	5735.0600		5746.8600		0.2		P
Manganese		3.0100	B	2.6200	B	13.9		P
Mercury		0.1000	U	0.1000	U			CV
Nickel		17.7000	U	17.7000	U			P
Potassium		796.0000	U	796.0000	U			P
Selenium		2.0000	U	2.0000	U			F
Silver		2.0000	U	2.0000	U			
Sodium		606.3200	B	610.2100	B	0.6		P
Thallium		1.5000	U	1.5000	U			F
Vanadium		2.3000	U	2.3000	U			P
Zinc		19.4600	B	19.7100	B	1.3		P
Cyanide								NR

10
Instrument Detection Limits (Quarterly)

Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

ICP ID Number: TXTJA61 Date: 01/15/96

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	14.5	P
Antimony	206.83		60	26.6	P
Arsenic			10		NR
Barium	455.40		200	0.4	P
Beryllium	313.04		5	0.3	P
Cadmium	249.77		5	3.0	P
Calcium	317.93		5000	3.0	P
Chromium	267.72		10	5.0	P
Cobalt	228.62		50	3.4	P
Copper	324.75		25	4.6	P
Iron	259.94		100	4.8	P
Lead			3		NR
Magnesium	279.08		5000	27.2	P
Manganese	257.61		15	0.7	P
Mercury			0.2		NR
Nickel	231.60		40	17.7	P
Potassium	766.49		5000	796.0	P
Selenium			5		NR
Silver	328.07		10	2.0	P
Sodium	589.00		5000	21.5	P
Thallium			10		NR
Vanadium	292.40		50	2.3	P
Zinc	213.86		20	1.6	P

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

ICP ID Number: _____ Date: 10/15/95

Flame AA ID Number : _____

Furnace AA ID Number : TXPE4100____

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	196.00	BZ	5	2.0	F
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10
Instrument Detection Limits (Quarterly)

Name: CHESTER_LABNET Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231 SAS No.: SDG No.: MEACH7

CP ID Number: Date: 10/15/95

Flame AA ID Number :

urnace AA ID Number : TXPE560

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	283.30	BD	3	1.1	F
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

omments:

10
Instrument Detection Limits (Quarterly)

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

ICP ID Number: _____ Date: 10/15/95

Flame AA ID Number : TXMAS50A____

Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.70		0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

U.S. EPA - CLP

10
Instrument Detection Limits (Quarterly)

b Name: CHESTER_LABNET_____ Contract: 68-D5-0140

ab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.: MEACH7

CP ID Number: _____ Date: 10/15/95

lame AA ID Number : _____

ırnace AA ID Number : TXPE3030____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic	193.70	BZ	10	2.7	F
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	276.00	BZ	10	1.5	F
Vanadium			50		NR
Zinc			20		NR

ɔmments:

14
ANALYSIS RUN LOG

L , Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXTJA61_____ Method: P_

Start Date: 01/19/96 End Date: 01/19/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
S0	1.00	1358		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X		X	X		X	X
S	1.00	1402				X	X		X		X				X							X				
S	1.00	1405		X	X			X				X	X	X			X		X						X	X
S	1.00	1408								X						X				X			X			
ICV	1.00	1410		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
ICV	1.00	1414																								
ICB	1.00	1417		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
CRI	1.00	1421			X			X	X		X	X	X				X		X			X			X	X
CRI	1.00	1424																								
ICSA	1.00	1427		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
ICSAB	1.00	1431		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
CCV	1.00	1434		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
B	1.00	1437		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
PBW	1.00	1441		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
LCSW	1.00	1444		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
LCSW	1.00	1448																								
MEACH7	1.00	1453		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACH9	1.00	1456		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ1	1.00	1500		X	X		X	X	Y	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ3	1.00	1503		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ5	1.00	1506		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ5D	1.00	1509		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ5S	1.00	1513		X	X		X	X			X	X	X	X			X		X			X			X	X
CCV	1.00	1516		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
CCB	1.00	1519		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ5L	5.00	1523		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
MEACJ7	1.00	1526		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
CRI	1.00	1529			X			X	X		X	X	X				X		X			X			X	X
ICSA	1.00	1535		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
ZZZZZZ	1.00	1539																								
CCV	1.00	1542		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X
CCB	1.00	1545		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXTJA61_____ Method: P_

Start Date: 01/19/96 End Date: 01/19/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
EA[illegible]J5S_	1.00	1551							X																		
ME J5A_	1.00	1556							X																		
CRI	1.00	1559			X			X	X		X	X	X				X		X			X			X	X	
CSA	1.00	1604		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CSAB	1.00	1607		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CCV	1.00	1611		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	
CCB	1.00	1614		X	X		X	X	X	X	X	X	X	X		X	X		X	X		X	X		X	X	

FORM XIV - IN ILM04.0

000045

14
ANALYSIS RUN LOG

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE3030_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																						
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
S0	1.00	1200				X																			
S10	1.00	1205				X																			
S25	1.00	1210				X																			
S50	1.00	1215				X																			
S100	1.00	1220				X																			
ICV	1.00	1225				X																			
ICB	1.00	1230				X																			
CRA	1.00	1235				X																			
CCV	1.00	1240				X																			
CCB	1.00	1245				X																			
PBW	1.00	1250				X																			
PBWA	1.00	1255	111.5			X																			
SW	1.00	1300				X																			
LCSWA	1.00	1305	95.8			X																			
CCV	1.00	1310				X																			
CCB	1.00	1315				X																			
MEACH7	1.00	1320				X																			
MEACH7A	1.00	1325	105.5			X																			
MEACH9	1.00	1330				X																			
MEACH9A	1.00	1335	108.8			X																			
MEACJ1	1.00	1340				X																			
MEACJ1A	1.00	1345	106.8			X																			
MEACJ3	1.00	1350				X																			
MEACJ3A	1.00	1355	110.8			X																			
MEACJ5	1.00	1400				X																			
MEACJ5A	1.00	1405	110.3			X																			
CCV	1.00	1410				X																			
CCB	1.00	1415				X																			
MEACJ5D	1.00	1420				X																			
MEACJ5DA	1.00	1425	108.5			X																			
MEACJ5S	1.00	1430				X																			
MEACJ7	1.00	1435				X																			

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE3030_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
MEACJ7A_	1.00	1440	96.5			X																				
[illegible]	1.00	1445				X																				
[illegible]	1.00	1450				X																				

FORM XIV - IN ILM04.0

14
ANALYSIS RUN LOG

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE560_____ Method: F_

Start Date: 01/08/96 End Date: 01/08/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
S0	1.00	0800													X											
S3	1.00	0805													X											
S50	1.00	0810													X											
S100	1.00	0815													X											
ICV	100.00	0820													X											
ICB	1.00	0825													X											
CRA	1.00	0830													X											
CCV	1.00	0835													X											
CCB	1.00	0840													X											
CCV	1.00	0845													X											
CCB	1.00	0850													X											
ZZZZZ	1.00	0855																								
ZZZZA	1.00	0900	106.0																							
LCSW	2.00	0905																								
LCSWA	2.00	0910	113.8																							
ZZZZZZ	1.00	0915																								
ZZZZZZA	1.00	0920	95.8																							
ZZZZZZ	1.00	0925																								
ZZZZZZA	1.00	0930	101.8																							
ZZZZZZ	1.00	0935																								
ZZZZZZA	1.00	0940	76.8																							
CCV	1.00	0945													X											
CCB	1.00	0950													X											
ZZZZZZ	1.00	0955																								
ZZZZZZA	1.00	1000	82.8																							
ZZZZZZ	1.00	1005																								
ZZZZZZ	1.00	1010																								
ZZZZZZA	1.00	1015	81.5																							
ZZZZZZ	1.00	1020																								
ZZZZZZA	1.00	1025	93.3																							
ZZZZZZ	1.00	1030																								
ZZZZZZA	1.00	1035	82.5																							

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE560_____ Method: F_

Start Date: 01/08/96 End Date: 01/08/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCV	1.00	1040													X												
CC	1.00	1045													X												
ZZZZZZ	1.00	1050																									
ZZZZZZA	1.00	1055	91.0																								
CCV	1.00	1100													X												
CCB	1.00	1105													X												
CCV	1.00	1110													X												
CCB	1.00	1115													X												
PBW	1.00	1120																									
PBWA	1.00	1125	100.8																								
LCSW	100.00	1130													X												
LCSWA	100.00	1135	98.3												X												
ACH7	1.00	1140													X												
MEACH7A	1.00	1145	95.8												X												
MEACH9	1.00	1150													X												
MEACH9A	1.00	1155	69.0												X												
MEACJ1	1.00	1200													X												
MEACJ1A	1.00	1205	100.5												X												
CC	1.00	1210													X												
CCB	1.00	1215													X												
MEACJ3	1.00	1220													X												
MEACJ3A	1.00	1225	94.8												X												
MEACJ5	1.00	1230													X												
MEACJ5A	1.00	1235	93.3												X												
MEACJ5D	1.00	1240													X												
MEACJ5DA	1.00	1245	93.0												X												
MEACJ5S	1.00	1250													X												
MEACJ7	1.00	1255													X												
MEACJ7A	1.00	1300	41.0												X												
CCV	1.00	1305													X												
CCB	1.00	1310													X												
PBW	1.00	1315													X												

14
ANALYSIS RUN LOG

L . Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE560_____ Method: F_

Start Date: 01/08/96 End Date: 01/08/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
PBWA	1.00	1320	101.3												X										
CCV	1.00	1325													X										
CCB	1.00	1330													X										

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHESTER_LABNFT_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE4100_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
0	1.00	1033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
S5	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
S20	1.00	1043		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
50	1.00	1048		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
100	1.00	1053		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
ICV	1.00	1058		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CB	1.00	1102		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
RA	1.00	1107		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CV	1.00	1112		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCB	1.00	1117		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
BW	1.00	1122		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
RWA	1.00	1126	108.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
BW	1.00	1131		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CSWA	1.00	1136	103.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CV	1.00	1141		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCB	1.00	1146		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACH7	1.00	1150		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACH7A	1.00	1155	86.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
E H9	1.00	1200		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACH9A	1.00	1205	50.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACJ1	1.00	1210		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACJ1A	1.00	1215	109.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACJ3	1.00	1219		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACJ3A	1.00	1224	106.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACJ5	1.00	1229		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACJ5A	1.00	1234	108.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCV	1.00	1239		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
CCB	1.00	1244		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACJ5D	1.00	1249		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACJ5DA	1.00	1254	111.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
MEACJ5S	1.00	1258		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-
EACJ7	1.00	1303		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-

000051

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE4100_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN
MEACJ7A_	1.00	1308	22.0																	X					
CCV_____	1.00	1313																		X					
CCB_____	1.00	1318																		X					

000052

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE3030_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
0	1.00	0700																					X			
J1	1.00	0705																					X			
S25	1.00	0710																					X			
50	1.00	0715																					X			
100	1.00	0720																					X			
ICV	2.00	0725																					X			
CB	1.00	0730																					X			
RA	1.00	0735																					X			
CV	1.00	0740																					X			
CCB	1.00	0745																					X			
BW	1.00	0750																								
PWA	1.00	0755	116.5																							
N	1.00	0800																					X			
PBWA	1.00	0805	107.8																				X			
CSW	2.00	0810																					X			
LCSWA	2.00	0815	97.5																				X			
CCV	1.00	0820																					X			
CP	1.00	0825																					X			
E H7	1.00	0830																					X			
MEACH7A	1.00	0835	119.5																				X			
MEACH9	1.00	0840																					X			
MEACH9A	1.00	0845	110.0																				X			
MEACJ1	1.00	0850																					X			
MEACJ1A	1.00	0855	118.0																				X			
MEACJ3	1.00	0900																					X			
MEACJ3A	1.00	0905	118.8																				X			
MEACJ5	1.00	0910																					X			
MEACJ5A	1.00	0915	117.0																				X			
CV	1.00	0920																					X			
CCB	1.00	0925																					X			
MEACJ5D	1.00	0930																					X			
MEACJ5DA	1.00	0935	118.0																				X			

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.: _____ SDG No.:MEACH7

Instrument ID Number: TXPE3030_____ Method: F_

Start Date: 01/09/96 End Date: 01/09/96

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V		
MEACJ5S_	1.00	0940																					X			
MEACJ7__	1.00	0945																					X			
MEACJ7A_	1.00	0950	102.3																							
CCV_____	1.00	0955																					X			
CCB_____	1.00	1000																					X			

FORM XIV - IN ILMC

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Name: CHESTER_LABNET_____ Contract: 68-D5-0140

Lab Code: CHESTX Case No.: 24231_ SAS No.. _____ SDG No.:MEACH7

Instrument ID Number: TXMAS50A_____ Method: CV

Start Date: 01/04/96 End Date: 01/04/96

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0	1.00	0915																X									
S0.1	1.00	0918																X									
S0.5	1.00	0921																X									
S1	1.00	0924																X									
S5	1.00	0927																X									
S10	1.00	0930																X									
ICV	1.00	0933																X									
ICB	1.00	0936																X									
CRA	1.00	0939																X									
CCV	1.00	0942																X									
CCB	1.00	0945																X									
PBW	1.00	0948																X									
ZZZZ	1.00	0951																									
ZZZZZ	1.00	0954																									
ICV	1.00	0957																X									
CCB	1.00	1000																X									
MEACH7	1.00	1003																X									
MEACH9	1.00	1006																X									
MEACJ1	1.00	1009																X									
MEACJ3	1.00	1012																X									
MEACJ5	1.00	1015																X									
MEACJ5D	1.00	1018																X									
MEACJ5S	1.00	1021																X									
MEACJ7	1.00	1024																X									
ICV	1.00	1027																X									
ICB	1.00	1030																X									

EPA — Organic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program

(For Inorganic CLP Analysis)

SAS No. (if applicable): X

Case No.: 21331

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

2. Region No.: 5	Sampling Co.: EarthTech	4. Date Shipped: 12/19/95	Carrier: Federal Express
Sampler (Name): Billie J. Conway		Airbill Number: 735726 7915	
Sampler Signature: Billie J. Conway		5. Ship To: Chester Lehnert, 322 West Park Dr., Houston TX 77063, ATTN: Sample Custodian	
3. Purpose*: Lead: SF, PRP, ST, FED; Early Action: CLEM, PA, REM, RI, SI, ESI; Long-Term Action: FS, RD, RA, O&M, NPLD			
6. Date Received – Received by: 12-20-95 2:15 E Bernardo			
Laboratory Contract Number: 68-05-0140	Unit Price: 84.50		
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	Low only: Fluoride	High only: pH	High only: 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.
MEACJ3	2	L	G	2	X							5-153157	LL-D-MW-6-1	12/18/95/1605	EANW4	BJC			
MEACJ1	2	L	G	2	X							5-153140	LL-S-MW-6-1	12/18/95/1605	EANW3	BJC			
MEACJ5	2	L	G	2	X							5-153198	LL-S-MW-7-1	12/18/95/1450	EANW5	BJC			
↓	↓	↓	↓	↓	↓							5-153199	↓	↓	↓	↓			
↓	↓	↓	↓	↓	↓							5-153197	↓	↓	↓	↓			
MEACH7	2	L	G	2	X							5-153119	LL-S-MW-4I-1	12/19/95/1210	EANW1	BJC			
MEACH9	2	L	G	2	X							5-153129	LL-S-MW-4D-1	12/19/95/0910	EANW2	BJC			
MEACJ7	2	L	G	2	X							5-153170	LL-S-MW-8D-1	12/19/95/0930	EANW6	BJC			

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
	1 of 1	MEACJ5 - MS/MSD		46753, 46754

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Billie J Conway	12/19/95 1500				
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	
		E Bernardo	12/20/95 2:15	SDG: MEACH7	

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

A21-0126 REV. 3/93

000155

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IN

Case No: 24231 Site Name Location: Continental Steel

Contractor or EPA Lab: Chester LABNET Data User: COM

No. of Samples: 6 Date Sampled or Data Received: MF 1-25-9

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: 6 No. of samples received: 6

Received by: M. Fortner Date: 1/25/96

Received by LSSS: _____ Date: _____

Review started: 1/25/96 Reviewer Signature: M. Fortner

Total time spent on review: 6.2 +0.6 T.N. Date review completed: 1/26/96

Copied by: Lynette Burnett Date: 2/5/96

Mailed to user by: Lynette Burnett Date: 2/5/96

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: _____

Received 2/16/96
LL Monitoring wells
Vols, Semivols, Pesticides/PCBs

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data Received for Review on 1-23-96

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

TO: Data User: EarthTech Patricia Scott for Steve Ostrodka 02/07/96

We have reviewed the data for the following case:

SITE NAME: Lemon Lane LF (IN)

CASE NUMBER: 24331 SDG NUMBER: EANW1

Number and Type of Samples: 8 water

Sample Numbers: EANW1 - EANW8

Laboratory: ATAS Hrs. for Review: 8 12

Following are our findings:

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

Patricia Scott

cc: Regional TPO
Brian Freeman
HSMC-5J

NARRATIVE

CASE: 24331
SDG# EANW1
LABORATORY: ATAS, Inc.
SITE: Lemon Lane Landfill (IN)

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

This review covers eight water samples (EANW1 through EANW8) for complete organic analysis at low levels except for samples EANW7 and EANW8, which were analyzed for volatiles only. The samples were collected on 12/17/95 through 12/19/95 and all were received by the lab on 12/21/95.

The reviewer's narrative and data qualifiers follow.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 31 January 1996

NARRATIVE

CASE: 24331
SDG# EANW1
LABORATORY: ATAS, Inc.
SITE: Lemon Lane Landfill (IN)

1. Holding Times:

All samples were analyzed for volatiles well within the fourteen day holding time from date of sampling for preserved waters.

All samples analyzed for semi-volatiles and pesticides/PCBs were extracted well within the seven day holding times for these fractions; all extracts were very promptly analyzed.

2. GC/MS Tuning and GC Instrument Performance:

The GC/MS tunings and mass calibrations were all within the required Q.C. limits. All pesticide breakdown results were well below the maximum permissible limits. All pesticide resolution checks were satisfactory.

3. Calibration:

The volatile and semi-volatile calibration outliers are listed on the outliers forms; there were no pesticide outliers, but the forms are included for reference. All RPDs in the pesticide calibration verification summaries (Pest-1) were below the maximum permissible 25%.

4. Method Blanks:

Both volatile method blanks contained the common contaminant methylene chloride (well below CRQL); this compound was also found in all of the samples. In addition, VBLKDL contained a single TIC, but this TIC was not found in any of the associated samples.

The semi-volatile method blank contained no target compounds, but did contain ten early-eluting TICs (all between 5.0 and 6.5 minutes); all of the samples also contained most of these TICs.

The pesticide method blank contained only the target analyte Heptachlor (only a tiny fraction of CRQL); this compound was also found at similar levels in samples EANW2 and EANW6, and necessarily at higher levels in EANW5MS and EANW5MSD, since they were both spiked with this compound.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 31 January 1996

NARRATIVE

CASE: 24331
SDG# EANW1
LABORATORY: ATAS, Inc.
SITE: Lemon Lane Landfill (IN)

Target analytes and TICs found in both the sample and the associated method blank, and therefore flagged "B" by the lab, are further flagged "U" by the reviewer if the analytes are present in the sample at no more than five times (or ten times for common contaminants) the amount in the method blank. If the value is less than CRQL, it is deleted and raised to CRQL by the reviewer.

5. Surrogate Recoveries:

All surrogate recoveries for all fractions were within the Q.C. limits.

6. Matrix Spikes and Matrix Spike Duplicates:

Sample EANW5 was chosen for matrix spiking. All MS and MSD recoveries and RPDs for all fractions were well within the Q.C. limits.

7. Field Duplicates and Field Blanks:

Sample EANW4 was identified as duplicate of EANW3; both sets of analyses were nearly identical except that the pesticide/PCB fraction of EANW4 alone contained Aroclor 1260.

Samples EANW7 and EANW8 were identified as trip blanks and analyzed for volatiles only; both contained only methylene chloride (also found in the associated method blank).

8. Internal Standards Performance:

All volatile IS areas were very well within the Q.C. limits. All semi-volatile IS areas were within the limits.

9. Compound Identification:

The compound identifications for all fractions appear to be satisfactory.

10. Compound Quantitation and Reported Detection Limits:

The correct limits were used and no dilutions were made; therefore, no adjustments were necessary.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 31 January 1996

NARRATIVE

CASE: 24331
SDG# EANW1
LABORATORY: ATAS, Inc.
SITE: Lemon Lane Landfill (IN)

11. System Performance:

All aspects of the system performance appear to be satisfactory.

12. Additional Case-Specific Problems:

None noted.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 31 January 1996

CALIBRATION OUTLIER
Volatile TCL
(Page 1 of 1)

CASE/SAS #: 24331
COLUMN: DB-624
HEATED PURGE (Y/N) N

LABORATORY: ATAS, INC.
SITE NAME: Lemon Lane LF (IN)

Instrument ID: D		Initial Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
Date: 12-21-95													
Time:		12-21-95 9:53			12-22-95 9:58								
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	0.010												
Bromomethane	0.100												
Vinyl Chloride	0.100												
Chloroethane	0.010												
Methylene Chloride	0.010												
Acetone	0.010	.785			.504	35.8	J						
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	1.180			.782	33.7	J						
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	.444			.245	44.8	J						
2-Hexanone	0.010	.398			.188	52.8	J						
Tetrachloroethene	0.200												
1,1,2,2-Tetrachloroethane	0.300												
Toluene	0.400												
Chlorobenzene	0.500												
Ethylbenzene	0.100												
Styrene	0.300												
Xylene (total)	0.300												
Toluene-d_8	0.010												
Bromofluorobenzene	0.200												
1,2-Dichloroethane-d_4	0.010												

Affected Samples:

VBLKDL	VBLKDM	
EANW1	EANW3 thru EANW5	
EANW2	EANW5MS	
EANW6	EANW5MSD	
	EANW7	
	EANW8	

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.

Reviewer's Init/Date: AV 1-31-96

CALIBRATION OUTLIER
Semivolatile TCL
(Page 1 of 2)

CASE/SAS #: 24331
COLUMN: —

LABORATORY: ATAS, INC.
SITE NAME: Lemon Lane LF (IN)

Instrument ID: E		Initial Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
Date: 12-14-95													
Time:		12-18-95 16:29			12-29-95 12:48			1-2-96 13:46					
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol	0.800												
bis(2-Chloroethyl)ether	0.700												
2-Chlorophenol	0.800												
1,3-Dichlorobenzene	0.600												
1,4-Dichlorobenzene	0.500												
1,2-Dichlorobenzene	0.400												
2-Methylphenol	0.700												
2,2-oxybis(1-Chloropropane)	0.010	1.838			3.257	111.5	J	3.132	70.4	J			
4-Methylphenol	0.600												
N-Nitroso-di-n-propylamine	0.500	1.075			1.466	36.4	J	1.139					
Hexachloroethane	0.300												
Nitrobenzene	0.200												
Isophorone	0.400												
2-Nitrophenol	0.100												
2,4-Dimethylphenol	0.200												
bis(2-Chloroethoxy)methane	0.300												
2,4-Dichlorophenol	0.200												
1,2,4-Trichlorobenzene	0.200												
Naphthalene	0.700												
4-Chloroaniline	0.010	.376			.523	39.1	J	.471	25.3	J			
Hexachlorobutadiene	0.010												
4-Chloro-3-methylphenol	0.200												
2-Methylnaphthalene	0.400												
Hexachlorocyclopentadiene	0.010												
2,4,6-Trichlorophenol	0.200												
2,4,5-Trichlorophenol	0.200												
2-Chloronaphthalene	0.800												
2-Nitroaniline	0.010												
Dimethylphthalate	0.010												
Acenaphthylene	0.900												
2,6-Dinitrotoluene	0.200												
3-Nitroaniline	0.010												
Acenaphthene	0.900												
2,4-Dinitrophenol	0.010												

Affected Samples:

SDLKEA

	EANW1 through EANW5	EANW6	
	EANW5MS		
	EANW5MSD		

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: AV 1-31-96

CALIBRATION OUTLIER
Semivolatile TCL
(Page 2 of 2)

CASE/SAS #: 24331
COLUMN:

LABORATORY: ATAS, INC.
SITE NAME: Lemon Lane LF (IN)

Instrument ID: E		Initial Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
Date: 12-18-95													
Time:		12-18-95 16:24			12-29-95 12:48			1-2-96 13:46					
	#	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*
4-Nitrophenol	0.010	.234			.092	60.7	J	.083	64.5	J			
Dibenzofuran	0.800												
2,4-Dinitrotoluene	0.200												
Diethylphthalate	0.010	1.720			1.379			1.265	26.5	J			
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	.194			.247	27.3	J	.233					
Hexachlorobenzene	0.100												
Pentachlorophenol	0.050												
Phenanthrene	0.700												
Anthracene	0.700												
Carbazole	0.010												
Di-n-butylphthalate	0.010												
Fluoranthene	0.600												
Pyrene	0.600												
Butylbenzylphthalate	0.010	1.537			1.129	26.5	J	.981	36.2	J			
3-3'-Dichlorobenzidine	0.010												
Benzo(a)anthracene	0.800												
Chrysene	0.700												
bis(2-Ethylhexyl)phthalate	0.010	1.415			1.428	25.4	J	1.326	30.8	J			
Di-n-octylphthalate	0.010	3.619			2.684	25.8	J	2.272	37.2	J			
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												
2-Fluorophenol	0.600												
2,4,6-Tribromophenol	0.010												
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: AV 1-31-96

CALIBRATION OUTLIER
Pesticide/PCB TCL
(Page 1 of 1)

CASE/SAS #: 24331
COLUMN: PB17

LABORATORY: ATAS, INC
SITE NAME: Lemon Lane LF (IN)

Instrument Number HB05B	Initial Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.		Cont. Cal.	
Date 12-5-95										
Time	12-5-95 15:27		12-27-95 15:44		12-28-95 19:17					
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha-BHC										
beta-BHC										
delta-BHC										
gamma-BHC										
Hepachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4'-DDE										
Endrin										
Endosulfan II										
4,4'-DDD										
Endosulfan Sulfate										
4,4'-DDT										
Methoxychlor										
Endrin Ketone										
Endrin Aldehyde										
alpha-Chlordane										
gamma-Chlordane										
Arolcor 1016										
Aroclor 1221										
Aroclor 1232										
Arolcor 1242										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples:

	PBLK5W			
	EANW1 through EANW6			
	EANW5MS			
	EANW5MSD			

* 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: AV 1-31-96

CALIBRATION OUTLIER
Pesticide/PCB TCL
(Page 1 of 1)

CASE/SAS #: 24331
COLUMN: DB-1701

LABORATORY: ATAS, INC.
SITE NAME: Lemon Lane LF OU

Instrument Number HB-05A Date 12-8-95 Time	Initial Cal.		Cont. Cal. 12-27-95 15:44		Cont. Cal. 12-28-95 19:17		Cont. Cal.		Cont. Cal.	
	%RSD	*	%D	*	%D	*	%D	*	%D	*
alpha-BHC										
beta-BHC										
delta-BHC										
gamma-BHC										
Hepachlor										
Aldrin										
Heptachlor Epoxide										
Endosulfan I										
Dieldrin										
4,4'-DDE										
Endrin										
Endosulfan II										
4,4'-DDD										
Endosulfan Sulfate										
4,4'-DDT										
Methoxychlor										
Endrin Ketone										
Endrin Aldehyde										
alpha-Chlordane										
gamma-Chlordane										
Arolcor 1016										
Aroclor 1221										
Aroclor 1232										
Arolcor 1242										
Aroclor 1248										
Aroclor 1254										
Aroclor 1260										

Affected Samples:

	PBLK5W EANW1 through EANW6 EANW5MS EANW5MSD			

* 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 "

Reviewer's Init/Date: AV 1-31-96

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.

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (if applicable): \
Case No.: [illegible]

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)	2. Region No.	Sampling Co.	4. Date Shipped	Carrier	6. Date Received -- Received by:
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)	1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved	5	Earth Tech	12/20/95	Federal Express	12-21-95 [signature]

Sampler (Name): Bette T. Conway
Sampler Signature: Bette T. Conway
Airbill Number: 7359267882
Laboratory Contract Number: 68-D5-0018
Unit Price: $616.95

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

5. Ship To: American Technical & Analytical Services
875 Fee Fee Rd
Maryland Heights MO 63043-3211
ATTN: Sample Custodian

7. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Numbers (from labels)	A Matrix (from Box 1)	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2)	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
EANW2	2	L	G	5		X	X		5-153125, 5-153126	LL-S-MW-4D-1	12/18/95/1100	MEHC117, MEHC1[illegible]	BTC			
EANW1	2	L	G	5		X	X		5-153115, 5-153116	LL-S-MW-4I-1	12/18/95/1310	MEHC117, MEHC118	BTC			

Shipment for Case Complete? (Y/N): Y
Page 1 of 1
Sample(s) to be Used for Laboratory QC:
Additional Sampler Signatures:
Chain of Custody Seal Number(s): 46759, 46760

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bette Conway	12/20/95 1100				

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		[signature]	12-21-95 0943	2°C	Y

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

EPA Form 9110-2

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

A21-012-4 REV. 3/93

EANW1

362678

EPA — Organic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program

(For Organic CLP Analysis)

SAS No. (if applicable)	Case No.

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.	Sampling Co.	4. Date Shipped	Carrier
5	EarthTech	12/20/95	Federal Express

Sampler (Name)	Airbill Number
Beth J. Conway	735926735 6

Sampler Signature	5. Ship To
Beth J Conway	American Technical & Analytical Services 875 Fee Fee Road Maryland Heights, MO 63043-3211 ATTN: Sample Custodian

3. Purpose*

Lead	Early Action	Long-Term Action
SF	CLEM	FS
PRP	PA	RD
ST	REM	RA
FED	RI (X)	SI
	SI	O&M
	ESI	NPLD

6. Date Received -- Received by:	
12-21-95 L. Moseley	
Laboratory Contract Number	Unit Price
68-D5-0018	3616.95
7. Transfer to:	Date Received
Received by	
Contract Number	Price

A CLP Sample Numbers (from labels)	B Matrix (from Box 1) / Other:	C Conc.: Low Med High	D Sample Type: Comp./ Grab	E Preservative (from Box 2) / Other:	F RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/ TOX	G Regional Specific Tracking Number or Tag Numbers	H Station Location Identifier	I Mo/Day/ Year/Time Sample Collection	J Corresponding CLP Inorganic Sample No.	K Sampler Initials	L High Phases: Solids	Water-Miscible Liq.	Water-Immis. Liq.
EANW4	2	L	G	5		X	X		5-153153, 5-153154	LL-D-MW-6-1	12/18/95/1605	MEACJ3, MEACJ4	TJC			
EANW3	2	L	G	5		X	X		5-153135, 5-153136	LL-S-MW-6-1	12/18/95/1605	MEACJ1, MEACJ2	TJC			

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

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Beth J Conway	12/21/95 1100				
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) L. Moseley	Date / Time 12-21-95 0943	Remarks Is custody seal intact? (Y)N/none SC	

A21-0124 REV 3/93

EPA Form 9110-2 — SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS

EPA United States Environmental Protection Agency Contract Laboratory Program

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

SAS No. (if applicable): —

Case No.: [illegible]

000015

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)	2. Region No.	Sampling Co.	4. Date Shipped	Carrier	6. Date Received -- Received by:
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)	1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved	5	Earth Tech	12/20/95	Federal Express	12-21-95 L. Mauseley

Sampler (Name): Bette J. Conway

Airbill Number: 7359267860

Laboratory Contract Number: 68-D5-0018

Unit Price: $616.95

Sampler Signature: Bette J Conway

5. Ship To: American Technical & Analytical Service, 875 Fee Fee Road, Maryland Heights MO 63043-3.1[illegible]; ATTN: SAMPLE CUSTODIAN

7. Transfer to:

Date Received:

Received by:

Contract Number:

Price:

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

CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2) Other:	E RAS Analysis 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.
EANW5	2	L	G	5		X	X		5-1531164, 5-1531165	KS-MW 7-1	12/15/95/1150	MEACS5, MEACK[illegible]	[illegible]			
↓	↓	↓	↓	↓		↓	↓		5-1531166, 5-1531167	↓	↓	↓	↓			

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

Page 1 of 1

Sample(s) to be Used for Laboratory QC: EANW5 - MS/MSD

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 41765, 41766

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bette J Conway	12/20/95 1600				

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		L. Mauseley	12-21-95 0943	6°C	Y

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

EPA Form 9110-2

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

A21-012-4 REV 3/93

EANW1

362681

EPA United States Environmental Protection Agency
Contract Laboratory Program

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

SAS No. (if applicable): ~~X~~ | Case No.: 24331

BJC 12/20/95

0001

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)	2. Region No.	Sampling Co.	4. Date Shipped	Carrier	6. Date Received -- Received by:
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)	1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved	5	Earth Tech	12/19/95	Federal Express	12-21-95 [signature]

Sampler (Name): Bette T. Conway

Airbill Number: 7359267893

Laboratory Contract Number: 68-D5-0018

Unit Price: $616.95

Sampler Signature: Bette Conway

5. Ship To: American Technical & Analytical Services, 875 Fee Fee Rd., Maryland Heights, MO 63043-3211
ATTN: Sample Custodian

7. Transfer to: | Date Received: | Received by: | Contract Number: | Price:

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

CLP Sample Numbers (from labels)	A Matrix (from Box 1)	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 2)	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.
EANW5	2	L	G	1	X				5-153168, 5-153169, 5-153193,	LL-S-MW-7-1	12/18/95/1450	MEACJ5, MEACJ6	BJC			
↓	↓	↓	↓	↓	↓				5-153194, ~~5-193~~ BJC 12/20/95	↓	↓	↓	↓			
									5-153195, 5-153196							
*EANW6	2	L	G	1	X				5-153172, 5-153189	LL-S-MW-8D-1	12/19/95/0930	MEACJ7, MEACJ8	BJC			
EANW3	2	L	G	1	X				5-153138, 5-153137	LL-S-MW-6-1	12/19/95/1605	MEACJ1, MEACJ2	BJC			
EANW4	2	L	G	1	X				5-153155, 5-153156	LL-D-MW-6-1	12/18/95/1605	MEACJ3, MEACJ4	BJC			
EANW7	2	L	G	1	X				5-153251, 5-153176	LL-TB-MW-1-1	12/17/95/2345	—	BJC			
*EANW8	2	L	G	1	X				5-153252, 5-153253	LL-TB-MW-2-1	12/17/95/2350	—	BJC			
EANW2	2	L	G	1	X				5-153128, 5-153127	LL-S-MW-4D-1	12/18/95/1120	MEACH9, MEACJ0	BJC			
EANW1	2	L	G	1	X				5-153118, 5-153117	LL-S-MW-4I-1	12/18/95/1210	MEACH7, MEACH8	BJC			

Shipment for Case Complete? (Y/N): Y | Page 1 of 1 | Sample(s) to be Used for Laboratory QC: EANW5 MS/MSD | Additional Sampler Signatures: | Chain of Custody Seal Number(s): 46757, 46758

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bette Conway	12/20/95 1600				

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? Y/N/none
		[signature]	12-21-95 0943	1°C	Y

EPA Form 9110-2 (Rev. 3/93)

EPA — Organic Traffic Report & Chain of Custody Record

United States Environmental Protection Agency
Contract Laboratory Program

(For Organic CLP Analysis)

SAS No. (if applicable): /

Case No.:

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.: Earth Tech

4. Date Shipped: 12/20/95
Carrier: Federal Express

6. Date Received -- Received by: 12-21-95 J. Moseley

Sampler (Name): Bette J. Conway

Airbill Number: 735926757 1

Laboratory Contract Number: 68-D5-0018
Unit Price: $616.95

Sampler Signature: Bette J. Conway

5. Ship To: American Technical & Analytical Services
8975 Fee Fee Rd
Maryland Heights MO 63043-3211
ATTN: Sample Custodian

7. Transfer to:
Date Received: 00000

Received by:

Contract Number:
Price:

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

CLP Sample Numbers (from labels)	A Matrix (from Box 1) / Other	B Conc.: Low Med High	C Sample Type: Comp./ Grab	D Preservative (from Box 2) / Other	E RAS Analysis: 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.
EAN106	2	L	G	5		X	X		5-153171, 5-153186	LL-S-MW-8D-1	12/18/95/1005	MEAC17, MEAC18	BJC			
EAN105	2	L	G	5		X	X		5-153162, 5-153163	LL-S-MW-7-1	12/18/95/1450	MEAC15, MEAC16	BJC			

Shipment for Case Complete? (Y/N)

Page: 1 of 1

Sample(s) to be Used for Laboratory QC: EAN105 - MS/MSD

Additional Sampler Signatures:

Chain of Custody Seal Number(s): 16711 - 16712

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Bette J. Conway	12-21-95 / 1600				
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) J. Moseley	Date / Time: 12-21-95 / 0943	Remarks: 3°C — Is custody seal intact? (Y)N/none	

A21-012-4 REV 3/93

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

EPA Form 9110-2

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

~~*SDG FINAL SAMPLE~~ CK 12-21-95

EAN105

362679

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

SDG NARRATIVE

CONTRACT: 68-D5-0018

CASE: 24331

SDG #: EANW1

REGION: V

The samples listed below were received in good condition on December 21, 1995. All samples had sufficient volume for analysis. See pages 1080-1082.

ATAS ID	EPA SAMPLE ID		MATRIX
14572.01	EANW2	MW-5D	WATER
14572.02	EANW1	MW-4I	WATER
14572.03	EANW4	MW-6 DUP	WATER
14572.04	EANW3	MW-6	WATER
14572.05	EANW5	MW-7	WATER
14572.06	EANW5MS		WATER
14572.07	EANW5MSD		WATER
14572.08	EANW6	MW-5D	WATER
14572.09	EANW7	MW-1	WATER
14572.10	EANW8	MW-2	WATER

VOLATILE SAMPLE ANALYSIS:

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

The trap used for Volatile analysis is: Tekmar OV-1/Tenax/Silica, with 1 cm of OV-1, 15 cm of Tenax and 8 cm of Silica.

The column used for Volatile analysis is: J & W DB-624, 75 meter, 0.53 mm ID, 3 micron film thickness.

All water samples in this SDG for volatile analysis have a pH of 2.

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: EANW1, EANW2, EANW3, EANW4, EANW5 and EANW6.

PESTICIDE/PCB SAMPLE ANALYSIS:

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

The columns used for this Pesticide/PCB analysis are: J&W DB-1701, 30 meter, 0.32 mm ID, 0.25 micron film thickness and J&W DB-17, 30 meter, 0.32 mm ID, 0.25 micron film thickness.

Some single-component target compounds were not reported due to co-elution with Aroclor 1248 and/or Aroclor 1260. The Pesticide Residue Expert scratched all target compounds that were false positives due to the Aroclors present.

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.

Richard Lowe **January 22, 1996**
Laboratory Manager

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKDL	94	90	81		0
02	EANW2	89	90	86		0
03	EANW1	89	91	84		0
04	EANW6	88	87	82		0
05	VBLKDM	97	97	88		0
06	EANW4	94	94	86		0
07	EANW3	95	97	90		0
08	EANW5	96	98	90		0
09	EANW5MS	98	98	89		0
10	EANW5MSD	96	99	93		0
11	EANW8	96	97	89		0
12	EANW7	94	97	87		0
13	VBLKDN	98	100	95		0
14	VHBLKDN	96	99	94		0
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix Spike - EPA Sample No.: EANW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	45	90	61-145
Trichloroethene	50	4	50	92	71-120
Benzene	50	0	47	94	76-127
Toluene	50	0	47	94	76-125
Chlorobenzene	50	0	46	92	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	42	84	7	14	61-145
Trichloroethene	50	49	90	2	14	71-120
Benzene	50	47	94	0	11	76-127
Toluene	50	46	92	2	13	76-125
Chlorobenzene	50	45	90	2	13	75-130

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

* Values outside of QC limits

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

COMMENTS: _____

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKDL

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Lab File ID: D4306.D Lab Sample ID: 122195-01

Date Analyzed: 12/21/95 Time Analyzed: 1323

GC Column:DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EANW2	14572.01	D4316.D	1821
02	EANW1	14572.02	D4317.D	1849
03	EANW6	14572.08	D4320.D	2014
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKDM

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Lab File ID: D4324.D Lab Sample ID: 122295-01

Date Analyzed: 12/22/95 Time Analyzed: 1046

GC Column:DB-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EANW4	14572.03	D4325.D	1228
02	EANW3	14572.04	D4326.D	1256
03	EANW5	14572.05	D4327.D	1325
04	EANW5MS	14572.06	D4328.D	1409
05	EANW5MSD	14572.07	D4329.D	1439
06	EANW8	14572.10	D4331.D	1536
07	EANW7	14572.09	D4333.D	1635
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKDL

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122195-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4306.D

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

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	1	J
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.

VBLKDL

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122195-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4306.D

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

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	55429-85-1	Benzeneethanamine, N-[(penta	18.605	24	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKDM

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4324.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	5	J
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.

VBLKDM

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4324.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW1

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4317.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

EANW1

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4317.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	67-63-0	Isopropyl Alcohol	6.469	24	NJ
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW2

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4316.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EANW2

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4316.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW3
MW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4326.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	3	JB
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	94	
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

000045

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EANW3

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4326.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW4
mw-6 DP

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4325.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	13	JB 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	91	
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

EANW4

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4325.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW5 mw-7

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4327.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	JB
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	4	J
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

000059

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EANW5

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4327.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE
EANW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4320.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

EANW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4320.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/21/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW7

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.09

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4333.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	12	JB
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	
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.

EANW7

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.09

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4333.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW8

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4331.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/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	12	SB
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

AV 1-31-96

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EANW8

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: D4331.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: not dec. _____ Date Analyzed: 12/22/95

GC Column:DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

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

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #
01	SBLKEA	63	59	78	57	54	59	56	49
02	EANW2	68	64	76	56	55	67	56	48
03	EANW1	63	57	73	53	50	63	52	49
04	EANW4	64	53	74	56	53	65	54	47
05	EANW3	68	53	80	51	57	70	59	49
06	EANW5	62	59	95	56	52	69	55	49
07	EANW5MS	63	61	80	49	52	69	49	53
08	EANW5MSD	67	62	71	53	56	69	53	59
09	EANW6	67	58	66	72	64	67	64	46
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

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

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

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix Spike - EPA Sample No.: EANW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	75	0	36	48	12-110
2-Chlorophenol	75	0	37	49	27-123
1,4-Dichlorobenzene	50	0	26	52	36- 97
N-Nitroso-di-n-prop.(1)	50	0	27	54	41-116
1,2,4-Trichlorobenzene	50	0	26	52	39- 98
4-Chloro-3-Methylphenol	75	0	39	52	23- 97
Acenaphthene	50	0	30	60	46-118
4-Nitrophenol	75	0	43	57	10- 80
2,4-Dinitrotoluene	50	0	34	68	24- 96
Pentachlorophenol	75	0	41	55	9-103
Pyrene	50	0	38	76	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	75	39	52	8	42	12-110
2-Chlorophenol	75	40	53	8	40	27-123
1,4-Dichlorobenzene	50	28	56	7	28	36- 97
N-Nitroso-di-n-prop.(1)	50	31	62	14	38	41-116
1,2,4-Trichlorobenzene	50	28	56	7	28	39- 98
4-Chloro-3-Methylphenol	75	42	56	7	42	23- 97
Acenaphthene	50	30	60	0	31	46-118
4-Nitrophenol	75	56	75	27	50	10- 80
2,4-Dinitrotoluene	50	40	80	16	38	24- 96
Pentachlorophenol	75	49	65	17	50	9-103
Pyrene	50	37	74	3	31	26-127

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

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

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

COMMENTS: _____

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO

SBLKEA

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Lab File ID: EE5012.D Lab Sample ID: 122295-01

Instrument ID: E Date Extracted: 12/22/95

Matrix: (soil/water) WATER Date Analyzed: 12/29/95

Level: (low/med) LOW Time Analyzed: 1335

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EANW2	14572.01	EE5014.D	12/29/95
02	EANW1	14572.02	EE5015.D	12/29/95
03	EANW4	14572.03	EE5016.D	12/29/95
04	EANW3	14572.04	EE5017.D	12/29/95
05	EANW5	14572.05	EE5018.D	12/29/95
06	EANW5MS	14572.06	EE5019.D	12/29/95
07	EANW5MSD	14572.07	EE5020.D	12/29/95
08	EANW6	14572.08	EE5023.D	01/02/96
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKEA

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5012.D

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

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

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

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

SBLKEA

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5012.D

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

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

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	C
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	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	Dibenzo(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.

SBLKEA

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5012.D

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

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

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.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.143	22	NJ
2.		Unknown	5.657	8	J
3.		Unknown	5.818	3	J
4.		Unknown	5.887	2	J
5.		Unknown	6.037	20	J
6.		Unknown	6.075	4	J
7.		Unknown	6.214	8	J
8.		Unknown	6.337	14	J
9.	1678-82-6	Cyclohexane, 1-methyl-4-(1-m	6.391	13	J
10.		Unknown	6.434	2	J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000399

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW1

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5015.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW1

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5015.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	6	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(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.

EANW1

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5015.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

Number TICs found: 19

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.149	22	NJ
2.		Unknown	5.658	6	J
3.		Unknown	5.814	2	J
4.		Unknown	6.039	15	J
5.		Unknown	6.071	4	J
6.		Unknown	6.216	7	J
7.		Unknown	6.334	11	J
8.		Unknown	6.431	3	J
9.		Unknown	15.396	4	
10.		Unknown	17.173	3	
11.	55191-59-8	Ethanol, 2-(4-phenoxyphenoxy	17.378	5	N
12.	3648-21-3	1,2-Benzenedicarboxylic acid	17.502	6	N
13.		Unknown	17.873	3	
14.		Unknown	18.137	2	
15.	84-69-5	1,2-Benzenedicarboxylic acid	18.208	2	N
16.	1330-96-7	1,2-Benzenedicarboxylic acid	19.376	4	N
17.		Unknown	20.012	12	
18.	89-18-9	1,2-Benzenedicarboxylic acid	21.832	6	N
19.		Unknown	26.139	10	
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000177

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW2

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5014.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW2

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5014.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	
84-74-2	Di-n-butylphthalate	10	
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-octylphthalate	3	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(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.

EANW2

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5014.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.144	22	NJB
2.		Unknown	5.653	6	JB
3.		Unknown	5.814	2	JB
4.		Unknown	5.883	3	JB
5.		Unknown	6.033	16	JB
6.	13151-05-8	1-Heptene, 4-methyl-	6.200	7	NJ
7.		Unknown	6.334	11	JB
8.		Unknown	6.430	2	JB
9.		Unknown	6.731	3	J
10.		Unknown	12.288	9	J
11.		Unknown	15.401	59	J
12.	84-78-6	1,2-Benzenedicarboxylic acid	17.499	4	NJ
13.		Unknown	17.871	93	J
14.		Unknown	18.140	4	J
15.	3648-21-3	1,2-Benzenedicarboxylic acid	19.374	4	NJ
16.	119-07-3	1,2-Benzenedicarboxylic acid	20.010	7	NJ
17.		Unknown	21.309	38	J
18.	1330-96-7	1,2-Benzenedicarboxylic acid	21.820	4	NJ
19.		Unknown	27.915	22	J
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000205

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW3

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5017.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	C
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW3

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5017.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	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	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO

EANW3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5017.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 15

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.147	10	NJ
2.		Unknown	5.656	8	J
3.		Unknown	5.817	3	J
4.		Unknown	6.037	18	J
5.		Unknown	6.074	5	J
6.	13151-05-8	1-Heptene, 4-methyl-	6.203	9	N
7.		Unknown	6.337	12	J
8.		Unknown	6.434	2	J
9.		Unknown	16.896	4	
10.		Unknown	17.380	6	
11.	3648-21-3	1,2-Benzenedicarboxylic acid	17.503	8	N
12.	603-11-2	1,2-Benzenedicarboxylic acid	18.139	6	N
13.	131-18-0	1,2-Benzenedicarboxylic acid	19.378	5	N
14.	85-69-8	1,2-Benzenedicarboxylic acid	20.019	15	N
15.	119-07-3	1,2-Benzenedicarboxylic acid	21.834		N
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

AV

1-31-96

000233

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW4

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5016.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW4

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5016.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	
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-octylphthalate	4	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(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.

EANW4

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5016.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

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

Number TICs found: 14

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.145	22	NJB
2.		Unknown	5.654	7	JB
3.		Unknown	5.815	3	JB
4.		Unknown	5.885	2	JB
5.		Unknown	6.035	17	JB
6.		Unknown	6.072	4	JB
7.		Unknown	6.212	7	JB
8.		Unknown	6.335	11	JB
9.		Unknown	6.432	2	JB
10.		Unknown	17.376	2	J
11.	3648-21-3	1,2-Benzenedicarboxylic acid	17.500	4	NJ
12.	89-18-9	1,2-Benzenedicarboxylic acid	18.141	2	NJ
13.		Unknown	19.380	2	J
14.	84-61-7	1,2-Benzenedicarboxylic acid	20.016	7	NJ
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000258

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW5

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5018.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW5

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5018.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	26	
117-84-0	Di-n-octylphthalate	4	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(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: EANW5

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5018.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 12/29/95

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.141	21	NJ
2.		Unknown	5.655	6	J
3.		Unknown	5.816	3	J
4.		Unknown	6.035	15	J
5.		Unknown	6.073	4	J
6.		Unknown	6.212	7	J
7.		Unknown	6.336	12	J
8.		Unknown	6.432	2	J
9.		Unknown	17.173	2	
10.		Unknown	17.383	3	
11.	1330-96-7	1,2-Benzenedicarboxylic acid	18.142	2	N
12.	28553-12-0	1,2-Benzenedicarboxylic acid	19.380	2	N
13.		Unknown	20.015	8	
14.	119-07-3	1,2-Benzenedicarboxylic acid	21.835	[illegible]	N
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000285

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5023.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 01/02/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	0.6	J
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
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
111-91-1	bis(-2-Chloroethoxy)methane	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5023.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(UL) Date Analyzed: 01/02/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	
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	30	
117-84-0	Di-n-octylphthalate	6	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(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.

EANW6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: EE5023.D

Level: (low/med) LOW Date Received: 12/21/95

% Moisture: _____ decanted: (Y/N)___ Date Extracted:12/22/95

Concentrated Extract Volume: 1000(uL) Date Analyzed: 01/02/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5

Number TICs found: 19 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	5.163	19	NJB
2.		Unknown	5.672	6	JB
3.		Unknown	6.057	13	JB
4.		Unknown	6.089	3	JB
5.		Unknown	6.223	6	JB
6.		Unknown	6.352	10	JB
7.		Unknown	6.448	3	JB
8.		Unknown	15.420	17	J
9.		Unknown	16.536	4	J
10.	1330-96-7	1,2-Benzenedicarboxylic acid	17.192	3	NJ
11.		Unknown	17.402	4	J
12.		Unknown	17.899	18	J
13.	28553-12-0	1,2-Benzenedicarboxylic acid	18.168	7	NJ
14.	3648-21-3	1,2-Benzenedicarboxylic acid	18.233	3	NJ
15.		Unknown	19.419	6	J
16.	25724-58-7	1,2-Benzenedicarboxylic acid	20.060	11	NJ
17.		Unknown	21.365	7	J
18.	119-07-3	1,2-Benzenedicarboxylic acid	21.893	6	NJ
19.		Unknown	23.234	2	J
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

000309

2E
WATER PESTICIDE SURROGATE RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

GC Column(1): DB-1701 ID: 0.32(mm) GC Column(2): DB-17 ID: 0.32(m

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK3W	112	90	62	62			0
02	EANW2	113	87	69	70			0
03	EANW1	92	73	63	63			0
04	EANW4	99	79	71	72			0
05	EANW3	110	84	66	67			0
06	EANW5	102	81	73	74			0
07	EANW5MS	106	80	67	68			0
08	EANW5MSD	98	77	51	52			0
09	EANW6	108	81	67	68			0
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

QC LIMITS

TCX = Tetrachloro-m-xylene (30-150)
DCB = Decachlorobiphenyl (30-150)

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

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix Spike - EPA Sample NO.: EANW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC(Lindane)	0.500	0	0.449	90	56-123
Heptachlor	0.500	0	0.413	82	40-131
Aldrin	0.500	0	0.459	92	40-120
Dieldrin	1.00	0	0.970	97	52-126
Endrin	1.00	0	0.914	91	56-121
4,4'-DDT	1.00	0	0.868	87	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC(Lindane)	0.500	0.458	92	2	15	56-123
Heptachlor	0.500	0.411	82	0	20	40-131
Aldrin	0.500	0.444	89	3	22	40-120
Dieldrin	1.00	0.997	100	3	18	52-126
Endrin	1.00	0.932	93	2	21	56-121
4,4'-DDT	1.00	0.854	85	2	27	38-127

Column to be used to flag recovery values

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

Comments: _____

000432

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK5W

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Lab Sample ID: 122295-01 Lab File ID: 5_2032

Matrix: (soil/water) WATER Extraction: (SepF/Cont/Sonc) SEPF

Sulfur Cleanup: (Y/N) N Date Extracted: 12/22/95

Date Analyzed (1): 12/27/95 Date Analyzed (2): 12/27/95

Time Analyzed (1): 1651 Time Analyzed (2): 1651

Instrument ID (1): HP_05A Instrument ID (2): HP_05B

GC Column (1): DB-1701 ID: 0.32(mm) GC Column (2): DB-17 ID: 0.32(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EANW2	14572.01	12/27/95	12/27/95
02	EANW1	14572.02	12/27/95	12/27/95
03	EANW4	14572.03	12/27/95	12/27/95
04	EANW3	14572.04	12/27/95	12/27/95
05	EANW5	14572.05	12/27/95	12/27/95
06	EANW5MS	14572.06	12/27/95	12/27/95
07	EANW5MSD	14572.07	12/27/95	12/27/95
08	EANW6	14572.08	12/27/95	12/27/95
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

Comments:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK5W

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 122295-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

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

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 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	0.0039	PJ
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW1
MW 41

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 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	J
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	0.35	JP
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.

EANW2
MW-4D

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 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~~ 0.0040	PJB
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	0.0065	PJ
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

AL

1-31-

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW3
MW-6

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 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
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	0.32	JP
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.

EANW4 mw-6 DF

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 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
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	0.74	J
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	18	

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

EANW5

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 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
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	0.23	JP
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

000541

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EANW6
MW-8D

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

Lab Code: ATAS Case No.: 24331 SAS No.: SDG No.: EANW1

Matrix: (soil/water) WATER Lab Sample ID: 14572.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N) __ Date Received: 12/21/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 12/22/95

Concentrated Extract Volume: 10000(uL) Date Analyzed: 12/27/95

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 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	0.0064	PJ
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	~~0.050~~ 0.0041	PJB
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	0.0045	PJ
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.0058	PJ
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

000572

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD Central Regional Laboratory
Data Tracking Form for Contract Samples

Data Set No: _____ CERCLIS No: IN

Case No: 24331 Site Name Location: Lemon Lane LF

Contractor or EPA Lab: ATAS Data User: EARTHTECH

No. of Samples: 8 Date Sampled or Data Received: 1-23-96

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: 8 No. of samples received: 8

Received by: M. Fetcher Date: 1-23-96

Received by LSSS: _____ _____ Date: _____

Review started: 1-31-96 Reviewer Signature: Al Venuto

Total time spent on review: 11 1/2 hrs Date review completed: 1-31-

Copied by: Lynette Burnett via 1/31/96 Date: 2-13-96

Mailed to user by: Lynette Burnett Date: 2-13-96

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: _____