RFI REPORT AND STABILIZATION/CORRECTIVE MEASURES PLAN
Volume II of II

MONSANTO NITRO PLANT

Attachment A
Laboratory Reports for Soil and Ground Water

ROUX

MO06619J03.9.9

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **Field Blank** Collected: **08/24/94 15:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Antimony, Total	<0.02	0.02	mg/L Sb	09/01/94	KHA	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/02/94	JEC	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	08/30/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/01/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	08/30/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	08/30/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	08/30/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	08/31/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/08/94	KHA	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	08/31/94	JEC	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	08/30/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	08/31/94	KHA	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	08/30/94	JBC	200.7/6010

SAMPLE ID: **02** **RB-1** Collected: **08/24/94 16:00** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	85	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	7.8	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	250	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	0.9	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	0.6	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	11	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	19	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	34	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	13	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	0.5	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	83	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **03** **RB-2** Collected: **08/24/94 17:00** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	82	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	3.4	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	110	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	0.9	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	1.1	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	15	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	17	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	37	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	0.5	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	15	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	140	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **04** **RB-3** Collected: **08/24/94 18:00** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	77	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	8.6	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	150	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	1.1	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	0.9	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	15	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	29	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	73	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	0.9	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	19	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	0.7	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	180	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **05** **10S** Collected: **08/25/94 10:30** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	86	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	3.5	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	72	0.5	mg/kg Ba	09/01/94	JBC	200.7/6[illegible]
Beryllium, Total	0.7	0.5	mg/kg Be	09/01/94	JBC	200.7/[illegible]
Cadmium, Total	0.9	0.5	mg/kg Cd	08/30/94	JBC	200.7/6[illegible]
Chromium, Total	26	1	mg/kg Cr	08/30/94	JBC	200.7/60[illegible]
Copper, Total	19	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	40	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	14	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	52	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **06** **10D** Collected: **08/25/94 13:00** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	81	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	2.1	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	130	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	1.1	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	1.4	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	13	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	8	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	16	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	13	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	58	0.5	mg/kg Zn	08/30/94	JBC	6010/795[illegible]

SAMPLE ID: **07 10M** Collected: **08/25/94 13:15** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	82	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	2.7	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	130	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	1.2	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	0.7	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	13	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	7	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	12	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	13	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	47	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **08 SED 3** Collected: **08/25/94 14:50** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	90	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	8.2	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	51	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	0.6	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	2.1	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	15	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	32	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	25	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	290	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	120	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **09 SED 2** Collected: **08/25/94 15:00** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	73	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	0.8	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	16	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	<0.5	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	<0.5	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	1	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	2	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	<5	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	3	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	6.7	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **10** **SED 1** Collected: **08/25/94 15:15** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	47	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	0.6	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	16	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	<0.5	0.5	mg/kg Be	09/01/94	JBC	200.7/6010
Cadmium, Total	<0.5	0.5	mg/kg Cd	08/30/94	JBC	200.7/6010
Chromium, Total	1	1	mg/kg Cr	08/30/94	JBC	200.7/6010
Copper, Total	2	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	<5	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	<2	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	<0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	5.4	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

SAMPLE ID: **11** **SED 4** Collected: **08/25/94 15:20** Category: **SOIL**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Percent Solids	44	1	% wt.	08/29/94	GWH	Gravimetric
Antimony, Total	<10	10	mg/kg Sb	09/01/94	JBC	200.7/6010
Arsenic, Total	0.6	0.2	mg/kg As	08/30/94	JEC	7060
Barium, Total	24	0.5	mg/kg Ba	09/01/94	JBC	200.7/6010
Beryllium, Total	<0.5	0.5	mg/kg Be	09/01/94	JBC	200.7/60[illegible]
Cadmium, Total	<0.5	0.5	mg/kg Cd	08/30/94	JBC	200.7/6[illegible]
Chromium, Total	1	1	mg/kg Cr	08/30/94	JBC	200.7/601[illegible]
Copper, Total	2	1	mg/kg Cu	08/30/94	JBC	6010
Lead, Total	<5	5	mg/kg Pb	08/30/94	JBC	6010/7420
Mercury, Total	<0.25	0.25	mg/kg Hg	09/01/94	JEC	7471
Nickel, Total	2	2	mg/kg Ni	08/30/94	JBC	200.7/6010
Selenium, Total	0.2	0.2	mg/kg Se	08/31/94	JEC	270.2
Silver, Total	<2	2	mg/kg Ag	08/30/94	JBC	6010
Thallium, Total	<0.25	0.25	mg/kg Tl	09/02/94	JEC	279.2/7841
Zinc, Total	6.2	0.5	mg/kg Zn	08/30/94	JBC	6010/7950

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01B** Collected: **08/24/94 15:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO36654
Instrument: FINN3 Injected: 08/29/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	120	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	101	% Recovery	(76% - 114%)
Toluene-d8	104	% Recovery	(88% - 110%)
p-Bromofluorobenzene	93	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01C** Collected: **08/24/94 15:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/30/94 File #: 4MO17250
Instrument: FINN4 Injected: 09/09/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01C** Collected: **08/24/94 15:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/30/94 File #: 4MO17250
Instrument: FINN4 Injected: 09/09/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	44 % Recovery	(21% - 100%)
Phenol-d6	28 % Recovery	(10% - 94%)
Nitrobenzene-d5	60 % Recovery	(35% - 114%)
2-Fluorobiphenyl	61 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	60 % Recovery	(10% - 123%)
p-Terphenyl-d14	85 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02A** Collected: **08/24/94 16:00**
Sample Description: **RB-1** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO36683
Instrument: FINN3 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	7	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	16	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	112	% Recovery	(76% - 114%)
Toluene-d8	128 **	% Recovery	(88% - 110%)
p-Bromofluorobenzene	82	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
** = REANALYSIS CONFIRMS SAMPLE MATRIX INTERFERENCE
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02B** Collected: **08/24/94 16:00**
Sample Description: **RB-1** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17265
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	430	160
129-00-0	Pyrene	360	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	210	160
218-01-9	Chrysene	290	160
117-81-7	bis(2-Ethylhexyl)phthalate	390	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	250	160
207-08-9	Benzo(k)fluoranthene	180	160
50-32-8	Benzo(a)pyrene	180	160
193-39-5	Indeno(1,2,3-cd)pyrene	180	160

Test Code: **M8270** Lab No: **02B** Collected: **08/24/94 16:00**
Sample Description: **RB-1** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17265
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	250	160

SURROGATES:

2-Fluorophenol	74 % Recovery	(21% - 100%)
Phenol-d6	68 % Recovery	(10% - 94%)
Nitrobenzene-d5	67 % Recovery	(35% - 114%)
2-Fluorobiphenyl	70 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	78 % Recovery	(10% - 123%)
p-Terphenyl-d14	101 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03A** Collected: **08/24/94 17:00**
Sample Description: **RB-2** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TKT File #: 3MO36666
Instrument: FINN3 Injected: 08/29/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery	(76% - 114%)
Toluene-d8	107	% Recovery	(88% - 110%)
p-Bromofluorobenzene	88	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03B** Collected: **08/24/94 17:00**
Sample Description: **RB-2** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17281
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **03B** Collected: **08/24/94 17:00**
Sample Description: **RB-2** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17281
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	64 % Recovery	(21% - 100%)
Phenol-d6	60 % Recovery	(10% - 94%)
Nitrobenzene-d5	61 % Recovery	(35% - 114%)
2-Fluorobiphenyl	68 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	78 % Recovery	(10% - 123%)
p-Terphenyl-d14	94 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04A** Collected: **08/24/94 18:00**
Sample Description: **RB-3** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TKT File #: 3MO36667
Instrument: FINN3 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	6	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	10	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	100 % Recovery	(76% - 114%)
Toluene-d8	114 % Recovery	(88% - 110%)
p-Bromofluorobenzene	78 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04B** Collected: **08/24/94 18:00**
Sample Description: **RB-3** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17282
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	390	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	530	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	320	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	430	160
129-00-0	Pyrene	340	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	180	160
218-01-9	Chrysene	220	160
117-81-7	bis(2-Ethylhexyl)phthalate	820	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	230	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **04B** Collected: **08/24/94 18:00**
Sample Description: **RB-3** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17282
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	79 % Recovery	(21% - 100%)
Phenol-d6	74 % Recovery	(10% - 94%)
Nitrobenzene-d5	75 % Recovery	(35% - 114%)
2-Fluorobiphenyl	80 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	81 % Recovery	(10% - 123%)
p-Terphenyl-d14	112 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05A** Collected: **08/25/94 10:30**
Sample Description: **10S** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TKT File #: 3MO36668
Instrument: FINN3 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	160	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	8	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	8	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	110	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	87	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05B** Collected: **08/25/94 10:30**
Sample Description: **10S** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17283
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	660	160
120-12-7	Anthracene	170	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	740	160
129-00-0	Pyrene	520	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	260	160
218-01-9	Chrysene	220	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	190	160
207-08-9	Benzo(k)fluoranthene	180	160
50-32-8	Benzo(a)pyrene	180	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **05B** Collected: **08/25/94 10:30**
Sample Description: **10S** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17283
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	48 % Recovery	(21% - 100%)
Phenol-d6	46 % Recovery	(10% - 94%)
Nitrobenzene-d5	47 % Recovery	(35% - 114%)
2-Fluorobiphenyl	56 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	67 % Recovery	(10% - 123%)
p-Terphenyl-d14	76 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06A** Collected: **08/25/94 13:00**
Sample Description: **10D** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39207
Instrument: FINN2 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	75 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	92 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06B** Collected: **08/25/94 13:00**
Sample Description: **10D** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17266
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06B** Collected: **08/25/94 13:00**
Sample Description: **10D** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17266
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	50 % Recovery	(21% - 100%)
Phenol-d6	47 % Recovery	(10% - 94%)
Nitrobenzene-d5	45 % Recovery	(35% - 114%)
2-Fluorobiphenyl	42 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	48 % Recovery	(10% - 123%)
p-Terphenyl-d14	66 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07A** Collected: **08/25/94 13:15**
Sample Description: **10M** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TKT File #: 2MO39225
Instrument: FINN2 Injected: 08/31/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	460	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	95 % Recovery	(76% - 114%)
Toluene-d8	98 % Recovery	(88% - 110%)
p-Bromofluorobenzene	100 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07B** Collected: **08/25/94 13:15**
Sample Description: **10M** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17271
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07B** Collected: **08/25/94 13:15**
Sample Description: **10M** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17271
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	50 % Recovery	(21% - 100%)
Phenol-d6	47 % Recovery	(10% - 94%)
Nitrobenzene-d5	48 % Recovery	(35% - 114%)
2-Fluorobiphenyl	45 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	57 % Recovery	(10% - 123%)
p-Terphenyl-d14	79 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08A** Collected: **08/25/94 14:50**
Sample Description: **SED 3** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39209
Instrument: FINN2 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	70 % Recovery	(76% - 114%)
Toluene-d8	107 % Recovery	(88% - 110%)
p-Bromofluorobenzene	93 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **08B** Collected: **08/25/94 14:50**
Sample Description: **SED 3** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17284
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	210	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	4400	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **08B** Collected: **08/25/94 14:50**
Sample Description: **SED 3** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17284
Instrument: FINN4 Injected: 09/13/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	66 % Recovery	(21% - 100%)
Phenol-d6	63 % Recovery	(10% - 94%)
Nitrobenzene-d5	62 % Recovery	(35% - 114%)
2-Fluorobiphenyl	69 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	70 % Recovery	(10% - 123%)
p-Terphenyl-d14	101 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **09A** Collected: **08/25/94 15:00**
Sample Description: **SED 2** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39212
Instrument: FINN2 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	104 % Recovery	(76% - 114%)
Toluene-d8	104 % Recovery	(88% - 110%)
p-Bromofluorobenzene	103 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **09B** Collected: **08/25/94 15:00**
Sample Description: **SED 2** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17268
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **09B** Collected: **08/25/94 15:00**
Sample Description: **SED 2** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17268
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	76 % Recovery	(21% - 100%)
Phenol-d6	71 % Recovery	(10% - 94%)
Nitrobenzene-d5	70 % Recovery	(35% - 114%)
2-Fluorobiphenyl	69 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	68 % Recovery	(10% - 123%)
p-Terphenyl-d14	92 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **10A** Collected: **08/25/94 15:15**
Sample Description: **SED 1** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39213
Instrument: FINN2 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	96 % Recovery	(76% - 114%)
Toluene-d8	90 % Recovery	(88% - 110%)
p-Bromofluorobenzene	87 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **10B** Collected: **08/25/94 15:15**
Sample Description: **SED 1** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17269
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **10B** Collected: **08/25/94 15:15**
Sample Description: **SED 1** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17269
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	51 % Recovery	(21% - 100%)
Phenol-d6	48 % Recovery	(10% - 94%)
Nitrobenzene-d5	49 % Recovery	(35% - 114%)
2-Fluorobiphenyl	46 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	43 % Recovery	(10% - 123%)
p-Terphenyl-d14	66 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **11A** Collected: **08/25/94 15:20**
Sample Description: **SED 4** Category: **SOIL**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39214
Instrument: FINN2 Injected: 08/30/94 Factor: 1 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	90 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	84 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **11B** Collected: **08/25/94 15:20**
Sample Description: **SED 4** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17270
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	160
111-44-4	bis(2-Chloroethyl)ether	ND	160
95-57-8	2-Chlorophenol	ND	160
541-73-1	1,3-Dichlorobenzene	ND	160
106-46-7	1,4-Dichlorobenzene	ND	160
100-51-6	Benzyl alcohol	ND	160
95-50-1	1,2-Dichlorobenzene	ND	160
95-48-7	2-Methylphenol	ND	160
108-60-1	bis(2-Chloroisopropyl)ether	ND	160
106-44-5	4-Methylphenol	ND	160
621-64-7	N-Nitroso-di-n-propylamine	ND	160
67-72-1	Hexachloroethane	ND	160
98-95-3	Nitrobenzene	ND	160
78-59-1	Isophorone	ND	160
88-75-5	2-Nitrophenol	ND	160
105-67-9	2,4-Dimethylphenol	ND	160
65-85-0	Benzoic acid	ND	820
111-91-1	bis(2-Chloroethoxy)methane	ND	160
120-83-2	2,4-Dichlorophenol	ND	160
120-82-1	1,2,4-Trichlorobenzene	ND	160
91-20-3	Naphthalene	ND	160
106-47-8	4-Chloroaniline	ND	160
87-68-3	Hexachlorobutadiene	ND	160
59-50-7	4-Chloro-3-methylphenol	ND	160
91-57-6	2-Methylnaphthalene	ND	160
77-47-4	Hexachlorocyclopentadiene	ND	160
88-06-2	2,4,6-Trichlorophenol	ND	160
95-95-4	2,4,5-Trichlorophenol	ND	820
91-58-7	2-Chloronaphthalene	ND	160
88-74-4	2-Nitroaniline	ND	820
131-11-3	Dimethylphthalate	ND	160
208-96-8	Acenaphthylene	ND	160
606-20-2	2,6-Dinitrotoluene	ND	160
99-09-2	3-Nitroaniline	ND	820
83-32-9	Acenaphthene	ND	160
51-28-5	2,4-Dinitrophenol	ND	820
100-02-7	4-Nitrophenol	ND	820
132-64-9	Dibenzofuran	ND	160
121-14-2	2,4-Dinitrotoluene	ND	160
84-66-2	Diethylphthalate	ND	160
7005-72-3	4-Chlorophenyl-phenyl ether	ND	160
86-73-7	Fluorene	ND	160
100-01-6	4-Nitroaniline	ND	820
534-52-1	4,6-Dinitro-2-methylphenol	ND	820
86-30-6	N-Nitrosodiphenylamine	ND	160
101-55-3	4-Bromophenyl-phenylether	ND	160
118-74-1	Hexachlorobenzene	ND	160
87-86-5	Pentachlorophenol	ND	820
85-01-8	Phenanthrene	ND	160
120-12-7	Anthracene	ND	160
84-74-2	Di-n-butylphthalate	ND	160
206-44-0	Fluoranthene	ND	160
129-00-0	Pyrene	ND	160
85-68-7	Butylbenzylphthalate	ND	160
91-94-1	3,3-Dichlorobenzidine	ND	330
56-55-3	Benzo(a)anthracene	ND	160
218-01-9	Chrysene	ND	160
117-81-7	bis(2-Ethylhexyl)phthalate	ND	160
117-84-0	Di-n-octylphthalate	ND	160
205-99-2	Benzo(b)fluoranthene	ND	160
207-08-9	Benzo(k)fluoranthene	ND	160
50-32-8	Benzo(a)pyrene	ND	160
193-39-5	Indeno(1,2,3-cd)pyrene	ND	160

Test Code: **M8270** Lab No: **11B** Collected: **08/25/94 15:20**
Sample Description: **SED 4** Category: **SOIL**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 08/27/94 File #: 4MO17270
Instrument: FINN4 Injected: 09/12/94 Factor: 33 Units: ug/kg Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	160
191-24-2	Benzo(g,h,i)perylene	ND	160

SURROGATES:

2-Fluorophenol	61 % Recovery	(21% - 100%)
Phenol-d6	56 % Recovery	(10% - 94%)
Nitrobenzene-d5	57 % Recovery	(35% - 114%)
2-Fluorobiphenyl	54 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	58 % Recovery	(10% - 123%)
p-Terphenyl-d14	78 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **12A** Collected: **08/24/94**
Sample Description: **Trip Blank** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5MO10984
Instrument: FINN5 Injected: 08/29/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	89	% Recovery	(76% - 114%)
Toluene-d8	100	% Recovery	(88% - 110%)
p-Bromofluorobenzene	88	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

EPA Method 200.7/6010 (ICP) - Silver

SW-846 METHOD SW6010 - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

SW-846 METHOD SW7060 - Arsenic

EPA Method 200.7/SW6010 (ICP) - Beryllium

SW-846 METHOD SW6010/200.7 - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

SW-846 METHOD SW6010 - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

SW-846 METHOD SW6010/200.7 - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

SW-846 METHOD SW6010 - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 METHOD SW7471 (AA - Cold Vapor Method) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

SW-846 METHOD SW6010 - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

SW846 METHOD SW6010 - Lead

Percent Solids
EPA Method 160.3 - Gravimetric, Dried at 103-105 Degrees C
To convert test results to "Dry Weight Basis" use this formula:

$$\text{RESULT (DRY WT.)} = \frac{\text{RESULT (REPORTED) X 100}}{\text{PERCENT SOLIDS}}$$

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 METHOD SW6010/200.7 - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

SW-846 METHOD SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

SW-846 METHOD SW7841 - Thallium

EPA Method 200.7/SW6010 (ICP) - Zinc

SW-846 METHOD SW6010 - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON Environmental ·es

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 08/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
AMMONIA	mg/L	REB	2	2.08	104.00	124	80	0.2 <	0.2	0.00	<0.1	0.1	1	1.14	114.00	140	89
HARDNESS	mg/L	PJH	100	105	105.00	106	93	270	270	0.00	<5	5	50	50	100.00	116	78
COD	mg/L	PJH	100	109	109.00	109	82 <	5 <	5	0.00	<5	5	50	59	118.00	128	75
SILVER-FURNACE F	mg/L	KHA	0.05	0.0472	94.40	121	72 <	0.2 <	0.2	0.00	<0.004	0.004	0.05	0.043	86.00	125	65
CADMIUM-FURNACE K	mg/L	KHA	0.005	0.005	100.00	125	73	0.0045	0.0047	4.35	<0.0005	0.0005	0.005	0.0045	90.00	115	74
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0054	108.00	125	73	0.033	0.039	16.67	<0.0005	0.0005	0.005	0.0049	98.00	115	74
SELENIUM-FURN F	mg/L	JEC	0.05	0.0534	106.80	112	88	0.4	0.5	22.22	<0.004	0.004	0.05	0.049	98.00	119	67
SELENIUM-FURN K	mg/L	JEC	0.05	0.0483	96.60	112	88	0.048	0.051	6.06	<0.004	0.004	0.05	0.048	96.00	119	67
SELENIUM-FURN L	mg/L	JEC	0.05	0.0522	104.40	112	88	0.052	0.051	1.94	<0.004	0.004	0.05	0.052	104.00	119	67
TKN	mg/L	REB	1	1.25	125.00	147	50	0.73	0.75	2.70	<0.1	0.1	0.5	0.515	103.00	151	49
PHOSPHORUS	mg/L	REB	2	1.64	82.00	103	69	0.5	0.5	0.00	<0.1	0.1	0.5	0.464	92.80	116	41
SILVER-ICP	mg/L	JBC	0.2	0.199	99.50	111	85	0.205	0.218	6.15	<0.01	0.01	0.2	0.205	102.50	110	75
ARSENIC-ICP	mg/L	JBC	1	1.03	103.00	117	81	1.08	1.14	5.41	<0.1	0.1	1	0.98	98.00	110	82
BARIUM-ICP	mg/L	JBC	10	9.88	98.80	112	86	10.5	10.9	3.74	<0.01	0.01	10	10.4	104.00	116	78
CADMIUM-ICP	mg/L	JBC	1	0.987	98.70	105	89	0.972	1.03	5.79	<0.01	0.01	1	0.97	97.00	108	78
CHROMIUM-ICP	mg/L	JBC	1	1	100.00	112	90	1.02	1.05	2.90	<0.02	0.02	1	1.02	102.00	116	79
LEAD-ICP	mg/L	JBC	1	0.908	90.80	116	83	0.942	1.03	8.92	<0.1	0.1	1	0.94	94.00	112	70
SELENIUM-ICP	mg/L	JBC	1	0.977	97.70	113	80	1.06	1.11	4.61	<0.1	0.1	1	0.95	95.00	113	74
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	10.6	6.83	<1	1	10	10.6	106.00	154	67
TDS	mg/L	SMC	500	476	95.20	106	84 <	10 <	10	0.00	<10	10	500	486	97.20	132	67
TSS	mg/L	DIH	50	44	88.00	114	79	35	36	2.82	<5	5	50	48	96.00	125	81
COPPER-FURNACE K	mg/L	JEC	0.05	0.0484	96.80	103	79	0.042	0.046	9.09	<0.005	0.005	0.05	0.042	84.00	117	64
ARSENIC-FURNACE K	mg/L	JEC	0.05	0.0469	93.80	125	76	0.046	0.049	6.32	<0.004	0.004	0.05	0.046	92.00	124	74
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0427	85.40	125	76	0.067	0.068	1.48	<0.004	0.004	0.05	0.048	96.00	124	74
TOX	mg/L	SMC	0.1	0.081	81.00	133	55 <	0.02 <	0.02	0.00	<0.01	0.01	0.1	0.076	76.00	148	64
COPPER-ICP	mg/L	JBC	1	0.995	99.50	115	84	1.06	1.1	3.70	<0.02	0.02	1	1.05	105.00	114	65
NICKEL-ICP	mg/L	JBC	1	0.951	95.10	113	87	1	1.06	5.83	<0.04	0.04	1	1	100.00	113	76
ZINC-ICP	mg/L	JBC	1	0.976	97.60	112	88	1.01	1.01	0.00	<0.01	0.01	1	1	100.00	113	77
BARIUM-ICP	mg/L	JBC	10	10.1	101.00	113	85	90	82	9.30	<0.01	0.01	10	9	90.00	112	74

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/01/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
AMMONIA	mg/L	REB	2	1.78	89.00	125	75	0.2	< 0.1	66.67	<0.1	1	0.5	0.878	175.60	125	75
ANTIMONY-FURN C	mg/L	JEC	0.05	0.0474	94.80	122	81	0.051	0.052	1.94	<0.02	0.02	0.05	0.051	102.00	130	52
MERCURY-A	mg/L	JEC	0.01	0.0097	97.00	124	72	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.0089	89.00	125	68
MERCURY-I	mg/L	JEC	0.01	0.01	100.00	124	72	0.5	0.3	50.00	<0.0002	0.0002	0.01	0.0098	98.00	125	68
OIL & GREASE	mg/L	PJH	10	10.1	101.00	137	74	10	6	50.00	<1	1	10	10	100.00	154	67
TSS	mg/L	DIH	50	35	70.00	114	79	< 5	< 5	0.00	<5	5	50	24	48.00	125	81
TDS	mg/L	DIH	500	450	90.00	106	84	780	860	9.76	42	10	520	528	101.54	132	67
ALUMINUM-ICP	mg/L	JBC	1	0.934	93.40	120	80	7800	8300	6.21	<0.1	0.1	1	1.12	112.00	122	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	109	85	0.957	0.94	1.79	<0.01	0.01	1	0.96	96.00	114	77
CADMIUM-ICP	mg/L	JBC	1	0.929	92.90	105	89	0.96	0.957	0.31	<0.01	0.01	1	0.96	96.00	108	78
COBALT-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.966	0.948	1.88	<0.02	0.02	1	0.96	96.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.96	96.00	112	90	0.979	0.961	1.86	<0.02	0.02	1	0.98	98.00	116	79
COPPER-ICP	mg/L	JBC	1	0.917	91.70	115	84	0.944	0.923	2.25	<0.02	0.02	1	0.94	94.00	114	65
IRON-ICP	mg/L	JBC	1	0.95	95.00	113	90	0.986	0.963	2.36	<0.04	0.04	1	0.95	95.00	111	87
MANGANESE-ICP	mg/L	JBC	1	0.943	94.30	111	88	1.02	1	1.98	<0.01	0.01	1	0.97	97.00	115	78
NICKEL-ICP	mg/L	JBC	1	0.961	96.10	113	87	0.991	0.967	2.45	<0.04	0.04	1	0.99	99.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	113	82	1.04	0.964	7.58	<0.2	0.2	1	1.02	102.00	115	78
VANADIUM-ICP	mg/L	JBC	1	0.932	93.20	111	86	0.961	0.941	2.10	<0.01	0.01	1	0.96	96.00	115	75
ZINC-ICP	mg/L	JBC	1	0.925	92.50	112	88	0.993	0.955	3.90	<0.01	0.01	1	0.97	97.00	113	77
MOLYBDENUM-ICP	mg/L	JBC	1	0.97	97.00	*	*	0.997	1.07	7.06	<0.1	0.1	1	0.99	99.00	125	75
TIN-ICP	mg/L	JBC	10	10	100.00	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	10	8.1	81.00	125	75
BOD	mg/L	SMC	200	203	101.50	124	77	320	350	8.96	<3	3	200	234	117.00	133	71
COD	mg/L	PJH	100	117	117.00	103	82	22	25	12.77	<5	5	50	44	88.00	128	75
TOC	mg/L	PJH	25	27.86	111.44	*	*	< 1	< 1	0.00	<1	1	25	30.89	123.56	125	75
BARIUM-ICP	mg/L	JBC	10	8.82	88.20	113	85	28	30	6.90	<0.01	0.01	10	10.2	102.00	112	74

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ROUX

CHAIN OF CUSTODY

№ 00877 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

ANALYSES

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WEST VIRGINIA

SAMPLER(S): SCOTT ANDERSON, PHIL CHANG, NEIL RIVERS

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY USEPA METHOD 8240	BN/AE's BY USEPA METHOD 8270	METALS			TOTAL BOTTLES	PRESERVATION
SED 4	8/25/94	1520	SEDIMENT	X	X	X			2	ICE
TRIP BLANK	8/24/94	X	WATER	X					2	HCl, ICE

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Scott Anderson (SAMPLER'S)	ROUX	8/25/94	1700	Y	Clifford Asher	Kemron	8/25/94	1700	Y
Clifford Asher	Kemron	8/25/94	2030	Y	Brenda Cuply	Kemron	8/26	800	Y

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: Samples stored in locked cooler overnight - CA.

ROUX

CHAIN OF CUSTODY

№ 01664 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

ANALYSES

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WEST VIRGINIA

SAMPLER(S): SCOTT ANDERSON, PHIL CHANG

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCS BY USEPA METHOD 8240	BNA'S BY USEPA METHOD 8270	METALS			TOTAL BOTTLES	PRESERVATION
FIELD BLANK	8/24/94	1530	WATER	X	X	X			5	HCl, NO3, ICE
RB-1	8/24/94	1600	SOIL	X	X	X			2	ICE
RB-2	8/24/94	1700	SOIL	X	X	X			2	ICE
RB-3	8/24/94	1800	SOIL	X	X	X			2	ICE
10S	8/25/94	1030	SOIL	X	X	X			2	ICE
10D	8/25/94	1300	SOIL	X	X	X			2	ICE
10M	8/25/94	1315	SOIL	X	X	X			2	ICE
SED3	8/25/94	1450	SEDIMENT	X	X	X			2	ICE
SED2	8/25/94	1500	SEDIMENT	X	X	X			2	ICE
SED1	8/25/94	1515	SEDIMENT	X	X	X			2	ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Scott Anderson	ROUX	8/25/94	1700	Y	Clifford Asher	Kemron	8/25/94	1700	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Clifford Asher	Kemron	8/25/94	2030	Y	Brenda Gregory	Kemron	8/26	800	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: Samples stored in locked coolers overnight - CPA

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE SOIL

RUN DATE: 08/29/94 BLK FLNM: 3BK36660
INSTRUMENT: FINN3 LCS FLNM: 3QC36661
ANALYST(S): TKT SHIFT: PM

SMPL NAME:
FILE NAME:
MS FLNM:
MSD FLNM:

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/Kg	METHOD BLANK ug/kg	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTR LIMITS %REC	SAMPLE RESULT ug/kg	MS 50 ug/Kg ug/kg	MSD 50 ug/kg ug/kg	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.9	84.7	43-129	0-273								
BROMOMETHANE	10	BQL	17.8	88.8	62-115	0-242								
VINYL CHLORIDE	10	BQL	22.5	112.3	47-128	0-251								
CHLOROETHANE	10	BQL	21.2	106.0	60-138	14-230								
METHYLENE CHLORIDE	5	BQL	25.2	126.1	70-160	0-221								
ACETONE	100	BQL			30-165	30-165								
CARBON DISULFIDE	5	BQL			45-165	45-165								
1,1-DICHLOROETHENE	5	BQL	20.5	102.6	66-138	0-234	0.0	0.0	0.0	0.0	0.0	59 - 172	ERR	22.0
1,1-DICHLOROETHANE	5	BQL	20.7	103.5	71-149	59-155								
1,2-DICHLOROETHENE (TO	5	BQL	22.7	113.5	77-127	54-156								
CHLOROFORM	5	BQL	20.8	104.1	82-124	51-138								
1,2-DICHLOROETHANE	5	BQL	18.6	93.0	87-118	49-155								
2-BUTANONE	100	BQL			35-160	35-160								
1,1,1-TRICHLOROETHANE	5	BQL	21.7	108.7	85-120	52-162								
CARBON TETRACHLORIDE	5	BQL	20.3	101.5	70-140	70-140								
VINYL ACETATE	10	BQL			40-170	40-170								
BROMODICHLOROMETHAN	5	BQL	19.9	99.7	80-118	35-155								
1,2-DICHLOROPROPANE	5	BQL	21.0	104.9	76-134	0-210								
CIS-1,3-DICHLOROPROPEN	5	BQL	22.8	114.1	80-148	0-227								
TRICHLOROETHENE	5	BQL	22.7	113.3	83-129	71-157	0.0	0.0	0.0	0.0	0.0	62 - 137	ERR	24.0
DIBROMOCHLOROMETHAN	5	BQL	19.7	98.6	75-114	53-149								
1,1,2-TRICHLOROETHANE	5	BQL	21.7	108.8	86-127	52-150								
BENZENE	5	BQL	21.3	106.5	87-120	37-151	0.0	0.0	0.0	0.0	0.0	66 - 142	ERR	21.0
TRANS-1,3-DICHLOROPRO	5	BQL	17.1	85.4	48-108	17-183								
2-CHLOROETHYLVINYL ETH	10	BQL			10-305	10-305								
BROMOFORM	5	BQL	21.3	106.4	66-113	45-169								
2-HEXANONE	10	BQL			45-150	45-150								
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								
TETRACHLOROETHENE	5	BQL	20.9	104.4	87-121	64-168								
1,1,2,2-TETRACHLOROETH	5	BQL	16.1	80.6	78-124	46-147								
TOLUENE	5	BQL	20.2	101.0	86-115	47-150	0.0	0.0	0.0	0.0	0.0	59 - 139	ERR	21.0
CHLOROBENZENE	5	BQL	19.9	99.7	85-119	37-160	0.0	0.0	0.0	0.0	0.0	60 - 133	ERR	21.0
ETHYLBENZENE	5	BQL	26.1	130.3	75-153	37-162								
STYRENE	5	BQL			40-160	17-181								
XYLENES, TOTAL	5	BQL			40-135	40-135								
TRICHLOROFLUOROMETH	5	BQL	21.8	107.8	37-142	17-181								
1,2-DICHLOROBENZENE	5	BQL	24.7	123.5	78-109	18-190								
1,3-DICHLOROBENZENE	5	BQL	26.2	130.8	79-109	59-156								
1,4-DICHLOROBENZENE	5	BQL	24.1	120.4	80-109	18-190								
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 08/29/94
INSTRUMENT: FINN3
ANALYST(S): MBJ

BLK FLNM: 3BK36646
LCS FLNM: 3QC36647
SHIFT: AM

SMPL NAME: 08-531-06
FILE NAME: 3AL36649
MS FLNM: 3AL36652
MSD FLNM: 3AL36653

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	20.3	101.6	43-129	0-273								33
BROMOMETHANE	10	BQL	20.2	101.2	62-115	0-242								22
VINYL CHLORIDE	10	BQL	23.3	116.6	47-128	0-251								18
CHLOROETHANE	10	BQL	23.8	119.1	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	25.7	128.7	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	23.9	119.5	66-138	0-234	0.0	43.3	42.4	86.6	84.8	61 - 145	2.0	31
1,1-DICHLOROETHANE	5	BQL	23.8	119.2	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	23.5	117.5	77-127	54-156								31
CHLOROFORM	5	BQL	25.7	128.4	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	21.0	105.2	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	24.5	122.3	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	23.1	115.4	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	22.6	113.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	23.7	118.7	78-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	26.3	131.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.0	100.1	83-129	71-157	0.0	39.5	39.0	78.9	78.0	71 - 120	1.1	14
DIBROMOCHLOROMETHA	5	BQL	22.7	113.4	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	24.0	120.0	86-127	52-150								21
BENZENE	5	BQL	24.9	124.7	87-120	37-151	0.0	54.4	54.0	108.8	108.0	76 - 127	0.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	19.8	99.2	49-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	24.1	120.4	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	23.1	115.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	42.2	211.1	79-124	46-147								17
TOLUENE	5	BQL	23.2	116.1	86-115	47-150	0.0	46.7	47.3	93.4	94.7	76 - 125	1.3	14
CHLOROBENZENE	5	BQL	23.3	116.6	85-119	37-160	0.0	53.6	53.3	107.2	106.7	75 - 130	0.4	14
ETHYLBENZENE	5	BQL	34.2	170.8	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.0	110.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	23.2	116.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	23.5	117.6	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	23.4	116.8	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE SOIL

RUN DATE: 08/30/94
INSTRUMENT: FINN3
ANALYST(S): MBJ
BLK FLNM: 3BK36685
LCS FLNM: 3QC36684
SHIFT: AM

SMPL NAME: 08-540-01
FILE NAME: 3OS36686
MS FLNM: 3OS36688
MSD FLNM: 3OS36689

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/Kg	METHOD BLANK ug/kg	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTR LIMITS %REC	SAMPLE RESULT ug/kg	MS 50 ug/Kg ug/kg	MSD 50 ug/kg ug/kg	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	22.3	111.3	43-129	0-273								
BROMOMETHANE	10	BQL	20.1	100.4	62-115	0-242								
VINYL CHLORIDE	10	BQL	28.4	141.8	47-128	0-251								
CHLOROETHANE	10	BQL	22.4	112.1	60-138	14-230								
METHYLENE CHLORIDE	5	BQL	27.6	138.2	70-160	0-221								
ACETONE	100	BQL			30-165	30-165								
CARBON DISULFIDE	5	BQL			45-165	45-165								
1,1-DICHLOROETHENE	5	BQL	25.5	127.4	66-138	0-234	0.0	42.6	41.3	85.6	82.5	59 - 172	3.8	22.0
1,1-DICHLOROETHANE	5	BQL	25.5	127.6	71-149	59-155								
1,2-DICHLOROETHENE (TO	5	BQL	25.1	125.5	77-127	54-156								
CHLOROFORM	5	BQL	24.6	122.9	82-124	51-138								
1,2-DICHLOROETHANE	5	BQL	21.5	107.6	87-118	49-155								
2-BUTANONE	100	BQL			35-160	35-160								
1,1,1-TRICHLOROETHANE	5	BQL	23.7	118.3	85-120	52-162								
CARBON TETRACHLORIDE	5	BQL	23.6	117.9	70-140	70-140								
VINYL ACETATE	10	BQL			40-170	40-170								
BROMODICHLOROMETHAN	5	BQL	22.4	112.0	80-118	35-155								
1,2-DICHLOROPROPANE	5	BQL	22.7	113.5	76-134	0-210								
CIS-1,3-DICHLOROPROPEN	5	BQL	26.8	134.2	80-146	0-227								
TRICHLOROETHENE	5	BQL	24.5	122.3	83-129	71-157	0.0	53.2	51.1	106.4	102.2	62 - 137	4.0	24.0
DIBROMOCHLOROMETHAN	5	BQL	23.3	116.7	75-114	53-149								
1,1,2-TRICHLOROETHANE	5	BQL	25.9	129.3	86-127	52-150								
BENZENE	5	BQL	23.7	118.4	87-120	37-151	0.0	54.0	52.2	107.9	104.4	68 - 142	3.3	21.0
TRANS-1,3-DICHLOROPRO	5	BQL	20.1	100.7	48-106	17-183								
2-CHLOROETHYLVINYL ETH	10	BQL			10-305	10-305								
BROMOFORM	5	BQL	26.4	132.2	68-113	45-169								
2-HEXANONE	10	BQL			45-150	45-150								
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								
TETRACHLOROETHENE	5	BQL	22.3	111.5	87-121	64-168								
1,1,2,2-TETRACHLOROETH	5	BQL	23.3	116.6	78-124	46-147								
TOLUENE	5	BQL	21.8	109.1	86-115	47-150	0.0	45.5	43.3	91.0	86.7	59 - 139	4.8	21.0
CHLOROBENZENE	5	BQL	21.8	109.2	85-119	37-160	0.0	53.3	48.7	106.6	97.4	60 - 133	9.1	21.0
ETHYLBENZENE	5	BQL	29.2	145.8	75-153	37-162								
STYRENE	5	BQL			40-160	17-181								
XYLENES, TOTAL	5	BQL			40-135	40-135								
TRICHLOROFLUOROMETH	5	BQL	23.4	117.2	37-142	17-181								
1,2-DICHLOROBENZENE	5	BQL	23.5	117.3	76-109	18-190								
1,3-DICHLOROBENZENE	5	BQL	25.2	126.1	79-109	59-156								
1,4-DICHLOROBENZENE	5	BQL	23.7	118.5	80-109	18-190								
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE SOIL

RUN DATE: 08/30/94
INSTRUMENT: FINN 2
ANALYST(S): PNW

BLK FLNM: 2BK39206
LCS FLNM: 2QC39202
SHIFT: AM

SMPL NAME: 08-517-08
FILE NAME: 2MO39209
MS FLNM: 2MO39210
MSD FLNM: 2MO39211

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/Kg	METHOD BLANK ug/kg	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTR LIMITS %REC	SAMPLE RESULT ug/kg	MS 50 ug/Kg ug/kg	MSD 50 ug/kg ug/kg	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	24.6	123.2	43-129	0-273								
BROMOMETHANE	10	BQL	10.0	50.0	62-115	0-242								
VINYL CHLORIDE	10	BQL	18.9	94.3	47-128	0-251								
CHLOROETHANE	10	BQL	11.1	55.5	60-138	14-230								
METHYLENE CHLORIDE	5	BQL	16.8	83.8	70-160	0-221								
ACETONE	100	BQL			30-165	30-165								
CARBON DISULFIDE	5	BQL			45-165	45-165								
1,1-DICHLOROETHENE	5	BQL	16.8	84.0	66-138	0-234	0.0	39.8	42.6	79.2	85.2	59 - 172	7.3	22.0
1,1-DICHLOROETHANE	5	BQL	21.9	109.7	71-149	59-155								
1,2-DICHLOROETHENE (TO	5	BQL	18.2	90.9	77-127	54-156								
CHLOROFORM	5	BQL	19.7	98.7	82-124	51-138								
1,2-DICHLOROETHANE	5	BQL	24.8	124.1	97-118	49-155								
2-BUTANONE	100	BQL			35-160	35-160								
1,1,1-TRICHLOROETHANE	5	BQL	13.3	66.4	85-120	52-162								
CARBON TETRACHLORIDE	5	BQL	12.6	62.8	70-140	70-140								
VINYL ACETATE	10	BQL			40-170	40-170								
BROMODICHLOROMETHAN	5	BQL	18.6	92.8	80-118	35-155								
1,2-DICHLOROPROPANE	5	BQL	20.6	103.2	78-134	0-210								
CIS-1,3-DICHLOROPROPEN	5	BQL	19.8	99.1	80-146	0-227								
TRICHLOROETHENE	5	BQL	21.0	105.0	83-129	71-157	0.0	39.8	41.6	79.6	83.3	62 - 137	4.5	24.0
DIBROMOCHLOROMETHAN	5	BQL	16.0	80.0	75-114	53-149								
1,1,2-TRICHLOROETHANE	5	BQL	19.0	95.0	86-127	52-150								
BENZENE	5	BQL	19.4	96.8	87-120	37-151	0.0	46.0	47.7	91.9	95.4	66 - 142	3.7	21.0
TRANS-1,3-DICHLOROPRO	5	BQL	13.9	69.3	48-106	17-183								
2-CHLOROETHYLVINYL ETH	10	BQL			10-305	10-305								
BROMOFORM	5	BQL	13.0	64.8	66-113	45-169								
2-HEXANONE	10	BQL			45-150	45-150								
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								
TETRACHLOROETHENE	5	BQL	19.7	98.4	87-121	64-168								
1,1,2,2-TETRACHLOROETH	5	BQL	15.2	75.9	78-124	46-147								
TOLUENE	5	BQL	20.5	102.3	86-115	47-150	0.0	52.0	50.5	104.0	100.9	59 - 139	3.0	21.0
CHLOROBENZENE	5	BQL	19.4	96.9	85-119	37-160	0.0	47.2	48.5	94.4	97.0	60 - 133	2.7	21.0
ETHYLBENZENE	5	BQL	20.3	101.4	75-153	37-162								
STYRENE	5	BQL			40-160	17-181								
XYLENES, TOTAL	5	BQL			40-135	40-135								
TRICHLOROFLUOROMETH	5	BQL	16.2	81.0	37-142	17-181								
1,2-DICHLOROBENZENE	5	BQL	20.8	103.9	76-109	18-190								
1,3-DICHLOROBENZENE	5	BQL	20.9	104.4	79-109	59-156								
1,4-DICHLOROBENZENE	5	BQL	21.3	106.5	80-109	18-190								
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE SOIL

RUN DATE: 08/31/94
INSTRUMENT: FINN 2
ANALYST(S): TKT

BLK FLNM: 2BK39220
LCS FLNM: 2QC39219
SHIFT: AM

SMPL NAME:
FILE NAME:
MS FLNM:
MSD FLNM:

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/Kg	METHOD BLANK ug/kg	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTR LIMITS %REC	SAMPLE RESULT ug/kg	MS 50 ug/Kg ug/kg	MSD 50 ug/kg ug/kg	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	24.9	124.4	43-129	0-273								
BROMOMETHANE	10	BQL	15.6	77.9	62-115	0-242								
VINYL CHLORIDE	10	BQL	19.2	95.8	47-128	0-251								
CHLOROETHANE	10	BQL	18.9	94.4	60-138	14-230								
METHYLENE CHLORIDE	5	BQL	22.3	111.5	70-160	0-221								
ACETONE	100	BQL			30-165	30-165								
CARBON DISULFIDE	5	BQL			45-165	45-165								
1,1-DICHLOROETHENE	5	BQL	20.7	103.4	66-138	0-234	0.0	0.0	0.0	0.0	0.0	59 - 172	ERR	22.0
1,1-DICHLOROETHANE	5	BQL	20.7	103.6	71-149	59-155			1					
1,2-DICHLOROETHENE (TO	5	BQL	19.5	97.4	77-127	54-156								
CHLOROFORM	5	BQL	19.4	97.2	82-124	51-138								
1,2-DICHLOROETHANE	5	BQL	20.3	101.4	87-118	49-155								
2-BUTANONE	100	BQL			35-160	35-160								
1,1,1-TRICHLOROETHANE	5	BQL	18.9	94.7	85-120	52-162								
CARBON TETRACHLORIDE	5	BQL	17.7	88.5	70-140	70-140								
VINYL ACETATE	10	BQL			40-170	40-170								
BROMODICHLOROMETHAN	5	BQL	19.2	96.1	80-118	35-155								
1,2-DICHLOROPROPANE	5	BQL	20.9	104.7	76-134	0-210								
CIS-1,3-DICHLOROPROPEN	5	BQL	20.4	101.9	80-146	0-227								
TRICHLOROETHENE	5	BQL	20.1	100.5	83-129	71-157	0.0	0.0	0.0	0.0	0.0	62 - 137	ERR	24.0
DIBROMOCHLOROMETHAN	5	BQL	18.5	92.5	75-114	53-149								
1,1,2-TRICHLOROETHANE	5	BQL	20.8	103.8	88-127	52-150								
BENZENE	5	BQL	20.1	100.7	87-120	37-151	0.0	0.0	0.0	0.0	0.0	66 - 142	ERR	21.0
TRANS-1,3-DICHLOROPRO	5	BQL	14.6	73.2	48-106	17-183								
2-CHLOROETHYLVINYL ETH	10	BQL			10-305	10-305								
BROMOFORM	5	BQL	15.2	76.0	68-113	45-169								
2-HEXANONE	10	BQL			45-150	45-150								
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								
TETRACHLOROETHENE	5	BQL	20.0	99.9	87-121	64-168								
1,1,2,2-TETRACHLOROETH	5	BQL	18.3	91.4	78-124	46-147								
TOLUENE	5	BQL	20.2	101.2	86-115	47-150	0.0	0.0	0.0	0.0	0.0	59 - 139	ERR	21.0
CHLOROBENZENE	5	BQL	20.4	101.9	85-119	37-160	0.0	0.0	0.0	0.0	0.0	60 - 133	ERR	21.0
ETHYLBENZENE	5	BQL	21.1	105.4	75-153	37-162								
STYRENE	5	BQL			40-160	17-181								
XYLENES, TOTAL	5	BQL			40-135	40-135								
TRICHLOROFLUOROMETH	5	BQL	21.3	106.6	37-142	17-181								
1,2-DICHLOROBENZENE	5	BQL	17.8	89.1	76-109	18-190								
1,3-DICHLOROBENZENE	5	BQL	17.7	88.5	79-109	59-156								
1,4-DICHLOROBENZENE	5	BQL	17.7	88.3	80-109	18-190								
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 08/31/94
INSTRUMENT: FINN 2
ANALYST(S): TKT

BLK FLNM: 2BK39218
LCS FLNM: 2QC39219
SHIFT: AM

SMPL NAME: 08-567-04
FILE NAME: 2AL39222
MS FLNM: 2AL39228
MSD FLNM: 2AL39229

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	24.9	124.4	43-129	0-273								33
BROMOMETHANE	10	BQL	15.6	77.8	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.2	95.8	47-128	0-251								18
CHLOROETHANE	10	BQL	18.9	94.4	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	22.3	111.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	20.7	103.4	66-138	0-234	0.0	43.1	43.0	86.1	86.0	61 - 145	0.2	31
1,1-DICHLOROETHANE	5	BQL	20.7	103.6	71-149	59-155			1					50
1,2-DICHLOROETHENE (T	5	BQL	19.5	97.4	77-127	54-156								31
CHLOROFORM	5	BQL	19.4	97.2	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	20.3	101.4	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.9	94.7	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.7	88.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.2	96.1	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.9	104.7	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	20.4	101.9	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.1	100.5	83-129	71-157	0.0	43.8	44.4	87.5	88.9	71 - 120	1.5	14
DIBROMOCHLOROMETHA	5	BQL	18.5	92.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.8	103.8	86-127	52-150								21
BENZENE	5	BQL	20.1	100.7	87-120	37-151	0.0	47.3	47.4	94.6	94.7	76 - 127	0.1	23
TRANS-1,3-DICHLOROPRO	5	BQL	14.6	73.2	46-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	15.2	76.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	20.0	99.9	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.3	91.4	79-124	46-147								17
TOLUENE	5	BQL	20.2	101.2	86-115	47-150	0.0	46.2	47.8	92.4	95.5	76 - 125	3.3	14
CHLOROBENZENE	5	BQL	20.4	101.9	85-119	37-160	0.0	46.6	48.6	93.1	97.2	75 - 130	4.3	14
ETHYLBENZENE	5	BQL	21.1	105.4	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	21.3	106.6	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	17.8	89.1	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	17.7	88.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	17.7	88.3	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE SOIL

RUN DATE: 09/01/94 BLK FLNM: 2BK39244
INSTRUMENT: FINN 2 LCS FLNM: 2QC39242
ANALYST(S): TKT SHIFT: AM

SMPL NAME:
FILE NAME:
MS FLNM:
MSD FLNM:

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/Kg	METHOD BLANK ug/kg	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTR LIMITS %REC	SAMPLE RESULT ug/kg	MS 50 ug/Kg ug/kg	MSD 50 ug/kg ug/kg	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	20.6	102.8	43-129	0-273								
BROMOMETHANE	10	BQL	18.4	91.8	62-115	0-242								
VINYL CHLORIDE	10	BQL	21.7	108.5	47-128	0-251								
CHLOROETHANE	10	BQL	21.2	105.8	60-138	14-230								
METHYLENE CHLORIDE	5	BQL	19.3	96.3	70-160	0-221								
ACETONE	100	BQL			30-165	30-165								
CARBON DISULFIDE	5	BQL			45-165	45-165								
1,1-DICHLOROETHENE	5	BQL	18.1	90.5	66-138	0-234	0.0	0.0	0.0	0.0	0.0	59 - 172	ERR	22.0
1,1-DICHLOROETHANE	5	BQL	21.2	105.8	71-149	59-155								
1,2-DICHLOROETHENE (TO	5	BQL	21.0	105.0	77-127	54-156								
CHLOROFORM	5	BQL	20.7	103.7	82-124	51-138								
1,2-DICHLOROETHANE	5	BQL	21.6	107.8	87-118	49-155								
2-BUTANONE	100	BQL			35-160	35-160								
1,1,1-TRICHLOROETHANE	5	BQL	20.7	103.4	86-120	52-162								
CARBON TETRACHLORIDE	5	BQL	19.9	99.7	70-140	70-140								
VINYL ACETATE	10	BQL			40-170	40-170								
BROMODICHLOROMETHAN	5	BQL	21.0	104.8	80-118	35-155								
1,2-DICHLOROPROPANE	5	BQL	22.2	111.2	76-134	0-210								
CIS-1,3-DICHLOROPROPEN	5	BQL	22.2	111.0	80-146	0-227								
TRICHLOROETHENE	5	BQL	21.7	108.4	83-129	71-157	0.0	0.0	0.0	0.0	0.0	62 - 137	ERR	24.0
DIBROMOCHLOROMETHAN	5	BQL	19.6	97.8	75-114	53-149								
1,1,2-TRICHLOROETHANE	5	BQL	21.1	105.3	86-127	52-150								
BENZENE	5	BQL	21.0	104.8	87-120	37-151	0.0	0.0	0.0	0.0	0.0	66 - 142	ERR	21.0
TRANS-1,3-DICHLOROPRO	5	BQL	16.3	81.4	48-106	17-183								
2-CHLOROETHYLVINYL ETH	10	BQL			10-305	10-305								
BROMOFORM	5	BQL	18.1	90.6	66-113	45-169								
2-HEXANONE	10	BQL			45-150	45-150								
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								
TETRACHLOROETHENE	5	BQL	21.2	105.8	87-121	64-168								
1,1,2,2-TETRACHLOROETH	5	BQL	20.2	100.8	78-124	46-147								
TOLUENE	5	BQL	20.6	102.9	86-115	47-150	0.0	0.0	0.0	0.0	0.0	59 - 139	ERR	21.0
CHLOROBENZENE	5	BQL	21.7	108.6	85-119	37-160	0.0	0.0	0.0	0.0	0.0	60 - 133	ERR	21.0
ETHYLBENZENE	5	BQL	20.3	101.7	75-153	37-162								
STYRENE	5	BQL			40-160	17-181								
XYLENES, TOTAL	5	BQL			40-135	40-135								
TRICHLOROFLUOROMETH	5	BQL	22.6	113.0	37-142	17-181								
1,2-DICHLOROBENZENE	5	BQL	19.8	99.2	76-109	18-190								
1,3-DICHLOROBENZENE	5	BQL	18.8	94.1	79-109	59-156								
1,4-DICHLOROBENZENE	5	BQL	19.8	99.1	80-109	18-190								
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOASOIL

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/01/94
INSTRUMENT: FINN 2
ANALYST(S): TKT

BLK FLNM: 2BK39241
LCS FLNM: 2QC39242
SHIFT: AM

SMPL NAME: 09-004-02
FILE NAME: 2AL39246
MS FLNM: 2AL39247
MSD FLNM: 2AL39248

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	20.6	102.8	43-129	0-273								33
BROMOMETHANE	10	BQL	18.4	91.8	62-115	0-242								22
VINYL CHLORIDE	10	BQL	21.7	108.5	47-128	0-251								18
CHLOROETHANE	10	BQL	21.2	105.8	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	19.3	96.3	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	18.1	90.5	66-138	0-234	0.0	39.6	35.9	79.1	71.7	61 - 145	9.8	31
1,1-DICHLOROETHANE	5	BQL	21.2	105.8	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	21.0	105.0	77-127	54-156								31
CHLOROFORM	5	BQL	20.7	103.7	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	21.6	107.8	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.7	103.4	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	19.9	99.7	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	21.0	104.8	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	22.2	111.2	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.2	111.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	21.7	108.4	83-129	71-157	0.0	47.2	44.0	94.5	87.9	71 - 120	7.2	14
DIBROMOCHLOROMETHA	5	BQL	19.8	97.8	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	21.1	105.3	86-127	52-150								21
BENZENE	5	BQL	21.0	104.8	87-120	37-151	0.0	48.7	49.5	97.3	98.9	76 - 127	1.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.3	81.4	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.1	90.6	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.2	105.8	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	20.2	100.8	78-124	46-147								17
TOLUENE	5	BQL	20.6	102.9	86-115	47-150	0.0	48.1	44.0	96.2	88.0	76 - 125	9.0	14
CHLOROBENZENE	5	BQL	21.7	108.6	85-119	37-160	0.0	52.2	49.4	104.5	98.9	75 - 130	5.5	14
ETHYLBENZENE	5	BQL	20.3	101.7	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.6	113.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.8	99.2	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	18.8	94.1	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.1	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 08/30/94 SMPL NAM 08-517-01
TYPE: SEPFUNNEL FILE NAME 4MO17250
BLK FLNM: 4BK17183 MS FLNM: 4MO17251
QC FLNM: 4QC17184 MSD FLNM 4MO17252

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	32	64	32	13-132	0	43	46	86	92	43	46	7
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	54	108	54	48-115	0	55	67	110	134	55	67	20
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	13	26	26	32-115	0	14	18	28	36	28	36	25
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	24	48	48	35-124	0	22	29	44	58	44	58	27
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	14	28	28	29- 98	0	15	18	30	36	30	36	18
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	79	158	79	45-117	0	76	79	152	158	76	79	4
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	26	52	52	43-117	0	26	31	52	62	52	62	18

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 08/30/94 SMPL NAM 08-517-01
TYPE: SEPFUNNEL FILE NAME 4MO17250
BLK FLNM: 4BK17183 MS FLNM: 4MO17251
QC FLNM: 4QC17184 MSD FLNM 4MO17252

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	40	80	40	1- 148	0	47	58	94	116	47	58	21
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	19	38	38	34-110	0	20	22	40	44	40	44	-10
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	75	150	75	36-137	0	53	69	106	138	53	69	26
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	41	82	82	42-139	0	41	41	82	82	82	82	0
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE SOIL

EXT DATE:	08/27/94	SMPL NAME	08-517-08
TYPE:	SONICATION	FILE NAME:	4MO17284
BLK FLNM:	4BK17243	MS FLNM:	4MO17285
QC FLNM:	4QC17244	MSD FLNM:	4MO17286

SEMIVOA COMPOUND LIST	PRACTICAL QUANTITATION LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCENT RECOVER	ADVISORY LIMITS	SAMPLE RESULT	MS INSTR. RESUL	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVERY	MSD PERCENT RECOVER	PERCENT RPD
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	%		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	%	%	%
PHENOL	165	BQL	100	59	59	59	26- 90	0	46	60	46	60	46	60	26
BIS(2-CHLOROETHYL)ETHER	165	BQL													
2-CHLOROPHENOL	165	BQL	100	67	67	67	25-102	0	51	66	51	66	51	66	26
1,3-DICHLOROBENZENE	165	BQL													
1,4-DICHLOROBENZENE	165	BQL	50	21	21	42	28-104	0	15	19	15	19	30	38	24
BENZYL ALCOHOL	165	BQL													
1,2-DICHLOROBENZENE	165	BQL													
2-METHYLPHENOL	165	BQL													
BIS(-CHLOROISOPROPYL)ET	165	BQL													
4-METHYLPHENOL	165	BQL													
N-NITROSO-DI-N-PROPYLAMI	165	BQL	50	33	33	66	41-126	0	26	33	26	33	52	66	24
HEXACHLOROETHANE	165	BQL													
NITROBENZENE	165	BQL													
ISOPHORONE	165	BQL													
2-NITROPHENOL	165	BQL													
2,4-DIMETHYLPHENOL	165	BQL													
BENZOIC ACID	825	BQL													
BIS(2-CHLOROETHOXY)METH	165	BQL													
2,4-DICHLOROPHENOL	165	BQL													
1,2,4-TRICHLOROBENZENE	165	BQL	50	23	23	46	38-107	0	17	22	17	22	34	44	26
NAPHTHALENE	165	BQL													
4-CHLOROANILINE	165	BQL													
HEXACHLOROBUTADIENE	165	BQL													
4-CHLORO-3-METHYLPHENO	165	BQL	100	73	73	73	26-103	0	57	74	57	74	57	74	26
2-METHYLNAPHTHALENE	165	BQL													
HEXACHLOROCYCLOPENTA	165	BQL													
2,4,6-TRICHLOROPHENOL	165	BQL													
2,4,5-TRICHLOROPHENOL	825	BQL													
2-CHLORONAPHTHALENE	165	BQL													
2-NITROANALINE	825	BQL													
DIMETHYLPHTHALATE	165	BQL													
ACENAPHTHYLENE	165	BQL													
2,6-DINITROTOLUENE	165	BQL													
3-NITROANILINE	825	BQL													
ACENAPHTHENE	165	BQL	50	36	36	72	31-137	0	27	34	27	34	54	68	23

000003

ROUX

CHAIN OF CUSTODY

№ 01664 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WEST VIRGINIA

SAMPLER(S): SCOTT ANDERSON, PHIL CHANG

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCS BY USEPA METHOD 8240	BNA'S BY USEPA METHOD 8270	METALS			TOTAL BOTTLES	PRESERVATION
FIELD BLANK	8/24/94	1530	WATER	X	X	X			5	HCl, NO3, ICE
✓ RB-1	8/24/94	1600	SOIL	X	X	X			2	ICE
✓ RB-2	8/24/94	1700	SOIL	X	X	X			2	ICE
✓ RB-3	8/24/94	1800	SOIL	X	X	X			2	ICE
✓ 10S	8/25/94	1030	SOIL	X	X	X			2	ICE
✓ 10D	8/25/94	1300	SOIL	X	X	X			2	ICE
10M	8/25/94	1315	SOIL	X	X	X			2	ICE
✓ SED3	8/25/94	1450	SEDIMENT	X	X	X			2	ICE
✓ SED2	8/25/94	1500	SEDIMENT	X	X	X			2	ICE
✓ SED1	8/25/94	1515	SEDIMENT	X	X	X			2	ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Scott Anderson	ROUX	8/25/94	1700	Y OR N	Clifford Asher	Kemron	8/25/94	1700 ~~1800~~	Y OR N
Clifford Asher	Kemron	8/25/94	2030	Y OR N	Brenda Gregory	Kemron	8/26	800	Y OR N
				Y OR N					Y OR N

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: Samples stored in locked coolers overnight - CPA.

ROUX

CHAIN OF CUSTODY

№ 00877 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WEST VIRGINIA

SAMPLER(S): SCOTT ANDERSON, PHIL CHANG, NEIL RIVERS

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOLS BY USEPA METHOD 8240	BN/AES BY USEPA METHOD 8270	METALS			TOTAL BOTTLES	PRESERVATION
SED 4	8/25/94	1520	SEDIMENT	X	X	X			2	ICE
TRIP BLANK	8/24/94	X	WATER	X					2	HCl, ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Scott Anderson	ROUX	8/25/94	1700	Y	Clifford Asher	Kemron	8/25/94	1700	Y
Clifford Asher	Kemron	8/25/94	2030	Y	Brenda Gregory	Kemron	8/26	800	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: Samples stored in locked cooler overnight - CA.

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522404

Order #: N4-08-517
Date: December 2, 1994 14:43
Work ID: 06619J03/Monsanto, Nitro
Date Received: 08/25/94
Date Completed: 09/14/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	Field Blank	02	RB-1
03	RB-2	04	RB-3
05	10S	06	10D
07	10M	08	SED 3
09	SED 2	10	SED 1
11	SED 4	12	Trip Blank

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/02/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

CASE NARRATIVE

M8240 VOLATILE ANALYSIS

Field Blank (KEMRON ID N4-08-517-01) exhibited a positive result for 2-butanone. The sample was re-analyzed. Re-analysis confirmed the reported result.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794

Order #: N4-09-369
Date: December 1, 1994 09:47
Work ID: 06619J03/Monsanto Nitro
Date Received: 09/19/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-1A	02	MW-1B
03	MW-23A	04	MW-3A
05	MW-3B	06	MW-19B
07	Field Blank		

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Leslie Bucina

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **MW-1A** Collected: **09/19/94 13:10** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	0.06	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	0.013	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.12	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	0.04	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.030	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	0.0003	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.06	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.17	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **02** **MW-1B** Collected: **09/19/94 12:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/21/94	DIH	415.1/90
Total Organic Halides	0.03	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.03	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.012	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/23/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.09	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **03** **MW-23A** Collected: **09/19/94 14:25** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	1	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	1.2	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.17	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	0.03	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/23/94	TAS	245.1/74
Nickel, Total	0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/60
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.08	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **04** **MW-3A** Collected: **09/19/94 15:20** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	2	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	1.8	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	0.009	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.18	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	0.07	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	0.06	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.029	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	0.0004	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.12	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.35	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **05** **MW-3B** Collected: **09/19/94 15:55** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	3	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	0.28	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	1.8	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	0.04	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.026	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/23/94	TAS	245.1/7470
Nickel, Total	0.08	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.66	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **06** **MW-19B** Collected: **09/19/94 16:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	3	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	0.10	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.10	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.014	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/23/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.14	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **07** **Field Blank** Collected: **09/19/94 16:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/22/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/23/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-1A**
Test Description: **Volatile Organics**

Lab No: **01D**

Collected: **09/19/94 13:10**
Category: **WATER**
Method: **8240**

Analyst: SLM
File #: 5MO11242
Instrument: FINN5 Injected: 09/20/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	10	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	81 % Recovery	(76% - 114%)
Toluene-d8	102 % Recovery	(88% - 110%)
p-Bromofluorobenzene	93 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/19/94 13:10**
Sample Description: **MW-1A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30667
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/19/94 13:10**
Sample Description: **MW-1A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30667
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	9 *	% Recovery (21% - 100%)
Phenol-d6	11	% Recovery (10% - 94%)
Nitrobenzene-d5	63	% Recovery (35% - 114%)
2-Fluorobiphenyl	75	% Recovery (43% - 116%)
2,4,6-Tribromophenol	13	% Recovery (10% - 123%)
p-Terphenyl-d14	18 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-1B**
Test Description: **Volatile Organics**

Lab No: **02D**

Collected: **09/19/94 12:40**
Category: **WATER**
Method: **8240**

Analyst: SLM
File #: 5MO11243
Instrument: FINN5 Injected: 09/20/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	91	% Recovery (76% - 114%)
Toluene-d8	105	% Recovery (88% - 110%)
p-Bromofluorobenzene	99	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/19/94 12:40**
Sample Description: **MW-1B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30668
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	19	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/19/94 12:40**
Sample Description: **MW-1B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30668
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	23 % Recovery	(21% - 100%)
Phenol-d6	25 % Recovery	(10% - 94%)
Nitrobenzene-d5	59 % Recovery	(35% - 114%)
2-Fluorobiphenyl	70 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	29 % Recovery	(10% - 123%)
p-Terphenyl-d14	36 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/19/94 14:25**
Sample Description: **MW-23A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5MO11244
Instrument: FINN5 Injected: 09/20/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	13	5
67-66-3	Chloroform	81	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	250	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	1300	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	7	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	170	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	85	% Recovery	(76% - 114%)
Toluene-d8	103	% Recovery	(88% - 110%)
p-Bromofluorobenzene	96	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF= NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/19/94 14:25**
Sample Description: **MW-23A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30669
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/19/94 14:25**
Sample Description: **MW-23A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30669
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	11 *	% Recovery (21% - 100%)
Phenol-d6	12	% Recovery (10% - 94%)
Nitrobenzene-d5	73	% Recovery (35% - 114%)
2-Fluorobiphenyl	83	% Recovery (43% - 116%)
2,4,6-Tribromophenol	8 *	% Recovery (10% - 123%)
p-Terphenyl-d14	70	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-3A**
Test Description: **Volatile Organics**

Lab No: **04D**

Collected: **09/19/94 15:20**
Category: **WATER**
Method: **8240**

Analyst: SLM
File #: 5MO11245
Instrument: FINN5 Injected: 09/20/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	10	5
75-34-3	1,1-Dichloroethane	31	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	32	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	18	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	990	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	8	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	6	5
108-90-7	Chlorobenzene	240	5
100-41-4	Ethyl benzene	7	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	22	5
156-59-2	cis-1,2-Dichloroethene	480	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	97 % Recovery	(76% - 114%)
Toluene-d8	110 % Recovery	(88% - 110%)
p-Bromofluorobenzene	108 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/19/94 15:20**
Sample Description: **MW-3A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30670
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	200	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	12	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **04E** Collected: **09/19/94 15:20**
Sample Description: **MW-3A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30670
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	6 *	% Recovery (21% - 100%)
Phenol-d6	10	% Recovery (10% - 94%)
Nitrobenzene-d5	64	% Recovery (35% - 114%)
2-Fluorobiphenyl	74	% Recovery (43% - 116%)
2,4,6-Tribromophenol	3 *	% Recovery (10% - 123%)
p-Terphenyl-d14	34	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/19/94 15:55**
Sample Description: **MW-3B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5MO11246
Instrument: FINN5 Injected: 09/20/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	8	5
75-34-3	1,1-Dichloroethane	23	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	7	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	77	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	8	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	54	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	95 % Recovery	(76% - 114%)
Toluene-d8	109 % Recovery	(88% - 110%)
p-Bromofluorobenzene	102 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/19/94 15:55**
Sample Description: **MW-3B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30671
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **05E** Collected: **09/19/94 15:55**
Sample Description: **MW-3B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30671
Instrument: FINN1 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	26 % Recovery	(21% - 100%)
Phenol-d6	29 % Recovery	(10% - 94%)
Nitrobenzene-d5	69 % Recovery	(35% - 114%)
2-Fluorobiphenyl	80 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	23 % Recovery	(10% - 123%)
p-Terphenyl-d14	12 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/19/94 16:40**
Sample Description: **MW-19B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5MO11257
Instrument: FINN5 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	6	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	21	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	11	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	110	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	94	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/19/94 16:40**
Sample Description: **MW-19B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30749
Instrument: FINN1 Injected: 10/10/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **06E** Collected: **09/19/94 16:40**
Sample Description: **MW-19B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30749
Instrument: FINN1 Injected: 10/10/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	8 *	% Recovery (21% - 100%)
Phenol-d6	12	% Recovery (10% - 94%)
Nitrobenzene-d5	84	% Recovery (35% - 114%)
2-Fluorobiphenyl	92	% Recovery (43% - 116%)
2,4,6-Tribromophenol	13	% Recovery (10% - 123%)
p-Terphenyl-d14	13 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/19/94 16:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5MO11260
Instrument: FINN5 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	110	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	95	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/19/94 16:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30684
Instrument: FINN1 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07E** Collected: **09/19/94 16:30**
Sample Description: **Field Blank** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/20/94 File #: 1MO30684
Instrument: FINN1 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	68 % Recovery	(21% - 100%)
Phenol-d6	71 % Recovery	(10% - 94%)
Nitrobenzene-d5	74 % Recovery	(35% - 114%)
2-Fluorobiphenyl	82 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	78 % Recovery	(10% - 123%)
p-Terphenyl-d14	96 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON
ENVIRONMENTAL SERVICES

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QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64
BARIUM-ICP	mg/L	JEC	10	10.2	102.00	113	85	10	10.1	1.00	<0.01	0.01	10	9.97	99.70	112	74

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ces

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental vices

QUALITY ASSURANCE DAIL. .EPORT

OHIO VALLEY LABORATORY Date: 09/22/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
LEAD-FURNACE D	mg/L	KHA	0.05	0.046	92.00	114	81	0.048	0.045	6.45	<0.005	0.005	0.05	0.048	96.00	126	61
CHROMIUM (6)	mg/L	PJH	0.1	0.111	111.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.115	115.00	120	77
LEAD-FURNACE P	mg/L	TAS	0.05	0.0464	92.80	114	81	< 0.005	< 0.005	0.00	<0.005	0.005	0.05	0.049	98.00	126	61
CONDUCTIVITY	uS/cm	MZL	1413	1390	98.37	107	95	620	620	0.00	<1	1	---	---	---	---	---
SILVER-ICP	mg/L	JEC	0.2	0.198	99.00	113	83	0.18	0.18	0.00	<0.01	0.01	0.2	0.18	90.00	112	76
ALUMINUM-ICP	mg/L	JEC	1	0.855	85.50	112	86	1.4	1.3	7.41	<0.1	0.1	1	0.86	86.00	131	63
BARIUM-ICP	mg/L	JEC	10	9.87	98.70	113	85	9.1	8.9	2.22	<0.01	0.01	10	9.1	91.00	112	74
BERYLLIUM-ICP	mg/L	JEC	1	1	100.00	110	88	0.92	0.91	1.09	<0.01	0.01	1	0.92	92.00	112	79
CALCIUM-ICP	mg/L	JEC	10	10.2	102.00	112	88	39	39	0.00	<0.2	0.2	10	8	80.00	123	75
CADMIUM-ICP	mg/L	JEC	1	1.02	102.00	112	83	0.92	0.91	1.09	<0.01	0.01	1	0.92	92.00	115	73
COBALT-ICP	mg/L	JEC	1	1.01	101.00	111	88	0.91	0.91	0.00	<0.02	0.02	1	0.91	91.00	111	80
CHROMIUM-ICP	mg/L	JEC	1	1.04	104.00	114	88	0.94	0.93	1.07	<0.02	0.02	1	0.94	94.00	113	80
COPPER-ICP	mg/L	JEC	1	0.969	96.90	111	88	1.9	1.9	0.00	<0.02	0.02	1	0.88	88.00	111	67
IRON-ICP	mg/L	JEC	1	1.05	105.00	113	90	0.96	0.95	1.05	<0.04	0.04	1	0.96	96.00	111	87
MAGNESIUM-ICP	mg/L	JEC	10	9.61	96.10	120	84	16	16	0.00	<0.5	0.5	10	8.2	82.00	128	65
MANGANESE-ICP	mg/L	JEC	1	1.01	101.00	112	89	0.93	0.93	0.00	<0.01	0.01	1	0.93	93.00	119	81
NICKEL-ICP	mg/L	JEC	1	1.01	101.00	113	87	0.92	0.93	1.08	<0.04	0.04	1	0.92	92.00	113	76
ANTIMONY-ICP	mg/L	JEC	1	0.979	97.90	119	80	0.9	0.91	1.10	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JEC	1	1	100.00	111	86	0.91	0.9	1.10	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JEC	1	1.06	106.00	112	89	4.1	4.1	0.00	<0.01	0.01	1	1	100.00	122	71
LEAD-ICP	mg/L	JEC	1	0.997	99.70	114	84	7500	7400	1.34	<0.1	0.1	1	0.83	83.00	115	60
ARSENIC-ICP	mg/L	JEC	1	0.963	96.30	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.86	86.00	126	65
CYANIDE	mg/L	JWR	0.4	0.409	102.25	119	94	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.195	97.50	121	86
LEAD-FURNACE F	mg/L	TAS	0.05	0.0493	98.60	114	81	0.05	0.05	0.00	<0.005	0.005	0.05	0.05	100.00	126	61
SELENIUM-FURN A	mg/L	TAS	0.05	0.0524	104.80	117	84	< 1	< 1	0.00	<0.004	0.004	0.05	0.037	74.00	130	69
AMMONIA	mg/L	REB	2	2.05	102.50	123	69	0.57	0.55	3.57	<0.1	0.1	1	1.1	110.00	146	87
MBAS	mg/L	REB	1	0.919	91.90	113	71	59	55	7.02	<0.1	0.1	1	0.983	98.30	142	57
OIL & GREASE	mg/L	PJH	10	10.5	105.00	137	74	10.5	9.5	10.00	<1	1	10	9.5	95.00	154	67
TSS	mg/L	MZL	50	50	100.00	124	65	< 5	< 5	0.00	<5	5	50	50	100.00	130	60
TOX	mg/L	DIH	0.1	0.1	100.00	141	71	1.694	1.728	1.99	<0.02	0.02	0.1	0.09	90.00	146	56

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/23/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.502	100.40	133	74	0.89	0.89	0.00	<0.05	0.05	0.25	0.253	101.20	134	77
FORMALDEHYDE	mg/L	JWR	0.5	0.492	98.40	131	74	0.2	0.2	0.00	<0.1	0.1	0.5	0.449	89.80	129	70
CHLORIDE	mg/L	REB	50	50.8	101.60	114	84	41	38	7.59	<2	2	25	25.4	101.60	128	80
ALKALINITY	mg/L	REB	100	98	98.00	112	80	380	360	5.41	<10	10	50	54.8	109.60	120	62
PHENOL	mg/L	REB	0.5	0.497	99.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	---	---	---	122	57
NITRITE	mg/L	PJH	0.1	0.096	96.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.102	102.00	114	77
MERCURY-Q	mg/L	TAS	0.01	0.0106	106.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-N	mg/L	TAS	0.01	0.0105	105.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	TAS	0.01	0.0107	107.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-L	mg/L	TAS	0.01	0.0105	105.00	121	77	< 0.25	< 0.25	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
SELENIUM-FURN F	mg/L	TAS	0.05	0.0488	97.60	117	84	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	130	69
SELENIUM-FURN P	mg/L	TAS	0.05	0.0497	99.40	117	84	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	130	69
BARIUM-ICP	mg/L	JEC	10	10	100.00	111	85	120	110	8.70	<0.01	0.01	10	7.9	79.00	107	84
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	107	85	0.72	0.53	30.40	<0.01	0.01	1	0.91	91.00	106	79
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	87	16	15	6.45	<0.02	0.02	1	0.9	90.00	111	85
COPPER-ICP	mg/L	JEC	1	1.04	104.00	105	91	11	11	0.00	<0.02	0.02	1	0.88	88.00	109	85
VANADIUM-ICP	mg/L	JEC	1	1.02	102.00	118	91	21	20	4.88	<0.01	0.01	1	1	100.00	120	88
ZINC-ICP	mg/L	JEC	1	1.06	106.00	114	87	47	44	6.59	<0.01	0.01	1	0.82	82.00	114	80
COD	mg/L	PJH	1000	887	88.70	137	61	720	760	5.41	<5	5	500	434	86.80	125	66
TOC	mg/L	DIH	25	25.1	100.40	*	*	19	19	0.00	<1	1	25	23.4	93.60	125	75
ALUMINUM-ICP	mg/L	JEC	1	0.992	99.20	122	86	1.1	1.1	0.00	<1	1	1	0.94	94.00	131	63
BARIUM-ICP	mg/L	JEC	10	9.94	99.40	113	85	9.5	9.5	0.00	<0.01	0.01	10	9.1	91.00	112	74
CALCIUM-ICP	mg/L	JEC	10	10	100.00	112	88	720	730	1.38	<0.2	0.2	10	9.2	92.00	123	75
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	112	83	0.89	0.91	2.22	<0.01	0.01	1	0.89	89.00	115	73
COBALT-ICP	mg/L	JEC	1	0.989	98.90	111	88	0.9	0.91	1.10	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	88	0.91	0.92	1.09	<0.02	0.02	1	0.91	91.00	113	80
IRON-ICP	mg/L	JEC	1	1.05	105.00	113	90	0.9	0.93	3.28	<0.04	0.04	1	0.9	90.00	111	87
POTASSIUM-ICP	mg/L	JEC	10	9.76	97.60	120	84	26	26	0.00	<1	1	10	10	100.00	128	65
MAGNESIUM-ICP	mg/L	JEC	10	9.65	96.50	109	87	28	28	0.00	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JEC	1	0.999	99.90	112	89	0.92	0.93	1.08	<0.01	0.01	1	0.9	90.00	119	81
SODIUM-ICP	mg/L	JEC	10	9.88	98.80	112	87	140	140	0.00	<0.5	0.5	10	11	110.00	129	58
NICKEL-ICP	mg/L	JEC	1	1.03	103.00	113	87	0.91	0.89	2.22	<0.04	0.04	1	0.89	89.00	113	76
ANTIMONY-ICP	mg/L	JEC	1	1.01	101.00	119	80	1	1	0.00	<0.2	0.2	1	0.94	94.00	120	71
ZINC-ICP	mg/L	JEC	1	0.972	97.20	112	89	0.92	0.92	0.00	<0.01	0.01	1	0.83	83.00	122	71
LEAD-ICP	mg/L	JEC	1	0.998	99.80	114	84	1	1.1	9.52	<0.1	0.1	1	0.9	90.00	115	60
TOX	mg/L	DIH	0.1	0.09	90.00	141	71	3.451	3.52	1.98	<0.02	0.02	0.1	0.09	90.00	146	56
MBAS	mg/L	JWR	1	1.04	104.00	113	71	47	49	4.17	<0.1	0.1	1	1.13	113.00	142	57
TIN-ICP	mg/L	JEC	1	0.937	93.70	109	83	0.94	1.05	11.06	<0.5	0.5	1	1.05	105.00	114	72
BERYLLIUM-ICP	mg/L	JEC	1	0.977	97.70	110	88	0.9	0.92	2.20	<0.01	0.01	1	0.92	92.00	112	79

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·ices

QUALITY ASSURANCE DAIL: REPORT

OHIO VALLEY LABORATORY Date: 09/21/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
PHENOL	mg/L	REB	0.5	0.52	104.00	110	99	1	1	0.00	<0.005	0.005	0.5	0.536	107.20	118	96
PHOSPHORUS	mg/L	REB	2	1.79	89.50	110	63	0.21	0.2	4.88	<0.1	0.1	0.5	0.525	105.00	125	75
TKN	mg/L	REB	1	0.798	79.80	147	50	1.5	1.5	0.00	<0.1	0.1	0.5	0.382	76.40	151	49
TOC	mg/L	DIH	25	25.7	102.80	*	*	1	1	0.00	<1	1	25	25.5	102.00	125	75
CHROMIUM-FURN H	mg/L	TAS	0.05	0.0496	99.20	126	78	0.052	0.052	0.00	<0.005	0.005	0.05	0.052	104.00	133	61
ARSENIC-FURNACE H	mg/L	TAS	0.05	0.0525	105.00	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	10.7	7.77	<1	1	10	10.7	107.00	154	67
MBAS	mg/L	PJH	1	0.981	98.10	113	71	26	36	32.26	<0.1	0.1	1	0.804	80.40	142	57
BOD	mg/L	RJS	200	190	95.00	124	77	54	58	7.14	<3	3	200	176	88.00	133	71

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/20/94 BLK FLNM: 5BK11228
INSTRUMENT: FINN 5 LCS FLNM: 5QC11229
ANALYST(S): SLM SHIFT: AM

SMPL NAME: 09-308-06
FILE NAME: 5AS11236
MS FLNM: 5AS11237
MSD FLNM: 5AS11238

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	13.1	65.5	43-129	0-273								33
BROMOMETHANE	10	BQL	14.1	70.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	15.5	77.7	47-128	0-251								18
CHLOROETHANE	10	BQL	15.5	77.7	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	21.5	107.6	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	20.1	100.5	66-138	0-234	0.0	51.1	41.3	102.2	82.7	61 - 145	21.2	31
1,1-DICHLOROETHANE	5	BQL	18.4	91.8	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	16.8	84.0	77-127	54-156								31
CHLOROFORM	5	BQL	21.0	105.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	20.2	101.1	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.8	103.8	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	20.6	103.1	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	20.1	100.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	22.1	110.3	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	21.4	107.2	80-148	0-227								40
TRICHLOROETHENE	5	BQL	22.3	111.3	83-129	71-157	0.0	52.1	51.2	104.1	102.4	71 - 120	1.7	14
DIBROMOCHLOROMETHA	5	BQL	18.7	93.6	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.9	104.3	86-127	52-150								21
BENZENE	5	BQL	21.5	107.5	87-120	37-151	0.0	49.6	47.4	99.2	94.7	76 - 127	4.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.3	81.4	48-108	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.9	94.7	68-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	23.0	115.1	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	23.6	118.1	78-124	46-147								17
TOLUENE	5	BQL	22.5	112.8	88-115	47-150	0.0	51.8	51.4	103.6	102.9	78 - 125	0.7	14
CHLOROBENZENE	5	BQL	22.7	113.7	85-119	37-160	0.0	53.8	52.4	107.6	104.7	75 - 130	2.7	14
ETHYLBENZENE	5	BQL	26.3	131.3	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	14.4	72.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	22.0	110.2	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	22.8	114.1	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.9	109.3	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/21/94 BLK FLNM: 5BK11252 SMPL NAME: 09-369-06
INSTRUMENT: FINN 5 LCS FLNM: 5QC11253 FILE NAME: 5MO11257
ANALYST(S): SLM SHIFT: AM MS FLNM: 5MO11258
MSD FLNM: 5MO11259

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.6	83.2	43-129	0-273								33
BROMOMETHANE	10	BQL	16.2	81.2	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.1	95.6	47-128	0-251								18
CHLOROETHANE	10	BQL	14.4	71.8	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	21.7	108.3	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.8	89.1	66-138	0-234	0.0	42.3	45.3	84.6	90.6	61 - 145	7.0	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.4	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.1	77-127	54-156								31
CHLOROFORM	5	BQL	21.5	107.3	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	21.6	107.9	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.1	100.3	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	19.3	96.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.6	98.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.7	103.5	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	21.8	109.0	80-148	0-227								40
TRICHLOROETHENE	5	BQL	21.2	105.9	83-129	71-157	21.3	68.0	66.2	93.3	89.8	71 - 120	3.9	14
DIBROMOCHLOROMETHA	5	BQL	18.8	93.8	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.8	103.8	86-127	52-150								21
BENZENE	5	BQL	20.7	103.7	87-120	37-151	0.0	50.0	49.6	99.9	99.3	76 - 127	0.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.7	83.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	17.0	84.9	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.6	108.1	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.2	91.0	78-124	46-147								17
TOLUENE	5	BQL	20.8	104.2	86-115	47-150	0.0	48.8	47.6	97.7	95.3	76 - 125	2.5	14
CHLOROBENZENE	5	BQL	20.6	102.8	85-119	37-160	0.0	51.2	50.7	102.4	101.5	75 - 130	0.9	14
ETHYLBENZENE	5	BQL	24.0	120.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	16.6	83.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	17.5	87.7	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	17.4	87.1	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	16.7	83.7	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 9/20/94 SMPL NAM 09-347-01
TYPE: CONTINUOUS FILE NAME 1AS30600
BLK FLNM: 1BK30519 MS FLNM: 1AS30601
QC FLNM: 1QC30520 MSD FLNM 1AS30602

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	60	120	60	13-132	0	46	36	92	72	46	36	24
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	67	134	67	48-115	0	49	32	98	64	49	32	42
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	26	52	52	32-115	0	22	20	44	40	44	40	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	34	68	68	35-124	0	34	33	68	66	68	66	3
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	27	54	54	29- 98	0	20	20	40	40	40	40	0
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	72	144	72	45-117	0	69	74	138	148	69	74	7
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	40	80	80	43-117	0	34	36	68	72	68	72	6

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 9/20/94 SMPL NAM 09-347-01
TYPE: CONTINUOUS FILE NAME 1AS30600
BLK FLNM: 1BK30519 MS FLNM: 1AS30601
QC FLNM: 1QC30520 MSD FLNM 1AS30602

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	73	146	73	1- 148	0	51	50	102	100	51	50	2
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	28	56	56	34-110	0	31	33	62	66	62	66	-6
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	88	176	88	36-137	0	70	83	140	166	70	83	17
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	51	102	102	42-139	0	37	45	74	90	74	90	-20
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 0191 / J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

ANALYSES — PAGE OF

PROJECT NAME: MONSANTO-NITRO
PROJECT NUMBER: 06619J03
PROJECT LOCATION: NITRO, WEST VIRGINIA
SAMPLER(S): S. ANDERSON, P. CHANG

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
MW-1A	9.19.94	1310	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-1B	9.19.94	1240	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-23A	9.19.94	1425	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-3A	9.19.94	1520	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-3B	9.19.94	1555	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-19B	9.19.94	1640	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
FIELD BLANK	9.19.94	1630	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	ROUX	9.19.94	1700	Y	[signature]	Kemron	9/19/94	1700	Y
[signature]	Kemron	9/19/94	1930	Y	Brenda Gregory	Kemron	9/20/94	745	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEAL #'s 0001, 0002, [redacted] SYO stored in locked cooler overnight

DIG

KEMRON
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522879

Order #: N4-09-397
Date: December 1, 1994 10:23
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/20/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-19A	02	MW-4A
03	MW-4B	04	MW-20A
05	MW-20B	06	MW-5A
07	MW-5B	08	MW-21A
09	MW-21B	10	FIELD BLANK 2

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, N.J. 08066
Attn: Mr. Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **MW-19A** Collected: **09/20/94 09:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	0.34	0.02	mg/L Cl	09/23/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.021	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.69	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	0.02	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	0.03	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.25	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.25	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.20	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	0.0007	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.35	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.99	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **02** **MW-4A** Collected: **09/20/94 11:55** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	1	1	mg/L	09/23/94	DIH	415.1/90
Total Organic Halides	0.85	0.02	mg/L Cl	09/23/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.18	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	0.23	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.07	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.08	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.051	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.10	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.62	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **03** **MW-4B** Collected: **09/20/94 11:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	21	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	0.23	0.02	mg/L Cl	09/23/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.02	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/74
Nickel, Total	0.05	0.04	mg/L Ni	09/29/94	JBC	200.7/60
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **04** **MW-20A** Collected: **09/20/94 12:55** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	39	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	3.6	0.02	mg/L Cl	09/26/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.07	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.013	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.06	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.08	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **05** **MW-20B** Collected: **09/20/94 13:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	34	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	1.4	0.02	mg/L Cl	09/26/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.10	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.007	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **06** **MW-5A** Collected: **09/20/94 14:50** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	1	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	1.2	0.02	mg/L Cl	09/26/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.011	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.52	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.06	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.05	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.036	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.09	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.22	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **07** **MW-5B** Collected: **09/20/94 15:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	19	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	1.6	0.02	mg/L Cl	09/27/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	2.1	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.05	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **08** **MW-21A** Collected: **09/20/94 16:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	32	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	1.5	0.02	mg/L Cl	09/27/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.042	0.004	mg/L As	09/28/94	JEC	206.2/70[illegible]
Barium, Total	0.52	0.01	mg/L Ba	09/29/94	JBC	200.7/60[illegible]
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/601[illegible]
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.17	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.13	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.069	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.17	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.37	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **09** **MW-21B** Collected: **09/20/94 16:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	12	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	1.4	0.02	mg/L Cl	09/27/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.006	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.22	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.014	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/601[illegible]
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/78[illegible]
Zinc, Total	0.12	0.01	mg/L Zn	09/29/94	JBC	200.7/601[illegible]

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

SAMPLE ID: **10** **FIELD BLANK 2** Collected: **09/20/94 10:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/27/94	DIH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/29/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01D** Collected: **09/20/94 09:00**
Sample Description: **MW-19A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17544
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01D** Collected: **09/20/94 09:00**
Sample Description: **MW-19A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17544
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF * % Recovery	(21% - 100%)
Phenol-d6	NF * % Recovery	(10% - 94%)
Nitrobenzene-d5	61 % Recovery	(35% - 114%)
2-Fluorobiphenyl	61 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	NF * % Recovery	(10% - 123%)
p-Terphenyl-d14	84 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01E** Collected: **09/20/94 09:00**
Sample Description: **MW-19A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39446
Instrument: FINN2 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	29	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	5	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	140	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	15	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	130	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	94 % Recovery	(76% - 114%)
Toluene-d8	97 % Recovery	(88% - 110%)
p-Bromofluorobenzene	96 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02D** Collected: **09/20/94 11:55**
Sample Description: **MW-4A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17545
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **02D** Collected: **09/20/94 11:55**
Sample Description: **MW-4A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17545
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF *	% Recovery (21% - 100%)
Phenol-d6	NF *	% Recovery (10% - 94%)
Nitrobenzene-d5	56	% Recovery (35% - 114%)
2-Fluorobiphenyl	56	% Recovery (43% - 116%)
2,4,6-Tribromophenol	NF *	% Recovery (10% - 123%)
p-Terphenyl-d14	78	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02E** Collected: **09/20/94 11:55**
Sample Description: **MW-4A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39453
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	170	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	6	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	21	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	220	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	11	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	37	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	790	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	107 % Recovery	(76% - 114%)
Toluene-d8	107 % Recovery	(88% - 110%)
p-Bromofluorobenzene	109 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03D** Collected: **09/20/94 11:15**
Sample Description: **MW-4B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17546
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03D** Collected: **09/20/94 11:15**
Sample Description: **MW-4B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17546
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	29 % Recovery	(21% - 100%)
Phenol-d6	21 % Recovery	(10% - 94%)
Nitrobenzene-d5	58 % Recovery	(35% - 114%)
2-Fluorobiphenyl	60 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	62 % Recovery	(10% - 123%)
p-Terphenyl-d14	89 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03E** Collected: **09/20/94 11:15**
Sample Description: **MW-4B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39440
Instrument: FINN2 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	69	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	7	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	31	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	51	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	108 % Recovery	(76% - 114%)
Toluene-d8	108 % Recovery	(88% - 110%)
p-Bromofluorobenzene	106 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04D** Collected: **09/20/94 12:55**
Sample Description: **MW-20A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17547
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04D** Collected: **09/20/94 12:55**
Sample Description: **MW-20A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17547
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF * % Recovery	(21% - 100%)
Phenol-d6	NF * % Recovery	(10% - 94%)
Nitrobenzene-d5	46 % Recovery	(35% - 114%)
2-Fluorobiphenyl	55 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	3 * % Recovery	(10% - 123%)
p-Terphenyl-d14	79 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-20A**
Test Description: **Volatile Organics**

Lab No: **04E**

Collected: **09/20/94 12:55**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2MO39454
Instrument: FINN2 Injected: 09/22/94 Factor: 5 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	50
74-83-9	Bromomethane	ND	50
75-01-4	Vinyl chloride	300	50
75-00-3	Chloroethane	ND	50
75-09-2	Methylene chloride	ND	25
67-64-1	Acetone	ND	500
75-15-0	Carbon disulfide	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	25
156-60-5	trans-1,2-Dichloroethene	170	25
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	25
78-93-3	2-Butanone	ND	500
71-55-6	1,1,1-Trichloroethane	ND	25
56-23-5	Carbon tetrachloride	ND	25
108-05-4	Vinyl acetate	ND	50
75-27-4	Bromodichloromethane	ND	25
78-87-5	1,2-Dichloropropane	ND	25
10061-01-5	cis-1,3-Dichloropropene	ND	25
79-01-6	Trichloroethene	3200	25
124-48-1	Dibromochloromethane	ND	25
79-00-5	1,1,2-Trichloroethane	ND	25
71-43-2	Benzene	6	25
10061-02-6	trans-1,3-Dichloropropene	ND	25
110-75-8	2-Chloroethyl vinyl ether	ND	50
75-25-2	Bromoform	ND	25
108-10-1	4-Methyl-2-pentanone	ND	50
591-78-6	2-Hexanone	ND	50
127-18-4	Tetrachloroethene	ND	25
79-34-5	1,1,2,2,-Tetrachloroethane	ND	25
108-88-3	Toluene	ND	25
108-90-7	Chlorobenzene	ND	25
100-41-4	Ethyl benzene	ND	25
100-42-5	Styrene	ND	25
1330-20-7	Xylenes (Total)	ND	25
156-59-2	cis-1,2-Dichloroethene	830	25
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
75-71-8	Dichlorodifluoromethane	ND	50
75-69-4	Trichlorofluoromethane	ND	50
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	112 % Recovery	(76% - 114%)
Toluene-d8	98 % Recovery	(88% - 110%)
p-Bromofluorobenzene	109 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05D** Collected: **09/20/94 13:30**
Sample Description: **MW-20B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17548
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	53	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **05D** Collected: **09/20/94 13:30**
Sample Description: **MW-20B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17548
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	30 % Recovery	(21% - 100%)
Phenol-d6	25 % Recovery	(10% - 94%)
Nitrobenzene-d5	60 % Recovery	(35% - 114%)
2-Fluorobiphenyl	62 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	61 % Recovery	(10% - 123%)
p-Terphenyl-d14	90 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-20B**
Test Description: **Volatile Organics**

Lab No: **05E**

Collected: **09/20/94 13:30**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2MO39444
Instrument: FINN2 Injected: 09/21/94 Factor: 5 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	50
74-83-9	Bromomethane	ND	50
75-01-4	Vinyl chloride	45	50
75-00-3	Chloroethane	ND	50
75-09-2	Methylene chloride	ND	25
67-64-1	Acetone	ND	500
75-15-0	Carbon disulfide	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	25
156-60-5	trans-1,2-Dichloroethene	ND	25
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	25
78-93-3	2-Butanone	ND	500
71-55-6	1,1,1-Trichloroethane	ND	25
56-23-5	Carbon tetrachloride	ND	25
108-05-4	Vinyl acetate	ND	50
75-27-4	Bromodichloromethane	ND	25
78-87-5	1,2-Dichloropropane	ND	25
10061-01-5	cis-1,3-Dichloropropene	ND	25
79-01-6	Trichloroethene	2300	25
124-48-1	Dibromochloromethane	ND	25
79-00-5	1,1,2-Trichloroethane	ND	25
71-43-2	Benzene	ND	25
10061-02-6	trans-1,3-Dichloropropene	ND	25
110-75-8	2-Chloroethyl vinyl ether	ND	50
75-25-2	Bromoform	ND	25
108-10-1	4-Methyl-2-pentanone	ND	50
591-78-6	2-Hexanone	ND	50
127-18-4	Tetrachloroethene	ND	25
79-34-5	1,1,2,2,-Tetrachloroethane	ND	25
108-88-3	Toluene	ND	25
108-90-7	Chlorobenzene	ND	25
100-41-4	Ethyl benzene	ND	25
100-42-5	Styrene	ND	25
1330-20-7	Xylenes (Total)	ND	25
156-59-2	cis-1,2-Dichloroethene	260	25
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
75-71-8	Dichlorodifluoromethane	ND	50
75-69-4	Trichlorofluoromethane	ND	50
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	94 % Recovery	(76% - 114%)
Toluene-d8	99 % Recovery	(88% - 110%)
p-Bromofluorobenzene	96 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06D** Collected: **09/20/94 14:50**
Sample Description: **MW-5A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17549
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06D** Collected: **09/20/94 14:50**
Sample Description: **MW-5A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17549
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	5 * % Recovery	(21% - 100%)
Phenol-d6	4 * % Recovery	(10% - 94%)
Nitrobenzene-d5	55 % Recovery	(35% - 114%)
2-Fluorobiphenyl	54 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	26 % Recovery	(10% - 123%)
p-Terphenyl-d14	86 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06E** Collected: **09/20/94 14:50**
Sample Description: **MW-5A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39445
Instrument: FINN2 Injected: 09/21/94 Factor: 5 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	50
74-83-9	Bromomethane	ND	50
75-01-4	Vinyl chloride	ND	50
75-00-3	Chloroethane	ND	50
75-09-2	Methylene chloride	ND	25
67-64-1	Acetone	ND	500
75-15-0	Carbon disulfide	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	25
156-60-5	trans-1,2-Dichloroethene	ND	25
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	25
78-93-3	2-Butanone	ND	500
71-55-6	1,1,1-Trichloroethane	ND	25
56-23-5	Carbon tetrachloride	ND	25
108-05-4	Vinyl acetate	ND	50
75-27-4	Bromodichloromethane	ND	25
78-87-5	1,2-Dichloropropane	ND	25
10061-01-5	cis-1,3-Dichloropropene	ND	25
79-01-6	Trichloroethene	880	25
124-48-1	Dibromochloromethane	ND	25
79-00-5	1,1,2-Trichloroethane	ND	25
71-43-2	Benzene	ND	25
10061-02-6	trans-1,3-Dichloropropene	ND	25
110-75-8	2-Chloroethyl vinyl ether	ND	50
75-25-2	Bromoform	ND	25
108-10-1	4-Methyl-2-pentanone	ND	50
591-78-6	2-Hexanone	ND	50
127-18-4	Tetrachloroethene	ND	25
79-34-5	1,1,2,2,-Tetrachloroethane	ND	25
108-88-3	Toluene	ND	25
108-90-7	Chlorobenzene	ND	25
100-41-4	Ethyl benzene	ND	25
100-42-5	Styrene	ND	25
1330-20-7	Xylenes (Total)	ND	25
156-59-2	cis-1,2-Dichloroethene	170	25
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
75-71-8	Dichlorodifluoromethane	ND	50
75-69-4	Trichlorofluoromethane	ND	50
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	105 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	106 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07D** Collected: **09/20/94 15:30**
Sample Description: **MW-5B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17550
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	17	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07D** Collected: **09/20/94 15:30**
Sample Description: **MW-5B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17550
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	26 % Recovery	(21% - 100%)
Phenol-d6	18 % Recovery	(10% - 94%)
Nitrobenzene-d5	57 % Recovery	(35% - 114%)
2-Fluorobiphenyl	60 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	41 % Recovery	(10% - 123%)
p-Terphenyl-d14	99 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

SURROGATES:

1,2-Dichloroethane-d4	109	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	104	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **08D** Collected: **09/20/94 16:15**
Sample Description: **MW-21A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17551
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	23	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **08D** Collected: **09/20/94 16:15**
Sample Description: **MW-21A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17551
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	17 * % Recovery	(21% - 100%)
Phenol-d6	11 % Recovery	(10% - 94%)
Nitrobenzene-d5	63 % Recovery	(35% - 114%)
2-Fluorobiphenyl	70 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	51 % Recovery	(10% - 123%)
p-Terphenyl-d14	80 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08E** Collected: **09/20/94 16:15**
Sample Description: **MW-21A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M011267
Instrument: FINN5 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	130	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	51	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	470	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	5	5
108-90-7	Chlorobenzene	15	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	1800	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	115**	% Recovery	(76% - 114%)
Toluene-d8	106	% Recovery	(88% - 110%)
p-Bromofluorobenzene	93	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND
** = REANALYSIS CONFIRMS SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **09D** Collected: **09/20/94 16:45**
Sample Description: **MW-21B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17552
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	17	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	16	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **09D** Collected: **09/20/94 16:45**
Sample Description: **MW-21B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17552
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	15 *	% Recovery (21% - 100%)
Phenol-d6	14	% Recovery (10% - 94%)
Nitrobenzene-d5	57	% Recovery (35% - 114%)
2-Fluorobiphenyl	67	% Recovery (43% - 116%)
2,4,6-Tribromophenol	51	% Recovery (10% - 123%)
p-Terphenyl-d14	80	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **09E** Collected: **09/20/94 16:45**
Sample Description: **MW-21B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M011268
Instrument: FINN5 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	14	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	6	5
67-66-3	Chloroform	19	5
107-06-2	1,2-Dichloroethane	6	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	460	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	320	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	108 % Recovery	(76% - 114%)
Toluene-d8	108 % Recovery	(88% - 110%)
p-Bromofluorobenzene	95 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **10D** Collected: **09/20/94 10:45**
Sample Description: **FIELD BLANK 2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17566
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **10D** Collected: **09/20/94 10:45**
Sample Description: **FIELD BLANK 2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17566
Instrument: FINN4 Injected: 10/04/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	52 % Recovery	(21% - 100%)
Phenol-d6	34 % Recovery	(10% - 94%)
Nitrobenzene-d5	91 % Recovery	(35% - 114%)
2-Fluorobiphenyl	95 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	68 % Recovery	(10% - 123%)
p-Terphenyl-d14	127 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **10E** Collected: **09/20/94 10:45**
Sample Description: **FIELD BLANK 2** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M011269
Instrument: FINN5 Injected: 09/21/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102	% Recovery	(76% - 114%)
Toluene-d8	108	% Recovery	(88% - 110%)
p-Bromofluorobenzene	92	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64
TDS	mg/L	MZL	500	480	96.00	106	84	8400	8300	1.20	<10	10	500	446	89.20	132	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental /ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta' vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta /ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/26/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE F	mg/L	TAS	0.05	0.0516	103.20	120	80	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	123	72
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.052	104.00	120	80	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	123	72
LEAD-FURNACE M	mg/L	TAS	0.05	0.049	98.00	114	81	6.8	7.6	11.11	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE G	mg/L	TAS	0.05	0.0453	90.60	114	81	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	123	61
LEAD-FURNACE I	mg/L	TAS	0.05	0.0528	105.60	114	81	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	123	61
TOC	mg/L	REB	25	26.7	106.80	113	85	< 1	< 1	0.00	<1	1	25	26.7	106.80	115	63
PHOSPHORUS	mg/L	REB	2	1.99	99.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.494	98.80	125	75
BERYLLIUM-FURN G	mg/L	TAS	0.005	0.0051	102.00	121	76	0.0052	0.0049	5.94	<0.0005	0.0005	0.005	0.0049	98.00	116	72
THALLIUM-FURN G	mg/L	JEC	0.05	0.0506	101.20	120	72	0.04	0.048	18.18	<0.005	0.005	0.05	0.049	98.00	112	86
THALLIUM-FURN M	mg/L	JEC	0.05	0.0485	97.00	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.039	78.00	112	86
THALLIUM-FURN F	mg/L	JEC	0.05	0.042	84.00	120	72	0.05	0.055	9.52	<0.005	0.005	0.05	0.05	100.00	112	86
SELENIUM-FURN P	mg/L	JEC	0.05	0.0491	98.20	117	84	0.048	0.046	4.26	<0.004	0.004	0.05	0.048	96.00	130	69
SELENIUM-FURN M	mg/L	JEC	0.05	0.0462	92.40	117	84	0.7	0.6	15.38	<0.004	0.004	0.05	0.04	80.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.19	95.00	113	83	0.179	0.175	2.26	<0.01	0.01	0.2	0.179	89.50	112	76
IRON-ICP	mg/L	JBC	1	0.996	99.60	113	90	0.994	0.981	1.32	<0.04	0.04	1	0.99	99.00	111	87
SODIUM-ICP	mg/L	JBC	10	9.4	94.00	112	87	12	11.9	0.84	<0.5	0.5	10	9.4	94.00	128	58
ARSENIC-ICP	mg/L	JBC	1	1.03	103.00	123	76	1.09	1.05	3.74	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	1.05	1.07	1.89	<0.1	0.1	1	1.02	102.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.979	97.90	117	80	1.02	0.95	7.11	<0.1	0.1	1	1.02	102.00	122	66
TOX	mg/L	DIH	0.1	0.11	110.00	141	71	1.18	1.17	0.85	<0.02	0.02	0.1	0.07	70.00	146	56
SULFATE	mg/L	PJW	20	15.6	78.00	130	78	75	100	28.57	<2	2	10	12.8	128.00	127	85
MBAS	mg/L	JWR	1	1.09	109.00	113	71	52	53	1.90	<0.1	0.1	1	1.11	111.00	142	57
CYANIDE	mg/L	JWR	0.4	0.397	99.25	119	94	0.11	0.11	0.00	<0.01	0.01	0.2	0.193	96.50	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/23/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.502	100.40	133	74	0.89	0.89	0.00	<0.05	0.05	0.25	0.253	101.20	134	77
FORMALDEHYDE	mg/L	JWR	0.5	0.492	98.40	131	74	0.2	0.2	0.00	<0.1	0.1	0.5	0.449	89.80	129	70
CHLORIDE	mg/L	REB	50	50.8	101.60	114	84	41	38	7.59	<2	2	25	25.4	101.60	128	80
ALKALINITY	mg/L	REB	100	98	98.00	112	80	380	360	5.41	<10	10	50	54.8	109.60	120	62
PHENOL	mg/L	REB	0.5	0.497	99.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	---	---	---	122	57
NITRITE	mg/L	PJH	0.1	0.096	96.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.102	102.00	114	77
MERCURY-Q	mg/L	TAS	0.01	0.0106	106.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-N	mg/L	TAS	0.01	0.0105	105.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	TAS	0.01	0.0107	107.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-L	mg/L	TAS	0.01	0.0105	105.00	121	77	< 0.25	< 0.25	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
SELENIUM-FURN F	mg/L	TAS	0.05	0.0488	97.60	117	84	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	130	69
SELENIUM-FURN P	mg/L	TAS	0.05	0.0497	99.40	117	84	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	130	69
BARIUM-ICP	mg/L	JEC	10	10	100.00	111	85	120	110	8.70	<0.01	0.01	10	7.9	79.00	107	84
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	107	85	0.72	0.53	30.40	<0.01	0.01	1	0.91	91.00	106	79
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	87	16	15	6.45	<0.02	0.02	1	0.9	90.00	111	85
COPPER-ICP	mg/L	JEC	1	1.04	104.00	105	91	11	11	0.00	<0.02	0.02	1	0.88	88.00	109	85
VANADIUM-ICP	mg/L	JEC	1	1.02	102.00	118	91	21	20	4.88	<0.01	0.01	1	1	100.00	120	88
ZINC-ICP	mg/L	JEC	1	1.06	106.00	114	87	47	44	6.59	<0.01	0.01	1	0.82	82.00	114	80
COD	mg/L	PJH	1000	887	88.70	137	61	720	760	5.41	<5	5	500	434	86.80	125	66
TOC	mg/L	DIH	25	25.1	100.40	*	*	19	19	0.00	<1	1	25	23.4	93.60	125	75
ALUMINUM-ICP	mg/L	JEC	1	0.992	99.20	122	86	1.1	1.1	0.00	<1	1	1	0.94	94.00	131	63
BARIUM-ICP	mg/L	JEC	10	9.94	99.40	113	85	9.5	9.5	0.00	<0.01	0.01	10	9.1	91.00	112	74
CALCIUM-ICP	mg/L	JEC	10	10	100.00	112	88	720	730	1.38	<0.2	0.2	10	9.2	92.00	123	75
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	112	83	0.89	0.91	2.22	<0.01	0.01	1	0.89	89.00	115	73
COBALT-ICP	mg/L	JEC	1	0.989	98.90	111	88	0.9	0.91	1.10	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	88	0.91	0.92	1.09	<0.02	0.02	1	0.91	91.00	113	80
IRON-ICP	mg/L	JEC	1	1.05	105.00	113	90	0.9	0.93	3.28	<0.04	0.04	1	0.9	90.00	111	87
POTASSIUM-ICP	mg/L	JEC	10	9.76	97.60	120	84	26	26	0.00	<1	1	10	10	100.00	128	65
MAGNESIUM-ICP	mg/L	JEC	10	9.65	96.50	109	87	28	28	0.00	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JEC	1	0.999	99.90	112	89	0.92	0.93	1.08	<0.01	0.01	1	0.9	90.00	119	81
SODIUM-ICP	mg/L	JEC	10	9.88	98.80	112	87	140	140	0.00	<0.5	0.5	10	11	110.00	129	58
NICKEL-ICP	mg/L	JEC	1	1.03	103.00	113	87	0.91	0.89	2.22	<0.04	0.04	1	0.89	89.00	113	76
ANTIMONY-ICP	mg/L	JEC	1	1.01	101.00	119	80	1	1	0.00	<0.2	0.2	1	0.94	94.00	120	71
ZINC-ICP	mg/L	JEC	1	0.972	97.20	112	89	0.92	0.92	0.00	<0.01	0.01	1	0.83	83.00	122	71
LEAD-ICP	mg/L	JEC	1	0.998	99.80	114	84	1	1.1	9.52	<0.1	0.1	1	0.9	90.00	115	60
TOX	mg/L	DIH	0.1	0.09	90.00	141	71	3.451	3.52	1.98	<0.02	0.02	0.1	0.09	90.00	146	56
MBAS	mg/L	JWR	1	1.04	104.00	113	71	47	49	4.17	<0.1	0.1	1	1.13	113.00	142	57
TIN-ICP	mg/L	JEC	1	0.937	93.70	109	83	0.94	1.05	11.06	<0.5	0.5	1	1.05	105.00	114	72
BERYLLIUM-ICP	mg/L	JEC	1	0.977	97.70	110	88	0.9	0.92	2.20	<0.01	0.01	1	0.92	92.00	112	79

UCLx = Upper Control Limit (Standard)
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UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
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Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000001

RUN DATE: 09/22/94 BLK FLNM: 5BK11276
INSTRUMENT: FINN 5 LCS FLNM: 5QC11278
ANALYST(S): SLM SHIFT: AM

SMPL NAME: 09-450-03
FILE NAME: 5AA11280
MS FLNM: 5AA11281
MSD FLNM: 5AA11282

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	14.5	72.6	43-129	0-273								33
BROMOMETHANE	10	BQL	14.0	70.1	62-115	0-242								22
VINYL CHLORIDE	10	BQL	15.6	78.1	47-128	0-251								18
CHLOROETHANE	10	BQL	12.3	61.7	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	21.1	105.7	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	19.1	95.3	66-138	0-234	0.0	42.3	43.9	84.7	87.8	61 - 145	3.6	31
1,1-DICHLOROETHANE	5	BQL	20.7	103.4	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.1	77-127	54-156								31
CHLOROFORM	5	BQL	20.5	102.6	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.9	99.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.9	94.4	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	18.4	91.9	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.5	92.4	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	19.8	98.9	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	20.0	99.8	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.6	103.0	83-129	71-157	0.0	47.7	45.9	95.5	91.7	71 - 120	4.0	14
DIBROMOCHLOROMETHA	5	BQL	18.2	91.2	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.5	97.3	86-127	52-150								21
BENZENE	5	BQL	20.1	100.6	87-120	37-151	0.0	47.5	46.1	95.0	92.2	76 - 127	3.0	23
TRANS-1,3-DICHLOROPRO	5	BQL	15.8	78.8	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	15.6	77.9	68-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	19.7	98.6	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.2	81.0	78-124	46-147								17
TOLUENE	5	BQL	19.9	99.4	86-115	47-150	0.0	44.9	43.9	89.7	87.8	76 - 125	2.2	14
CHLOROBENZENE	5	BQL	19.5	97.5	85-119	37-160	0.0	46.8	45.5	93.7	90.9	75 - 130	3.0	14
ETHYLBENZENE	5	BQL	21.0	104.9	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	16.1	80.3	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	16.8	84.2	78-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	17.0	85.2	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	16.3	81.4	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000002

RUN DATE: 09/21/94 BLK FLNM: 5BK11252
INSTRUMENT: FINN 5 LCS FLNM: 5QC11253
ANALYST(S): SLM SHIFT: AM

SMPL NAME: 09-369-08
FILE NAME: 5MO11257
MS FLNM: 5MO11258
MSD FLNM: 5MO11259

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.6	83.2	43-129	0-273								33
BROMOMETHANE	10	BQL	16.2	81.2	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.1	95.6	47-128	0-251								18
CHLOROETHANE	10	BQL	14.4	71.8	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	21.7	108.3	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.8	89.1	66-138	0-234	0.0	42.3	45.3	84.6	90.6	61 - 145	7.0	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.4	71-148	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.1	77-127	54-156								31
CHLOROFORM	5	BQL	21.5	107.3	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	21.6	107.9	87-119	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.1	100.3	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	19.3	96.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.6	98.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.7	103.5	78-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	21.8	109.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	21.2	105.9	83-129	71-157	21.3	68.0	66.2	93.3	89.8	71 - 120	3.9	14
DIBROMOCHLOROMETHA	5	BQL	18.8	93.8	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.8	103.8	86-127	52-150								21
BENZENE	5	BQL	20.7	103.7	87-120	37-151	0.0	50.0	49.6	99.9	99.3	76 - 127	0.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.7	83.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	17.0	84.9	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.6	108.1	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.2	91.0	78-124	46-147								17
TOLUENE	5	BQL	20.8	104.2	86-115	47-150	0.0	48.8	47.6	97.7	95.3	76 - 125	2.5	14
CHLOROBENZENE	5	BQL	20.6	102.8	85-119	37-160	0.0	51.2	50.7	102.4	101.5	75 - 130	0.9	14
ETHYLBENZENE	5	BQL	24.0	120.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	16.6	83.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	17.5	87.7	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	17.4	87.1	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	16.7	83.7	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000003

RUN DATE: 09/21/94 BLK FLNM: 2BK39434
INSTRUMENT: FINN2 LCS FLNM: 2QC39435
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-397-03
FILE NAME: 2MO39440
MS FLNM: 2MO39441
MSD FLNM: 2MO39442

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	19.0	95.0	43-129	0-273								33
BROMOMETHANE	10	BQL	12.2	61.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	17.6	88.0	47-128	0-251								18
CHLOROETHANE	10	BQL	13.7	68.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.2	101.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.8	89.0	66-138	0-234	0.0	50.5	45.8	101.0	91.0	61 - 145	10.4	31
1,1-DICHLOROETHANE	5	BQL	18.8	94.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	16.4	82.0	77-127	54-156								31
CHLOROFORM	5	BQL	19.8	99.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.6	93.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	17.7	88.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.4	87.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.9	84.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.2	91.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	17.9	89.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	18.5	92.5	83-129	71-157	31.4	72.9	69.0	83.0	75.2	71 - 120	9.9	14
DIBROMOCHLOROMETHA	5	BQL	16.4	82.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	17.6	88.0	86-127	52-150								21
BENZENE	5	BQL	18.0	90.0	87-120	37-151	0.0	45.6	44.1	91.2	88.2	76 - 127	3.3	23
TRANS-1,3-DICHLOROPRO	5	BQL	13.2	66.0	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	17.5	87.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.3	91.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.5	82.5	76-124	46-147								17
TOLUENE	5	BQL	18.8	94.0	86-115	47-150	0.0	41.9	39.6	83.8	79.2	76 - 125	5.6	14
CHLOROBENZENE	5	BQL	17.8	89.0	85-119	37-160	0.0	44.8	43.3	89.6	86.6	75 - 130	3.4	14
ETHYLBENZENE	5	BQL	17.6	88.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	19.5	97.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.9	109.5	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	21.9	109.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	22.0	110.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000004

RUN DATE: 09/22/94 BLK FLNM: 2BK39451
INSTRUMENT: FINN2 LCS FLNM: 2QC39452
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-400-01
FILE NAME: 2MO39458
MS FLNM: 2MO39459
MSD FLNM: 2MO39460

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.2	86.0	43-129	0-273								33
BROMOMETHANE	10	BQL	16.3	81.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	15.5	77.5	47-128	0-251								18
CHLOROETHANE	10	BQL	19.8	99.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	17.5	87.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	18.5	92.5	66-138	0-234	0.0	49.3	53.2	98.6	106.4	61 - 145	7.8	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.0	77-127	54-156								31
CHLOROFORM	5	BQL	18.3	91.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.7	93.5	87-118	49-155								22
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.0	90.0	85-140	52-162								14
CARBON TETRACHLORID	5	BQL	17.8	89.0	70-140	70-140								28
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.4	92.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.2	101.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.8	99.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	19.2	96.0	83-129	71-157	157.5	238.2	290.0	161.4	265.0	71 - 120	48.8	14
DIBROMOCHLOROMETHA	5	BQL	18.1	90.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.1	95.5	86-127	52-150								21
BENZENE	5	BQL	18.7	93.5	87-120	37-151	0.0	53.5	57.4	107.0	114.8	76 - 127	7.0	23
TRANS-1,3-DICHLOROPRO	5	BQL	14.9	74.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	20.2	101.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.9	94.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.1	90.5	78-124	46-147								17
TOLUENE	5	BQL	18.1	90.5	86-115	47-150	0.0	44.6	43.0	89.2	86.0	76 - 125	3.7	14
CHLOROBENZENE	5	BQL	19.0	95.0	85-119	37-160	16.7	79.1	80.0	124.8	126.6	75 - 130	1.4	14
ETHYLBENZENE	5	BQL	18.0	90.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	21.2	106.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.7	98.5	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	23.2	116.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	23.8	119.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000005

EXT DATE: 09/21/94 SMPL NAM 09-400-01 DUP
TYPE: SEPFUNNEL FILE NAME 4MO17541
BLK FLNM: 4BK17405 MS FLNM: -02 4MO17542
QC FLNM: 4QC17406 MSD FLNM -03 4MO17543

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	31	62	31	13-132	0	0	0	0	0	0	0	ERR
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	66	132	66	48-115	0	0	0	0	0	0	0	ERR
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	26	52	52	32-115	0	22	20	44	40	44	40	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	30	60	60	35-124	0	29	28	58	56	58	56	4
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					46-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	30	60	60	29- 98	0	25	24	50	48	50	48	4
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	84	168	84	45-117	0	0	0	0	0	0	0	ERR
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	43	86	86	43-117	0	38	37	76	74	76	74	3

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000006

EXT DATE: 09/21/94 SMPL NAM 09-400-01 DUP
TYPE: SEPFUNNEL FILE NAME 4MO17541
BLK FLNM: 4BK17405 MS FLNM: -02 4MO17542
QC FLNM: 4QC17406 MSD FLNM -03 4MO17543

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	39	78	39	1- 148	0	26	19	52	38	26	19	31
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	28	56	56	34-110	0	29	29	58	58	58	58	0
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	73	146	73	36-137	0	5	11	10	22	5	11	75
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	39	78	78	42-139	0	46	49	92	98	92	98	-6
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01935 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619 J03
PROJECT LOCATION: NITRO WEST VIRGINIA
SAMPLER(S): S. ANDERSON, P. CHANG, J. VANDER VLIET

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
MW-19A	9-20-94	0900	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-4A	9-20-94	1155	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-4B	9-20-94	1115	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-20A	9-20-94	1255	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-20B	9-20-94	1330	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-5A	9-20-94	1450	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-5B	9-20-94	1530	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-21A	9-20-94	1615	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-21B	9-20-94	1645	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
FIELD BLANK 2	9-20-94	1045	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	ROUX	9-20	1700	Y	[signature]	Kemron	9/20/94	1700	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	Kemron	9/20/94	1920	Y					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
					Angelina R. Brown	Kemron	9/21	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #'S 0003, 0004, 0005

Sample stored in locked cooler overnight — (AA)

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522880

Order #: N4-09-400
Date: December 1, 1994 11:32
Work ID: M06619JO3/Monsanto-Nitro
Date Received: 09/20/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	DUPLICATE	02	MS
03	MSD	04	TRIP BLANK

cc: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
Attn: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

CASE NARRATIVE

M8270 SEMIVOLATILE ANALYSIS

Method 8270 analysis of sample description Duplicate, Matrix spike, and Matrix spike duplicate yielded percent recoveries below advisory limits for acid surrogates as well as low recoveries for spike compounds 4-chloro-3-methylphenol pentachlorophenol, and 4-nitrophenol. The laboratory control sample (QC) extracted with these samples showed recoveries within limits for all compounds. We attribute these reduced sample recoveries to matrix interference based on the observed reproducibility.

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **DUPLICATE** Collected: **09/20/94** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	2	1	mg/L	09/21/94	DIH	415.1/9060
Total Organic Halides	0.20	0.02	mg/L Cl	09/29/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	09/27/94	JEC	204.2/7041
Arsenic, Total	0.018	0.004	mg/L As	09/28/94	JEC	206.2/7060
Barium, Total	0.06	0.01	mg/L Ba	09/27/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.20	0.005	mg/L Pb	09/27/94	JEC	239.2/7421
Mercury, Total	0.0007	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.09	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/27/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.24	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01D** Collected: **09/20/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17541
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01D** Collected: **09/20/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17541
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF *	% Recovery (21% - 100%)
Phenol-d6	NF *	% Recovery (10% - 94%)
Nitrobenzene-d5	77	% Recovery (35% - 114%)
2-Fluorobiphenyl	72	% Recovery (43% - 116%)
2,4,6-Tribromophenol	NF *	% Recovery (10% - 123%)
p-Terphenyl-d14	81	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01E** Collected: **09/20/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39458
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	37	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	5	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	160	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	17	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	170	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	114 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	107 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02A** Collected: **09/20/94 12:15**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/27/94 File #: 4MO17542
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	44	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	58	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	50	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	NF	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	76	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	52	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	58	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	10	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	92	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02A** Collected: **09/20/94 12:15**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/27/94 File #: 4MO17542
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF * % Recovery	(21% - 100%)
Phenol-d6	NF * % Recovery	(10% - 94%)
Nitrobenzene-d5	67 % Recovery	(35% - 114%)
2-Fluorobiphenyl	70 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	NF * % Recovery	(10% - 123%)
p-Terphenyl-d14	79 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02B** Collected: **09/20/94 12:15**
Sample Description: **MS** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39474
Instrument: FINN2 Injected: 09/23/94 Factor: 1 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	81	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	118	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	86	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	89	5
108-90-7	Chlorobenzene	97	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	99	% Recovery	(76% - 114%)
Toluene-d8	103	% Recovery	(88% - 110%)
p-Bromofluorobenzene	101	% Recovery	(86% - 115%)

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DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO %
LEVELS REPORTED

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03A** Collected: **09/20/94 12:15**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17543
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	40	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	56	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	48	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	NF	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	74	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	19	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	58	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	11	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	98	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **03A** Collected: **09/20/94 12:15**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/21/94 File #: 4MO17543
Instrument: FINN4 Injected: 10/03/94 Factor: 2 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF *	% Recovery (21% - 100%)
Phenol-d6	NF *	% Recovery (10% - 94%)
Nitrobenzene-d5	66	% Recovery (35% - 114%)
2-Fluorobiphenyl	68	% Recovery (43% - 116%)
2,4,6-Tribromophenol	2 *	% Recovery (10% - 123%)
p-Terphenyl-d14	81	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MSD**
Test Description: **Volatile Organics**

Lab No: **03B**

Collected: **09/20/94 12:15**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2MO39475
Instrument: FINN2 Injected: 09/23/94 Factor: 1 Units: % **
Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	77	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	105	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	78	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	85	5
108-90-7	Chlorobenzene	88	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	86 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	93 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY. DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04A** Collected: **09/20/94**
Sample Description: **TRIP BLANK** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39457
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	91	% Recovery	(76% - 114%)
Toluene-d8	110	% Recovery	(88% - 110%)
p-Bromofluorobenzene	113	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD
DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmenta es

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ˙ces

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/21/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
PHENOL	mg/L	REB	0.5	0.52	104.00	110	99	1	1	0.00	<0.005	0.005	0.5	0.536	107.20	118	96
PHOSPHORUS	mg/L	REB	2	1.79	89.50	110	63	0.21	0.2	4.88	<0.1	0.1	0.5	0.525	105.00	125	75
TKN	mg/L	REB	1	0.798	79.80	147	50	1.5	1.5	0.00	<0.1	0.1	0.5	0.382	76.40	151	49
TOC	mg/L	DIH	25	25.7	102:80	*	*	1	< 1	0.00	<1	1	25	25.5	102.00	125	75
CHROMIUM-FURN H	mg/L	TAS	0.05	0.0496	99.20	126	78	0.052	0.052	0.00	<0.005	0.005	0.05	0.052	104.00	133	61
ARSENIC-FURNACE H	mg/L	TAS	0.05	0.0525	105.00	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	10.7	7.77	<1	1	10	10.7	107.00	154	67
MBAS	mg/L	PJH	1	0.981	98.10	113	71	26	36	32.26	<0.1	0.1	1	0.804	80.40	142	57
BOD	mg/L	RJS	200	190	95.00	124	77	54	58	7.14	<3	3	200	176	88.00	133	71

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000061

EXT DATE: 09/21/94 SMPL NAM 09-400-01 DUP
TYPE: SEPFUNNEL FILE NAME 4MO17541
BLK FLNM: 4BK17405 MS FLNM: -02 4MO17542
QC FLNM: 4QC17406 MSD FLNM -03 4MO17543

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	31	62	31	13-132	0	0	0	0	0	0	0	ERR
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	66	132	66	48-115	0	0	0	0	0	0	0	ERR
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	26	52	52	32-115	0	22	20	44	40	44	40	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	30	60	60	35-124	0	29	28	58	56	58	56	4
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	30	60	60	29- 98	0	25	24	50	48	50	48	4
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	84	168	84	45-117	0	0	0	0	0	0	0	ERR
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	43	86	86	43-117	0	38	37	76	74	76	74	3

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000002

EXT DATE: 09/21/94 SMPL NAM 09-400-01 DUP
TYPE: SEPFUNNEL FILE NAME 4MO17541
BLK FLNM: 4BK17405 MS FLNM: -02 4MO17542
QC FLNM: 4QC17406 MSD FLNM -03 4MO17543

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	39	78	39	1- 148	0	26	19	52	38	26	19	31
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	28	56	56	34-110	0	29	29	58	58	58	58	0
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	73	146	73	36-137	0	5	11	10	22	5	11	75
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	39	78	78	42-139	0	46	49	92	98	92	98	-6
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000003

RUN DATE: 09/22/94 BLK FLNM: 2BK39451
INSTRUMENT: FINN2 LCS FLNM: 2QC39452
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-400-01
FILE NAME: 2MO39458
MS FLNM: 2MO39459
MSD FLNM: 2MO39460

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.2	86.0	43-129	0-273								33
BROMOMETHANE	10	BQL	16.3	81.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	15.5	77.5	47-128	0-251								18
CHLOROETHANE	10	BQL	19.8	99.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	17.5	87.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	18.5	92.5	66-138	0-234	0.0	49.3	53.2	98.6	106.4	61 - 145	7.8	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.0	77-127	54-156								31
CHLOROFORM	5	BQL	18.3	91.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.7	93.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.0	90.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.8	89.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.4	92.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.2	101.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.8	99.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	19.2	96.0	83-129	71-157	157.5	238.2	290.0	161.4	265.0	71 - 120	48.8	14
DIBROMOCHLOROMETHA	5	BQL	18.1	90.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.1	95.5	86-127	52-150								21
BENZENE	5	BQL	18.7	93.5	87-120	37-151	0.0	53.5	57.4	107.0	114.8	76 - 127	7.0	23
TRANS-1,3-DICHLOROPRO	5	BQL	14.9	74.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	20.2	101.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.9	94.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.1	90.5	76-124	46-147								17
TOLUENE	5	BQL	18.1	90.5	86-115	47-150	0.0	44.6	43.0	89.2	86.0	76 - 125	3.7	14
CHLOROBENZENE	5	BQL	19.0	95.0	85-119	37-160	18.7	79.1	80.0	124.8	126.6	75 - 130	1.4	14
ETHYLBENZENE	5	BQL	18.0	90.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	21.2	106.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.7	98.5	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	23.2	116.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	23.8	119.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000064

RUN DATE: 09/23/94 BLK FLNM: 2BK39471
INSTRUMENT: FINN2 LCS FLNM: 2QC39472
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-400-01
FILE NAME: 2MO39473
MS FLNM: 2MO39474
MSD FLNM: 2MO39475

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	14.5	72.5	43-129	0-273								33
BROMOMETHANE	10	BQL	14.9	74.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	17.6	88.0	47-128	0-251								18
CHLOROETHANE	10	BQL	15.5	77.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	18.6	93.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.2	86.0	66-138	0-234	0.0	40.7	38.4	81.4	76.8	61 - 145	5.8	31
1,1-DICHLOROETHANE	5	BQL	18.3	91.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	17.3	86.5	77-127	54-156								31
CHLOROFORM	5	BQL	18.1	90.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	15.5	77.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	17.3	86.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	16.9	84.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	17.2	86.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.7	93.5	78-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	18.4	92.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	18.3	91.5	83-129	71-157	26.0	84.8	78.4	117.7	104.9	71 - 120	11.5	14
DIBROMOCHLOROMETHA	5	BQL	17.0	85.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	17.9	89.5	86-127	52-150								21
BENZENE	5	BQL	17.4	87.0	87-120	37-151	0.0	43.0	39.1	86.0	78.2	76 - 127	9.5	23
TRANS-1,3-DICHLOROPRO	5	BQL	13.8	69.0	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.3	91.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.4	92.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.4	82.0	78-124	46-147								17
TOLUENE	5	BQL	17.3	86.5	88-115	47-150	0.0	44.3	42.6	88.6	85.2	76 - 125	3.9	14
CHLOROBENZENE	5	BQL	17.9	89.5	85-119	37-160	0.0	48.4	43.8	96.8	87.6	75 - 130	10.0	14
ETHYLBENZENE	5	BQL	19.1	95.5	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	18.7	93.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.6	98.0	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	20.4	102.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	20.4	102.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

ROUX

CHAIN OF CUSTODY

№ 01934 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619.JD3
PROJECT LOCATION: NITRO, WEST VIRGINIA
SAMPLER(S): S. ANDERSON, P. CHANG, J. VANDERVLIET

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
DUPLICATE	9-20-94	—	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MS	9-20-94	1215	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MSD	9-20-94	1215	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
TRIP BLANK	9-14-94	—	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
	20 percent		JRP							

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S [signature]	ROUX	9-20	1700	Y	[signature]	Kemron	9/20/94	1700	Y
[signature]	Kemron	9/20/94	1920	Y					
					[signature]		9/21	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #'s 0003, 0004, 0005

Sample stored in locked cooler overnight - CSA

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522881

Order #: N4-09-444
Date: December 2, 1994 15:51
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/22/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-2A	02	MW-2B
03	MW-6A	04	MW-6B
05	MW-17A	06	MW-17B
07	MW-18A	08	MW-18B

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/02/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **MW-2A** Collected: **09/21/94 12:20** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	20	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	0.46	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.022	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.21	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.03	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.03	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.081	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.11	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.14	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **02** **MW-2B** Collected: **09/21/94 13:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	5	1	mg/L	09/26/94	REB	415.1/90
Total Organic Halides	0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.09	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.008	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.06	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **03** **MW-6A** Collected: **09/21/94 11:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	310	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.14	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.28	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.08	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/74
Nickel, Total	0.08	0.04	mg/L Ni	09/29/94	JBC	200.7/60
Selenium, Total	0.005	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.04	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **04** **MW-6B** Collected: **09/21/94 11:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	21	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	0.48	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.007	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.46	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	0.04	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.06	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.14	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **05** **MW-17A** Collected: **09/21/94 09:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.86	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.076	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.05	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.21	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **06** **MW-17B** Collected: **09/21/94 10:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	5	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.006	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.02	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.05	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **07** **MW-18A** Collected: **09/21/94 14:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	2	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	0.30	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.016	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.09	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	0.02	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.09	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.38	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **08** **MW-18B** Collected: **09/21/94 14:25** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	6	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.024	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.09	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.016	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/10/94	TAS	279.2/7841
Zinc, Total	0.18	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/21/94 12:20**
Sample Description: **MW-2A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39501
Instrument: FINN2 Injected: 09/26/94 Factor: 5 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	50
74-83-9	Bromomethane	ND	50
75-01-4	Vinyl chloride	ND	50
75-00-3	Chloroethane	ND	50
75-09-2	Methylene chloride	ND	25
67-64-1	Acetone	ND	500
75-15-0	Carbon disulfide	ND	25
75-35-4	1,1-Dichloroethene	ND	25
75-34-3	1,1-Dichloroethane	ND	25
156-60-5	trans-1,2-Dichloroethene	ND	25
67-66-3	Chloroform	ND	25
107-06-2	1,2-Dichloroethane	ND	25
78-93-3	2-Butanone	ND	500
71-55-6	1,1,1-Trichloroethane	ND	25
56-23-5	Carbon tetrachloride	ND	25
108-05-4	Vinyl acetate	ND	50
75-27-4	Bromodichloromethane	ND	25
78-87-5	1,2-Dichloropropane	ND	25
10061-01-5	cis-1,3-Dichloropropene	ND	25
79-01-6	Trichloroethene	120	25
124-48-1	Dibromochloromethane	ND	25
79-00-5	1,1,2-Trichloroethane	ND	25
71-43-2	Benzene	ND	25
10061-02-6	trans-1,3-Dichloropropene	ND	25
110-75-8	2-Chloroethyl vinyl ether	ND	50
75-25-2	Bromoform	ND	25
108-10-1	4-Methyl-2-pentanone	ND	50
591-78-6	2-Hexanone	ND	50
127-18-4	Tetrachloroethene	ND	25
79-34-5	1,1,2,2,-Tetrachloroethane	ND	25
108-88-3	Toluene	27	25
108-90-7	Chlorobenzene	80	25
100-41-4	Ethyl benzene	110	25
100-42-5	Styrene	ND	25
1330-20-7	Xylenes (Total)	300	25
156-59-2	cis-1,2-Dichloroethene	230	25
107-02-9	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
75-71-8	Dichlorodifluoromethane	ND	50
75-69-4	Trichlorofluoromethane	ND	50
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	77 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	89 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 12:20**
Sample Description: **MW-2A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30697
Instrument: FINN1 Injected: 10/07/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	18	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	14	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	11	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	110	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 12:20**
Sample Description: **MW-2A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30697
Instrument: FINN1 Injected: 10/07/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	62 % Recovery	(21% - 100%)
Phenol-d6	70 % Recovery	(10% - 94%)
Nitrobenzene-d5	94 % Recovery	(35% - 114%)
2-Fluorobiphenyl	80 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	77 % Recovery	(10% - 123%)
p-Terphenyl-d14	18 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/21/94 13:05**
Sample Description: **MW-2B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39502
Instrument: FINN2 Injected: 09/26/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	16	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	77 % Recovery	(76% - 114%)
Toluene-d8	104 % Recovery	(88% - 110%)
p-Bromofluorobenzene	88 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 13:05**
Sample Description: **MW-2B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/22/94 File #: 1MO30698
Instrument: FINN1 Injected: 10/07/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	13	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 13:05**
Sample Description: **MW-2B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/22/94 File #: 1MO30698
Instrument: FINN1 Injected: 10/07/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	49 % Recovery	(21% - 100%)
Phenol-d6	47 % Recovery	(10% - 94%)
Nitrobenzene-d5	84 % Recovery	(35% - 114%)
2-Fluorobiphenyl	92 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	65 % Recovery	(10% - 123%)
p-Terphenyl-d14	40 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/21/94 11:00**
Sample Description: **MW-6A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39517
Instrument: FINN2 Injected: 09/27/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	550	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	68	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	18	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	54	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	130	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	67	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	250	5
156-59-2	cis-1,2-Dichloroethene	320	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	86 % Recovery	(76% - 114%)
Toluene-d8	99 % Recovery	(88% - 110%)
p-Bromofluorobenzene	92 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/21/94 11:00**
Sample Description: **MW-6A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30707
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	88	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	200	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/21/94 11:00**
Sample Description: **MW-6A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30707
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	47 % Recovery	(21% - 100%)
Phenol-d6	16 % Recovery	(10% - 94%)
Nitrobenzene-d5	48 % Recovery	(35% - 114%)
2-Fluorobiphenyl	50 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	35 % Recovery	(10% - 123%)
p-Terphenyl-d14	7 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/21/94 11:30**
Sample Description: **MW-6B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39504
Instrument: FINN2 Injected: 09/26/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	37	5
107-06-2	1,2-Dichloroethane	13	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	10	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	11	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	170	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	27	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	17	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	37	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	90	% Recovery	(76% - 114%)
Toluene-d8	107	% Recovery	(88% - 110%)
p-Bromofluorobenzene	97	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/21/94 11:30**
Sample Description: **MW-6B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30708
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/21/94 11:30**
Sample Description: **MW-6B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30708
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	42 % Recovery	(21% - 100%)
Phenol-d6	56 % Recovery	(10% - 94%)
Nitrobenzene-d5	80 % Recovery	(35% - 114%)
2-Fluorobiphenyl	84 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	52 % Recovery	(10% - 123%)
p-Terphenyl-d14	21 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-17A**
Test Description: **Volatile Organics**

Lab No: **05D**

Collected: **09/21/94 09:40**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2MO39518
Instrument: FINN2 Injected: 09/27/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	110	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102 % Recovery	(76% - 114%)
Toluene-d8	109 % Recovery	(88% - 110%)
p-Bromofluorobenzene	106 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/21/94 09:40**
Sample Description: **MW-17A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30709
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/21/94 09:40**
Sample Description: **MW-17A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30709
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	35 % Recovery	(21% - 100%)
Phenol-d6	34 % Recovery	(10% - 94%)
Nitrobenzene-d5	86 % Recovery	(35% - 114%)
2-Fluorobiphenyl	91 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	32 % Recovery	(10% - 123%)
p-Terphenyl-d14	22 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-17B**
Test Description: **Volatile Organics**

Lab No: **06D**

Collected: **09/21/94 10:00**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2MO39563
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	91	% Recovery (76% - 114%)
Toluene-d8	106	% Recovery (88% - 110%)
p-Bromofluorobenzene	105	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/21/94 10:00**
Sample Description: **MW-17B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30710
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **06E** Collected: **09/21/94 10:00**
Sample Description: **MW-17B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30710
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	77 % Recovery	(21% - 100%)
Phenol-d6	80 % Recovery	(10% - 94%)
Nitrobenzene-d5	95 % Recovery	(35% - 114%)
2-Fluorobiphenyl	95 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	92 % Recovery	(10% - 123%)
p-Terphenyl-d14	49 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/21/94 14:05**
Sample Description: **MW-18A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39545
Instrument: FINN2 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	57	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	53	5
75-34-3	1,1-Dichloroethane	170	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	11	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	55	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	91	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	106 % Recovery	(76% - 114%)
Toluene-d8	105 % Recovery	(88% - 110%)
p-Bromofluorobenzene	103 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/21/94 14:05**
Sample Description: **MW-18A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30711
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07E** Collected: **09/21/94 14:05**
Sample Description: **MW-18A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30711
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	8 *	% Recovery (21% - 100%)
Phenol-d6	10 *	% Recovery (10% - 94%)
Nitrobenzene-d5	88	% Recovery (35% - 114%)
2-Fluorobiphenyl	98	% Recovery (43% - 116%)
2,4,6-Tribromophenol	9 *	% Recovery (10% - 123%)
p-Terphenyl-d14	27 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08D** Collected: **09/21/94 14:25**
Sample Description: **MW-18B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39565
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	1000	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	23	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	7	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	6	5
107-02-9	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	95 % Recovery	(76% - 114%)
Toluene-d8	105 % Recovery	(88% - 110%)
p-Bromofluorobenzene	107 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **08E** Collected: **09/21/94 14:25**
Sample Description: **MW-18B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30712
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **08E** Collected: **09/21/94 14:25**
Sample Description: **MW-18B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30712
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	52 % Recovery	(21% - 100%)
Phenol-d6	53 % Recovery	(10% - 94%)
Nitrobenzene-d5	89 % Recovery	(35% - 114%)
2-Fluorobiphenyl	93 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	70 % Recovery	(10% - 123%)
p-Terphenyl-d14	8 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON Environmental ·vices

QUALITY ASSURANCE DA REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64
TDS	mg/L	MZL	500	480	96.00	106	84	8400	8300	1.20	<10	10	500	446	89.20	132	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/11/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURN C	mg/L	TAS	0.05	0.0539	107.80	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.044	88.00	125	62
SELENIUM-FURN K	mg/L	TAS	0.05	0.053	106.00	118	81	0.053	0.051	3.85	<0.004	0.004	0.05	0.057	114.00	125	62
LEAD-FURNACE J	mg/L	TAS	0.05	0.0436	87.20	114	81	0.041	0.042	2.41	<0.005	0.005	0.05	0.042	84.00	123	61
LEAD-FURNACE E	mg/L	KHA	0.05	0.0499	99.80	114	81	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	123	61
THALLIUM-FURN H	mg/L	KHA	0.05	0.0519	103.80	120	72	0.052	0.059	12.61	<0.005	0.005	0.05	0.052	104.00	112	86
THALLIUM-FURN L	mg/L	KHA	0.05	0.0485	97.00	120	72	0.009	0.008	11.76	<0.005	0.005	0.05	0.046	92.00	112	86
AMMONIA	mg/L	REB	2	2.37	118.50	117	80	4.2	3.8	10.00	<0.1	0.1	1	1.06	106.00	142	76
BERYLLIUM-FURN K	mg/L	KHA	0.005	0.0053	106.00	121	76	0.0054	0.0055	1.83	<0.0005	0.0005	0.005	0.0064	128.00	116	72
BERYLLIUM-FURN H	mg/L	KHA	0.005	0.0051	102.00	121	76	0.006	0.0061	1.65	<0.0005	0.0005	0.005	0.0051	102.00	116	72
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0516	103.20	124	76	0.044	0.046	4.44	<0.005	0.005	0.05	0.046	92.00	126	68
ARSENIC-FURNACE K	mg/L	KHA	0.05	0.0538	107.60	124	76	2.7	2.4	11.76	<0.005	0.005	0.05	0.054	108.00	126	68
MERCURY I	mg/L	TAS	0.05	0.0419	83.80	112	81	0.048	0.05	4.08	<0.004	0.004	0.05	0.05	100.00	111	74
MERCURY	mg/L	TAS	0.01	0.0108	108.00	121	77	0.011	0.011	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY Q	mg/L	TAS	0.01	0.0109	109.00	121	77	0.0099	0.0099	0.00	<0.0002	0.0002	0.01	0.0099	99.00	124	76
MOLYBDENUM-FURN K	mg/L	JKM	0.05	0.0434	86.80	*	*	0.047	0.043	8.89	<0.005	0.005	0.05	0.047	94.00	125	75
TOX	mg/L	RJS	0.1	0.098	98.00	133	55	0.033	0.037	11.43	<0.02	0.02	0.1	0.091	91.00	148	64
TDS	mg/L	MZL	500	488	97.60	106	92	3900	3900	0.00	<10	10	500	432	86.40	110	93
MOLYBDENUM-ICP	mg/L	JBC	1	1.06	106.00	113	88	1.02	1.03	0.98	<0.1	0.1	1	1.02	102.00	116	87
SILICON-ICP	mg/L	JBC	10	9.81	98.10	*	*	10	10.3	2.96	<1	1	10	10	100.00	125	75
TIN-ICP	mg/L	JBC	10	10.2	102.00	*	*	10.7	11.1	3.67	<0.5	0.5	10	10.3	103.00	125	75
OSMIUM-ICP	mg/L	JBC	10	9.26	92.60	*	*	9.25	9.8	5.77	<0.2	0.2	10	9.3	93.00	125	75
BORON-ICP	mg/L	JBC	1	0.98	98.00	*	*	0.935	0.983	5.01	<0.5	0.5	1	0.94	94.00	125	75
TSS	mg/L	MZL	50	40	80.00	124	65	72	72	0.00	<5	5	50	47	94.00	130	60
OIL & GREASE	mg/L	ALC	10	9.4	94.00	137	74	9	9	0.00	<1	1	10	9.3	93.00	154	67
FORMALDEHYDE	mg/L	JWR	0.5	0.43	86.00	131	74	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.441	88.20	129	70
TDS	mg/L	MZL	500	488	97.60	106	84	3900	3900	0.00	<10	10	500	432	86.40	132	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta' ~vices

QUALITY ASSURANCE DA..Y REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP Q	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP Q	mg/L	JBC	0.2	0.215	107.50	113	83	< 2	< 2	0.00	<0.01	0.01	0.2	0.169	84.50	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66
COD	mg/L	PJH	1000	877	87.70	103	82	570	530	7.27	<5	5	50	50.3	100.60	128	75
CONDUCTIVITY	uS/cm	AJS	1413	1650	116.77	107	95	3700	3800	2.67	<1	1	---	---	---	125	75
CYANIDE	mg/L	JWR	0.4	0.407	101.75	119	94	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.211	105.50	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/03/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	KHA	0.05	0.0532	106.40	120	72	0.047	0.048	2.11	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN P	mg/L	KHA	0.05	0.0428	85.60	120	72	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	112	86
SELENIUM-FURN P	mg/L	TAS	0.05	0.0532	106.40	117	84	0.05	0.049	2.02	<0.005	0.005	0.05	0.05	100.00	130	69
SILVER-ICP O	mg/L	JBC	0.2	0.197	98.50	113	83	< 0.02	< 0.02	0.00	<0.01	0.01	0.2	0.192	96.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.91	91.00	122	86	0.931	0.933	0.21	<0.1	0.1	1	0.931	93.10	131	63
BARIUM-ICP O	mg/L	JBC	10	9.55	95.50	113	85	< 0.02	< 0.02	0.00	<0.01	0.01	10	9.05	90.50	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.968	96.80	110	88	1	0.993	0.70	<0.01	0.01	1	1	100.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.56	95.60	112	88	10.2	10	1.98	<0.2	0.2	10	10	100.00	123	75
CADMIUM-ICP O	mg/L	JBC	1	0.981	98.10	112	83	< 0.02	< 0.02	0.00	<0.01	0.01	1	0.921	92.10	115	73
COBALT-ICP	mg/L	JBC	1	0.965	96.50	111	88	1	0.987	1.31	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP O	mg/L	JBC	1	1.01	101.00	114	88	< 0.04	< 0.04	0.00	<0.02	0.02	1	0.943	94.30	113	80
COPPER-ICP	mg/L	JBC	1	0.972	97.20	111	88	1.02	1.02	0.00	<0.02	0.02	1	1	100.00	111	67
IRON-ICP	mg/L	JBC	1	0.927	92.70	113	90	0.934	0.92	1.51	<0.04	0.04	1	0.934	93.40	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.78	97.80	120	84	10.7	10.9	1.85	<1	1	10	10.7	107.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.51	95.10	109	87	10	9.81	1.92	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.948	94.80	112	89	0.973	0.961	1.24	<0.01	0.01	1	0.973	97.30	119	81
SODIUM-ICP	mg/L	JBC	10	9.35	93.50	112	87	10.2	10.3	0.98	<0.5	0.5	10	10	100.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.932	93.20	113	87	0.992	1.03	3.76	<0.04	0.04	1	0.98	98.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.01	101.00	119	80	1.05	1.08	2.82	<0.2	0.2	1	1.05	105.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.936	93.60	111	86	0.952	0.946	0.63	<0.01	0.01	1	0.95	95.00	115	75
ZINC-ICP	mg/L	JBC	1	0.966	96.60	112	89	1.02	1.02	0.00	<0.01	0.01	1	1.02	102.00	122	71
ARSENIC-ICP O	mg/L	JBC	1	0.984	98.40	123	76	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.897	89.70	126	65
LEAD-ICP O	mg/L	JBC	1	0.993	99.30	114	84	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.978	97.80	115	60
SELENIUM-ICP O	mg/L	JBC	1	0.958	95.80	117	80	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.959	95.90	122	66
BORON-ICP	mg/L	JBC	1	0.921	92.10	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.97	97.00	125	75
MERCURY-G	mg/L	KHA	0.01	0.0103	103.00	121	77	0.01	0.011	9.52	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	KHA	0.01	0.0099	99.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.0498	99.60	120	80	0.052	0.051	1.94	<0.004	0.004	0.05	0.051	102.00	123	72
LEAD-FURNACE P	mg/L	JEC	0.05	0.0483	96.60	114	81	0.038	0.04	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE N	mg/L	JEC	0.05	0.048	96.00	114	81	0.037	0.037	0.00	<0.005	0.005	0.05	0.05	100.00	123	61
COPPER-FURNACE P	mg/L	JEC	0.05	0.0475	95.00	103	79	0.04	0.04	0.00	<0.005	0.005	0.05	0.04	80.00	117	64
CHROMIUM-FURN P	mg/L	JEC	0.05	0.0488	97.60	126	78	0.058	0.058	0.00	<0.005	0.005	0.05	0.058	116.00	133	61
CHROMIUM-FURN N	mg/L	JEC	0.05	0.0432	86.40	126	78	0.039	0.041	5.00	<0.005	0.005	0.05	0.041	82.00	133	61
ALKALINITY	mg/L	REB	100	88	88.00	112	80	400	420	4.88	<10	10	50	50.1	100.20	120	62
MBAS	mg/L	JWR	1	1.07	107.00	113	71	0.3	0.4	28.57	<0.1	0.1	1	1.05	105.00	142	57
CYANIDE	mg/L	JWR	0.4	0.394	98.50	119	94	0.24	0.25	4.08	<0.01	0.01	0.2	0.188	94.00	121	86
COD	mg/L	PJH	1000	885	88.50	137	61	880	1000	12.77	<5	5	500	589	117.80	125	66
TOC	mg/L	DIH	25	25.2	100.80	124	89	< 1	< 1	0.00	<1	1	25	24.6	98.40	136	72
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.14	0.14	0.00	<0.02	0.02	0.1	0.093	93.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.4	0.3	28.57	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64
SULFATE	mg/L	JWR	20	18.6	93.00	130	78	730	650	11.59	<2	2	10	10.3	103.00	127	85

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64
BARIUM-ICP	mg/L	JEC	10	10.2	102.00	113	85	10	10.1	1.00	<0.01	0.01	10	9.97	99.70	112	74

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/26/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE F	mg/L	TAS	0.05	0.0516	103.20	120	80	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	123	72
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.052	104.00	120	80	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	123	72
LEAD-FURNACE M	mg/L	TAS	0.05	0.049	98.00	114	81	6.8	7.6	11.11	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE G	mg/L	TAS	0.05	0.0453	90.60	114	81	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	123	61
LEAD-FURNACE I	mg/L	TAS	0.05	0.0528	105.60	114	81	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	123	61
TOC	mg/L	REB	25	26.7	106.80	113	85	< 1	< 1	0.00	<1	1	25	26.7	106.80	115	63
PHOSPHORUS	mg/L	REB	2	1.99	99.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.494	98.80	125	75
BERYLLIUM-FURN G	mg/L	TAS	0.005	0.0051	102.00	121	76	0.0052	0.0049	5.94	<0.0005	0.0005	0.005	0.0049	98.00	116	72
THALLIUM-FURN G	mg/L	JEC	0.05	0.0506	101.20	120	72	0.04	0.048	18.18	<0.005	0.005	0.05	0.049	98.00	112	86
THALLIUM-FURN M	mg/L	JEC	0.05	0.0485	97.00	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.039	78.00	112	86
THALLIUM-FURN F	mg/L	JEC	0.05	0.042	84.00	120	72	0.05	0.055	9.52	<0.005	0.005	0.05	0.05	100.00	112	86
SELENIUM-FURN P	mg/L	JEC	0.05	0.0491	98.20	117	84	0.048	0.046	4.26	<0.004	0.004	0.05	0.048	96.00	130	69
SELENIUM-FURN M	mg/L	JEC	0.05	0.0462	92.40	117	84	0.7	0.6	15.38	<0.004	0.004	0.05	0.04	80.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.19	95.00	113	83	0.179	0.175	2.26	<0.01	0.01	0.2	0.179	89.50	112	76
IRON-ICP	mg/L	JBC	1	0.996	99.60	113	90	0.994	0.981	1.32	<0.04	0.04	1	0.99	99.00	111	87
SODIUM-ICP	mg/L	JBC	10	9.4	94.00	112	87	12	11.9	0.84	<0.5	0.5	10	9.4	94.00	128	58
ARSENIC-ICP	mg/L	JBC	1	1.03	103.00	123	76	1.09	1.05	3.74	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	1.05	1.07	1.89	<0.1	0.1	1	1.02	102.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.979	97.90	117	80	1.02	0.95	7.11	<0.1	0.1	1	1.02	102.00	122	66
TOX	mg/L	DIH	0.1	0.11	110.00	141	71	1.18	1.17	0.85	<0.02	0.02	0.1	0.07	70.00	146	56
SULFATE	mg/L	PJW	20	15.6	78.00	130	78	75	100	28.57	<2	2	10	12.8	128.00	127	85
MBAS	mg/L	JWR	1	1.09	109.00	113	71	52	53	1.90	<0.1	0.1	1	1.11	111.00	142	57
CYANIDE	mg/L	JWR	0.4	0.397	99.25	119	94	0.11	0.11	0.00	<0.01	0.01	0.2	0.193	96.50	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ROUX

CHAIN OF CUSTODY

№ 01019J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619 J03
PROJECT LOCATION: NITRO, WEST VIRGINIA
SAMPLER(S): P. CHANG / S. ANDERSON

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
MW-2A	9.21.94	1220	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-2B	9.21.94	1305	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-6A	9.21.94	1100	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-6B	9.21.94	1130	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-17A	9.21.94	0940	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-17B	9.21.94	1000	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-18A	9.21.94	1405	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-18B	9.21.94	1425	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
FIELD BLANK	9.21.94	1400	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
~~MW~~ WT-7A	9.21.94	1530	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE

SAMPLER'S RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	ROUX	9.21	1710	Y	[signature]	Kemron	9/21/94	1710	Y
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	Kemron	9/21/94	2130	Y	[signature]	Kemron	9/22	8:00	
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEAL # 0006, 0007, + 0008
Samples stored in locked cooler overnight - CPA

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522882

Order #: N4-09-448
Date: December 1, 1994 11:18
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/22/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	FIELD BLANK	02	WT-7A
03	WT-7B	04	WT-7C

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **FIELD BLANK** Collected: **09/21/94 14:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **02** **WT-7A** Collected: **09/21/94 15:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	16	1	mg/L	09/23/94	DIH	415.1/90
Total Organic Halides	<0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.11	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.06	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

SAMPLE ID: **03** **WT-7B** Collected: **09/21/94 15:55** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	18	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/28/94	PJH	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.05	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/747
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/60
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/774
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

SAMPLE ID: **04** **WT-7C** Collected: **09/21/94 16:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/23/94	DIH	415.1/9060
Total Organic Halides	0.05	0.02	mg/L Cl	09/29/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/04/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/28/94	KHA	206.2/7060
Barium, Total	0.51	0.01	mg/L Ba	09/28/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/27/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/27/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/27/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/27/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	09/28/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/28/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/27/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	09/28/94	KHA	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/27/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	09/28/94	JEC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/21/94 14:00**
Sample Description: **FIELD BLANK** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39633
Instrument: FINN2 Injected: 10/05/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	83 % Recovery	(76% - 114%)
Toluene-d8	96 % Recovery	(88% - 110%)
p-Bromofluorobenzene	86 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 14:00**
Sample Description: **FIELD BLANK** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30716
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 14:00**
Sample Description: **FIELD BLANK** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30716
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	80 % Recovery	(21% - 100%)
Phenol-d6	79 % Recovery	(10% - 94%)
Nitrobenzene-d5	83 % Recovery	(35% - 114%)
2-Fluorobiphenyl	92 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	96 % Recovery	(10% - 123%)
p-Terphenyl-d14	98 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/21/94 15:30**
Sample Description: **WT-7A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39462
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	10	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	190	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	94 % Recovery	(76% - 114%)
Toluene-d8	99 % Recovery	(88% - 110%)
p-Bromofluorobenzene	102 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 15:30**
Sample Description: **WT-7A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30717
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	41	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 15:30**
Sample Description: **WT-7A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30717
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	3 *	% Recovery (21% - 100%)
Phenol-d6	5 *	% Recovery (10% - 94%)
Nitrobenzene-d5	91	% Recovery (35% - 114%)
2-Fluorobiphenyl	101	% Recovery (43% - 116%)
2,4,6-Tribromophenol	5 *	% Recovery (10% - 123%)
p-Terphenyl-d14	36	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/21/94 15:55**
Sample Description: **WT-7B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39463
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	12	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	11	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	23	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	12	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	74	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	14	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	11	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	97	% Recovery	(76% - 114%)
Toluene-d8	105	% Recovery	(88% - 110%)
p-Bromofluorobenzene	108	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/21/94 15:55**
Sample Description: **WT-7B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30718
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **03E** Collected: **09/21/94 15:55**
Sample Description: **WT-7B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30718
Instrument: FINN1 Injected: 10/08/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	2 *	% Recovery (21% - 100%)
Phenol-d6	4 *	% Recovery (10% - 94%)
Nitrobenzene-d5	75	% Recovery (35% - 114%)
2-Fluorobiphenyl	92	% Recovery (43% - 116%)
2,4,6-Tribromophenol	3 *	% Recovery (10% - 123%)
p-Terphenyl-d14	22 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/21/94 16:45**
Sample Description: **WT-7C** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39464
Instrument: FINN2 Injected: 09/22/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	18	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	108 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	115 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/21/94 16:45**
Sample Description: **WT-7C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30727
Instrument: FINN1 Injected: 10/09/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/21/94 16:45**
Sample Description: **WT-7C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/22/94 File #: 1MO30727
Instrument: FINN1 Injected: 10/09/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	75 % Recovery	(21% - 100%)
Phenol-d6	75 % Recovery	(10% - 94%)
Nitrobenzene-d5	89 % Recovery	(35% - 114%)
2-Fluorobiphenyl	90 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	100 % Recovery	(10% - 123%)
p-Terphenyl-d14	100 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmenta ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64
BARIUM-ICP	mg/L	JEC	10	10.2	102.00	113	85	10	10.1	1.00	<0.01	0.01	10	9.97	99.70	112	74

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental vices

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58*	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ices

QUALITY ASSURANCE DAILI REPORT

OHIO VALLEY LABORATORY Date: 09/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE E	mg/L	JEC	0.05	0.053	106.00	120	80	0.05	0.049	2.02	<0.004	0.004	0.05	0.05	100.00	123	72
ARSENIC-FURNACE G	mg/L	JEC	0.05	0.0537	107.40	120	80	0.052	0.053	1.90	<0.004	0.004	0.05	0.052	104.00	123	72
CHLORIDE	mg/L	REB	50	50.7	101.40	115	94	6.7	6.3	6.15	<2	2	25	24.1	96.40	120	86
ALKALINITY	mg/L	REB	100	101	101.00	112	80	210	240	13.33	<10	10	50	36.8	73.60	120	62
MBAS	mg/L	REB	.1	0.943	94.30	113	71	54	55	1.83	<0.1	0.1	1	1	100.00	142	57
LEAD-FURNACE H	mg/L	TAS	0.05	0.0454	90.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
TITANIUM-ICP	mg/L	JEC	1	1.09	109.00	112	85	190	200	5.13	<0.03	0.03	1	0.72	72.00	117	82
MERCURY-B	mg/L	TAS	0.01	0.0095	95.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
ZINC-ICP	mg/L	JEC	1	1.11	111.00	112	89	1.1	1.1	0.00	0.01	0.01	1	1.06	106.00	122	71
SELENIUM-FURN H	mg/L	KHA	0.05	0.0446	89.20	117	84	0.045	0.042	6.90	<0.004	0.004	0.04	0.045	112.50	130	69
ARSENIC-FURNACE M	mg/L	KHA	0.05	0.0439	87.80	120	80	5.2	6	14.29	<0.004	0.004	0.05	0.054	108.00	123	72
LEAD-FURNACE	mg/L	TAS	0.05	0.0515	103.00	111	86	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	112	79
COPPER-ICP	mg/L	JKM	1	1.01	101.00	105	91	0.02	0.02	0.00	<0.02	0.02	1	0.97	97.00	109	85
IRON-ICP	mg/L	JKM	1	1.02	102.00	110	88	1.3	1.4	7.41	<0.04	0.04	1	0.96	96.00	108	84
CALCIUM-ICP	mg/L	JEC	10	10.3	103.00	112	88	56	57	1.77	<0.2	0.2	10	11	110.00	123	75
PHENOL	mg/L	REB	0.5	0.523	104.60	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.494	98.80	111	90
LEAD-ICP	mg/L	JBC	1	1.05	105.00	114	84	0.879	1.08	20.52	<0.1	0.1	1	0.88	88.00	115	60
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	0.862	1.01	15.81	<0.01	0.01	1	0.86	86.00	112	79
BOD	mg/L	PJH	200	176	88.00	124	77	13	15	14.29	<3	3	200	203	101.50	133	71
TOX	mg/L	PJH	0.1	0.129	129.00	133	55	0.26	0.3	14.29	<0.02	0.02	0.1	0.15	150.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ices

QUALITY ASSURANCE DAIL. REPORT

OHIO VALLEY LABORATORY Date: 09/23/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.502	100.40	133	74	0.89	0.89	0.00	<0.05	0.05	0.25	0.253	101.20	134	77
FORMALDEHYDE	mg/L	JWR	0.5	0.492	98.40	131	74	0.2	0.2	0.00	<0.1	0.1	0.5	0.449	89.80	129	70
CHLORIDE	mg/L	REB	50	50.8	101.60	114	84	41	38	7.59	<2	2	25	25.4	101.60	128	80
ALKALINITY	mg/L	REB	100	98	98.00	112	80	380	360	5.41	<10	10	50	54.8	109.60	120	62
PHENOL	mg/L	REB	0.5	0.497	99.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	---	---	---	122	57
NITRITE	mg/L	PJH	0.1	0.096	96.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.102	102.00	114	77
MERCURY-Q	mg/L	TAS	0.01	0.0106	106.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-N	mg/L	TAS	0.01	0.0105	105.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	TAS	0.01	0.0107	107.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-L	mg/L	TAS	0.01	0.0105	105.00	121	77	< 0.25	< 0.25	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
SELENIUM-FURN F	mg/L	TAS	0.05	0.0488	97.60	117	84	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	130	69
SELENIUM-FURN P	mg/L	TAS	0.05	0.0497	99.40	117	84	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	130	69
BARIUM-ICP	mg/L	JEC	10	10	100.00	111	85	120	110	8.70	<0.01	0.01	10	7.9	79.00	107	84
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	107	85	0.72	0.53	30.40	<0.01	0.01	1	0.91	91.00	106	79
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	87	16	15	6.45	<0.02	0.02	1	0.9	90.00	111	85
COPPER-ICP	mg/L	JEC	1	1.04	104.00	105	91	11	11	0.00	<0.02	0.02	1	0.88	88.00	109	85
VANADIUM-ICP	mg/L	JEC	1	1.02	102.00	118	91	21	20	4.88	<0.01	0.01	1	1	100.00	120	88
ZINC-ICP	mg/L	JEC	1	1.06	106.00	114	87	47	44	6.59	<0.01	0.01	1	0.82	82.00	114	80
COD	mg/L	PJH	1000	887	88.70	137	61	720	760	5.41	<5	5	500	434	86.80	125	66
TOC	mg/L	DIH	25	25.1	100.40	*	*	19	19	0.00	<1	1	25	23.4	93.60	125	75
ALUMINUM-ICP	mg/L	JEC	1	0.992	99.20	122	86	1.1	1.1	0.00	<1	1	1	0.94	94.00	131	63
BARIUM-ICP	mg/L	JEC	10	9.94	99.40	113	85	9.5	9.5	0.00	<0.01	0.01	10	9.1	91.00	112	74
CALCIUM-ICP	mg/L	JEC	10	10	100.00	112	88	720	730	1.38	<0.2	0.2	10	9.2	92.00	123	75
CADMIUM-ICP	mg/L	JEC	1	1.01	101.00	112	83	0.89	0.91	2.22	<0.01	0.01	1	0.89	89.00	115	73
COBALT-ICP	mg/L	JEC	1	0.989	98.90	111	88	0.9	0.91	1.10	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	88	0.91	0.92	1.09	<0.02	0.02	1	0.91	91.00	113	80
IRON-ICP	mg/L	JEC	1	1.05	105.00	113	90	0.9	0.93	3.28	<0.04	0.04	1	0.9	90.00	111	87
POTASSIUM-ICP	mg/L	JEC	10	9.76	97.60	120	84	26	26	0.00	<1	1	10	10	100.00	128	65
MAGNESIUM-ICP	mg/L	JEC	10	9.65	96.50	109	87	28	28	0.00	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JEC	1	0.999	99.90	112	89	0.92	0.93	1.08	<0.01	0.01	1	0.9	90.00	119	81
SODIUM-ICP	mg/L	JEC	10	9.88	98.80	112	87	140	140	0.00	<0.5	0.5	10	11	110.00	129	58
NICKEL-ICP	mg/L	JEC	1	1.03	103.00	113	87	0.91	0.89	2.22	<0.04	0.04	1	0.89	89.00	113	76
ANTIMONY-ICP	mg/L	JEC	1	1.01	101.00	119	80	1	1	0.00	<0.2	0.2	1	0.94	94.00	120	71
ZINC-ICP	mg/L	JEC	1	0.972	97.20	112	89	0.92	0.92	0.00	<0.01	0.01	1	0.83	83.00	122	71
LEAD-ICP	mg/L	JEC	1	0.998	99.80	114	84	1	1.1	9.52	<0.1	0.1	1	0.9	90.00	115	60
TOX	mg/L	DIH	0.1	0.09	90.00	141	71	3.451	3.52	1.98	<0.02	0.02	0.1	0.09	90.00	146	56
MBAS	mg/L	JWR	1	1.04	104.00	113	71	47	49	4.17	<0.1	0.1	1	1.13	113.00	142	57
TIN-ICP	mg/L	JEC	1	0.937	93.70	109	83	0.94	1.05	11.06	<0.5	0.5	1	1.05	105.00	114	72
BERYLLIUM-ICP	mg/L	JEC	1	0.977	97.70	110	88	0.9	0.92	2.20	<0.01	0.01	1	0.92	92.00	112	79

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/22/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39451
LCS FLNM: 2QC39452
SHIFT: AM

SMPL NAME: 09-400-01
FILE NAME: 2MO39458
MS FLNM: 2MO39459
MSD FLNM: 2MO39460

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.2	86.0	43-129	0-273								33
BROMOMETHANE	10	BQL	16.3	81.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	15.5	77.5	47-128	0-251								18
CHLOROETHANE	10	BQL	19.8	99.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	17.5	87.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	18.5	92.5	66-138	0-234	0.0	49.3	53.2	98.6	106.4	61 - 145	7.6	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	18.6	93.0	77-127	54-156								31
CHLOROFORM	5	BQL	18.3	91.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.7	93.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.0	90.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.8	89.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.4	92.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.2	101.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.8	99.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	19.2	96.0	83-129	71-157	157.5	238.2	290.0	161.4	265.0	71 - 120	48.8	14
DIBROMOCHLOROMETHA	5	BQL	18.1	90.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.1	95.5	88-127	52-150								21
BENZENE	5	BQL	18.7	93.5	87-120	37-151	0.0	53.5	57.4	107.0	114.8	76 - 127	7.0	23
TRANS-1,3-DICHLOROPRO	5	BQL	14.9	74.5	48-108	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	20.2	101.0	68-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.9	94.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.1	90.5	78-124	46-147								17
TOLUENE	5	BQL	18.1	90.5	86-115	47-150	0.0	44.6	43.0	89.2	86.0	76 - 125	3.7	14
CHLOROBENZENE	5	BQL	19.0	95.0	85-119	37-160	16.7	79.1	80.0	124.8	126.6	75 - 130	1.4	14
ETHYLBENZENE	5	BQL	18.0	90.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	21.2	106.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.7	98.5	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	23.2	116.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	23.8	119.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 10/05/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39630
LCS FLNM: 2QC39631
SHIFT: AM

SMPL NAME: 10-014-01
FILE NAME: 2AS39635
MS FLNM: 2AS39636
MSD FLNM: 2AS39637

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	21.9	109.5	43-129	0-273								33
BROMOMETHANE	10	BQL	24.7	123.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	24.5	122.5	47-128	0-251								18
CHLOROETHANE	10	BQL	19.8	99.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	18.6	93.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	23.9	119.5	68-138	0-234	0.0	45.0	43.8	90.0	87.2	61 - 145	3.2	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	20.1	100.5	77-127	54-156								31
CHLOROFORM	5	BQL	19.9	99.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.1	90.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	16.9	84.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.6	88.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.2	81.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.1	90.5	78-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.1	95.5	80-148	0-227								40
TRICHLOROETHENE	5	BQL	17.5	87.5	83-129	71-157	0.0	38.7	38.8	77.4	77.6	71 - 120	0.3	14
DIBROMOCHLOROMETHA	5	BQL	16.7	83.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	16.8	84.0	88-127	52-150								21
BENZENE	5	BQL	19.4	97.0	87-120	37-151	0.0	38.6	39.3	77.2	78.6	76 - 127	1.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	15.6	78.0	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.2	91.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	17.3	86.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.3	91.5	78-124	46-147								17
TOLUENE	5	BQL	18.7	93.5	86-115	47-150	0.0	39.3	39.0	78.6	78.0	76 - 125	0.8	14
CHLOROBENZENE	5	BQL	16.9	84.5	85-119	37-160	0.0	42.1	39.2	84.2	78.4	75 - 130	7.1	14
ETHYLBENZENE	5	BQL	16.3	81.5	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	26.1	130.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.8	99.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	19.9	99.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/22/94 SMPL NAM 09-444-02
TYPE: CONTINUOUS FILE NAME 1MO30698
BLK FLNM: 1BK30685 MS FLNM: 1MO30699
QC FLNM: 1QC30691 MSD FLNM 1MO30700

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	55	110	55	13-132	0	44	42	88	84	44	42	5
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	60	120	60	48-115	0	51	49	102	98	51	49	4
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	23	46	46	32-115	0	24	23	48	46	48	46	4
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	36	72	72	35-124	0	36	34	72	68	72	68	6
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M.	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	24	48	48	29- 98	0	26	25	52	50	52	50	4
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	67	134	67	45-117	0	56	51	112	102	56	51	9
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	37	74	74	43-117	0	37	38	74	76	74	76	3

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/22/94
TYPE: CONTINUOUS
BLK FLNM: 1BK30685
QC FLNM: 1QC30691

SMPL NAM 09-444-02
FILE NAME 1MO30698
MS FLNM: 1MO30699
MSD FLNM 1MO30700

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	63	126	63	1- 148	0	71	68	142	136	71	68	4
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	27	54	54	34-110	0	27	27	54	54	54	54	0
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	73	146	73	36-137	0	60	55	120	110	60	55	9
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	37	74	74	42-139	0	29	28	58	56	58	56	4
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01919 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619 J03
PROJECT LOCATION: NITRO, WEST VIRGINIA
SAMPLER(S): P. CHANG / S. ANDERSON

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOC's by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
MW-2A	9.21.94	1220	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-2B	9.21.94	1305	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-6A	9.21.94	1100	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-6B	9.21.94	1130	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-17A	9.21.94	0940	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-17B	9.21.94	1000	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-18A	9.21.94	1405	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
MW-18B	9.21.94	1425	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
FIELD BLANK	9.21.94	1400	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
INT-7A	9.21.94	1530	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S [signature]	ROUX	9.21	1710	Y	[signature]	Kemron	9/21/94	1710	Y
[signature]	Kemron	9/21/94	2130	Y	[signature]	Kemron	9/22	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEAL # 0006, 0007, + 0008
Samples stored in locked cooler overnight - CPA

ROUX

CHAIN OF CUSTODY

№ 01920 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619J03
PROJECT LOCATION: NITRO, WEST VIRGINIA
SAMPLER(S): P. CHANG / S. ANDERSON

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOC's by 8240	BN/AE by 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
WT-7B	9.21.94	1555	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE
WT-7C	9.21.94	1645	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ICE

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S James Van Vly	ROUX	9.21	1710	Y	Clifford Ashe	Kemron	9/21/94	1710	Y
Clifford Ashe	Kemron	9/21/94	2130	Y	[illegible]	[illegible]	9/22	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEAL # 0006, 0007, + 0008
Samples stored in locked cooler overnight - CPA

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522883

Order #: N4-09-468
Date: December 1, 1994 10:49
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/22/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-22R	02	MW-24A
03	WT-4A	04	WT-4B
05	WT-3	06	WT-2
07	WT-9A	08	WT-9B
09	WT-9C	10	WT-10A

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **MW-22R** Collected: **09/21/94 21:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	66	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.67	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.015	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.11	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.09	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.07	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.016	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.08	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.38	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **02** **MW-24A** Collected: **09/21/94 22:35** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	910	1	mg/L	09/27/94	DIH	415.1/906[illegible]
Total Organic Halides	4.7	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/704[illegible]
Arsenic, Total	0.055	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	1.1	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.05	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.016	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.13	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **03** **WT-4A** Collected: **09/22/94 09:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	15	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.31	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.007	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.05	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.13	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.021	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/747[illegible]
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/60[illegible]
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/77[illegible]
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.12	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **04** **WT-4B** Collected: **09/22/94 09:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	10	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.06	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.01	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.03	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.04	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **05** **WT-3** Collected: **09/22/94 10:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.17	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.01	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.12	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.011	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **06** **WT-2** Collected: **09/22/94 11:20** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.02	0.02	mg/L Cl	10/03/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.55	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.017	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **07** **WT-9A** Collected: **09/22/94 14:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	14	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	3.7	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.13	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.04	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.03	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.027	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	0.05	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.20	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **08** **WT-9B** Collected: **09/22/94 15:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.03	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	09/29/94	JEC	206.2/706[illegible]
Barium, Total	0.16	0.01	mg/L Ba	09/29/94	JBC	200.7/60[illegible]
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/60[illegible]
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.03	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

SAMPLE ID: **09** **WT-9C** Collected: **09/22/94 16:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	3	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.04	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.11	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/601[illegible]
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/78[illegible]
Zinc, Total	0.02	0.01	mg/L Zn	09/29/94	JBC	200.7/60[illegible]

SAMPLE ID: **10** **WT-10A** Collected: **09/22/94 16:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/27/94	DIH	415.1/9060
Total Organic Halides	0.03	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.01	0.004	mg/L As	09/29/94	JEC	206.2/7060
Barium, Total	0.19	0.01	mg/L Ba	09/29/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	09/29/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	09/29/94	JBC	200.7/6010
Chromium, Total	0.05	0.02	mg/L Cr	09/29/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	09/29/94	JBC	200.7/6010
Lead, Total	0.032	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	09/30/94	JEC	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	09/29/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/11/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	09/29/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.17	0.01	mg/L Zn	09/29/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/21/94 21:45**
Sample Description: **MW-22R** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39499
Instrument: FINN2 Injected: 09/26/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	110	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	6	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	6	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	21	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	20	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	5	5
100-41-4	Ethyl benzene	44	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	26	5
156-59-2	cis-1,2-Dichloroethene	84	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	82 % Recovery	(76% - 114%)
Toluene-d8	100 % Recovery	(88% - 110%)
p-Bromofluorobenzene	90 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 21:45**
Sample Description: **MW-22R** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17581
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	36	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/21/94 21:45**
Sample Description: **MW-22R** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17581
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	16 *	% Recovery (21% - 100%)
Phenol-d6	13	% Recovery (10% - 94%)
Nitrobenzene-d5	58	% Recovery (35% - 114%)
2-Fluorobiphenyl	72	% Recovery (43% - 116%)
2,4,6-Tribromophenol	32	% Recovery (10% - 123%)
p-Terphenyl-d14	91	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/21/94 22:35**
Sample Description: **MW-24A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39519
Instrument: FINN2 Injected: 09/27/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	25	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	110	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	450	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	590	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	5	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	270	5
108-90-7	Chlorobenzene	47	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	120	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	86 % Recovery	(76% - 114%)
Toluene-d8	103 % Recovery	(88% - 110%)
p-Bromofluorobenzene	95 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 22:35**
Sample Description: **MW-24A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17590
Instrument: FINN4 Injected: 10/05/94 Factor: 20 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	100
111-44-4	bis(2-Chloroethyl)ether	ND	100
95-57-8	2-Chlorophenol	ND	100
541-73-1	1,3-Dichlorobenzene	ND	100
106-46-7	1,4-Dichlorobenzene	ND	100
100-51-6	Benzyl alcohol	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100
95-48-7	2-Methylphenol	ND	100
108-60-1	bis(2-Chloroisopropyl)ether	ND	100
106-44-5	4-Methylphenol	ND	100
621-64-7	N-Nitroso-di-n-propylamine	ND	100
67-72-1	Hexachloroethane	ND	100
98-95-3	Nitrobenzene	ND	100
78-59-1	Isophorone	ND	100
88-75-5	2-Nitrophenol	ND	100
105-67-9	2,4-Dimethylphenol	ND	100
65-85-0	Benzoic acid	ND	500
111-91-1	bis(2-Chloroethoxy)methane	ND	100
120-83-2	2,4-Dichlorophenol	410	100
120-82-1	1,2,4-Trichlorobenzene	ND	100
91-20-3	Naphthalene	ND	100
106-47-8	4-Chloroaniline	ND	100
87-68-3	Hexachlorobutadiene	ND	100
59-50-7	4-Chloro-3-methylphenol	ND	100
91-57-6	2-Methylnaphthalene	ND	100
77-47-4	Hexachlorocyclopentadiene	ND	100
88-06-2	2,4,6-Trichlorophenol	ND	100
95-95-4	2,4,5-Trichlorophenol	950	500
91-58-7	2-Chloronaphthalene	ND	100
88-74-4	2-Nitroaniline	ND	500
131-11-3	Dimethylphthalate	ND	100
208-96-8	Acenaphthylene	ND	100
606-20-2	2,6-Dinitrotoluene	ND	100
99-09-2	3-Nitroaniline	ND	500
83-32-9	Acenaphthene	ND	100
51-28-5	2,4-Dinitrophenol	ND	500
100-02-7	4-Nitrophenol	ND	500
132-64-9	Dibenzofuran	ND	100
121-14-2	2,4-Dinitrotoluene	ND	100
84-66-2	Diethylphthalate	ND	100
7005-72-3	4-Chlorophenyl-phenyl ether	ND	100
86-73-7	Fluorene	ND	100
100-01-6	4-Nitroaniline	ND	500
534-52-1	4,6-Dinitro-2-methylphenol	ND	500
86-30-6	N-Nitrosodiphenylamine	ND	100
101-55-3	4-Bromophenyl-phenylether	ND	100
118-74-1	Hexachlorobenzene	ND	100
87-86-5	Pentachlorophenol	ND	500
85-01-8	Phenanthrene	ND	100
120-12-7	Anthracene	ND	100
84-74-2	Di-n-butylphthalate	ND	100
206-44-0	Fluoranthene	ND	100
129-00-0	Pyrene	ND	100
85-68-7	Butylbenzylphthalate	ND	100
91-94-1	3,3-Dichlorobenzidine	ND	200
56-55-3	Benzo(a)anthracene	ND	100
218-01-9	Chrysene	ND	100
117-81-7	bis(2-Ethylhexyl)phthalate	ND	100
117-84-0	Di-n-octylphthalate	ND	100
205-99-2	Benzo(b)fluoranthene	ND	100
207-08-9	Benzo(k)fluoranthene	ND	100
50-32-8	Benzo(a)pyrene	ND	100
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/21/94 22:35**
Sample Description: **MW-24A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17590
Instrument: FINN4 Injected: 10/05/94 Factor: 20 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	100
191-24-2	Benzo(g,h,i)perylene	ND	100

SURROGATES:

2-Fluorophenol	52	% Recovery (21% - 100%)
Phenol-d6	52	% Recovery (10% - 94%)
Nitrobenzene-d5	290 *	% Recovery (35% - 114%)
2-Fluorobiphenyl	79	% Recovery (43% - 116%)
2,4,6-Tribromophenol	74	% Recovery (10% - 123%)
p-Terphenyl-d14	89	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/22/94 09:15**
Sample Description: **WT-4A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003104
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	40	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	52	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	19	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	7	5
156-59-2	cis-1,2-Dichloroethene	200	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109 % Recovery	(76% - 114%)
Toluene-d8	101 % Recovery	(88% - 110%)
p-Bromofluorobenzene	102 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/22/94 09:15**
Sample Description: **WT-4A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17582
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **03E** Collected: **09/22/94 09:15**
Sample Description: **WT-4A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17582
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	2 *	% Recovery (21% - 100%)
Phenol-d6	2 *	% Recovery (10% - 94%)
Nitrobenzene-d5	53	% Recovery (35% - 114%)
2-Fluorobiphenyl	60	% Recovery (43% - 116%)
2,4,6-Tribromophenol	12	% Recovery (10% - 123%)
p-Terphenyl-d14	82	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/22/94 09:45**
Sample Description: **WT-4B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003105
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	70	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	20	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	130	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109 % Recovery	(76% - 114%)
Toluene-d8	100 % Recovery	(88% - 110%)
p-Bromofluorobenzene	103 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/22/94 09:45**
Sample Description: **WT-4B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17583
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **04E** Collected: **09/22/94 09:45**
Sample Description: **WT-4B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17583
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	1 * % Recovery	(21% - 100%)
Phenol-d6	1 * % Recovery	(10% - 94%)
Nitrobenzene-d5	35 % Recovery	(35% - 114%)
2-Fluorobiphenyl	56 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	17 % Recovery	(10% - 123%)
p-Terphenyl-d14	78 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/22/94 10:30**
Sample Description: **WT-3** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003106
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	9	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	46	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery	(76% - 114%)
Toluene-d8	95	% Recovery	(88% - 110%)
p-Bromofluorobenzene	96	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/22/94 10:30**
Sample Description: **WT-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17584
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/22/94 10:30**
Sample Description: **WT-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17584
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	10 *	% Recovery (21% - 100%)
Phenol-d6	8 *	% Recovery (10% - 94%)
Nitrobenzene-d5	60	% Recovery (35% - 114%)
2-Fluorobiphenyl	67	% Recovery (43% - 116%)
2,4,6-Tribromophenol	38	% Recovery (10% - 123%)
p-Terphenyl-d14	93	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/22/94 11:20**
Sample Description: **WT-2** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003107
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102	% Recovery	(76% - 114%)
Toluene-d8	94	% Recovery	(88% - 110%)
p-Bromofluorobenzene	96	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/22/94 11:20**
Sample Description: **WT-2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17585
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/22/94 11:20**
Sample Description: **WT-2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17585
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	49 % Recovery	(21% - 100%)
Phenol-d6	31 % Recovery	(10% - 94%)
Nitrobenzene-d5	70 % Recovery	(35% - 114%)
2-Fluorobiphenyl	77 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	76 % Recovery	(10% - 123%)
p-Terphenyl-d14	101 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/22/94 14:40**
Sample Description: **WT-9A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003125
Instrument: HPMS1 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	590	100
75-15-0	Carbon disulfide	130	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	41	5
107-06-2	1,2-Dichloroethane	6	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	10	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	540	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	74	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	43	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	37	5
108-90-7	Chlorobenzene	1100	5
100-41-4	Ethyl benzene	43	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	85	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	95 % Recovery	(76% - 114%)
Toluene-d8	95 % Recovery	(88% - 110%)
p-Bromofluorobenzene	96 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/22/94 14:40**
Sample Description: **WT-9A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO18586
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	65	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	37	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07E** Collected: **09/22/94 14:40**
Sample Description: **WT-9A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO18586
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	NF *	% Recovery (21% - 100%)
Phenol-d6	1 *	% Recovery (10% - 94%)
Nitrobenzene-d5	40	% Recovery (35% - 114%)
2-Fluorobiphenyl	46	% Recovery (43% - 116%)
2,4,6-Tribromophenol	NF *	% Recovery (10% - 123%)
p-Terphenyl-d14	80	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
NF = NOT FOUND
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08D** Collected: **09/22/94 15:05**
Sample Description: **WT-9B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003109
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	106	% Recovery (76% - 114%)
Toluene-d8	97	% Recovery (88% - 110%)
p-Bromofluorobenzene	99	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **08E** Collected: **09/22/94 15:05**
Sample Description: **WT-9B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17587
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **08E** Collected: **09/22/94 15:05**
Sample Description: **WT-9B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17587
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	22 % Recovery	(21% - 100%)
Phenol-d6	13 % Recovery	(10% - 94%)
Nitrobenzene-d5	57 % Recovery	(35% - 114%)
2-Fluorobiphenyl	66 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	62 % Recovery	(10% - 123%)
p-Terphenyl-d14	94 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **09D** Collected: **09/22/94 16:40**
Sample Description: **WT-9C** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003146
Instrument: HPMS1 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	5	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	98	% Recovery	(76% - 114%)
Toluene-d8	101	% Recovery	(88% - 110%)
p-Bromofluorobenzene	99	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **09E** Collected: **09/22/94 16:40**
Sample Description: **WT-9C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17588
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **09E** Collected: **09/22/94 16:40**
Sample Description: **WT-9C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17588
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	49 % Recovery	(21% - 100%)
Phenol-d6	34 % Recovery	(10% - 94%)
Nitrobenzene-d5	66 % Recovery	(35% - 114%)
2-Fluorobiphenyl	75 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	83 % Recovery	(10% - 123%)
p-Terphenyl-d14	109 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **10D** Collected: **09/22/94 16:40**
Sample Description: **WT-10A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1M003111
Instrument: HPMS1 Injected: 09/28/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109 % Recovery	(76% - 114%)
Toluene-d8	100 % Recovery	(88% - 110%)
p-Bromofluorobenzene	101 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **10E** Collected: **09/22/94 16:40**
Sample Description: **WT-10A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17589
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **10E** Collected: **09/22/94 16:40**
Sample Description: **WT-10A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17589
Instrument: FINN4 Injected: 10/05/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	40 % Recovery	(21% - 100%)
Phenol-d6	26 % Recovery	(10% - 94%)
Nitrobenzene-d5	62 % Recovery	(35% - 114%)
2-Fluorobiphenyl	72 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	65 % Recovery	(10% - 123%)
p-Terphenyl-d14	93 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64
TDS	mg/L	MZL	500	480	96.00	106	84	8400	8300	1.20	<10	10	500	446	89.20	132	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ' ·ices

QUALITY ASSURANCE DAIL, ,EPORT

OHIO VALLEY LABORATORY Date: 10/12/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN I	mg/L	TAS	0.05	0.0474	94.80	120	72	0.051	0.052	1.94	<0.005	0.005	0.05	0.051	102.00	112	86
THALLIUM-FURN C	mg/L	TAS	0.05	0.053	106.00	120	72	0.046	0.048	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
SELENIUM-FURN I	mg/L	TAS	0.05	0.053	106.00	118	81	0.053	0.056	5.50	<0.005	0.005	0.05	0.053	106.00	125	62
TOX	mg/L	RJS	0.1	0.107	107.00	133	55	0.052	0.052	0.00	<0.02	0.02	0.1	0.097	97.00	148	64
THALLIUM-FURN L	mg/L	TAS	0.05	0.0434	86.80	120	72	0.038	0.04	5.13	<0.005	0.005	0.05	0.05	100.00	112	86
THALLIUM-FURN G	mg/L	TAS	0.05	0.0466	93.20	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
ARSENIC-FURNACE E	mg/L	TAS	0.05	0.0539	107.80	124	76	0.047	0.042	11.24	<0.004	0.004	0.05	0.047	94.00	126	68
ARSENIC-FURNACE G	mg/L	TAS	0.05	0.0527	105.40	124	76	< 0.2	< 0.2	0.00	<0.004	0.004	0.05	0.054	108.00	126	68
LEAD-FURNACE L	mg/L	TAS	0.05	0.0461	92.20	114	81	0.044	0.042	4.65	<0.005	0.005	0.05	0.044	88.00	123	61
SELENIUM-FURN E	mg/L	JKM	0.05	0.0501	100.20	118	81	0.045	0.044	2.25	<0.004	0.004	0.05	0.045	90.00	125	62
SELENIUM-FURN L	mg/L	JKM	0.05	0.0513	102.60	118	81	0.033	0.033	0.00	<0.004	0.004	0.05	0.033	66.00	125	62
PHENOL	mg/L	REB	0.5	0.519	103.80	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TIN_ICP	mg/L	JBC	10	9.67	96.70	109	83	9.4	9.5	1.06	<0.5	0.5	10	9.4	94.00	114	72
MBAS	mg/L	PJH	1	0.819	81.90	113	71	0.1	< 0.1	0.00	<0.1	0.1	1	0.989	98.90	142	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/11/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURN C	mg/L	TAS	0.05	0.0539	107.80	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.044	88.00	125	62
SELENIUM-FURN K	mg/L	TAS	0.05	0.053	106.00	118	81	0.053	0.051	3.85	<0.004	0.004	0.05	0.057	114.00	125	62
LEAD-FURNACE J	mg/L	TAS	0.05	0.0436	87.20	114	81	0.041	0.042	2.41	<0.005	0.005	0.05	0.042	84.00	123	61
LEAD-FURNACE E	mg/L	KHA	0.05	0.0499	99.80	114	81	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	123	61
THALLIUM-FURN H	mg/L	KHA	0.05	0.0519	103.80	120	72	0.052	0.059	12.61	<0.005	0.005	0.05	0.052	104.00	112	86
THALLIUM-FURN L	mg/L	KHA	0.05	0.0485	97.00	120	72	0.009	0.008	11.76	<0.005	0.005	0.05	0.046	92.00	112	86
AMMONIA	mg/L	REB	2	2.37	118.50	117	80	4.2	3.8	10.00	<0.1	0.1	1	1.06	106.00	142	76
BERYLLIUM-FURN K	mg/L	KHA	0.005	0.0053	106.00	121	76	0.0054	0.0055	1.83	<0.0005	0.0005	0.005	0.0064	128.00	116	72
BERYLLIUM-FURN H	mg/L	KHA	0.005	0.0051	102.00	121	76	0.006	0.0061	1.65	<0.0005	0.0005	0.005	0.0051	102.00	116	72
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0516	103.20	124	76	0.044	0.046	4.44	<0.005	0.005	0.05	0.046	92.00	126	68
ARSENIC-FURNACE K	mg/L	KHA	0.05	0.0538	107.60	124	76	2.7	2.4	11.76	<0.005	0.005	0.05	0.054	108.00	126	68
MERCURY I	mg/L	TAS	0.05	0.0419	83.80	112	81	0.048	0.05	4.08	<0.004	0.004	0.05	0.05	100.00	111	74
MERCURY	mg/L	TAS	0.01	0.0108	108.00	121	77	0.011	0.011	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY Q	mg/L	TAS	0.01	0.0109	109.00	121	77	0.0099	0.0099	0.00	<0.0002	0.0002	0.01	0.0099	99.00	124	76

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-B	mg/L	TAS	0.01	0.0097	97.00	121	77	0.011	0.011	0.00	<0.0002	0.0002	0.01	0.011	110.00	124	76
MERCURY-I	mg/L	TAS	0.01	0.0105	105.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-L	mg/L	TAS	0.01	0.0092	92.00	121	77	< 0.13	< 0.13	0.00	<0.0002	0.0002	0.01	0.0099	99.00	124	76
MERCURY-P	mg/L	TAS	0.01	0.01	100.00	121	77	0.0097	0.0097	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
LEAD-FURNACE K	mg/L	TAS	0.05	0.0414	82.80	119	84	13	13	0.00	<0.005	0.005	0.05	0.045	90.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0482	96.40	126	78	0.056	0.056	0.00	<0.005	0.005	0.05	0.056	112.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
ANTIMONY-FURN C	mg/L	JEC	0.05	0.0482	96.40	125	72	0.025	0.023	8.33	<0.02	0.02	0.05	0.055	110.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta' rvices

QUALITY ASSURANCE DA... REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/03/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	KHA	0.05	0.0532	106.40	120	72	0.047	0.048	2.11	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN P	mg/L	KHA	0.05	0.0428	85.60	120	72	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	112	86
SELENIUM-FURN P	mg/L	TAS	0.05	0.0532	106.40	117	84	0.05	0.049	2.02	<0.005	0.005	0.05	0.05	100.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.199	99.50	113	83	0.206	0.201	2.46	<0.01	0.01	0.2	0.206	103.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.91	91.00	122	86	0.931	0.933	0.21	<0.1	0.1	1	0.931	93.10	131	63
BARIUM-ICP	mg/L	JBC	10	9.41	94.10	113	85	9.54	9.48	0.63	<0.01	0.01	10	9.54	95.40	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.968	96.80	110	88	1	0.993	0.70	<0.01	0.01	1	1	100.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.56	95.60	112	88	10.2	10	1.98	<0.2	0.2	10	10	100.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.976	97.60	112	83	1.01	0.994	1.60	<0.01	0.01	1	1.01	101.00	115	73
COBALT-ICP	mg/L	JBC	1	0.965	96.50	111	88	1	0.987	1.31	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1.02	1	1.98	<0.02	0.02	1	1.02	102.00	113	80
COPPER-ICP	mg/L	JBC	1	0.972	97.20	111	88	1.02	1.02	0.00	<0.02	0.02	1	1	100.00	111	67
IRON-ICP	mg/L	JBC	1	0.927	92.70	113	90	0.934	0.92	1.51	<0.04	0.04	1	0.934	93.40	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.78	97.80	120	84	10.7	10.9	1.85	<1	1	10	10.7	107.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.51	95.10	109	87	10	9.81	1.92	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.948	94.80	112	89	0.973	0.961	1.24	<0.01	0.01	1	0.973	97.30	119	81
SODIUM-ICP	mg/L	JBC	10	9.35	93.50	112	87	10.2	10.3	0.98	<0.5	0.5	10	10	100.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.932	93.20	113	87	0.992	1.03	3.76	<0.04	0.04	1	0.98	98.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.01	101.00	119	80	1.05	1.08	2.82	<0.2	0.2	1	1.05	105.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.936	93.60	111	86	0.952	0.946	0.63	<0.01	0.01	1	0.95	95.00	115	75
ZINC-ICP	mg/L	JBC	1	0.966	96.60	112	89	1.02	1.02	0.00	<0.01	0.01	1	1.02	102.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	0.961	0.934	2.85	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.1	110.00	114	84	0.988	0.987	0.10	<0.1	0.1	1	0.95	95.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.987	0.981	0.61	<0.1	0.1	1	0.99	99.00	122	66
BORON-ICP	mg/L	JBC	1	0.921	92.10	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.97	97.00	125	75
MERCURY-G	mg/L	KHA	0.01	0.0103	103.00	121	77	0.01	0.011	9.52	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	KHA	0.01	0.0099	99.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.0498	99.60	120	80	0.052	0.051	1.94	<0.004	0.004	0.05	0.051	102.00	123	72
LEAD-FURNACE P	mg/L	JEC	0.05	0.0483	96.60	114	81	0.038	0.04	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE N	mg/L	JEC	0.05	0.048	96.00	114	81	0.037	0.037	0.00	<0.005	0.005	0.05	0.05	100.00	123	61
COPPER-FURNACE P	mg/L	JEC	0.05	0.0475	95.00	103	79	0.04	0.04	0.00	<0.005	0.005	0.05	0.04	80.00	117	64
CHROMIUM-FURN P	mg/L	JEC	0.05	0.0488	97.60	126	78	0.058	0.058	0.00	<0.005	0.005	0.05	0.058	116.00	133	61
CHROMIUM-FURN N	mg/L	JEC	0.05	0.0432	86.40	126	78	0.039	0.041	5.00	<0.005	0.005	0.05	0.041	82.00	133	61
ALKALINITY	mg/L	REB	100	88	88.00	112	80	400	420	4.88	<10	10	50	50.1	100.20	120	62
MBAS	mg/L	JWR	1	1.07	107.00	113	71	0.3	0.4	28.57	<0.1	0.1	1	1.05	105.00	142	57
CYANIDE	mg/L	JWR	0.4	0.394	98.50	119	94	0.24	0.25	4.08	<0.01	0.01	0.2	0.188	94.00	121	86
COD	mg/L	PJH	1000	885	88.50	137	61	880	1000	12.77	<5	5	500	589	117.80	125	66
TOC	mg/L	DIH	25	25.2	100.80	124	89	< 1	< 1	0.00	<1	1	25	24.6	98.40	136	72
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.14	0.14	0.00	<0.02	0.02	0.1	0.093	93.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta' ·rvices

QUALITY ASSURANCE D;. . REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta[illegible]vices

QUALITY ASSURANCE DA[illegible] REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta rvices

QUALITY ASSURANCE D.../ REPORT

OHIO VALLEY LABORATORY Date: 09/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SILVER-FURNACE P	mg/L	TAS	0.05	0.0507	101.40	112	81	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	111	74
CADMIUM-FURNACE H	mg/L	KHA	0.005	0.005	100.00	119	83	0.004	0.0042	4.88	<0.0005	0.0005	0.005	0.0042	84.00	125	73
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0043	86.00	119	83	0.0049	0.005	2.02	<0.0005	0.0005	0.005	0.005	100.00	125	73
COPPER-FURNACE H	mg/L	TAS	0.05	0.0468	93.60	103	79	0.045	0.049	8.51	<0.005	0.005	0.05	0.049	98.00	117	64
SELENIUM-FURN G	mg/L	KHA	0.05	0.0567	113.40	117	84	0.042	0.04	4.88	<0.004	0.004	0.05	0.05	100.00	103	69
ANTIMONY-FURN G	mg/L	JEC	0.05	0.0517	103.40	122	81	0.053	0.054	1.87	<0.02	0.02	0.05	0.053	106.00	130	52
LEAD-FURNACE E	mg/L	JEC	0.05	0.0546	109.20	114	81	0.049	0.051	4.00	<0.005	0.005	0.05	0.049	98.00	123	61
TOX	mg/L	DIH	0.1	0.109	109.00	141	71	1.56	1.5	3.92	<0.02	0.02	0.1	0.09	90.00	146	56
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0489	97.80	126	78	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	133	61
SULFATE	mg/L	JWR	20	17.9	89.50	130	78	180	180	0.00	<2	2	10	11.1	111.00	127	85
HARDNESS	mg/L	PJH	100	106	106.00	106	93	120	130	8.00	<5	5	50	47	94.00	116	78
AMMONIA	mg/L	REB	2	1.8	90.00	123	69	0.5	0.5	0.00	<0.1	0.1	1	1.08	108.00	146	87
NITRATE	mg/L	REB	0.5	0.5	100.00	133	74	1.9	1.9	0.00	<0.05	0.05	0.25	0.245	98.00	134	77
TOC	mg/L	DIH	25	25.7	102.80	113	85	< 1	< 1	0.00	<1	1	25	27.5	110.00	115	63
IRON-ICP	mg/L	JBC	1	1.06	106.00	13	90	1.8	2.1	15.38	<0.04	0.04	1	0.96	96.00	111	87
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.91	1.1	18.91	<0.01	0.01	1	0.91	91.00	119	81
CALCIUM-ICP	mg/L	JBC	10	9.87	98.70	112	88	11	13	16.67	<0.2	0.2	10	11	110.00	123	75
COPPER-ICP	mg/L	JBC	1	0.95	95.00	111	88	0.82	0.99	18.78	<0.02	0.02	1	0.84	84.00	111	67
NICKEL-ICP	mg/L	JBC	1	1	100.00	113	87	0.8	0.99	21.23	<0.04	0.04	1	0.86	86.00	113	76
SODIUM-ICP	mg/L	JBC	10	10.3	103.00	112	87	36	36	0.00	<0.5	0.5	10	7.6	76.00	129	58
POTASSIUM-ICP	mg/L	JBC	10	10.1	101.00	120	84	13	13	0.00	<1	1	10	10.1	101.00	128	65
LEAD-ICP	mg/L	JBC	1	1.07	107.00	114	84	1	1	0.00	0.1	0.1	1	0.97	97.00	115	60
SILVER-ICP	mg/L	JBC	0.2	0.223	111.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.15	75.00	112	76
BARIUM-ICP	mg/L	JBC	10	11.2	112.00	113	85	115	101	12.96	<0.01	0.01	10	7.4	74.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.07	107.00	112	83	1.04	0.89	15.54	<0.01	0.01	1	0.75	75.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.12	112.00	114	88	11.1	11.1	0.00	<0.01	0.01	1	0.81	81.00	113	80
MAGNESIUM-ICP	mg/L	JBC	10	9.8	98.00	109	87	24	24	0.00	<0.5	0.5	10	9.82	98.20	116	81
BERYLLIUM-ICP	mg/L	JBC	1	1	100.00	110	88	0.85	0.88	3.47	<0.01	0.01	1	0.85	85.00	112	79
COBALT-ICP	mg/L	JBC	1	1	100.00	111	88	0.85	0.88	3.47	<0.02	0.02	1	0.85	85.00	111	80
VANADIUM-ICP	mg/L	JBC	1	0.978	97.80	111	86	0.92	0.94	2.15	<0.01	0.01	1	0.83	83.00	115	75
ANTIMONY-ICP	mg/L	JBC	1	1	100.00	119	80	0.97	1.1	12.56	<0.2	0.2	1	1.1	110.00	120	71
TDS	mg/L	MZL	500	500	100.00	106	84	1800	1800	0.00	<10	10	500	518	103.60	132	67
NITRITE	mg/L	PJH	0.1	0.101	101.00	113	78	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.097	97.00	114	77
CHROMIUM (6)	mg/L	PJH	0.1	0.112	112.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.113	113.00	120	77
TSS	mg/L	MZL	50	52	104.00	124	65	5	5	0.00	<5	5	50	52	104.00	130	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000001

RUN DATE: 09/26/94 BLK FLNM: 2BK39489
INSTRUMENT: FINN2 LCS FLNM: 2QC39490
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-444-05
FILE NAME: 2MO39505
MS FLNM: 2MO39506
MSD FLNM: 2MO39507

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	18.8	94.0	43-129	0-273								33
BROMOMETHANE	10	BQL	13.2	66.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	17.6	88.0	47-128	0-251								18
CHLOROETHANE	10	BQL	13.5	67.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	16.9	84.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	18.2	91.0	66-138	0-234	0.0	40.5	35.8	81.0	71.6	61 - 145	12.3	31
1,1-DICHLOROETHANE	5	BQL	18.0	90.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	17.8	89.0	77-127	54-156								31
CHLOROFORM	5	BQL	18.2	91.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.2	91.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	18.6	93.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	16.2	81.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.4	82.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	17.1	85.5	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	17.5	87.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	18.1	90.5	83-129	71-157	0.0	40.2	38.5	80.4	77.0	71 - 120	4.3	14
DIBROMOCHLOROMETHA	5	BQL	15.4	77.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	16.7	83.5	86-127	52-150								21
BENZENE	5	BQL	17.6	88.0	87-120	37-151	0.0	41.0	41.7	82.0	83.4	76 - 127	1.7	23
TRANS-1,3-DICHLOROPRO	5	BQL	12.8	64.0	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.4	97.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	17.8	89.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.8	84.0	78-124	46-147								17
TOLUENE	5	BQL	17.8	89.0	86-115	47-150	0.0	43.0	40.2	86.0	80.4	76 - 125	6.7	14
CHLOROBENZENE	5	BQL	17.6	88.0	85-119	37-160	0.0	41.2	41.5	82.4	83.0	75 - 130	0.7	14
ETHYLBENZENE	5	BQL	18.0	90.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	18.9	94.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	24.1	120.5	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	24.8	124.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	24.7	123.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000002

RUN DATE: 09/27/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39511
LCS FLNM: 2QC39512
SHIFT: AM

SMPL NAME: 09-444-08
FILE NAME: 2MO39523
MS FLNM: 2MO39524
MSD FLNM: 2MO39525

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	15.7	78.5	43-129	0-273								33
BROMOMETHANE	10	BQL	14.9	74.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	18.2	91.0	47-128	0-251								18
CHLOROETHANE	10	BQL	12.7	63.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	18.1	90.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	16.2	81.0	66-138	0-234	0.0	41.9	41.9	83.8	83.8	61 - 145	0.0	31
1,1-DICHLOROETHANE	5	BQL	17.6	88.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	16.8	84.0	77-127	54-156								31
CHLOROFORM	5	BQL	17.8	89.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.4	92.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	17.6	88.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.9	89.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.3	91.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	19.9	99.5	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	20.4	102.0	80-148	0-227								40
TRICHLOROETHENE	5	BQL	18.9	94.5	83-129	71-157	10.7	53.3	54.0	85.2	86.6	71 - 120	1.8	14
DIBROMOCHLOROMETHA	5	BQL	19.4	97.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.6	98.0	86-127	52-150								21
BENZENE	5	BQL	18.0	90.0	87-120	37-151	0.0	43.1	43.7	86.2	87.4	76 - 127	1.4	23
TRANS-1,3-DICHLOROPRO	5	BQL	15.9	79.5	48-108	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.5	92.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.5	92.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.3	91.5	78-124	46-147								17
TOLUENE	5	BQL	17.2	86.0	86-115	47-150	0.0	44.7	44.4	89.4	88.8	76 - 125	0.7	14
CHLOROBENZENE	5	BQL	18.3	91.5	85-119	37-160	0.0	46.2	47.1	92.4	94.2	75 - 130	1.9	14
ETHYLBENZENE	5	BQL	17.6	88.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	17.9	89.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.0	100.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	20.4	102.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	20.1	100.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000003

RUN DATE: 09/28/94
INSTRUMENT: HPMS1
ANALYST(S): TLD

BLK FLNM: 1BK03095
LCS FLNM: 1QC03096
SHIFT: AM

SMPL NAME: W19
FILE NAME: 1CY03099
MS FLNM: 1CY03100
MSD FLNM: 1CY03101

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.8	88.9	43-129	0-273								33
BROMOMETHANE	10	BQL	19.6	98.2	62-115	0-242								22
VINYL CHLORIDE	10	BQL	20.0	100.2	47-128	0-251								18
CHLOROETHANE	10	BQL	20.8	103.9	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.9	104.7	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	20.3	101.4	66-138	0-234	0.0	55.3	54.4	110.6	108.9	61 - 145	1.6	31
1,1-DICHLOROETHANE	5	BQL	20.9	104.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	19.3	96.4	77-127	54-156								31
CHLOROFORM	5	BQL	20.1	100.4	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	20.8	103.9	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.4	102.2	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	21.5	107.4	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.9	99.4	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.6	103.2	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.2	110.8	80-146	0-227								40
TRICHLOROETHENE	5	BQL	21.3	106.3	83-129	71-157	0.0	50.9	51.8	101.7	103.6	71 - 120	1.8	14
DIBROMOCHLOROMETHA	5	BQL	21.0	105.1	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	21.2	105.8	86-127	52-150								21
BENZENE	5	BQL	19.8	98.9	87-120	37-151	0.0	49.3	50.3	98.7	100.6	76 - 127	1.9	23
TRANS-1,3-DICHLOROPRO	5	BQL	18.8	94.2	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	20.9	104.3	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.8	109.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.7	98.5	78-124	46-147								17
TOLUENE	5	BQL	19.6	97.8	86-115	47-150	0.0	47.9	49.1	95.7	98.2	76 - 125	2.6	14
CHLOROBENZENE	5	BQL	20.5	102.4	85-119	37-160	0.0	53.8	54.8	107.6	109.5	75 - 130	1.8	14
ETHYLBENZENE	5	BQL	19.9	99.4	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	21.6	107.8	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.6	102.8	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	19.9	99.8	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	20.4	102.1	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000004

RUN DATE: 09/29/94
INSTRUMENT: HPMS1
ANALYST(S): TLD

BLK FLNM: 1BK03121
LCS FLNM: 1QC03122
SHIFT: AM

SMPL NAME:
FILE NAME:
MS FLNM:
MSD FLNM:

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.6	87.9	43-129	0-273								33
BROMOMETHANE	10	BQL	18.9	94.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.9	99.4	47-128	0-251								18
CHLOROETHANE	10	BQL	20.4	102.1	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.5	102.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	20.2	101.2	66-138	0-234	0.0	0.0	0.0	0.0	0.0	61 - 145	ERR	31
1,1-DICHLOROETHANE	5	BQL	20.6	102.9	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	19.4	96.9	77-127	54-156								31
CHLOROFORM	5	BQL	20.0	100.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.6	97.9	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	19.8	99.1	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	20.6	103.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.1	95.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.3	101.4	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	21.4	106.9	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.9	104.4	83-129	71-157	0.0	0.0	0.0	0.0	0.0	71 - 120	ERR	14
DIBROMOCHLOROMETHA	5	BQL	19.6	97.8	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.7	98.4	86-127	52-150								21
BENZENE	5	BQL	19.4	96.8	87-120	37-151	0.0	0.0	0.0	0.0	0.0	76 - 127	ERR	23
TRANS-1,3-DICHLOROPRO	5	BQL	17.7	88.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.1	95.3	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	20.9	104.4	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	17.6	88.0	78-124	46-147								17
TOLUENE	5	BQL	19.2	96.2	86-115	47-150	0.0	0.0	0.0	0.0	0.0	76 - 125	ERR	14
CHLOROBENZENE	5	BQL	20.0	100.1	85-119	37-160	0.0	0.0	0.0	0.0	0.0	75 - 130	ERR	14
ETHYLBENZENE	5	BQL	19.5	97.3	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	20.5	102.4	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.8	103.9	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	20.2	100.9	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000005

RUN DATE: 09/30/94 BLK FLNM: 1BK03143
INSTRUMENT: HPMS1 LCS FLNM: 1QC03144
ANALYST(S): TLD SHIFT: AM

SMPL NAME: 09-472-02
FILE NAME: 1MO03153
MS FLNM: 1MO03154
MSD FLNM: 1MO03155

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.9	84.5	43-129	0-273								33
BROMOMETHANE	10	BQL	19.4	97.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.4	97.0	47-128	0-251								18
CHLOROETHANE	10	BQL	19.6	98.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.9	104.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	19.9	99.5	66-138	0-234	0.0	54.3	52.8	108.6	105.5	61 - 145	2.9	31
1,1-DICHLOROETHANE	5	BQL	20.5	102.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	19.2	96.0	77-127	54-156								31
CHLOROFORM	5	BQL	20.1	100.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	20.1	100.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.0	100.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	20.8	104.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.7	98.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.8	104.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.2	111.0	80-148	0-227								40
TRICHLOROETHENE	5	BQL	20.9	104.5	83-129	71-157	0.0	52.1	50.5	104.3	100.9	71 - 120	3.2	14
DIBROMOCHLOROMETHA	5	BQL	20.2	101.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.3	101.5	86-127	52-150								21
BENZENE	5	BQL	19.6	98.0	87-120	37-151	0.0	49.7	48.3	99.4	96.6	76 - 127	2.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	18.5	92.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.5	97.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL-2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.2	106.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.0	95.0	78-124	46-147								17
TOLUENE	5	BQL	19.9	99.5	86-115	47-150	0.0	48.6	47.3	97.3	94.6	76 - 125	2.8	14
CHLOROBENZENE	5	BQL	20.7	103.5	85-119	37-160	0.0	52.8	51.3	105.5	102.6	75 - 130	2.8	14
ETHYLBENZENE	5	BQL	19.6	98.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	20.0	100.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.5	102.5	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	20.0	100.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/23/94
TYPE: SEPFUNNEL
BLK FLNM: 4BK17439
QC FLNM: 4QC17440

SMPL NAM 09-472-01
FILE NAME 4MO17597
MS FLNM: -03 4MO17599
MSD FLNM -04 4MO17600

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	38	76	38	13-132	0	15	17	30	34	15	17	13
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	71	142	71	48-115	0	37	39	74	78	37	39	5
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	11	22	22	32-115	0	16	20	32	40	32	40	22
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	14	28	28	35-124	0	24	29	48	58	48	58	19
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	11	22	22	29- 98	0	18	20	36	40	36	40	11
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	88	176	88	45-117	0	39	38	78	76	39	38	3
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	17	34	34	43-117	0	28	32	56	64	56	64	13

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000007

EXT DATE: 09/23/94 SMPL NAM 09-472-01
TYPE: SEPFUNNEL FILE NAME 4MO17597
BLK FLNM: 4BK17439 MS FLNM: -03 4MO17599
QC FLNM: 4QC17440 MSD FLNM -04 4MO17600

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	36	72	36	1- 148	0	24	17	48	34	24	17	34
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	12	24	24	34-110	0	19	22	38	44	38	44	-15
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	74	148	74	36-137	0	34	8	68	16	34	8	124
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	26	52	52	42-139	0	41	42	82	84	82	84	-2
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01922 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619503
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. ANDERSON, P. CHANG, J. VANDERVLIET

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
MW-22R	9/21/94	2145	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
MW-24A	9/21/94	2235	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-4A	9/22/94	915	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-4B	9/22/94	945	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-3	9/22/94	1030	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-2	9/22/94	1120	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-9A	9/22/94	1440	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-9B	9/22/94	1505	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-9C	9/22/94	1640	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
WT-10A	9/22/94	1640	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S [signature]	ROUX	9/22	1700	Y	Clifford Asher	Kemron	9/22/94	1725	Y
Clifford Asher	Kemron	9/22/94	2030	Y					
					[signature]	Kemron	9/23	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #'s 0009, 0010, 0011, 0012

Samples stored in locked cooler overnight - CPA

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522884

Order #: N4-09-472
Date: December 2, 1994 08:55
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/22/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	FIELD BLANK 4	02	DUPLICATE
03	MS	04	MSD
05	TRIP BLANK		

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/02/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

CASE NARRATIVE

M8270 SEMIVOLATILE ANALYSIS

The analysis by Method 8270 of sample description Matrix Spike and Matrix Spike Dulicate had recoveries below advisory limits for acid spike compounds phenol, 2-chlorophenol, 4-chloro-3-methylphenol and pentachlorophenol. The laboratory control sample extracted with these samples showed acceptable recoveries for these spike compounds. We attribute these reduced sample spike recoveries to matrix interference based on the observed reproducibility.

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **FIELD BLANK 4** Collected: **09/22/94 15:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/04/94	TAS	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	10/03/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/03/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/03/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/03/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/03/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/06/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/03/94	KHA	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/03/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/04/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/03/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	10/03/94	JBC	200.7/6010

SAMPLE ID: **02** **DUPLICATE** Collected: **09/22/94** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/26/94	REB	415.1/9060
Total Organic Halides	0.04	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/05/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	10/04/94	TAS	206.2/7060
Barium, Total	0.12	0.01	mg/L Ba	10/03/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/03/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/03/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/03/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/03/94	JBC	200.7/6010
Lead, Total	0.01	0.005	mg/L Pb	10/06/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/03/94	KHA	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/03/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/04/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/03/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/04/94	JEC	279.2/7841
Zinc, Total	0.05	0.01	mg/L Zn	10/03/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/22/94 15:40**
Sample Description: **FIELD BLANK 4** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39634
Instrument: FINN2 Injected: 10/05/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	77	% Recovery (76% - 114%)
Toluene-d8	104	% Recovery (88% - 110%)
p-Bromofluorobenzene	91	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/22/94 15:40**
Sample Description: **FIELD BLANK 4** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17597
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **01E** Collected: **09/22/94 15:40**
Sample Description: **FIELD BLANK 4** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17597
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	57 % Recovery	(21% - 100%)
Phenol-d6	34 % Recovery	(10% - 94%)
Nitrobenzene-d5	74 % Recovery	(35% - 114%)
2-Fluorobiphenyl	81 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	93 % Recovery	(10% - 123%)
p-Terphenyl-d14	119 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/22/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1MO03153
Instrument: HPMS_1 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery (76% - 114%)
Toluene-d8	107	% Recovery (88% - 110%)
p-Bromofluorobenzene	106	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/22/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17598
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/22/94**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17598
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	48 % Recovery	(21% - 100%)
Phenol-d6	29 % Recovery	(10% - 94%)
Nitrobenzene-d5	76 % Recovery	(35% - 114%)
2-Fluorobiphenyl	79 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	79 % Recovery	(10% - 123%)
p-Terphenyl-d14	114 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03A** Collected: **09/22/94 15:20**
Sample Description: **MS** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1MO03154
Instrument: HPMS_1 Injected: 09/30/94 Factor: 1 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	109	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	104	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	99	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	97	5
108-90-7	Chlorobenzene	106	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	109	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD
DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE REPORTED IN UG/L AND DO NOT APPLY
TO % LEVELS REPORTED.
NF = NOT FOUND.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03B** Collected: **09/22/94 15:20**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17599
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: % * Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	15	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	37	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	32	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	48	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	36	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	39	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	56	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	24	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	38	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	34	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	82	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **03B** Collected: **09/22/94 15:20**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17599
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: % * Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	28 % Recovery	(21% - 100%)
Phenol-d6	20 % Recovery	(10% - 94%)
Nitrobenzene-d5	65 % Recovery	(35% - 114%)
2-Fluorobiphenyl	74 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	78 % Recovery	(10% - 123%)
p-Terphenyl-d14	99 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY. DETECTION LIMITS ARE REPORTED IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MSD**
Test Description: **Volatile Organics**

Lab No: **04A**

Collected: **09/22/94 15:20**
Category: **WATER**
Method: **8240**

Analyst: TLD
File #: 1MO03155
Instrument: HPMS_1 Injected: 09/30/94 Factor: 1 Units: % ** Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	106	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	101	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	97	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	95	5
108-90-7	Chlorobenzene	103	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	100 % Recovery	(76% - 114%)
Toluene-d8	101 % Recovery	(88% - 110%)
p-Bromofluorobenzene	100 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD
DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE REPORTED IN UG/L AND DO NOT APPLY
TO % LEVELS REPORTED.
NF = NOT FOUND.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04B** Collected: **09/22/94 15:20**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17600
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: % * Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	17	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	39	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	40	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	58	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	40	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	38	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	64	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	17	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	44	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	8	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	84	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **04B** Collected: **09/22/94 15:20**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/23/94 File #: 4MO17600
Instrument: FINN4 Injected: 10/06/94 Factor: 2 Units: % * Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	30	% Recovery (21% - 100%)
Phenol-d6	21	% Recovery (10% - 94%)
Nitrobenzene-d5	77	% Recovery (35% - 114%)
2-Fluorobiphenyl	84	% Recovery (43% - 116%)
2,4,6-Tribromophenol	73	% Recovery (10% - 123%)
p-Terphenyl-d14	111	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY. DETECTION LIMITS ARE REPORTED IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05A** Collected: **09/22/94**
Sample Description: **TRIP BLANK** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: TLD File #: 1MO03156
Instrument: HPMS_1 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	100 % Recovery	(76% - 114%)
Toluene-d8	99 % Recovery	(88% - 110%)
p-Bromofluorobenzene	98 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/03/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	KHA	0.05	0.0532	106.40	120	72	0.047	0.048	2.11	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN P	mg/L	KHA	0.05	0.0428	85.60	120	72	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	112	86
SELENIUM-FURN P	mg/L	TAS	0.05	0.0532	106.40	117	84	0.05	0.049	2.02	<0.005	0.005	0.05	0.05	100.00	130	69
SILVER-ICP O	mg/L	JBC	0.2	0.197	98.50	113	83	< 0.02	< 0.02	0.00	<0.01	0.01	0.2	0.192	96.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.91	91.00	122	86	0.931	0.933	0.21	<0.1	0.1	1	0.931	93.10	131	63
BARIUM-ICP O	mg/L	JBC	10	9.55	95.50	113	85	< 0.02	< 0.02	0.00	<0.01	0.01	10	9.05	90.50	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.968	96.80	110	88	1	0.993	0.70	<0.01	0.01	1	1	100.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.56	95.60	112	88	10.2	10	1.98	<0.2	0.2	10	10	100.00	123	75
CADMIUM-ICP O	mg/L	JBC	1	0.981	98.10	112	83	< 0.02	< 0.02	0.00	<0.01	0.01	1	0.921	92.10	115	73
COBALT-ICP	mg/L	JBC	1	0.965	96.50	111	88	1	0.987	1.31	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP O	mg/L	JBC	1	1.01	101.00	114	88	< 0.04	< 0.04	0.00	<0.02	0.02	1	0.943	94.30	113	80
COPPER-ICP	mg/L	JBC	1	0.972	97.20	111	88	1.02	1.02	0.00	<0.02	0.02	1	1	100.00	111	67
IRON-ICP	mg/L	JBC	1	0.927	92.70	113	90	0.934	0.92	1.51	<0.04	0.04	1	0.934	93.40	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.78	97.80	120	84	10.7	10.9	1.85	<1	1	10	10.7	107.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.51	95.10	109	87	10	9.81	1.92	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.948	94.80	112	89	0.973	0.961	1.24	<0.01	0.01	1	0.973	97.30	119	81
SODIUM-ICP	mg/L	JBC	10	9.35	93.50	112	87	10.2	10.3	0.98	<0.5	0.5	10	10	100.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.932	93.20	113	87	0.992	1.03	3.76	<0.04	0.04	1	0.98	98.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.01	101.00	119	80	1.05	1.08	2.82	<0.2	0.2	1	1.05	105.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.936	93.60	111	86	0.952	0.946	0.63	<0.01	0.01	1	0.95	95.00	115	75
ZINC-ICP	mg/L	JBC	1	0.966	96.60	112	89	1.02	1.02	0.00	<0.01	0.01	1	1.02	102.00	122	71
ARSENIC-ICP O	mg/L	JBC	1	0.984	98.40	123	76	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.897	89.70	126	65
LEAD-ICP O	mg/L	JBC	1	0.993	99.30	114	84	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.978	97.80	115	60
SELENIUM-ICP O	mg/L	JBC	1	0.958	95.80	117	80	< 0.2	< 0.2	0.00	<0.1	0.1	1	0.959	95.90	122	66
BORON-ICP	mg/L	JBC	1	0.921	92.10	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.97	97.00	125	75
MERCURY-G	mg/L	KHA	0.01	0.0103	103.00	121	77	0.01	0.011	9.52	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	KHA	0.01	0.0099	99.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.0498	99.60	120	80	0.052	0.051	1.94	<0.004	0.004	0.05	0.051	102.00	123	72
LEAD-FURNACE P	mg/L	JEC	0.05	0.0483	96.60	114	81	0.038	0.04	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE N	mg/L	JEC	0.05	0.048	96.00	114	81	0.037	0.037	0.00	<0.005	0.005	0.05	0.05	100.00	123	61
COPPER-FURNACE P	mg/L	JEC	0.05	0.0475	95.00	103	79	0.04	0.04	0.00	<0.005	0.005	0.05	0.04	80.00	117	64
CHROMIUM-FURN P	mg/L	JEC	0.05	0.0488	97.60	126	78	0.058	0.058	0.00	<0.005	0.005	0.05	0.058	116.00	133	61
CHROMIUM-FURN N	mg/L	JEC	0.05	0.0432	86.40	126	78	0.039	0.041	5.00	<0.005	0.005	0.05	0.041	82.00	133	61
ALKALINITY	mg/L	REB	100	88	88.00	112	80	400	420	4.88	<10	10	50	50.1	100.20	120	62
MBAS	mg/L	JWR	1	1.07	107.00	113	71	0.3	0.4	28.57	<0.1	0.1	1	1.05	105.00	142	57
CYANIDE	mg/L	JWR	0.4	0.394	98.50	119	94	0.24	0.25	4.08	<0.01	0.01	0.2	0.188	94.00	121	86
COD	mg/L	PJH	1000	885	88.50	137	61	880	1000	12.77	<5	5	500	589	117.80	125	66
TOC	mg/L	DIH	25	25.2	100.80	124	89	< 1	< 1	0.00	<1	1	25	24.6	98.40	136	72
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.14	0.14	0.00	<0.02	0.02	0.1	0.093	93.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/06/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
COPPER-FURNACE B	mg/L	SPL	0.05	0.0553	110.60	103	79	8.7	9.1	4.49	<0.005	0.005	0.05	0.037	74.00	117	64
COPPER-FURNACE H	mg/L	SPL	0.05	0.0471	94.20	103	79	0.043	0.038	12.35	<0.005	0.005	0.05	0.043	86.00	117	64
TDS	mg/L	MZL	500	504	100.80	106	84	3300	3400	2.99	14	10	500	500	100.00	132	67
MBAS	mg/L	JWR	1	1.05	105.00	113	71	22	25	12.77	<0.1	0.1	1	1.05	105.00	142	57
LEAD-FURNACE N	mg/L	TAS	0.05	0.046	92.00	119	84	0.041	0.041	0.00	<0.005	0.005	0.05	0.041	82.00	117	67
ARSENIC-FURNACE I	mg/L	TAS	0.05	0.0505	101.00	120	80	< 0.004	< 0.004	0.00	<0.004	0.004	0.05	0.048	96.00	123	72
BERYLLIUM-FURN B	mg/L	SPL	0.005	0.005	100.00	116	81	0.23	0.21	9.09	<0.0005	0.0005	0.005	0.0061	122.00	148	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0458	91.60	114	81	0.047	0.045	4.35	<0.005	0.005	0.05	0.05	100.00	123	61
OIL & GREASE	mg/L	PJH	10	8.7	87.00	137	74	8.7	8.5	2.33	<1	1	10	8.5	85.00	154	67
TOC	mg/L	DIH	25	25.7	102.80	124	89	21	20	4.88	<1	1	25	25.2	100.80	136	72
PHENOL	mg/L	REB	0.5	0.526	105.20	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.509	101.80	118	96
SILVER-ICP	mg/L	JBC	0.2	0.23	115.00	113	83	< 2	< 2	0.00	<0.01	0.01	0.2	0.185	92.50	112	76
BARIUM-ICP	mg/L	JBC	10	9.85	98.50	113	85	10.1	10.1	0.00	<0.01	0.01	10	10.1	101.00	112	74
CALCIUM-ICP	mg/L	JBC	10	10.2	102.00	112	88	56.4	55.8	1.07	<0.2	0.2	10	8	80.00	123	75
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	1.02	0.999	2.08	<0.01	0.01	1	1.02	102.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.04	104.00	114	88	1.04	1.03	0.97	<0.02	0.02	1	1.03	103.00	113	80
COPPER-ICP	mg/L	JBC	1	0.992	99.20	111	88	2.1	2.05	2.41	<0.02	0.02	1	1.06	106.00	111	67
IRON-ICP	mg/L	JBC	1	1.02	102.00	113	90	2.62	2.6	0.77	<0.04	0.04	1	0.92	92.00	111	87
ZINC-ICP	mg/L	JBC	1	1.09	109.00	114	87	0.369	0.36	2.47	<0.01	0.01	1	0.98	98.00	114	80
ARSENIC-ICP	mg/L	JBC	1	0.937	93.70	123	76	0.983	0.985	0.20	<0.1	0.1	1	0.98	98.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	1.25	1.25	0.00	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.03	103.00	117	80	0.964	0.999	3.57	<0.1	0.1	1	0.91	91.00	122	66
BOD	mg/L	PJH	200	193	96.50	124	77	128	130	1.55	<3	3	200	195	97.50	133	71

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-B	mg/L	TAS	0.01	0.0097	97.00	121	77	0.011	0.011	0.00	<0.0002	0.0002	0.01	0.011	110.00	124	76
MERCURY-I	mg/L	TAS	0.01	0.0105	105.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-L	mg/L	TAS	0.01	0.0092	92.00	121	77	< 0.13	< 0.13	0.00	<0.0002	0.0002	0.01	0.0099	99.00	124	76
MERCURY-P	mg/L	TAS	0.01	0.01	100.00	121	77	0.0097	0.0097	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
LEAD-FURNACE K	mg/L	TAS	0.05	0.0414	82.80	119	84	13	13	0.00	<0.005	0.005	0.05	0.045	90.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
CHROMIUM-FURN H	mg/L	JEC	0.05	0.0482	96.40	126	78	0.056	0.056	0.00	<0.005	0.005	0.05	0.056	112.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
ANTIMONY-FURN C	mg/L	JEC	0.05	0.0482	96.40	125	72	0.025	0.023	8.33	<0.02	0.02	0.05	0.055	110.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·vices

QUALITY ASSURANCE DA... REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/03/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	KHA	0.05	0.0532	106.40	120	72	0.047	0.048	2.11	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN P	mg/L	KHA	0.05	0.0428	85.60	120	72	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	112	86
SELENIUM-FURN P	mg/L	TAS	0.05	0.0532	106.40	117	84	0.05	0.049	2.02	<0.005	0.005	0.05	0.05	100.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.199	99.50	113	83	0.206	0.201	2.46	<0.01	0.01	0.2	0.206	103.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.91	91.00	122	86	0.931	0.933	0.21	<0.1	0.1	1	0.931	93.10	131	63
BARIUM-ICP	mg/L	JBC	10	9.41	94.10	113	85	9.54	9.48	0.63	<0.01	0.01	10	9.54	95.40	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.968	96.80	110	88	1	0.993	0.70	<0.01	0.01	1	1	100.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.56	95.60	112	88	10.2	10	1.98	<0.2	0.2	10	10	100.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.976	97.60	112	83	1.01	0.994	1.60	<0.01	0.01	1	1.01	101.00	115	73
COBALT-ICP	mg/L	JBC	1	0.965	96.50	111	88	1	0.987	1.31	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1.02	1	1.98	<0.02	0.02	1	1.02	102.00	113	80
COPPER-ICP	mg/L	JBC	1	0.972	97.20	111	88	1.02	1.02	0.00	<0.02	0.02	1	1	100.00	111	67
IRON-ICP	mg/L	JBC	1	0.927	92.70	113	90	0.934	0.92	1.51	<0.04	0.04	1	0.934	93.40	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.78	97.80	120	84	10.7	10.9	1.85	<1	1	10	10.7	107.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.51	95.10	109	87	10	9.81	1.92	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.948	94.80	112	89	0.973	0.961	1.24	<0.01	0.01	1	0.973	97.30	119	81
SODIUM-ICP	mg/L	JBC	10	9.35	93.50	112	87	10.2	10.3	0.98	<0.5	0.5	10	10	100.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.932	93.20	113	87	0.992	1.03	3.76	<0.04	0.04	1	0.98	98.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.01	101.00	119	80	1.05	1.08	2.82	<0.2	0.2	1	1.05	105.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.936	93.60	111	86	0.952	0.946	0.63	<0.01	0.01	1	0.95	95.00	115	75
ZINC-ICP	mg/L	JBC	1	0.966	96.60	112	89	1.02	1.02	0.00	<0.01	0.01	1	1.02	102.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	0.961	0.934	2.85	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.1	110.00	114	84	0.988	0.987	0.10	<0.1	0.1	1	0.95	95.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.987	0.981	0.61	<0.1	0.1	1	0.99	99.00	122	66
BORON-ICP	mg/L	JBC	1	0.921	92.10	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.97	97.00	125	75
MERCURY-G	mg/L	KHA	0.01	0.0103	103.00	121	77	0.01	0.011	9.52	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	KHA	0.01	0.0099	99.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.0498	99.60	120	80	0.052	0.051	1.94	<0.004	0.004	0.05	0.051	102.00	123	72
LEAD-FURNACE P	mg/L	JEC	0.05	0.0483	96.60	114	81	0.038	0.04	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE N	mg/L	JEC	0.05	0.048	96.00	114	81	0.037	0.037	0.00	<0.005	0.005	0.05	0.05	100.00	123	61
COPPER-FURNACE P	mg/L	JEC	0.05	0.0475	95.00	103	79	0.04	0.04	0.00	<0.005	0.005	0.05	0.04	80.00	117	64
CHROMIUM-FURN P	mg/L	JEC	0.05	0.0488	97.60	126	78	0.058	0.058	0.00	<0.005	0.005	0.05	0.058	116.00	133	61
CHROMIUM-FURN N	mg/L	JEC	0.05	0.0432	86.40	126	78	0.039	0.041	5.00	<0.005	0.005	0.05	0.041	82.00	133	61
ALKALINITY	mg/L	REB	100	88	88.00	112	80	400	420	4.88	<10	10	50	50.1	100.20	120	62
MBAS	mg/L	JWR	1	1.07	107.00	113	71	0.3	0.4	28.57	<0.1	0.1	1	1.05	105.00	142	57
CYANIDE	mg/L	JWR	0.4	0.394	98.50	119	94	0.24	0.25	4.08	<0.01	0.01	0.2	0.188	94.00	121	86
COD	mg/L	PJH	1000	885	88.50	137	61	880	1000	12.77	<5	5	500	589	117.80	125	66
TOC	mg/L	DIH	25	25.2	100.80	124	89	< 1	< 1	0.00	<1	1	25	24.6	98.40	136	72
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.14	0.14	0.00	<0.02	0.02	0.1	0.093	93.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental /ices

QUALITY ASSURANCE DAI.. REPORT

OHIO VALLEY LABORATORY Date: 09/26/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE F	mg/L	TAS	0.05	0.0516	103.20	120	80	0.049	0.049	0.00	<0.004	0.004	0.05	0.049	98.00	123	72
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.052	104.00	120	80	0.052	0.052	0.00	<0.004	0.004	0.05	0.052	104.00	123	72
LEAD-FURNACE M	mg/L	TAS	0.05	0.049	98.00	114	81	6.8	7.6	11.11	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE G	mg/L	TAS	0.05	0.0453	90.60	114	81	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	123	61
LEAD-FURNACE I	mg/L	TAS	0.05	0.0528	105.60	114	81	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	123	61
TOC	mg/L	REB	25	26.7	106.80	113	85	< 1	< 1	0.00	<1	1	25	26.7	106.80	115	63
PHOSPHORUS	mg/L	REB	2	1.99	99.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.494	98.80	125	75
BERYLLIUM-FURN G	mg/L	TAS	0.005	0.0051	102.00	121	76	0.0052	0.0049	5.94	<0.0005	0.0005	0.005	0.0049	98.00	116	72
THALLIUM-FURN G	mg/L	JEC	0.05	0.0506	101.20	120	72	0.04	0.048	18.18	<0.005	0.005	0.05	0.049	98.00	112	86
THALLIUM-FURN M	mg/L	JEC	0.05	0.0485	97.00	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.039	78.00	112	86
THALLIUM-FURN F	mg/L	JEC	0.05	0.042	84.00	120	72	0.05	0.055	9.52	<0.005	0.005	0.05	0.05	100.00	112	86
SELENIUM-FURN P	mg/L	JEC	0.05	0.0491	98.20	117	84	0.048	0.046	4.26	<0.004	0.004	0.05	0.048	96.00	130	69
SELENIUM-FURN M	mg/L	JEC	0.05	0.0462	92.40	117	84	0.7	0.6	15.38	<0.004	0.004	0.05	0.04	80.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.19	95.00	113	83	0.179	0.175	2.26	<0.01	0.01	0.2	0.179	89.50	112	76
IRON-ICP	mg/L	JBC	1	0.996	99.60	113	90	0.994	0.981	1.32	<0.04	0.04	1	0.99	99.00	111	87
SODIUM-ICP	mg/L	JBC	10	9.4	94.00	112	87	12	11.9	0.84	<0.5	0.5	10	9.4	94.00	128	58
ARSENIC-ICP	mg/L	JBC	1	1.03	103.00	123	76	1.09	1.05	3.74	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	1.05	1.07	1.89	<0.1	0.1	1	1.02	102.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.979	97.90	117	80	1.02	0.95	7.11	<0.1	0.1	1	1.02	102.00	122	66
TOX	mg/L	DIH	0.1	0.11	110.00	141	71	1.18	1.17	0.85	<0.02	0.02	0.1	0.07	70.00	146	56
SULFATE	mg/L	PJW	20	15.6	78.00	130	78	75	100	28.57	<2	2	10	12.8	128.00	127	85
MBAS	mg/L	JWR	1	1.09	109.00	113	71	52	53	1.90	<0.1	0.1	1	1.11	111.00	142	57
CYANIDE	mg/L	JWR	0.4	0.397	99.25	119	94	0.11	0.11	0.00	<0.01	0.01	0.2	0.193	96.50	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000001

EXT DATE: 09/23/94
TYPE: SEPFUNNEL
BLK FLNM: 4BK17439
QC FLNM: 4QC17440

SMPL NAM 09-472-01
FILE NAME 4MO17597
MS FLNM: -03 4MO17599
MSD FLNM -04 4MO17600

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	38	76	38	13-132	0	15	17	30	34	15	17	13
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	71	142	71	48-115	0	37	39	74	78	37	39	5
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	11	22	22	32-115	0	16	20	32	40	32	40	22
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	14	28	28	35-124	0	24	29	48	58	48	58	19
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	11	22	22	29- 98	0	18	20	36	40	36	40	11
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	88	176	88	45-117	0	39	38	78	76	39	38	3
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	17	34	34	43-117	0	28	32	56	64	56	64	13

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

000002

EXT DATE: 09/23/94 SMPL NAM 09-472-01
TYPE: SEPFUNNEL FILE NAME 4MO17597
BLK FLNM: 4BK17439 MS FLNM: -03 4MO17599
QC FLNM: 4QC17440 MSD FLNM -04 4MO17600

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	36	72	36	1- 148	0	24	17	48	34	24	17	34
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	12	24	24	34-110	0	19	22	38	44	38	44	-15
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	74	148	74	36-137	0	34	8	68	16	34	8	124
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	26	52	52	42-139	0	41	42	82	84	82	84	-2
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000003

RUN DATE: 09/30/94 BLK FLNM: 1BK03143
INSTRUMENT: HPMS1 LCS FLNM: 1QC03144
ANALYST(S): TLD SHIFT: AM

SMPL NAME: 09-472-02
FILE NAME: 1MO03153
MS FLNM: 1MO03154
MSD FLNM: 1MO03155

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.9	84.5	43-129	0-273								33
BROMOMETHANE	10	BQL	19.4	97.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	19.4	97.0	47-128	0-251								18
CHLOROETHANE	10	BQL	19.6	98.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.9	104.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	19.9	99.5	66-139	0-234	0.0	54.3	52.8	108.6	105.5	61 - 145	2.9	31
1,1-DICHLOROETHANE	5	BQL	20.5	102.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	19.2	96.0	77-127	54-156								31
CHLOROFORM	5	BQL	20.1	100.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	20.1	100.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.0	100.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	20.8	104.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.7	98.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.8	104.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.2	111.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.9	104.5	83-129	71-157	0.0	52.1	50.5	104.3	100.9	71 - 120	3.2	14
DIBROMOCHLOROMETHA	5	BQL	20.2	101.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	20.3	101.5	86-127	52-150								21
BENZENE	5	BQL	19.6	98.0	87-120	37-151	0.0	49.7	48.3	99.4	96.6	76 - 127	2.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	18.5	92.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.5	97.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.2	106.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.0	95.0	78-124	46-147								17
TOLUENE	5	BQL	19.9	99.5	86-115	47-150	0.0	48.6	47.3	97.3	94.6	76 - 125	2.8	14
CHLOROBENZENE	5	BQL	20.7	103.5	85-119	37-160	0.0	52.8	51.3	105.5	102.6	75 - 130	2.8	14
ETHYLBENZENE	5	BQL	19.6	98.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	20.0	100.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.5	102.5	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	20.0	100.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

000004

RUN DATE: 10/05/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39630
LCS FLNM: 2QC39631
SHIFT: AM

SMPL NAME: 10-014-01
FILE NAME: 2AS39635
MS FLNM: 2AS39636
MSD FLNM: 2AS39637

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	21.9	109.5	43-129	0-273								33
BROMOMETHANE	10	BQL	24.7	123.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	24.5	122.5	47-128	0-251								18
CHLOROETHANE	10	BQL	19.8	99.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	18.6	93.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	23.9	119.5	66-138	0-234	0.0	45.0	43.6	90.0	87.2	61 - 145	3.2	31
1,1-DICHLOROETHANE	5	BQL	20.3	101.5	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	20.1	100.5	77-127	54-156								31
CHLOROFORM	5	BQL	19.9	99.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	18.1	90.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	16.9	84.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.6	88.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.2	81.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.1	90.5	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.1	95.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	17.5	87.5	83-129	71-157	0.0	38.7	38.8	77.4	77.6	71 - 120	0.3	14
DIBROMOCHLOROMETHA	5	BQL	16.7	83.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	16.8	84.0	86-127	52-150								21
BENZENE	5	BQL	19.4	97.0	87-120	37-151	0.0	38.6	39.3	77.2	78.6	76 - 127	1.8	23
TRANS-1,3-DICHLOROPRO	5	BQL	15.6	78.0	48-108	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.2	91.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	17.3	86.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.3	91.5	78-124	46-147								17
TOLUENE	5	BQL	18.7	93.5	86-115	47-150	0.0	39.3	39.0	78.6	78.0	76 - 125	0.8	14
CHLOROBENZENE	5	BQL	16.9	84.5	85-119	37-160	0.0	42.1	39.2	84.2	78.4	76 - 130	7.1	14
ETHYLBENZENE	5	BQL	16.3	81.5	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	26.1	130.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.8	99.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	19.9	99.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	19.8	99.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

ROUX

CHAIN OF CUSTODY

№ 01921 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

ANALYSES — PAGE OF

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619.T03
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. ANDERSON, P. CHANG, J. VANDERVLIET

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCS BY 8240	BN/AC BY 8270	TOX	TOC	METALS	TOTAL BOTTLES	PRESERVATION
FIELD BLANK 4	9/22/94	1540	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
DUPLICATE	9/22/94	—	AQ	2	2	1	1	1	7	HCl, H_2SO_4, HNO_3, ice
MS	9/22/94	1520	AQ	2	2				4	HCl, H_2SO_4
MSD	9/22/94	1520	AQ	2	2				4	HCl, H_2SO_4
TRIP BLANK	9/16/94	—	AQ	2					2	HCl
	22	PB								

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Philip Chang	ROUX	9/22	1700	Y	Clifford Asher	Kemron	9/23/94	1725	Y
Clifford Asher	Kemron	9/22/94	2030	Y					
					Madhuri Bhaskar	Kemron	9/23/94	AM	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #'s 0009, ~~[illegible]~~ 0010, 0011, 0012

Samples stored in locked cooler overnight - CPA

KEMRON
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522885

Order #: N4-09-513
Date: December 1, 1994 13:15
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/23/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	WT-8A	02	WT-8B
03	WT-11A	04	WT-11B
05	WT-11C	06	WT-5B
07	WT-5A		

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **WT-8A** Collected: **09/22/94 19:35** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	6	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.10	0.02	mg/L Cl	10/05/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.13	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.039	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.09	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **02** **WT-8B** Collected: **09/22/94 20:10** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	5	1	mg/L	09/30/94	REB	415.1/90[illegible]
Total Organic Halides	0.04	0.02	mg/L Cl	10/05/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	0.025	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.76	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.12	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.16	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.19	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.12	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.55	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **03** **WT-11A** Collected: **09/22/94 21:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/05/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.09	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.015	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/747[illegible]
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/60[illegible]
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/774[illegible]
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.06	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **04** **WT-11B** Collected: **09/22/94 22:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.04	0.02	mg/L Cl	10/05/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	0.024	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.50	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.13	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.20	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.20	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	0.0003	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.19	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.76	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **05** **WT-11C** Collected: **09/22/94 22:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.15	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.008	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.03	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **06** **WT-5B** Collected: **09/23/94 08:50** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	5	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.06	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	0.004	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.10	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.11	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

SAMPLE ID: **07** **WT-5A** Collected: **09/23/94 10:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	3	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.05	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/18/94	JEC	204.2/7041
Arsenic, Total	0.004	0.004	mg/L As	10/06/94	TAS	206.2/7060
Barium, Total	0.13	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/10/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/16/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/12/94	TAS	279.2/7841
Zinc, Total	0.04	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/22/94 19:35**
Sample Description: **WT-8A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37108
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	6	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery	(76% - 114%)
Toluene-d8	107	% Recovery	(88% - 110%)
p-Bromofluorobenzene	93	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/22/94 19:35**
Sample Description: **WT-8A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030757
Instrument: FINN2 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/22/94 19:35**
Sample Description: **WT-8A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030757
Instrument: FINN2 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	42 % Recovery	(21% - 100%)
Phenol-d6	50 % Recovery	(10% - 94%)
Nitrobenzene-d5	*1 % Recovery	(35% - 114%)
2-Fluorobiphenyl	98 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	60 % Recovery	(10% - 123%)
p-Terphenyl-d14	80 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/22/94 20:10**
Sample Description: **WT-8B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37109
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102 % Recovery	(76% - 114%)
Toluene-d8	109 % Recovery	(88% - 110%)
p-Bromofluorobenzene	92 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/22/94 20:10**
Sample Description: **WT-8B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030158
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/22/94 20:10**
Sample Description: **WT-8B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030158
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	74 % Recovery	(21% - 100%)
Phenol-d6	74 % Recovery	(10% - 94%)
Nitrobenzene-d5	*2 % Recovery	(35% - 114%)
2-Fluorobiphenyl	97 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	74 % Recovery	(10% - 123%)
p-Terphenyl-d14	40 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/22/94 21:30**
Sample Description: **WT-11A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37110
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery	(76% - 114%)
Toluene-d8	109	% Recovery	(88% - 110%)
p-Bromofluorobenzene	93	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/22/94 22:00**
Sample Description: **WT-11B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37111
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103 % Recovery	(76% - 114%)
Toluene-d8	109 % Recovery	(88% - 110%)
p-Bromofluorobenzene	94 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/22/94 22:00**
Sample Description: **WT-11B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030759
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/22/94 22:00**
Sample Description: **WT-11B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030759
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	69 % Recovery	(21% - 100%)
Phenol-d6	70 % Recovery	(10% - 94%)
Nitrobenzene-d5	74 % Recovery	(35% - 114%)
2-Fluorobiphenyl	90 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	80 % Recovery	(10% - 123%)
p-Terphenyl-d14	54 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/22/94 22:05**
Sample Description: **WT-11C** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37112
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	105	% Recovery	(76% - 114%)
Toluene-d8	105	% Recovery	(88% - 110%)
p-Bromofluorobenzene	97	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/22/94 22:05**
Sample Description: **WT-11C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030760
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/22/94 22:05**
Sample Description: **WT-11C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030760
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	72 % Recovery	(21% - 100%)
Phenol-d6	72 % Recovery	(10% - 94%)
Nitrobenzene-d5	83 % Recovery	(35% - 114%)
2-Fluorobiphenyl	89 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	85 % Recovery	(10% - 123%)
p-Terphenyl-d14	32 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/23/94 08:50**
Sample Description: **WT-5B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37113
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	105 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	95 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/23/94 08:50**
Sample Description: **WT-5B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030761
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **06E** Collected: **09/23/94 08:50**
Sample Description: **WT-5B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030761
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	*4 % Recovery	(21% - 100%)
Phenol-d6	*7 % Recovery	(10% - 94%)
Nitrobenzene-d5	71 % Recovery	(35% - 114%)
2-Fluorobiphenyl	89 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	*6 % Recovery	(10% - 123%)
p-Terphenyl-d14	40 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference.

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/23/94 10:00**
Sample Description: **WT-5A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 3MO37114
Instrument: FINN3 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	106	% Recovery	(76% - 114%)
Toluene-d8	103	% Recovery	(88% - 110%)
p-Bromofluorobenzene	99	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/23/94 10:00**
Sample Description: **WT-5A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030762
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07E** Collected: **09/23/94 10:00**
Sample Description: **WT-5A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: JLH Extracted: 09/26/94 File #: 1M030762
Instrument: FINN1 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	*1 % Recovery	(21% - 100%)
Phenol-d6	*3 % Recovery	(10% - 94%)
Nitrobenzene-d5	70 % Recovery	(35% - 114%)
2-Fluorobiphenyl	96 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	*2 % Recovery	(10% - 123%)
p-Terphenyl-d14	35 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference.

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON
ENVIRONMENTAL SERVICES

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]es

QUALITY ASSURANCE DAIL. REPORT

OHIO VALLEY LABORATORY Date: 10/18/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
MERCURY	mg/L	JKM	0.01	0.011	110.00	122	82	0.011	0.011	0.00	<0.0002	0.0002	0.01	0.011	110.00	114	85
MOLYBDENUM-FURN	mg/L	JEC	0.05	0.0468	93.60	*	*	0.046	0.051	10.31	<0.005	0.005	0.05	0.048	96.00	125	75
THALLIUM-FURNACE	mg/L	JEC	0.05	0.0505	101.00	120	72	0.052	0.053	1.90	<0.005	0.005	0.05	0.052	104.00	112	86
ANTIMONY-FURNACE	mg/L	JEC	0.05	0.0533	106.60	125	72	0.055	0.055	0.00	<0.02	0.02	0.05	0.055	110.00	120	63
SELENIUM-FURNACE	mg/L	JEC	0.05	0.0521	104.20	118	81	< 0.2	< 0.2	0.00	<0.004	0.004	0.05	0.052	104.00	125	62
THALLIUM-FURN E	mg/L	JEC	0.05	0.047	94.00	120	72	< 0.005	< 0.005	0.00	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN B	mg/L	JEC	0.05	0.0477	95.40	120	72	0.48	0.47	2.11	<0.005	0.005	0.05	0.06	120.00	112	86
THALLIUM-FURN R	mg/L	JEC	0.05	0.0504	100.80	120	72	0.049	0.05	2.02	<0.005	0.005	0.05	0.05	100.00	112	86
PHOSPHORUS	mg/L	REB	2	1.98	99.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.468	93.60	117	58
AMMONIA	mg/L	REB	2	1.93	96.50	115	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	76
TKN	mg/L	REB	1	0.988	98.80	132	67	0.6	0.6	0.00	<0.1	0.1	0.5	0.426	85.20	145	75
BORON	mg/L	REB	1	0.711	71.10	125	75	22	26	16.67	<0.1	0.1	0.5	0.337	67.40	125	75
CYANIDE	mg/L	JWR	0.4	0.392	98.00	119	94	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.208	104.00	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ices

QUALITY ASSURANCE DA.. REPORT

OHIO VALLEY LABORATORY Date: 10/16/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0526	105.20	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.0437	87.40	125	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0456	91.20	114	81	0.05	0.049	2.02	<0.005	0.005	0.05	0.0495	99.00	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.055	110.00	124	76	0.057	0.058	1.74	<0.004	0.004	0.05	0.0535	107.00	126	68
TOC	mg/L	DIH	25	26.3	105.20	124	89	< 1	< 1	0.00	<1	1	25	25.8	103.20	136	72
THALLIUM-FURNACE	mg/L	TAS	0.05	0.0491	98.20	120	72	0.048	0.049	2.06	<0.005	0.005	0.05	0.048	96.00	112	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]ces

QUALITY ASSURANCE DA[illegible]EPORT

OHIO VALLEY LABORATORY Date: 10/12/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN I	mg/L	TAS	0.05	0.0474	94.80	120	72	0.051	0.052	1.94	<0.005	0.005	0.05	0.051	102.00	112	86
THALLIUM-FURN C	mg/L	TAS	0.05	0.053	106.00	120	72	0.046	0.048	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
SELENIUM-FURN I	mg/L	TAS	0.05	0.053	106.00	118	81	0.053	0.056	5.50	<0.005	0.005	0.05	0.053	106.00	125	62
TOX	mg/L	RJS	0.1	0.107	107.00	133	55	0.052	0.052	0.00	<0.02	0.02	0.1	0.097	97.00	148	64
THALLIUM-FURN L	mg/L	TAS	0.05	0.0434	86.80	120	72	0.038	0.04	5.13	<0.005	0.005	0.05	0.05	100.00	112	86
THALLIUM-FURN G	mg/L	TAS	0.05	0.0466	93.20	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
ARSENIC-FURNACE E	mg/L	TAS	0.05	0.0539	107.80	124	76	0.047	0.042	11.24	<0.004	0.004	0.05	0.047	94.00	126	68
ARSENIC-FURNACE G	mg/L	TAS	0.05	0.0527	105.40	124	76	< 0.2	< 0.2	0.00	<0.004	0.004	0.05	0.054	108.00	126	68
LEAD-FURNACE L	mg/L	TAS	0.05	0.0461	92.20	114	81	0.044	0.042	4.65	<0.005	0.005	0.05	0.044	88.00	123	61
SELENIUM-FURN E	mg/L	JKM	0.05	0.0501	100.20	118	81	0.045	0.044	2.25	<0.004	0.004	0.05	0.045	90.00	125	62
SELENIUM-FURN L	mg/L	JKM	0.05	0.0513	102.60	118	81	0.033	0.033	0.00	<0.004	0.004	0.05	0.033	66.00	125	62
PHENOL	mg/L	REB	0.5	0.519	103.80	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TIN_ICP	mg/L	JBC	10	9.67	96.70	109	83	9.4	9.5	1.06	<0.5	0.5	10	9.4	94.00	114	72
MBAS	mg/L	PJH	1	0.819	81.90	113	71	0.1	< 0.1	0.00	<0.1	0.1	1	0.989	98.90	142	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S· ·ices

QUALITY ASSURANCE DAI. :PORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP	mg/L	JBC	0.2	0.187	93.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]es

QUALITY ASSURANCE DAIL[illegible]PORT

OHIO VALLEY LABORATORY Date: 10/06/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
COPPER-FURNACE B	mg/L	SPL	0.05	0.0553	110.60	103	79	8.7	9.1	4.49	<0.005	0.005	0.05	0.037	74.00	117	64
COPPER-FURNACE H	mg/L	SPL	0.05	0.0471	94.20	103	79	0.043	0.038	12.35	<0.005	0.005	0.05	0.043	86.00	117	64
TDS	mg/L	MZL	500	504	100.80	106	84	3300	3400	2.99	14	10	500	500	100.00	132	67
MBAS	mg/L	JWR	1	1.05	105.00	113	71	22	25	12.77	<0.1	0.1	1	1.05	105.00	142	57
LEAD-FURNACE N	mg/L	TAS	0.05	0.046	92.00	119	84	0.041	0.041	0.00	<0.005	0.005	0.05	0.041	82.00	117	67
ARSENIC-FURNACE I	mg/L	TAS	0.05	0.0505	101.00	120	80	< 0.004	< 0.004	0.00	<0.004	0.004	0.05	0.048	96.00	123	72
BERYLLIUM-FURN B	mg/L	SPL	0.005	0.005	100.00	116	81	0.23	0.21	9.09	<0.0005	0.0005	0.005	0.0061	122.00	148	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0458	91.60	114	81	0.047	0.045	4.35	<0.005	0.005	0.05	0.05	100.00	123	61
OIL & GREASE	mg/L	PJH	10	8.7	87.00	137	74	8.7	8.5	2.33	<1	1	10	8.5	85.00	154.	67
TOC	mg/L	DIH	25	25.7	102.80	124	89	21	20	4.88	<1	1	25	25.2	100.80	136	72
PHENOL	mg/L	REB	0.5	0.526	105.20	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.509	101.80	118	96
SILVER-ICP	mg/L	JBC	0.2	0.23	115.00	113	83	< 2	< 2	0.00	<0.01	0.01	0.2	0.185	92.50	112	76
BARIUM-ICP	mg/L	JBC	10	9.85	98.50	113	85	10.1	10.1	0.00	<0.01	0.01	10	10.1	101.00	112	74
CALCIUM-ICP	mg/L	JBC	10	10.2	102.00	112	88	56.4	55.8	1.07	<0.2	0.2	10	8	80.00	123	75
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	1.02	0.999	2.08	<0.01	0.01	1	1.02	102.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.04	104.00	114	88	1.04	1.03	0.97	<0.02	0.02	1	1.03	103.00	113	80
COPPER-ICP	mg/L	JBC	1	0.992	99.20	111	88	2.1	2.05	2.41	<0.02	0.02	1	1.06	106.00	111	67
IRON-ICP	mg/L	JBC	1	1.02	102.00	113	90	2.62	2.6	0.77	<0.04	0.04	1	0.92	92.00	111	87
ZINC-ICP	mg/L	JBC	1	1.09	109.00	114	87	0.369	0.36	2.47	<0.01	0.01	1	0.98	98.00	114	80
ARSENIC-ICP	mg/L	JBC	1	0.937	93.70	123	76	0.983	0.985	0.20	<0.1	0.1	1	0.98	98.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	1.25	1.25	0.00	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.03	103.00	117	80	0.964	0.999	3.57	<0.1	0.1	1	0.91	91.00	122	66
BOD	mg/L	PJH	200	193	96.50	124	77	128	130	1.55	<3	3	200	195	97.50	133	71
TOX	mg/L	RJS	0.1	0.09	90.00	133	55	< 0.02	< 0.02	0.00	<0.02	0.02	0.1	0.09	90.00	148	64
TSS	mg/L	MZL	50	43	86.00	124	65	< 5	< 5	0.00	<5	5	50	49	98.00	130	60
CHLORIDE	mg/L	DIH	50	51.1	102.20	115	94	29	26	10.91	<2	2	25	25.9	103.60	120	86
ALUMINUM-ICP	mg/L	JBC	1	1.11	111.00	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	131	63
ANTIMONY-ICP	mg/L	JBC	1	1.08	108.00	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.96	96.00	120	71
COBALT-ICP	mg/L	JBC	1	1.08	108.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.94	94.00	111	80
MAGNESIUM-ICP	mg/L	JBC	10	10.6	106.00	109	87	5.5	5.5	0.00	<0.5	0.5	10	10.1	101.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.07	107.00	112	89	0.029	0.029	0.00	<0.01	0.01	1	0.87	87.00	119	81
NICKEL-ICP	mg/L	JBC	1	1.07	107.00	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.95	95.00	113	76
VANADIUM-ICP	mg/L	JBC	1	1.06	106.00	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.93	93.00	115	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ' ices

QUALITY ASSURANCE DAIL. .EPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]ces

QUALITY ASSURANCE DAI[illegible]PORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/29/94 BLK FLNM: 3BK37101
INSTRUMENT: FINN3 LCS FLNM: 3QC37102
ANALYST(S): SLM SHIFT: AM

SMPL NAME: 09-598-03
FILE NAME: 3AA37104
MS FLNM: 3AA37105
MSD FLNM: 3AA37106

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	17.7	88.3	43-129	0-273								33
BROMOMETHANE	10	BQL	18.9	94.4	62-115	0-242								22
VINYL CHLORIDE	10	BQL	20.3	101.3	47-128	0-251								18
CHLOROETHANE	10	BQL	20.8	103.8	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	24.9	124.3	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	20.0	100.0	66-138	0-234	0.0	37.0	37.4	73.9	74.8	61 - 145	1.2	31
1,1-DICHLOROETHANE	5	BQL	23.4	117.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	22.4	112.1	77-127	54-156								31
CHLOROFORM	5	BQL	23.6	117.8	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	21.0	105.0	87-119	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	24.4	121.8	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	23.6	118.2	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	22.1	110.6	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	23.8	118.8	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	25.4	127.2	80-148	0-227								40
TRICHLOROETHENE	5	BQL	23.4	117.1	83-129	71-157	0.0	48.3	47.6	96.6	95.1	71 - 120	1.5	14
DIBROMOCHLOROMETHA	5	BQL	23.8	118.9	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	23.7	118.4	86-127	52-150								21
BENZENE	5	BQL	23.8	119.1	87-120	37-151	0.0	54.0	52.5	108.0	105.0	76 - 127	2.9	23
TRANS-1,3-DICHLOROPRO	5	BQL	19.8	99.1	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	28.2	141.1	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL-2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	22.1	110.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	22.8	114.2	78-124	46-147								17
TOLUENE	5	BQL	21.3	106.4	86-115	47-150	0.0	45.1	44.8	90.2	89.6	76 - 125	0.8	14
CHLOROBENZENE	5	BQL	22.7	113.7	85-119	37-160	0.0	53.1	51.3	106.2	102.6	76 - 130	3.4	14
ETHYLBENZENE	5	BQL	29.3	146.7	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	19.4	97.2	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	23.0	115.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	22.5	112.3	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	23.9	119.4	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 9/26/94 SMPL NAM 09-473-01
TYPE: CONTINUOUS FILE NAME 1CY30644
BLK FLNM: 1BK30631 MS FLNM: 1CY30645
QC FLNM: 1QC30632 MSD FLNM 1CY30646

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	62	124	62	13-132	0	62	72	124	144	62	72	15
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	71	142	71	48-115	0	66	75	132	150	66	75	13
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	31	62	62	32-115	0	29	31	58	62	58	62	7
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	42	84	84	35-124	0	38	41	76	82	76	82	8
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	32	64	64	29- 98	0	29	31	58	62	58	62	7
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	73	146	73	45-117	0	68	75	136	150	68	75	10
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	43	86	86	43-117	0	41	44	82	88	82	88	7

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 9/26/94 SMPL NAM 09-473-01
TYPE: CONTINUOUS FILE NAME 1CY30644
BLK FLNM: 1BK30631 MS FLNM: 1CY30645
QC FLNM: 1QC30632 MSD FLNM 1CY30646

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	53	106	53	1- 148	0	66	77	132	154	66	77	15
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	27	54	54	34-110	0	27	27	54	54	54	54	0
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	83	166	83	36-137	0	61	80	122	160	61	80	27
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	53	106	106	42-139	0	34	37	68	74	68	74	-8
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL) PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01914 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619503
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BNA/AC BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZOFURAN	TOTAL BOTTLES	PRESERVATION
WT-8A	9/22/94	1935	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-8B	9/22/94	2010	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11A	9/22/94	2130	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11B	9/22/94	2200	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11C	9/22/94	2205	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-5B	9/23/94	850	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-5A	9/23/94	1000	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-3	9/23/94	1040	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-13A	9/23/94	1130	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
MS	9/23/94	1145	AQ	2	2					4	HCl, H_2SO_4, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Philip Chang	ROUX	9/23	1700	Y	Clifford Asher	Kemron	9/23/94	1735	Y
Clifford Asher	Kemron	9/23/94	1940	Y					
					[illegible]		9/26	3:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: MS + MSD TAKEN AT WT-13A

CUSTODY SEALS # 0013, 0014, 0015, 0016, 0017, 0018, 0019
* Samples stored in locked cooler overnight CPA

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522886

Order #: N4-09-514
Date: December 2, 1994 12:09
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/23/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	TD-3	02	WT-13A
03	MS	04	MSD
05	MW-11A	06	MW-11B

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/02/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Leslie Bucina

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **TD-3** Collected: **09/23/94 10:40** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	30	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.66	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.28	0.01	mg/L Ba	10/10/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/10/94	JBC	200.7/6010
Cadmium, Total	0.03	0.01	mg/L Cd	10/10/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/10/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.006	0.005	mg/L Pb	10/05/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/13/94	TAS	245.1/7470
Nickel, Total	0.20	0.04	mg/L Ni	10/10/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/10/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.24	0.01	mg/L Zn	10/10/94	JBC	200.7/6010

SAMPLE ID: **02** **WT-13A** Collected: **09/23/94 11:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	12	1	mg/L	09/30/94	REB	415.1/90
Total Organic Halides	1.3	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.16	0.01	mg/L Ba	10/10/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/10/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/15/94	JBC	200.7/6010
Chromium, Total	0.04	0.02	mg/L Cr	10/10/94	JBC	200.7/6010
Copper, Total	0.07	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.008	0.005	mg/L Pb	10/05/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/13/94	TAS	245.1/7470
Nickel, Total	0.17	0.04	mg/L Ni	10/10/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/10/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	1.1	0.01	mg/L Zn	10/10/94	JBC	200.7/6010

SAMPLE ID: **05** **MW-11A** Collected: **09/23/94 15:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.008	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.06	0.01	mg/L Ba	10/10/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/10/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/10/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/10/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.012	0.005	mg/L Pb	10/05/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/13/94	TAS	245.1/74
Nickel, Total	0.07	0.04	mg/L Ni	10/10/94	JBC	200.7/60
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/10/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.13	0.01	mg/L Zn	10/10/94	JBC	200.7/6010

SAMPLE ID: **06** **MW-11B** Collected: **09/23/94 15:20** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	14	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.04	0.01	mg/L Ba	10/10/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/10/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/10/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/10/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.005	0.005	mg/L Pb	10/05/94	JEC	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/13/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/10/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/10/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.12	0.01	mg/L Zn	10/10/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/23/94 10:40**
Sample Description: **TD-3** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39567
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	10	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	7	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	41	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	990	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	
107-13-1	Acrylonitrile	ND	
75-71-8	Dichlorodifluoromethane	ND	
75-69-4	Trichlorofluoromethane	ND	
630-20-6	1,1,1,2-Tetrachloroethane	ND	

SURROGATES:

1,2-Dichloroethane-d4	89 % Recovery	(76% - 114%)
Toluene-d8	98 % Recovery	(88% - 110%)
p-Bromofluorobenzene	97 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 10:40**
Sample Description: **TD-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17760
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	35	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	17	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 10:40**
Sample Description: **TD-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17760
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	2 *	% Recovery (21% - 100%)
Phenol-d6	6 *	% Recovery (10% - 94%)
Nitrobenzene-d5	77	% Recovery (35% - 114%)
2-Fluorobiphenyl	86	% Recovery (43% - 116%)
2,4,6-Tribromophenol	2 *	% Recovery (10% - 123%)
p-Terphenyl-d14	20 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/23/94 11:30**
Sample Description: **WT-13A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39568
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	610	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	11	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	17	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	98 % Recovery	(76% - 114%)
Toluene-d8	109 % Recovery	(88% - 110%)
p-Bromofluorobenzene	111 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 11:30**
Sample Description: **WT-13A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17761
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	55	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 11:30**
Sample Description: **WT-13A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17761
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	1 *	% Recovery (21% - 100%)
Phenol-d6	5 *	% Recovery (10% - 94%)
Nitrobenzene-d5	83	% Recovery (35% - 114%)
2-Fluorobiphenyl	92	% Recovery (43% - 116%)
2,4,6-Tribromophenol	4 *	% Recovery (10% - 123%)
p-Terphenyl-d14	15 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03A** Collected: **09/23/94 11:45**
Sample Description: **MS** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39569
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	88	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	234	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	93	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	92	5
108-90-7	Chlorobenzene	76	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	108 % Recovery	(76% - 114%)
Toluene-d8	107 % Recovery	(88% - 110%)
p-Bromofluorobenzene	106 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY. DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED

Test Code: **M8270** Lab No: **03B** Collected: **09/23/94 11:45**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17762
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	7	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	5	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	40	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	60	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	44	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	22	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	62	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	82	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	52	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	12	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	54	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03B** Collected: **09/23/94 11:45**
Sample Description: **MS** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17762
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	3 *	% Recovery (21% - 100%)
Phenol-d6	8 *	% Recovery (10% - 94%)
Nitrobenzene-d5	80	% Recovery (35% - 114%)
2-Fluorobiphenyl	90	% Recovery (43% - 116%)
2,4,6-Tribromophenol	6 *	% Recovery (10% - 123%)
p-Terphenyl-d14	25 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04A** Collected: **09/23/94 11:45**
Sample Description: **MSD** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39584
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	83	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	372	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	92	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	96	5
108-90-7	Chlorobenzene	77	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109 % Recovery	(76% - 114%)
Toluene-d8	110 % Recovery	(88% - 110%)
p-Bromofluorobenzene	107 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD
DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO %
LEVELS REPORTED

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04B** Collected: **09/23/94 11:45**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17763
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	13	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	14	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	44	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	66	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	48	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	17	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	62	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	79	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	50	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	12	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	52	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04B** Collected: **09/23/94 11:45**
Sample Description: **MSD** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/28/94 File #: 4MO17763
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: % ** Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	12 *	% Recovery (21% - 100%)
Phenol-d6	14	% Recovery (10% - 94%)
Nitrobenzene-d5	86	% Recovery (35% - 114%)
2-Fluorobiphenyl	97	% Recovery (43% - 116%)
2,4,6-Tribromophenol	9 *	% Recovery (10% - 123%)
p-Terphenyl-d14	18 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE
** = REPORTED RESULTS ARE FOR SPIKE COMPOUNDS ONLY.
DETECTION LIMITS ARE IN UG/L AND DO NOT APPLY TO % LEVELS REPORTED

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/23/94 15:00**
Sample Description: **MW-11A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39571
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	107 % Recovery	(76% - 114%)
Toluene-d8	103 % Recovery	(88% - 110%)
p-Bromofluorobenzene	115 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/23/94 15:00**
Sample Description: **MW-11A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17770
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	38	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **05E** Collected: **09/23/94 15:00**
Sample Description: **MW-11A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17770
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	54 % Recovery	(21% - 100%)
Phenol-d6	62 % Recovery	(10% - 94%)
Nitrobenzene-d5	88 % Recovery	(35% - 114%)
2-Fluorobiphenyl	91 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	51 % Recovery	(10% - 123%)
p-Terphenyl-d14	44 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

1

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/23/94 15:20**
Sample Description: **MW-11B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39572
Instrument: FINN2 Injected: 09/29/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	110	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	17	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	111	% Recovery	(76% - 114%)
Toluene-d8	95	% Recovery	(88% - 110%)
p-Bromofluorobenzene	105	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/23/94 15:20**
Sample Description: **MW-11B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17771
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	11	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **06E** Collected: **09/23/94 15:20**
Sample Description: **MW-11B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17771
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	20 *	% Recovery (21% - 100%)
Phenol-d6	29	% Recovery (10% - 94%)
Nitrobenzene-d5	89	% Recovery (35% - 114%)
2-Fluorobiphenyl	89	% Recovery (43% - 116%)
2,4,6-Tribromophenol	51	% Recovery (10% - 123%)
p-Terphenyl-d14	87	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

SW-8280 - Dioxins and Furans

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmental [illegible]es

QUALITY ASSURANCE DAIL[illegible] REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP Q	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP Q	mg/L	JBC	0.2	0.215	107.50	113	83	< 2	< 2	0.00	<0.01	0.01	0.2	0.169	84.50	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66
COD	mg/L	PJH	1000	877	87.70	103	82	570	530	7.27	<5	5	50	50.3	100.60	128	75
CONDUCTIVITY	uS/cm	AJS	1413	1650	116.77	107	95	3700	3800	2.67	<1	1	---	---	---	125	75
CYANIDE	mg/L	JWR	0.4	0.407	101.75	119	94	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.211	105.50	121	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S ices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/17/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	46.5	93.00	115	94	100	85	16.22	<2	2	50	40.7	81.40	120	86
CONDUCTIVITY	uS/cm	AJS	1413	1480	104.74	107	95	4700	4800	2.11	<1	1	---	---	---	125	75
COD	mg/L	PJH	1000	874	87.40	137	61	3000	3000	0.00	<5	5	500	432	86.40	125	66
TOC	mg/L	DIH	25	25.5	102.00	124	89	15	15	0.00	<0.5	0.5	25	24.9	99.60	136	72
LEAD-FURNACE R	mg/L	KHA	0.05	0.0501	100.20	114	81	0.046	0.047	2.15	<0.005	0.005	0.05	0.0465	93.00	123	61
LEAD-FURNACE T	mg/L	KHA	0.05	0.0488	97.60	114	81	20	17	16.22	<0.005	0.005	0.05	0.0442	88.40	123	61
TSS	mg/L	ALC	50	40	80.00	129	60	57	56	1.77	<5	5	50	41	82.00	132	67
PHOSPHORUS	mg/L	PJH	1	1.08	108.00	125	75	570	590	3.45	<0.05	0.05	0.5	0.304	60.80	125	75
ARSENIC-FURNACE R	mg/L	JEC	0.05	0.052	104.00	124	76	0.051	0.051	0.00	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE T	mg/L	JEC	0.05	0.053	106.00	124	76	3.1	3.4	9.23	<0.004	0.004	0.05	0.049	98.00	126	68
AMMONIA	mg/L	REB	2	1.93	96.50	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.978	97.80	142	76
SELENIUM-FURNACE	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
CADMIUM-ICP	mg/L	JBC	1	1.04	104.00	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.99	99.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.06	106.00	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.98	98.00	113	80
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
LEAD-ICP	mg/L	JBC	1	1.13	113.00	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.06	106.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.95	95.00	122	66
ANTIMONY-FURN U	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
SELENIUM-FURN U	mg/L	JEC	0.05	0.0576	115.20	118	81	0.049	0.052	5.94	<0.004	0.004	0.05	0.049	98.00	125	62
LEAD-FURNACE	mg/L	JEC	0.05	0.05	100.00	119	84	0.048	0.05	4.08	<0.005	0.005	0.05	0.048	96.00	117	67
SILVER-ICP	mg/L	JBC	0.2	0.226	113.00	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.07	107.00	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.98	98.00	131	63
BARIUM-ICP	mg/L	JBC	10	10.3	103.00	113	85	1.1	1.2	8.70	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	112	79
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	43	44	2.30	<0.2	0.2	10	8.5	85.00	123	75
COBALT-ICP	mg/L	JBC	1	1.05	105.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	80
COPPER-ICP	mg/L	JBC	1	1.03	103.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	0.92	0.94	2.15	<0.04	0.04	1	0.96	96.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	11.4	114.00	120	84	4	4.3	7.23	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.2	102.00	109	87	19	20	5.13	<0.5	0.5	10	8.3	83.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.09	0.1	10.53	<0.01	0.01	1	0.78	78.00	119	81
SODIUM-ICP	mg/L	JBC	10	11	110.00	112	87	120	110	8.70	<0.5	0.5	10	8.1	81.00	129	58
NICKEL-ICP	mg/L	JBC	1	1.04	104.00	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	1	100.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.14	114.00	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.94	94.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1	100.00	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	115	75
ZINC-ICP	mg/L	JBC	1	1.06	106.00	112	89	0.4	0.37	7.79	<0.01	0.01	1	0.98	98.00	122	71
MOLYBDENUM-ICP	mg/L	JBC	1	0.997	99.70	113	88	0.81	0.81	0.00	<0.1	0.1	1	0.8	80.00	116	87

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]s

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/16/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0526	105.20	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.0437	87.40	125	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0456	91.20	114	81	0.05	0.049	2.02	<0.005	0.005	0.05	0.0495	99.00	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.055	110.00	124	76	0.057	0.058	1.74	<0.004	0.004	0.05	0.0535	107.00	126	68
TOC	mg/L	DIH	25	26.3	105.20	124	89	< 1	< 1	0.00	<1	1	25	25.8	103.20	136	72
THALLIUM-FURNACE	mg/L	TAS	0.05	0.0491	98.20	120	72	0.048	0.049	2.06	<0.005	0.005	0.05	0.048	96.00	112	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·ices

QUALITY ASSURANCE DAIL. ..EPORT

OHIO VALLEY LABORATORY Date: 10/14/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	50.4	100.80	115	94	58	57	1.74	<2	2	25	25.4	101.60	120	86
LEAD-FURNACE	mg/L	JKM	0.05	0.0499	99.98	114	81	0.043	0.044	2.30	<0.005	0.005	0.05	0.0429	85.80	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.058	116.00	124	76	0.0054	0.0057	5.41	<0.004	0.004	0.05	0.0524	104.80	126	68
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0533	106.60	118	81	0.0562	0.0559	0.54	<0.004	0.004	0.05	0.0562	112.40	125	62
MERCURY	mg/L	TAS	0.01	0.0109	109.00	122	82	0.0113	0.0111	1.79	<0.0002	0.0002	0.01	0.0113	113.00	114	85
OIL & GREASE	mg/L	ALC	10	11	110.00	137	74	8.2	11	29.17	<1	1	10	8.2	82.00	154	67
PHENOL	mg/L	AJS	0.5	0.511	102.20	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.44	88.00	118	96

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]ces

QUALITY ASSURANCE DAI[illegible] REPORT

OHIO VALLEY LABORATORY Date: 10/13/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE L	mg/L	KHA	0.05	0.048	96.00	124	76	0.051	0.052	1.94	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0489	97.80	124	76	0.041	0.044	7.06	<0.004	0.004	0.05	0.044	88.00	126	68
ARSENIC-FURNACE A	mg/L	KHA	0.05	0.0461	92.20	124	76	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	126	68
LEAD-FURNACE	mg/L	TAS	0.05	0.0534	106.80	114	81	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	123	61
TKN	mg/L	REB	1	0.793	79.30	131	67	5.2	5.7	9.17	<0.1	0.1	0.5	0.75	150.00	145	57
CHROMIUM-ICP	mg/L	JBC	1	0.999	99.90	114	87	0.82	0.85	3.59	<0.02	0.02	1	0.81	81.00	111	85
SILVER-ICP	mg/L	JBC	0.2	0.204	102.00	113	93	0.18	0.19	5.41	<0.01	0.01	0.2	0.17	85.00	112	76
BARIUM-ICP	mg/L	JBC	10	10.5	105.00	113	85	8.6	9.1	5.65	<0.01	0.01	10	8.5	85.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.02	102.00	112	83	0.91	0.96	5.35	<0.01	0.01	1	0.91	91.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
ARSENIC-ICP	mg/L	JBC	1	1.06	106.00	123	76	0.9	0.97	7.49	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	0.92	0.98	6.32	<0.1	0.1	1	0.9	90.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.03	103.00	117	80	0.91	0.9	1.10	<0.1	0.1	1	0.91	91.00	122	66
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0534	106.80	118	81	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	125	62
TDS	mg/L	DIH	500	476	95.20	106	84	7200	7200	0.00	<10	10	500	524	104.80	132	67
BOD	mg/L	PJH	200	150	75.00	124	77	< 3	< 3	0.00	<3	3	200	156	78.00	133	71
TOC	mg/L	DIH	25	27.7	110.80	124	89	28	28	0.00	<1	1	25	28.2	112.80	136	72
ANTIMONY-FURNACE	mg/L	KHA	0.05	0.0485	97.00	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.031	62.00	120	63
BERYLLIUM-FURN L	mg/L	TAS	0.005	0.0047	94.00	116	81	0.0062	0.0062	0.00	<0.0005	0.0005	0.005	0.0062	124.00	148	62
PHOSPHORUS	mg/L	REB	2	2.09	104.50	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.422	84.40	117	58
TSS	mg/L	MZL	50	38	76.00	124	65	< 5	< 5	0.00	<5	5	50	47	94.00	130	60
BORON-ICP	mg/L	JBC	1	0.947	94.70	*	*	1.23	1.25	1.61	<0.5	0.5	1	0.95	95.00	125	75
LEAD-FURNACE	mg/L	KHA	0.05	0.0476	95.20	119	84	< 0.5	< 0.5	0.00	<0.005	0.005	0.05	0.051	102.00	117	67
CADMIUM-FURNACE	mg/L	JKM	0.005	0.0048	96.00	125	73	0.0049	0.0053	7.84	<0.0005	0.0005	0.005	0.0049	98.00	115	74
MERCURY	mg/L	TAS	0.01	0.0095	95.00	122	82	0.3	0.3	0.00	<0.0002	0.0002	0.01	0.011	110.00	114	85
ALUMINUM-ICP	mg/L	JBC	1	0.977	97.70	112	86	0.89	0.96	7.57	<0.1	0.1	1	0.81	81.00	131	63
BERYLLIUM-ICP	mg/L	JBC	1	1.01	101.00	110	88	0.87	0.93	6.67	<0.01	0.01	1	0.87	87.00	112	79
COBALT-ICP	mg/L	JBC	1	0.998	99.80	111	88	0.9	0.94	4.35	<0.02	0.02	1	0.9	90.00	111	80
COPPER-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	2.4	2.4	0.00	<0.04	0.04	1	1.1	110.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.4	104.00	120	84	10	11	9.52	<1	1	10	8.5	85.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.58	95.80	109	87	27	29	7.14	<0.5	0.5	10	8.9	89.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	1	1.1	9.52	<0.01	0.01	1	0.94	94.00	119	81
SODIUM-ICP	mg/L	JBC	10	10.2	102.00	112	87	13	15	14.29	<0.5	0.5	10	8.9	89.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.991	99.10	113	87	0.89	0.93	4.40	<0.04	0.04	1	0.88	88.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.03	103.00	119	80	0.91	0.91	0.00	<0.2	0.2	1	0.81	81.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1.03	103.00	111	86	0.85	0.91	6.82	<0.01	0.01	1	0.85	85.00	115	75
ZINC-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.91	0.96	5.35	<0.01	0.01	1	0.9	90.00	122	71
CALCIUM-ICP	mg/L	JBC	10	10.2	102.00	112	88	88	92	4.44	<0.2	0.2	10	9.7	97.00	123	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·ices

QUALITY ASSURANCE DAIL, REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP	mg/L	JBC	0.2	0.187	93.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66
COD	mg/L	PJH	1000	877	87.70	103	82	570	530	7.27	<5	5	50	50.3	100.60	128	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]es

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64
SULFATE	mg/L	JWR	20	18.6	93.00	130	78	730	650	11.59	<2	2	10	10.3	103.00	127	85

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/29/94 BLK FLNM: 2BK39561
INSTRUMENT: FINN2 LCS FLNM: 2BK39562
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-514-02
FILE NAME: 2MO39568
MS FLNM: 2MO39569
MSD FLNM: 2MO39570

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	14.8	74.0	43-129	0-273								33
BROMOMETHANE	10	BQL	12.5	62.5	62-115	0-242								22
VINYL CHLORIDE	10	BQL	18.7	93.5	47-128	0-251								18
CHLOROETHANE	10	BQL	12.7	63.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	19.2	96.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.3	86.5	66-138	0-234	0.0	43.9	41.4	87.8	82.8	61 - 145	5.9	31
1,1-DICHLOROETHANE	5	BQL	17.4	87.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	17.9	89.5	77-127	54-156								31
CHLOROFORM	5	BQL	17.7	88.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	15.6	78.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	17.9	89.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.2	86.0	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	17.0	85.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.0	90.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	18.2	91.0	80-146	0-227								40
TRICHLOROETHENE	5	BQL	19.5	97.5	83-129	71-157	689.0	806.0	875.0	234.0	372.0	71 - 120	45.5	14
DIBROMOCHLOROMETHA	5	BQL	15.7	78.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	17.4	87.0	86-127	52-150								21
BENZENE	5	BQL	18.2	91.0	87-120	37-151	0.0	46.3	45.8	92.6	91.6	76 - 127	1.1	23
TRANS-1,3-DICHLOROPRO	5	BQL	13.5	67.5	46-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.5	92.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.6	93.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.8	84.0	76-124	46-147								17
TOLUENE	5	BQL	19.5	97.5	88-115	47-150	0.0	45.9	47.8	91.8	95.6	76 - 125	4.1	14
CHLOROBENZENE	5	BQL	18.6	93.0	85-119	37-160	10.6	48.6	48.8	76.1	76.5	75 - 130	0.5	14
ETHYLBENZENE	5	BQL	20.1	100.5	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	16.0	80.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.2	106.0	78-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	20.1	100.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.3	106.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94 SMPL NAM 09-514-02
TYPE: CONTINUOUS FILE NAME 4MO17761
BLK FLNM: 4BK17758 MS FLNM: -03 4MO17762
QC FLNM: 4QC17759 MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	61	122	61	13-132	0	7	13	14	26	7	13	60
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	61	122	61	48-115	0	5	14	10	28	5	14	95
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	24	48	48	32-115	0	20	22	40	44	40	44	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	37	74	74	35-124	0	30	33	60	66	60	66	10
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	27	54	54	29- 98	0	22	24	44	48	44	48	9
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	66	132	66	45-117	0	22	17	44	34	22	17	26
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	40	80	80	43-117	0	31	31	62	62	62	62	0

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94 SMPL NAM 09-514-02
TYPE: CONTINUOUS FILE NAME 4MO17761
BLK FLNM: 4BK17758 MS FLNM: -03 4MO17762
QC FLNM: 4QC17759 MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	58	116	58	1- 148	0	82	79	164	158	82	79	4
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	26	52	52	34-110	0	26	25	52	50	52	50	4
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	58	116	58	36-137	0	12	12	24	24	12	12	0
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	46	92	92	42-139	0	27	26	54	52	54	52	4
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

SUBCONTRACTED RESULTS

Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-514-01
Lab ID: 077895-0001-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.504 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.97	
2,3,7,8-TCDF	ND	ng/L	0.97	
PeCDFs (total)	ND	ng/L	1.0	
1,2,3,7,8-PeCDF	ND	ng/L	1.0	
2,3,4,7,8-PeCDF	ND	ng/L	1.0	
HxCDFs (total)	ND	ng/L	1.6	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.6	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.6	
HpCDFs (total)	ND	ng/L	1.3	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.3	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.3	
OCDF	ND	ng/L	3.2	
Dioxins				
TCDDs (total)	ND	ng/L	0.55	
2,3,7,8-TCDD	ND	ng/L	0.55	
PeCDDs (total)	ND	ng/L	3.2	
1,2,3,7,8-PeCDD	ND	ng/L	3.2	
HxCDDs (total)	ND	ng/L	1.9	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.9	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.9	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.9	
HpCDDs (total)	ND	ng/L	1.2	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	1.2	
OCDD	ND	ng/L	1.9	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby
Approved By: Robert Hrabak

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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-514-01
Lab ID: 077895-0001-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.504 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	91
13C-2,3,7,8-TCDD	99
13C-1,2,3,7,8-PeCDD	107
13C-1,2,3,6,7,8-HxCDD	91
13C-1,2,3,4,6,7,8-HpCDD	85
13C-OCDD	68

ND = Not detected
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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-514-02
Lab ID: 077895-0002-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.500 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.88	
2,3,7,8-TCDF	ND	ng/L	0.88	
PeCDFs (total)	ND	ng/L	0.74	
1,2,3,7,8-PeCDF	ND	ng/L	0.74	
2,3,4,7,8-PeCDF	ND	ng/L	0.74	
HxCDFs (total)	ND	ng/L	0.94	
1,2,3,4,7,8-HxCDF	ND	ng/L	0.94	
1,2,3,6,7,8-HxCDF	ND	ng/L	0.94	
2,3,4,6,7,8-HxCDF	ND	ng/L	0.94	
1,2,3,7,8,9-HxCDF	ND	ng/L	0.94	
HpCDFs (total)	ND	ng/L	1.3	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.3	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.3	
OCDF	ND	ng/L	2.9	
Dioxins				
TCDDs (total)	ND	ng/L	0.36	
2,3,7,8-TCDD	ND	ng/L	0.36	
PeCDDs (total)	ND	ng/L	2.9	
1,2,3,7,8-PeCDD	ND	ng/L	2.9	
HxCDDs (total)	ND	ng/L	1.2	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.2	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.2	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.2	
HpCDDs (total)	ND	ng/L	1.8	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	1.8	
OCDD	ND	ng/L	1.3	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-514-02
Lab ID: 077895-0002-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.500 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	91
13C-2,3,7,8-TCDD	101
13C-1,2,3,7,8-PeCDD	111
13C-1,2,3,6,7,8-HxCDD	110
13C-1,2,3,4,6,7,8-HpCDD	109
13C-OCDD	100

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby

Approved By: Robert Hrabak

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: Method Blank
Lab ID: 077895-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 1.0 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.41	
2,3,7,8-TCDF	ND	ng/L	0.41	
PeCDFs (total)	ND	ng/L	0.41	
1,2,3,7,8-PeCDF	ND	ng/L	0.41	
2,3,4,7,8-PeCDF	ND	ng/L	0.41	
HxCDFs (total)	ND	ng/L	0.42	
1,2,3,4,7,8-HxCDF	ND	ng/L	0.42	
1,2,3,6,7,8-HxCDF	ND	ng/L	0.42	
2,3,4,6,7,8-HxCDF	ND	ng/L	0.42	
1,2,3,7,8,9-HxCDF	ND	ng/L	0.42	
HpCDFs (total)	ND	ng/L	0.37	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	0.37	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	0.37	
OCDF	ND	ng/L	2.2	
Dioxins				
TCDDs (total)	ND	ng/L	0.23	
2,3,7,8-TCDD	ND	ng/L	0.23	
PeCDDs (total)	ND	ng/L	0.95	
1,2,3,7,8-PeCDD	ND	ng/L	0.95	
HxCDDs (total)	ND	ng/L	0.44	
1,2,3,4,7,8-HxCDD	ND	ng/L	0.44	
1,2,3,6,7,8-HxCDD	ND	ng/L	0.44	
1,2,3,7,8,9-HxCDD	ND	ng/L	0.44	
HpCDDs (total)	ND	ng/L	0.65	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	0.65	
OCDD	ND	ng/L	0.49	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: Method Blank
Lab ID: 077895-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 1.0 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	99
13C-2,3,7,8-TCDD	109
13C-1,2,3,7,8-PeCDD	115
13C-1,2,3,6,7,8-HxCDD	111
13C-1,2,3,4,6,7,8-HpCDD	110
13C-OCDD	100

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

ROUX

CHAIN OF CUSTODY

№ 01914 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619J03
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BNA/AC BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZOFURAN	TOTAL BOTTLES	PRESERVATION
WT-8A	9/22/94	1935	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-8B	9/22/94	2010	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11A	9/22/94	2130	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11B	9/22/94	2200	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-11C	9/22/94	2205	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-5B	9/23/94	850	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-5A	9/23/94	1000	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-3	9/23/94	1040	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-13A	9/23/94	1130	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
MS	9/23/94	1145	AQ	2	2					4	HCl, H_2SO_4, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Philip Chang (SAMPLER'S)	ROUX	9/23	1700	Y	Clifford Asher	Kemron	9/23/94	1735	Y
Clifford Asher	Kemron	9/23/94	1940	Y					
					Angelina R. Brown	Kemron	9/26	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: MS + MSD TAKEN AT WT-13A

CUSTODY SEALS # 0013, 0014, 0015, 0016, 0017, 0018, 0019

* Samples stored in locked cooler overnight (CPA)

ROUX

CHAIN OF CUSTODY

№ 01915 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619J03
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZO FURAN	TOTAL BOTTLES	PRESERVATION
MSD	9/23/94	1145	AQ	2	2					4	HCl, H_2SO_4, ice
MW-11A	9/23/94	1500	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
MW-11B	9/23/94	1520	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TB-1	9/23/94	1625	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TB-3	9/23/94	1625	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-5	9/23/94	1630	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
DUPLICATE	9/23/94	1645	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
FIELD BLANK 5	9/23/94	1600	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TRIP BLANK	9/19/94	—	AQ	2						2	HCl, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Phil Chang	ROUX	9/23	1700	Y	Clifford Aber	Kemron	9/23/94	1735	Y
Clifford Aber	Kemron	9/23/94	1740	Y					
					Angelina R. Brown Kemron		9/26	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: MS + MSD TAKEN AT WT-13A
CUSTODY SEALS # 0013, 0014, 0015, 0016, 0017, 0018, 0019

* Samples stored in locked cooler overnight - [illegible]

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522887

Order #: N4-09-515
Date: December 2, 1994 16:37
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/23/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	TB-1	02	TB-3
03	TD-5	04	DUPLICATE
05	FIELD BLANK 5	06	TRIP BLANK

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/02/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Leslie Bucina

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **TB-1** Collected: **09/23/94 16:25** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	29	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.43	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/17/94	JEC	206.2/7060
Barium, Total	0.35	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	0.28	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.09	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.051	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	0.0007	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/13/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.08	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **02** **TB-3** Collected: **09/23/94 16:25** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	11	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.25	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/704
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	1.9	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	0.08	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.022	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.38	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/13/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.66	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **03** **TD-5** Collected: **09/23/94 16:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	20	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.57	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.005	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.11	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.013	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.07	0.04	mg/L Ni	10/05/94	JBC	200.7/601
Selenium, Total	<0.004	0.004	mg/L Se	10/13/94	TAS	270.2/774
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.41	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **04** **DUPLICATE** Collected: **09/23/94 16:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	21	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.54	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.006	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.54	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.017	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.07	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/13/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.37	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **05** **FIELD BLANK 5** Collected: **09/23/94 16:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/06/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/13/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/23/94 16:25**
Sample Description: **TB-1** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39585
Instrument: FINN2 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	6	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	78	% Recovery	(76% - 114%)
Toluene-d8	104	% Recovery	(88% - 110%)
p-Bromofluorobenzene	113	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 16:25**
Sample Description: **TB-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017772
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 16:25**
Sample Description: **TB-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017772
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	12* % Recovery	(21% - 100%)
Phenol-d6	30 % Recovery	(10% - 94%)
Nitrobenzene-d5	85 % Recovery	(35% - 114%)
2-Fluorobiphenyl	91 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	9* % Recovery	(10% - 123%)
p-Terphenyl-d14	26* % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/23/94 16:25**
Sample Description: **TB-3** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39599
Instrument: FINN2 Injected: 10/03/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	31	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	60	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	50	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	87 % Recovery	(76% - 114%)
Toluene-d8	103 % Recovery	(88% - 110%)
p-Bromofluorobenzene	98 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 16:25**
Sample Description: **TB-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017773
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 16:25**
Sample Description: **TB-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017773
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	3* % Recovery	(21% - 100%)
Phenol-d6	12 % Recovery	(10% - 94%)
Nitrobenzene-d5	88 % Recovery	(35% - 114%)
2-Fluorobiphenyl	89 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	5* % Recovery	(10% - 123%)
p-Terphenyl-d14	23* % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/23/94 16:30**
Sample Description: **TD-5** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39600
Instrument: FINN2 Injected: 10/03/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	7	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	9	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	6	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	97 % Recovery	(76% - 114%)
Toluene-d8	105 % Recovery	(88% - 110%)
p-Bromofluorobenzene	98 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/23/94 16:30**
Sample Description: **TD-5** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017774
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/23/94 16:30**
Sample Description: **TD-5** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017774
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	4*	% Recovery (21% - 100%)
Phenol-d6	7*	% Recovery (10% - 94%)
Nitrobenzene-d5	89	% Recovery (35% - 114%)
2-Fluorobiphenyl	91	% Recovery (43% - 116%)
2,4,6-Tribromophenol	5*	% Recovery (10% - 123%)
p-Terphenyl-d14	32*	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/23/94 16:45**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39588
Instrument: FINN2 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	7	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	8	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	6	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	84	% Recovery	(76% - 114%)
Toluene-d8	103	% Recovery	(88% - 110%)
p-Bromofluorobenzene	98	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/23/94 16:45**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017775
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **04E** Collected: **09/23/94 16:45**
Sample Description: **DUPLICATE** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017775
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	38 % Recovery	(21% - 100%)
Phenol-d6	38 % Recovery	(10% - 94%)
Nitrobenzene-d5	107 % Recovery	(35% - 114%)
2-Fluorobiphenyl	100 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	21 % Recovery	(10% - 123%)
p-Terphenyl-d14	19* % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
*Sample matrix interference

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/23/94 16:00**
Sample Description: **FIELD BLANK 5** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39589
Instrument: FINN2 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	89 % Recovery	(76% - 114%)
Toluene-d8	93 % Recovery	(88% - 110%)
p-Bromofluorobenzene	88 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/23/94 16:00**
Sample Description: **FIELD BLANK 5** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017776
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **05E** Collected: **09/23/94 16:00**
Sample Description: **FIELD BLANK 5** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4M017776
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: BAW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	92 % Recovery	(21% - 100%)
Phenol-d6	91 % Recovery	(10% - 94%)
Nitrobenzene-d5	93 % Recovery	(35% - 114%)
2-Fluorobiphenyl	89 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	86 % Recovery	(10% - 123%)
p-Terphenyl-d14	105 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06A** Collected: **09/23/94**
Sample Description: **TRIP BLANK** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39590
Instrument: FINN2 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	Cis-1,2-dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102 % Recovery	(76% - 114%)
Toluene-d8	104 % Recovery	(88% - 110%)
p-Bromofluorobenzene	109 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

SW-8280 - Dioxins and Furans

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/17/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	46.5	93.00	115	94	100	85	16.22	<2	2	50	40.7	81.40	120	86
CONDUCTIVITY	uS/cm	AJS	1413	1480	104.74	107	95	4700	4800	2.11	<1	1	---	---	---	125	75
COD	mg/L	PJH	1000	874	87.40	137	61	3000	3000	0.00	<5	5	500	432	86.40	125	66
TOC	mg/L	DIH	25	25.5	102.00	124	89	15	15	0.00	<0.5	0.5	25	24.9	99.60	136	72
LEAD-FURNACE R	mg/L	KHA	0.05	0.0501	100.20	114	81	0.046	0.047	2.15	<0.005	0.005	0.05	0.0465	93.00	123	61
LEAD-FURNACE T	mg/L	KHA	0.05	0.0488	97.60	114	81	20	17	16.22	<0.005	0.005	0.05	0.0442	88.40	123	61
TSS	mg/L	ALC	50	40	80.00	129	60	57	56	1.77	<5	5	50	41	82.00	132	67
PHOSPHORUS	mg/L	PJH	1	1.08	108.00	125	75	570	590	3.45	<0.05	0.05	0.5	0.304	60.80	125	75
ARSENIC-FURNACE R	mg/L	JEC	0.05	0.052	104.00	124	76	0.051	0.051	0.00	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE T	mg/L	JEC	0.05	0.053	106.00	124	76	3.1	3.4	9.23	<0.004	0.004	0.05	0.049	98.00	126	68
AMMONIA	mg/L	REB	2	1.93	96.50	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.978	97.80	142	76
SELENIUM-FURNACE	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
CADMIUM-ICP	mg/L	JBC	1	1.04	104.00	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.99	99.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.06	106.00	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.98	98.00	113	80
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
LEAD-ICP	mg/L	JBC	1	1.13	113.00	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.06	106.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.95	95.00	122	66
ANTIMONY-FURN U	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
SELENIUM-FURN U	mg/L	JEC	0.05	0.0576	115.20	118	81	0.049	0.052	5.94	<0.004	0.004	0.05	0.049	98.00	125	62
LEAD-FURNACE	mg/L	JEC	0.05	0.05	100.00	119	84	0.048	0.05	4.08	<0.005	0.005	0.05	0.048	96.00	117	67
SILVER-ICP	mg/L	JBC	0.2	0.226	113.00	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.07	107.00	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.98	98.00	131	63
BARIUM-ICP	mg/L	JBC	10	10.3	103.00	113	85	1.1	1.2	8.70	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	112	79
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	43	44	2.30	<0.2	0.2	10	8.5	85.00	123	75
COBALT-ICP	mg/L	JBC	1	1.05	105.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	80
COPPER-ICP	mg/L	JBC	1	1.03	103.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	0.92	0.94	2.15	<0.04	0.04	1	0.96	96.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	11.4	114.00	120	84	4	4.3	7.23	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.2	102.00	109	87	19	20	5.13	<0.5	0.5	10	8.3	83.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.09	0.1	10.53	<0.01	0.01	1	0.78	78.00	119	81
SODIUM-ICP	mg/L	JBC	10	11	110.00	112	87	120	110	8.70	<0.5	0.5	10	8.1	81.00	129	58
NICKEL-ICP	mg/L	JBC	1	1.04	104.00	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	1	100.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.14	114.00	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.94	94.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1	100.00	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	115	75
ZINC-ICP	mg/L	JBC	1	1.06	106.00	112	89	0.4	0.37	7.79	<0.01	0.01	1	0.98	98.00	122	71
MOLYBDENUM-ICP	mg/L	JBC	1	0.997	99.70	113	88	0.81	0.81	0.00	<0.1	0.1	1	0.8	80.00	116	87

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/16/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0526	105.20	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.0437	87.40	125	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0456	91.20	114	81	0.05	0.049	2.02	<0.005	0.005	0.05	0.0495	99.00	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.055	110.00	124	76	0.057	0.058	1.74	<0.004	0.004	0.05	0.0535	107.00	126	68
TOC	mg/L	DIH	25	26.3	105.20	124	89	< 1	< 1	0.00	<1	1	25	25.8	103.20	136	72
THALLIUM-FURNACE	mg/L	TAS	0.05	0.0491	98.20	120	72	0.048	0.049	2.06	<0.005	0.005	0.05	0.048	96.00	112	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/13/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE L	mg/L	KHA	0.05	0.048	96.00	124	76	0.051	0.052	1.94	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0489	97.80	124	76	0.041	0.044	7.06	<0.004	0.004	0.05	0.044	88.00	126	68
ARSENIC-FURNACE A	mg/L	KHA	0.05	0.0461	92.20	124	76	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	126	68
LEAD-FURNACE	mg/L	TAS	0.05	0.0534	106.80	114	81	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	123	61
TKN	mg/L	REB	1	0.793	79.30	131	67	5.2	5.7	9.17	<0.1	0.1	0.5	0.75	150.00	145	57
CHROMIUM-ICP	mg/L	JBC	1	0.999	99.90	114	87	0.82	0.85	3.59	<0.02	0.02	1	0.81	81.00	111	85
SILVER-ICP	mg/L	JBC	0.2	0.204	102.00	113	93	0.18	0.19	5.41	<0.01	0.01	0.2	0.17	85.00	112	76
BARIUM-ICP	mg/L	JBC	10	10.5	105.00	113	85	8.6	9.1	5.65	<0.01	0.01	10	8.5	85.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.02	102.00	112	83	0.91	0.96	5.35	<0.01	0.01	1	0.91	91.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
ARSENIC-ICP	mg/L	JBC	1	1.06	106.00	123	76	0.9	0.97	7.49	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	0.92	0.98	6.32	<0.1	0.1	1	0.9	90.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.03	103.00	117	80	0.91	0.9	1.10	<0.1	0.1	1	0.91	91.00	122	66
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0534	106.80	118	81	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	125	62
TDS	mg/L	DIH	500	476	95.20	106	84	7200	7200	0.00	<10	10	500	524	104.80	132	67
BOD	mg/L	PJH	200	150	75.00	124	77	< 3	< 3	0.00	<3	3	200	156	78.00	133	71
TOC	mg/L	DIH	25	27.7	110.80	124	89	28	28	0.00	<1	1	25	28.2	112.80	136	72
ANTIMONY-FURNACE	mg/L	KHA	0.05	0.0485	97.00	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.031	62.00	120	63
BERYLLIUM-FURN L	mg/L	TAS	0.005	0.0047	94.00	116	81	0.0062	0.0062	0.00	<0.0005	0.0005	0.005	0.0062	124.00	148	62
PHOSPHORUS	mg/L	REB	2	2.09	104.50	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.422	84.40	117	58
TSS	mg/L	MZL	50	38	76.00	124	65	< 5	< 5	0.00	<5	5	50	47	94.00	130	60
BORON-ICP	mg/L	JBC	1	0.947	94.70	*	*	1.23	1.25	1.61	<0.5	0.5	1	0.95	95.00	125	75
LEAD-FURNACE	mg/L	KHA	0.05	0.0476	95.20	119	84	< 0.5	< 0.5	0.00	<0.005	0.005	0.05	0.051	102.00	117	67
CADMIUM-FURNACE	mg/L	JKM	0.005	0.0048	96.00	125	73	0.0049	0.0053	7.84	<0.0005	0.0005	0.005	0.0049	98.00	115	74
MERCURY	mg/L	TAS	0.01	0.0095	95.00	122	82	0.3	0.3	0.00	<0.0002	0.0002	0.01	0.011	110.00	114	85
ALUMINUM-ICP	mg/L	JBC	1	0.977	97.70	112	86	0.89	0.96	7.57	<0.1	0.1	1	0.81	81.00	131	63
BERYLLIUM-ICP	mg/L	JBC	1	1.01	101.00	110	88	0.87	0.93	6.67	<0.01	0.01	1	0.87	87.00	112	79
COBALT-ICP	mg/L	JBC	1	0.998	99.80	111	88	0.9	0.94	4.35	<0.02	0.02	1	0.9	90.00	111	80
COPPER-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	2.4	2.4	0.00	<0.04	0.04	1	1.1	110.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.4	104.00	120	84	10	11	9.52	<1	1	10	8.5	85.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.58	95.80	109	87	27	29	7.14	<0.5	0.5	10	8.9	89.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	1	1.1	9.52	<0.01	0.01	1	0.94	94.00	119	81
SODIUM-ICP	mg/L	JBC	10	10.2	102.00	112	87	13	15	14.29	<0.5	0.5	10	8.9	89.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.991	99.10	113	87	0.89	0.93	4.40	<0.04	0.04	1	0.88	88.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.03	103.00	119	80	0.91	0.91	0.00	<0.2	0.2	1	0.81	81.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1.03	103.00	111	86	0.85	0.91	6.82	<0.01	0.01	1	0.85	85.00	115	75
ZINC-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.91	0.96	5.35	<0.01	0.01	1	0.9	90.00	122	71
CALCIUM-ICP	mg/L	JBC	10	10.2	102.00	112	88	88	92	4.44	<0.2	0.2	10	9.7	97.00	123	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta[illegible]vices

QUALITY ASSURANCE D[illegible]Y REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

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RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ·ices

QUALITY ASSURANCE DAI.. REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63
SILICON-ICP	mg/L	JBC	10	10.4	104.00	*	*	16.4	17.2	4.76	<1	1	10	10.7	107.00	125	75

UCLx = Upper Control Limit (Standard)
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UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64
SULFATE	mg/L	JWR	20	18.6	93.00	130	78	730	650	11.59	<2	2	10	10.3	103.00	127	85

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Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/30/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39578
LCS FLNM: 2QC39579
SHIFT: AM

SMPL NAME: 09-514-02
FILE NAME: 2MO39581
MS FLNM: 2MO39582
MSD FLNM: 2MO39584

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	18.8	94.0	43-129	0-273								33
BROMOMETHANE	10	BQL	11.6	58.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	20.9	104.5	47-128	0-251								18
CHLOROETHANE	10	BQL	11.9	59.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.7	103.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	16.9	84.5	66-138	0-234	0.0	40.2	45.7	80.4	91.4	61 - 145	12.8	31
1,1-DICHLOROETHANE	5	BQL	17.4	87.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	17.9	89.5	77-127	54-156								31
CHLOROFORM	5	BQL	19.7	98.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	16.0	80.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	16.9	84.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	16.7	83.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	18.1	90.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.2	91.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	18.7	93.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	18.4	92.0	83-129	71-157	64.0	104.9	51.3	81.8	-25.4	71 - 120	380.1	14
DIBROMOCHLOROMETHA	5	BQL	17.9	89.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	18.6	93.0	86-127	52-150								21
BENZENE	5	BQL	18.6	93.0	87-120	37-151	0.0	41.9	50.9	83.8	101.8	76 - 127	19.4	23
TRANS-1,3-DICHLOROPRO	5	BQL	18.0	90.0	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.2	91.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	18.2	91.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.6	83.0	76-124	46-147								17
TOLUENE	5	BQL	17.6	88.0	86-115	47-150	0.0	39.4	21.8	78.8	43.6	76 - 125	57.5	14
CHLOROBENZENE	5	BQL	17.6	88.0	85-119	37-160	0.0	44.1	45.9	88.2	91.8	75 - 130	4.0	14
ETHYLBENZENE	5	BQL	17.2	86.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	16.0	80.0	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.7	103.5	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	21.3	106.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.4	107.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 10/03/94 BLK FLNM: 2BK39594
INSTRUMENT: FINN2 LCS FLNM: 2QC39595
ANALYST(S): PNW SHIFT: AM

SMPL NAME: 09-514-02
FILE NAME: 2MO39596
MS FLNM: 2MO39597
MSD FLNM: 2MO39598

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	14.8	74.0	43-129	0-273								33
BROMOMETHANE	10	BQL	19.2	96.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	23.5	117.5	47-128	0-251								18
CHLOROETHANE	10	BQL	14.7	73.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	22.0	110.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	22.3	111.5	66-139	0-234	0.0	38.2	39.5	76.4	79.0	61 - 145	3.3	31
1,1-DICHLOROETHANE	5	BQL	19.4	97.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	22.3	111.5	77-127	54-156								31
CHLOROFORM	5	BQL	18.3	91.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	15.8	79.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	16.7	83.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.1	85.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.8	84.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.6	93.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.7	98.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	17.4	87.0	83-129	71-157	61.1	110.7	104.3	99.2	86.4	71 - 120	13.8	14
DIBROMOCHLOROMETHA	5	BQL	18.0	90.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	17.1	85.5	86-127	52-150								21
BENZENE	5	BQL	18.5	92.5	87-120	37-151	0.0	40.5	38.4	81.0	76.8	76 - 127	5.3	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.7	83.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.7	98.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	17.6	88.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.5	82.5	78-124	46-147								17
TOLUENE	5	BQL	16.7	83.5	86-115	47-150	0.0	44.9	38.3	89.8	76.6	76 - 125	15.9	14
CHLOROBENZENE	5	BQL	17.3	86.5	85-119	37-160	0.0	46.3	40.7	92.6	81.4	75 - 130	12.9	14
ETHYLBENZENE	5	BQL	16.4	82.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.7	113.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.2	106.0	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	21.4	107.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.5	107.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 10/03/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39601
LCS FLNM: 2QC39595
SHIFT: AM

SMPL NAME: 09-514-02
FILE NAME: 2MO39596
MS FLNM: 2MO39597
MSD FLNM: 2MO39598

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	14.8	74.0	43-129	0-273								33
BROMOMETHANE	10	BQL	19.2	96.0	62-115	0-242								22
VINYL CHLORIDE	10	BQL	23.5	117.5	47-128	0-251								18
CHLOROETHANE	10	BQL	14.7	73.5	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	22.0	110.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	22.3	111.5	66-138	0-234	0.0	38.2	39.5	76.4	79.0	61 - 145	3.3	31
1,1-DICHLOROETHANE	5	BQL	19.4	97.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	22.3	111.5	77-127	54-156								31
CHLOROFORM	5	BQL	18.3	91.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	15.8	79.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	16.7	83.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	17.1	85.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	16.8	84.0	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	18.6	93.0	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.7	98.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	17.4	87.0	83-129	71-157	61.1	110.7	104.3	99.2	86.4	71 - 120	13.8	14
DIBROMOCHLOROMETHA	5	BQL	18.0	90.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	17.1	85.5	86-127	52-150								21
BENZENE	5	BQL	18.5	92.5	87-120	37-151	0.0	40.5	38.4	81.0	76.8	76 - 127	5.3	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.7	83.5	46-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	19.7	98.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	17.6	88.0	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	16.5	82.5	78-124	46-147								17
TOLUENE	5	BQL	16.7	83.5	86-115	47-150	0.0	44.9	38.3	89.8	76.6	76 - 125	15.9	14
CHLOROBENZENE	5	BQL	17.3	86.5	85-119	37-160	0.0	46.3	40.7	92.6	81.4	75 - 130	12.9	14
ETHYLBENZENE	5	BQL	16.4	82.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.7	113.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.2	106.0	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	21.4	107.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.5	107.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94 SMPL NAM 09-514-02
TYPE: CONTINUOUS FILE NAME 4MO17761
BLK FLNM: 4BK17758 MS FLNM: -03 4MO17762
QC FLNM: 4QC17759 MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	61	122	61	13-132	0	7	13	14	26	7	13	60
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	61	122	61	48-115	0	5	14	10	28	5	14	95
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	24	48	48	32-115	0	20	22	40	44	40	44	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	37	74	74	35-124	0	30	33	60	66	60	66	10
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	27	54	54	29- 98	0	22	24	44	48	44	48	9
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	66	132	66	45-117	0	22	17	44	34	22	17	26
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	40	80	80	43-117	0	31	31	62	62	62	62	0

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94
TYPE: CONTINUOUS
BLK FLNM: 4BK17758
QC FLNM: 4QC17759

SMPL NAM 09-514-02
FILE NAME 4MO17761
MS FLNM: -03 4MO17762
MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	58	116	58	1- 148	0	82	79	164	158	82	79	4
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	26	52	52	34-110	0	26	25	52	50	52	50	4
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	58	116	58	36-137	0	12	12	24	24	12	12	0
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	46	92	92	42-139	0	27	26	54	52	54	52	4
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

SUBCONTRACTED RESULTS

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-01
Lab ID: 077895-0003-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.512 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.69	
2,3,7,8-TCDF	ND	ng/L	0.69	
PeCDFs (total)	ND	ng/L	0.68	
1,2,3,7,8-PeCDF	ND	ng/L	0.68	
2,3,4,7,8-PeCDF	ND	ng/L	0.68	
HxCDFs (total)	ND	ng/L	0.74	
1,2,3,4,7,8-HxCDF	ND	ng/L	0.74	
1,2,3,6,7,8-HxCDF	ND	ng/L	0.74	
2,3,4,6,7,8-HxCDF	ND	ng/L	0.74	
1,2,3,7,8,9-HxCDF	ND	ng/L	0.74	
HpCDFs (total)	ND	ng/L	1.0	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.0	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.0	
OCDF	ND	ng/L	4.9	
Dioxins				
TCDDs (total)	ND	ng/L	0.39	
2,3,7,8-TCDD	ND	ng/L	0.39	
PeCDDs (total)	ND	ng/L	1.6	
1,2,3,7,8-PeCDD	ND	ng/L	1.6	
HxCDDs (total)	ND	ng/L	1.1	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.1	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.1	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.1	
HpCDDs (total)	ND	ng/L	0.92	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	0.92	
OCDD	ND	ng/L	1.4	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-01
Lab ID: 077895-0003-SA
Matrix: AQUEOUS
Sampled: Unknown
Received: 27 SEP 94
Authorized: 27 SEP 94
Prepared: 03 OCT 94
Analyzed: 05 OCT 94

Sample Amount 0.512 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	82
13C-2,3,7,8-TCDD	91
13C-1,2,3,7,8-PeCDD	101
13C-1,2,3,6,7,8-HxCDD	96
13C-1,2,3,4,6,7,8-HpCDD	95
13C-OCDD	76

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby
Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-02
Lab ID: 077895-0004-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.97	
2,3,7,8-TCDF	ND	ng/L	0.97	
PeCDFs (total)	ND	ng/L	1.2	
1,2,3,7,8-PeCDF	ND	ng/L	1.2	
2,3,4,7,8-PeCDF	ND	ng/L	1.2	
HxCDFs (total)	ND	ng/L	1.2	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.2	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.2	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.2	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.2	
HpCDFs (total)	ND	ng/L	1.7	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.7	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.7	
OCDF	ND	ng/L	5.7	
Dioxins				
TCDDs (total)	ND	ng/L	0.60	
2,3,7,8-TCDD	ND	ng/L	0.60	
PeCDDs (total)	ND	ng/L	3.5	
1,2,3,7,8-PeCDD	ND	ng/L	3.5	
HxCDDs (total)	ND	ng/L	1.8	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.8	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.8	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.8	
HpCDDs (total)	ND	ng/L	1.2	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	1.2	
OCDD	ND	ng/L	2.2	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

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Rev 230787

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-02
Lab ID: 077895-0004-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	91
13C-2,3,7,8-TCDD	95
13C-1,2,3,7,8-PeCDD	105
13C-1,2,3,6,7,8-HxCDD	106
13C-1,2,3,4,6,7,8-HpCDD	105
13C-OCDD	84

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-03
Lab ID: 077895-0005-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.504 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.97	
2,3,7,8-TCDF	ND	ng/L	0.97	
PeCDFs (total)	ND	ng/L	0.99	
1,2,3,7,8-PeCDF	ND	ng/L	0.99	
2,3,4,7,8-PeCDF	ND	ng/L	0.99	
HxCDFs (total)	ND	ng/L	1.1	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.1	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.1	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.1	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.1	
HpCDFs (total)	ND	ng/L	1.6	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.6	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.6	
OCDF	ND	ng/L	3.5	
Dioxins				
TCDDs (total)	ND	ng/L	0.42	
2,3,7,8-TCDD	ND	ng/L	0.42	
PeCDDs (total)	ND	ng/L	2.6	
1,2,3,7,8-PeCDD	ND	ng/L	2.6	
HxCDDs (total)	ND	ng/L	1.2	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.2	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.2	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.2	
HpCDDs (total)	ND	ng/L	1.7	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	1.7	
OCDD	ND	ng/L	1.7	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-03
Lab ID: 077895-0005-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.504 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	87
13C-2,3,7,8-TCDD	101
13C-1,2,3,7,8-PeCDD	108
13C-1,2,3,6,7,8-HxCDD	107
13C-1,2,3,4,6,7,8-HpCDD	110
13C-OCDD	93

ND = Not detected
NA = Not applicable

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Approved By: Robert Hrabak

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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-04
Lab ID: 077895-0006-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.89	
2,3,7,8-TCDF	ND	ng/L	0.89	
PeCDFs (total)	ND	ng/L	0.90	
1,2,3,7,8-PeCDF	ND	ng/L	0.90	
2,3,4,7,8-PeCDF	ND	ng/L	0.90	
HxCDFs (total)	ND	ng/L	1.1	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.1	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.1	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.1	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.1	
HpCDFs (total)	ND	ng/L	1.2	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.2	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.2	
OCDF	ND	ng/L	3.7	
Dioxins				
TCDDs (total)	ND	ng/L	0.52	
2,3,7,8-TCDD	ND	ng/L	0.52	
PeCDDs (total)	ND	ng/L	4.1	
1,2,3,7,8-PeCDD	ND	ng/L	4.1	
HxCDDs (total)	ND	ng/L	1.6	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.6	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.6	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.6	
HpCDDs (total)	ND	ng/L	0.84	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	0.84	
OCDD	ND	ng/L	1.4	

(continued on following page)

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-04
Lab ID: 077895-0006-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	84
13C-2,3,7,8-TCDD	86
13C-1,2,3,7,8-PeCDD	102
13C-1,2,3,6,7,8-HxCDD	102
13C-1,2,3,4,6,7,8-HpCDD	105
13C-OCDD	91

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-05
Lab ID: 077895-0007-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.499 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.92	
2,3,7,8-TCDF	ND	ng/L	0.92	
PeCDFs (total)	ND	ng/L	0.99	
1,2,3,7,8-PeCDF	ND	ng/L	0.99	
2,3,4,7,8-PeCDF	ND	ng/L	0.99	
HxCDFs (total)	ND	ng/L	0.93	
1,2,3,4,7,8-HxCDF	ND	ng/L	0.93	
1,2,3,6,7,8-HxCDF	ND	ng/L	0.93	
2,3,4,6,7,8-HxCDF	ND	ng/L	0.93	
1,2,3,7,8,9-HxCDF	ND	ng/L	0.93	
HpCDFs (total)	ND	ng/L	1.2	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.2	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.2	
OCDF	ND	ng/L	3.4	
Dioxins				
TCDDs (total)	ND	ng/L	0.62	
2,3,7,8-TCDD	ND	ng/L	0.62	
PeCDDs (total)	ND	ng/L	1.9	
1,2,3,7,8-PeCDD	ND	ng/L	1.9	
HxCDDs (total)	ND	ng/L	1.4	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.4	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.4	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.4	
HpCDDs (total)	ND	ng/L	2.0	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	2.0	
OCDD	ND	ng/L	1.2	

(continued on following page)

ND = Not detected
NA = Not applicable

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Approved By: Robert Hrabak

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-515-05
Lab ID: 077895-0007-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.499 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	84
13C-2,3,7,8-TCDD	87
13C-1,2,3,7,8-PeCDD	102
13C-1,2,3,6,7,8-HxCDD	98
13C-1,2,3,4,6,7,8-HpCDD	104
13C-OCDD	89

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

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ROUX

CHAIN OF CUSTODY

№ 019_J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WV

SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZO FURAN	TOTAL BOTTLES	PRESERVATION
MSD	9/23/94	1145	AQ	2	2					4	HCl, H_2SO_4, ice
MW-11A	9/23/94	1500	AQ	2	2	1	1	1	2	9	HCl H_2SO_4, HNO_3, ice
MW-11B	9/23/94	1520	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TB-1	9/23/94	1625	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TB-3	9/23/94	1625	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-5	9/23/94	1630	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
DUPLICATE	9/23/94	1645	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
FIELD BLANK 5	9/23/94	1600	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TRIP BLANK	9/~~19~~/94 23 AKP	—	AQ	2						2	HCl, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Philip Chang	ROUX	9/23	1700	Y	Clifford Acker	Kemron	9/23/94	1735	Y
Clifford Acker	Kemron	9/23/94	1740	Y					
					Applicant: Bruce Kemron		9/26	8:00	

DELIVERY METHOD: COURIER

ANALYTICAL LABORATORY: KEMRON

COMMENTS: MS + MSD TAKEN AT WT-13A
CUSTODY SEALS # 0013, 0014, 0015, 0016, 0017, 0018, 0019

* Samples stored in locked cooler overnight - (PA)

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522888

Order #: N4-09-528
Date: December 2, 1994 10:06
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/26/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	WT-6	02	WT-10B
03	WT-10C	04	WT-15A
05	TD-1	06	WT-14A
07	WT-8C	08	WT-1

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Leslie Bucina

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **WT-6** Collected: **09/23/94 19:10** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	10	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.31	0.02	mg/L Cl	09/29/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.011	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.49	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.03	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.04	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.067	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.05	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.16	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **02** **WT-10B** Collected: **09/23/94 20:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/90
Total Organic Halides	<0.02	0.02	mg/L Cl	09/29/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.17	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.01	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **03** **WT-10C** Collected: **09/23/94 20:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/29/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.006	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.33	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/13/94	TAS	239.2/742
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/74
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/60
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.02	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **04** **WT-15A** Collected: **09/23/94 20:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	11	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	1.1	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.007	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.05	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.011	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.05	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **05** **TD-1** Collected: **09/24/94 08:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	10	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.27	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.04	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.03	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.017	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.07	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **06** **WT-14A** Collected: **09/24/94 09:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	260	1	mg/L	10/03/94	DIH	415.1/9060
Total Organic Halides	3.9	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.017	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.74	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.05	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	190	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.080	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	0.0075	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	0.005	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.09	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **07** **WT-8C** Collected: **09/24/94 10:00** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	2	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.009	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.35	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/10/94	JBC	200.7/6010
Lead, Total	0.038	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.05	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **08** **WT-1** Collected: **09/24/94 10:20** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.02	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.020	0.004	mg/L As	10/14/94	TAS	206.2/706[illegible]
Barium, Total	0.20	0.01	mg/L Ba	10/05/94	JBC	200.7/60[illegible]
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/60[illegible]
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.07	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.1	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.11	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.17	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.25	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/23/94 19:10**
Sample Description: **WT-6** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37125
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	46	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	150	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	110 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	89 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 19:10**
Sample Description: **WT-6** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17784
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/23/94 19:10**
Sample Description: **WT-6** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17784
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	70 % Recovery	(21% - 100%)
Phenol-d6	80 % Recovery	(10% - 94%)
Nitrobenzene-d5	101 % Recovery	(35% - 114%)
2-Fluorobiphenyl	103 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	58 % Recovery	(10% - 123%)
p-Terphenyl-d14	34 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/23/94 20:15**
Sample Description: **WT-10B** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37129
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	97	% Recovery	(76% - 114%)
Toluene-d8	105	% Recovery	(88% - 110%)
p-Bromofluorobenzene	90	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 20:15**
Sample Description: **WT-10B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17785
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/23/94 20:15**
Sample Description: **WT-10B** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17785
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	10 *	% Recovery	(21% - 100%)
Phenol-d6	22	% Recovery	(10% - 94%)
Nitrobenzene-d5	93	% Recovery	(35% - 114%)
2-Fluorobiphenyl	105	% Recovery	(43% - 116%)
2,4,6-Tribromophenol	27	% Recovery	(10% - 123%)
p-Terphenyl-d14	25 *	% Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **WT-10C**
Test Description: **Volatile Organics**

Lab No: **03D**

Collected: **09/23/94 20:00**
Category: **WATER**
Method: **8240**

Analyst: MBJ
File #: 3MO37130
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103 % Recovery	(76% - 114%)
Toluene-d8	107 % Recovery	(88% - 110%)
p-Bromofluorobenzene	92 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/23/94 20:00**
Sample Description: **WT-10C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17786
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/23/94 20:00**
Sample Description: **WT-10C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17786
Instrument: FINN4 Injected: 10/14/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	97 % Recovery	(21% - 100%)
Phenol-d6	80 % Recovery	(10% - 94%)
Nitrobenzene-d5	93 % Recovery	(35% - 114%)
2-Fluorobiphenyl	102 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	100 % Recovery	(10% - 123%)
p-Terphenyl-d14	84 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/23/94 20:30**
Sample Description: **WT-15A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37131
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	13	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	12	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	6	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	105	% Recovery	(76% - 114%)
Toluene-d8	107	% Recovery	(88% - 110%)
p-Bromofluorobenzene	88	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/23/94 20:30**
Sample Description: **WT-15A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17787
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/23/94 20:30**
Sample Description: **WT-15A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17787
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	22 % Recovery	(21% - 100%)
Phenol-d6	42 % Recovery	(10% - 94%)
Nitrobenzene-d5	83 % Recovery	(35% - 114%)
2-Fluorobiphenyl	93 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	19 % Recovery	(10% - 123%)
p-Terphenyl-d14	47 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **05D** Collected: **09/24/94 08:15**
Sample Description: **TD-1** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37132
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	14	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	15	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	6	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	16	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	10	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	108 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	93 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/24/94 08:15**
Sample Description: **TD-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17803
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	17	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/24/94 08:15**
Sample Description: **TD-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17803
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	40 % Recovery	(21% - 100%)
Phenol-d6	54 % Recovery	(10% - 94%)
Nitrobenzene-d5	107 % Recovery	(35% - 114%)
2-Fluorobiphenyl	101 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	10 % Recovery	(10% - 123%)
p-Terphenyl-d14	48 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/24/94 09:05**
Sample Description: **WT-14A** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37142
Instrument: FINN3 Injected: 10/03/94 Factor: 5 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT		DETECTION LIMIT
74-87-3	Chloromethane	600		50
74-83-9	Bromomethane		ND	50
75-01-4	Vinyl chloride		ND	50
75-00-3	Chloroethane		ND	50
75-09-2	Methylene chloride	170		25
67-64-1	Acetone	890		500
75-15-0	Carbon disulfide		ND	25
75-35-4	1,1-Dichloroethene		ND	25
75-34-3	1,1-Dichloroethane		ND	25
156-60-5	trans-1,2-Dichloroethene		ND	25
67-66-3	Chloroform		ND	25
107-06-2	1,2-Dichloroethane		ND	25
78-93-3	2-Butanone		ND	500
71-55-6	1,1,1-Trichloroethane		ND	25
56-23-5	Carbon tetrachloride		ND	25
108-05-4	Vinyl acetate		ND	50
75-27-4	Bromodichloromethane		ND	25
78-87-5	1,2-Dichloropropane		ND	25
10061-01-5	cis-1,3-Dichloropropene		ND	25
79-01-6	Trichloroethene		ND	25
124-48-1	Dibromochloromethane		ND	25
79-00-5	1,1,2-Trichloroethane		ND	25
71-43-2	Benzene	2600		25
10061-02-6	trans-1,3-Dichloropropene		ND	25
110-75-8	2-Chloroethyl vinyl ether		ND	50
75-25-2	Bromoform		ND	25
108-10-1	4-Methyl-2-pentanone		ND	50
591-78-6	2-Hexanone		ND	50
127-18-4	Tetrachloroethene		ND	25
79-34-5	1,1,2,2,-Tetrachloroethane		ND	25
108-88-3	Toluene	420		25
108-90-7	Chlorobenzene	31		25
100-41-4	Ethyl benzene		ND	25
100-42-5	Styrene		ND	25
1330-20-7	Xylenes (Total)	110		25
156-59-2	cis-1,2-Dichloroethene		ND	25
107-02-8	Acrolein		ND	500
107-13-1	Acrylonitrile		ND	500
75-71-8	Dichlorodifluoromethane		ND	50
75-69-4	Trichlorofluoromethane		ND	50
630-20-6	1,1,1,2-Tetrachloroethane		NF	

SURROGATES:

1,2-Dichloroethane-d4	89 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	95 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/24/94 09:05**
Sample Description: **WT-14A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17804
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	5800	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	2500	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	50,000 **	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	3800	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	130	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	1200	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	470	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/24/94 09:05**
Sample Description: **WT-14A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17804
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	70	% Recovery	(21% - 100%)
Phenol-d6	NF *	% Recovery	(10% - 94%)
Nitrobenzene-d5	141 *	% Recovery	(35% - 114%)
2-Fluorobiphenyl	100	% Recovery	(43% - 116%)
2,4,6-Tribromophenol	92	% Recovery	(10% - 123%)
p-Terphenyl-d14	34	% Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* NF = NOT FOUND, SAMPLE MATRIX INTERFERENCE
** = 3-METHYLPHENOL AND 4-METHYLPHENOL ARE UNRESOLVABLE COMPOUNDS

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/24/94 10:00**
Sample Description: **WT-8C** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37134
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	106 % Recovery	(76% - 114%)
Toluene-d8	107 % Recovery	(88% - 110%)
p-Bromofluorobenzene	93 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/24/94 10:00**
Sample Description: **WT-8C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17805
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	100 *	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	15	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/24/94 10:00**
Sample Description: **WT-8C** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17805
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	94 % Recovery	(21% - 100%)
Phenol-d6	88 % Recovery	(10% - 94%)
Nitrobenzene-d5	98 % Recovery	(35% - 114%)
2-Fluorobiphenyl	100 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	88 % Recovery	(10% - 123%)
p-Terphenyl-d14	48 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = 3-METHYLPHENOL AND 4-METHYLPHENOL ARE UNRESOLVABLE COMPOUNDS

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08D** Collected: **09/24/94 10:20**
Sample Description: **WT-1** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: MBJ File #: 3MO37135
Instrument: FINN3 Injected: 09/30/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	105	% Recovery (76% - 114%)
Toluene-d8	104	% Recovery (88% - 110%)
p-Bromofluorobenzene	91	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **08E** Collected: **09/24/94 10:20**
Sample Description: **WT-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17806
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	53 *	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **08E** Collected: **09/24/94 10:20**
Sample Description: **WT-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/28/94 File #: 4MO17806
Instrument: FINN4 Injected: 10/15/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	30 % Recovery	(21% - 100%)
Phenol-d6	49 % Recovery	(10% - 94%)
Nitrobenzene-d5	89 % Recovery	(35% - 114%)
2-Fluorobiphenyl	86 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	29 % Recovery	(10% - 123%)
p-Terphenyl-d14	58 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = 3-METHYLPHENOL AND 4-METHYLPHENOL ARE UNRESOLVABLE COMPOUNDS

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

SW-8280 - Dioxins and Furans

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental ··ices

QUALITY ASSURANCE DAILY ..EPORT

OHIO VALLEY LABORATORY Date: 10/17/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	46.5	93.00	115	94	100	85	16.22	<2	2	50	40.7	81.40	120	86
CONDUCTIVITY	uS/cm	AJS	1413	1480	104.74	107	95	4700	4800	2.11	<1	1	---	---	---	125	75
COD	mg/L	PJH	1000	874	87.40	137	61	3000	3000	0.00	<5	5	500	432	86.40	125	66
TOC	mg/L	DIH	25	25.5	102.00	124	89	15	15	0.00	<0.5	0.5	25	24.9	99.60	136	72
LEAD-FURNACE R	mg/L	KHA	0.05	0.0501	100.20	114	81	0.046	0.047	2.15	<0.005	0.005	0.05	0.0465	93.00	123	61
LEAD-FURNACE T	mg/L	KHA	0.05	0.0488	97.60	114	81	20	17	16.22	<0.005	0.005	0.05	0.0442	88.40	123	61
TSS	mg/L	ALC	50	40	80.00	129	60	57	56	1.77	<5	5	50	41	82.00	132	67
PHOSPHORUS	mg/L	PJH	1	1.08	108.00	125	75	570	590	3.45	<0.05	0.05	0.5	0.304	60.80	125	75
ARSENIC-FURNACE R	mg/L	JEC	0.05	0.052	104.00	124	76	0.051	0.051	0.00	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE T	mg/L	JEC	0.05	0.053	106.00	124	76	3.1	3.4	9.23	<0.004	0.004	0.05	0.049	98.00	126	68
AMMONIA	mg/L	REB	2	1.93	96.50	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.978	97.80	142	76
SELENIUM-FURNACE	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
CADMIUM-ICP	mg/L	JBC	1	1.04	104.00	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.99	99.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.06	106.00	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.98	98.00	113	80
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
LEAD-ICP	mg/L	JBC	1	1.13	113.00	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.06	106.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.95	95.00	122	66
ANTIMONY-FURN U	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
SELENIUM-FURN U	mg/L	JEC	0.05	0.0576	115.20	118	81	0.049	0.052	5.94	<0.004	0.004	0.05	0.049	98.00	125	62
LEAD-FURNACE	mg/L	JEC	0.05	0.05	100.00	119	84	0.048	0.05	4.08	<0.005	0.005	0.05	0.048	96.00	117	67
SILVER-ICP	mg/L	JBC	0.2	0.226	113.00	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.07	107.00	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.98	98.00	131	63
BARIUM-ICP	mg/L	JBC	10	10.3	103.00	113	85	1.1	1.2	8.70	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	112	79
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	43	44	2.30	<0.2	0.2	10	8.5	85.00	123	75
COBALT-ICP	mg/L	JBC	1	1.05	105.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	80
COPPER-ICP	mg/L	JBC	1	1.03	103.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	0.92	0.94	2.15	<0.04	0.04	1	0.96	96.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	11.4	114.00	120	84	4	4.3	7.23	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.2	102.00	109	87	19	20	5.13	<0.5	0.5	10	8.3	83.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.09	0.1	10.53	<0.01	0.01	1	0.78	78.00	119	81
SODIUM-ICP	mg/L	JBC	10	11	110.00	112	87	120	110	8.70	<0.5	0.5	10	8.1	81.00	129	58
NICKEL-ICP	mg/L	JBC	1	1.04	104.00	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	1	100.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.14	114.00	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.94	94.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1	100.00	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	115	75
ZINC-ICP	mg/L	JBC	1	1.06	106.00	112	89	0.4	0.37	7.79	<0.01	0.01	1	0.98	98.00	122	71
MOLYBDENUM-ICP	mg/L	JBC	1	0.997	99.70	113	88	0.81	0.81	0.00	<0.1	0.1	1	0.8	80.00	116	87

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental [illegible]es

QUALITY ASSURANCE DAIL. _PORT

OHIO VALLEY LABORATORY Date: 10/16/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0526	105.20	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.0437	87.40	125	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0456	91.20	114	81	0.05	0.049	2.02	<0.005	0.005	0.05	0.0495	99.00	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.055	110.00	124	76	0.057	0.058	1.74	<0.004	0.004	0.05	0.0535	107.00	126	68
TOC	mg/L	DIH	25	26.3	105.20	124	89	< 1	< 1	0.00	<1	1	25	25.8	103.20	136	72
THALLIUM-FURNACE	mg/L	TAS	0.05	0.0491	98.20	120	72	0.048	0.049	2.06	<0.005	0.005	0.05	0.048	96.00	112	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

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QUALITY ASSURANCE DAILY . .ORT

OHIO VALLEY LABORATORY Date: 10/14/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	50.4	100.80	115	94	58	57	1.74	<2	2	25	25.4	101.60	120	86
LEAD-FURNACE	mg/L	JKM	0.05	0.0499	99.98	114	81	0.043	0.044	2.30	<0.005	0.005	0.05	0.0429	85.80	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.058	116.00	124	76	0.0054	0.0057	5.41	<0.004	0.004	0.05	0.0524	104.80	126	68
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0533	106.60	118	81	0.0562	0.0559	0.54	<0.004	0.004	0.05	0.0562	112.40	125	62
MERCURY	mg/L	TAS	0.01	0.0109	109.00	122	82	0.0113	0.0111	1.79	<0.0002	0.0002	0.01	0.0113	113.00	114	85
OIL & GREASE	mg/L	ALC	10	11	110.00	137	74	8.2	11	29.17	<1	1	10	8.2	82.00	154	67
PHENOL	mg/L	AJS	0.5	0.511	102.20	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.44	88.00	118	96

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

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QUALITY ASSURANCE DAI.. REPORT

OHIO VALLEY LABORATORY Date: 10/13/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE L	mg/L	KHA	0.05	0.048	96.00	124	76	0.051	0.052	1.94	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0489	97.80	124	76	0.041	0.044	7.06	<0.004	0.004	0.05	0.044	88.00	126	68
ARSENIC-FURNACE A	mg/L	KHA	0.05	0.0461	92.20	124	76	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	126	68
LEAD-FURNACE	mg/L	TAS	0.05	0.0534	106.80	114	81	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	123	61
TKN	mg/L	REB	1	0.793	79.30	131	67	5.2	5.7	9.17	<0.1	0.1	0.5	0.75	150.00	145	57
CHROMIUM-ICP	mg/L	JBC	1	0.999	99.90	114	87	0.82	0.85	3.59	<0.02	0.02	1	0.81	81.00	111	85
SILVER-ICP	mg/L	JBC	0.2	0.204	102.00	113	93	0.18	0.19	5.41	<0.01	0.01	0.2	0.17	85.00	112	76
BARIUM-ICP	mg/L	JBC	10	10.5	105.00	113	85	8.6	9.1	5.65	<0.01	0.01	10	8.5	85.00	112	74
CADMIUM-ICP	mg/L	JBC	1	1.02	102.00	112	83	0.91	0.96	5.35	<0.01	0.01	1	0.91	91.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
ARSENIC-ICP	mg/L	JBC	1	1.06	106.00	123	76	0.9	0.97	7.49	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	1.09	109.00	114	84	0.92	0.98	6.32	<0.1	0.1	1	0.9	90.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.03	103.00	117	80	0.91	0.9	1.10	<0.1	0.1	1	0.91	91.00	122	66
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0534	106.80	118	81	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	125	62
TDS	mg/L	DIH	500	476	95.20	106	84	7200	7200	0.00	<10	10	500	524	104.80	132	67
BOD	mg/L	PJH	200	150	75.00	124	77	< 3	< 3	0.00	<3	3	200	156	78.00	133	71
TOC	mg/L	DIH	25	27.7	110.80	124	89	28	28	0.00	<1	1	25	28.2	112.80	136	72
ANTIMONY-FURNACE	mg/L	KHA	0.05	0.0485	97.00	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.031	62.00	120	63
BERYLLIUM-FURN L	mg/L	TAS	0.005	0.0047	94.00	116	81	0.0062	0.0062	0.00	<0.0005	0.0005	0.005	0.0062	124.00	148	62
PHOSPHORUS	mg/L	REB	2	2.09	104.50	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.422	84.40	117	58
TSS	mg/L	MZL	50	38	76.00	124	65	< 5	< 5	0.00	<5	5	50	47	94.00	130	60
BORON-ICP	mg/L	JBC	1	0.947	94.70	*	*	1.23	1.25	1.61	<0.5	0.5	1	0.95	95.00	125	75
LEAD-FURNACE	mg/L	KHA	0.05	0.0476	95.20	119	84	< 0.5	< 0.5	0.00	<0.005	0.005	0.05	0.051	102.00	117	67
CADMIUM-FURNACE	mg/L	JKM	0.005	0.0048	96.00	125	73	0.0049	0.0053	7.84	<0.0005	0.0005	0.005	0.0049	98.00	115	74
MERCURY	mg/L	TAS	0.01	0.0095	95.00	122	82	0.3	0.3	0.00	<0.0002	0.0002	0.01	0.011	110.00	114	85
ALUMINUM-ICP	mg/L	JBC	1	0.977	97.70	112	86	0.89	0.96	7.57	<0.1	0.1	1	0.81	81.00	131	63
BERYLLIUM-ICP	mg/L	JBC	1	1.01	101.00	110	88	0.87	0.93	6.67	<0.01	0.01	1	0.87	87.00	112	79
COBALT-ICP	mg/L	JBC	1	0.998	99.80	111	88	0.9	0.94	4.35	<0.02	0.02	1	0.9	90.00	111	80
COPPER-ICP	mg/L	JBC	1	1.04	104.00	111	88	0.84	0.91	8.00	<0.02	0.02	1	0.84	84.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	2.4	2.4	0.00	<0.04	0.04	1	1.1	110.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.4	104.00	120	84	10	11	9.52	<1	1	10	8.5	85.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.58	95.80	109	87	27	29	7.14	<0.5	0.5	10	8.9	89.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	1	1.1	9.52	<0.01	0.01	1	0.94	94.00	119	81
SODIUM-ICP	mg/L	JBC	10	10.2	102.00	112	87	13	15	14.29	<0.5	0.5	10	8.9	89.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.991	99.10	113	87	0.89	0.93	4.40	<0.04	0.04	1	0.88	88.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.03	103.00	119	80	0.91	0.91	0.00	<0.2	0.2	1	0.81	81.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1.03	103.00	111	86	0.85	0.91	6.82	<0.01	0.01	1	0.85	85.00	115	75
ZINC-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.91	0.96	5.35	<0.01	0.01	1	0.9	90.00	122	71
CALCIUM-ICP	mg/L	JBC	10	10.2	102.00	112	88	88	92	4.44	<0.2	0.2	10	9.7	97.00	123	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP	mg/L	JBC	0.2	0.187	93.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66
COD	mg/L	PJH	1000	877	87.70	103	82	570	530	7.27	<5	5	50	50.3	100.60	128	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/03/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	KHA	0.05	0.0532	106.40	120	72	0.047	0.048	2.11	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN P	mg/L	KHA	0.05	0.0428	85.60	120	72	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	112	86
SELENIUM-FURN P	mg/L	TAS	0.05	0.0532	106.40	117	84	0.05	0.049	2.02	<0.005	0.005	0.05	0.05	100.00	130	69
SILVER-ICP	mg/L	JBC	0.2	0.199	99.50	113	83	0.206	0.201	2.46	<0.01	0.01	0.2	0.206	103.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.91	91.00	122	86	0.931	0.933	0.21	<0.1	0.1	1	0.931	93.10	131	63
BARIUM-ICP	mg/L	JBC	10	9.41	94.10	113	85	9.54	9.48	0.63	<0.01	0.01	10	9.54	95.40	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.968	96.80	110	88	1	0.993	0.70	<0.01	0.01	1	1	100.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.56	95.60	112	88	10.2	10	1.98	<0.2	0.2	10	10	100.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.976	97.60	112	83	1.01	0.994	1.60	<0.01	0.01	1	1.01	101.00	115	73
COBALT-ICP	mg/L	JBC	1	0.965	96.50	111	88	1	0.987	1.31	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1.02	1	1.98	<0.02	0.02	1	1.02	102.00	113	80
COPPER-ICP	mg/L	JBC	1	0.972	97.20	111	88	1.02	1.02	0.00	<0.02	0.02	1	1	100.00	111	67
IRON-ICP	mg/L	JBC	1	0.927	92.70	113	90	0.934	0.92	1.51	<0.04	0.04	1	0.934	93.40	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.78	97.80	120	84	10.7	10.9	1.85	<1	1	10	10.7	107.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.51	95.10	109	87	10	9.81	1.92	<0.5	0.5	10	10	100.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.948	94.80	112	89	0.973	0.961	1.24	<0.01	0.01	1	0.973	97.30	119	81
SODIUM-ICP	mg/L	JBC	10	9.35	93.50	112	87	10.2	10.3	0.98	<0.5	0.5	10	10	100.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.932	93.20	113	87	0.992	1.03	3.76	<0.04	0.04	1	0.98	98.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.01	101.00	119	80	1.05	1.08	2.82	<0.2	0.2	1	1.05	105.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.936	93.60	111	86	0.952	0.946	0.63	<0.01	0.01	1	0.95	95.00	115	75
ZINC-ICP	mg/L	JBC	1	0.966	96.60	112	89	1.02	1.02	0.00	<0.01	0.01	1	1.02	102.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	0.961	0.934	2.85	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.1	110.00	114	84	0.988	0.987	0.10	<0.1	0.1	1	0.95	95.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.987	0.981	0.61	<0.1	0.1	1	0.99	99.00	122	66
BORON-ICP	mg/L	JBC	1	0.921	92.10	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.97	97.00	125	75
MERCURY-G	mg/L	KHA	0.01	0.0103	103.00	121	77	0.01	0.011	9.52	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-A	mg/L	KHA	0.01	0.0099	99.00	121	77	0.01	0.01	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
ARSENIC-FURNACE P	mg/L	TAS	0.05	0.0498	99.60	120	80	0.052	0.051	1.94	<0.004	0.004	0.05	0.051	102.00	123	72
LEAD-FURNACE P	mg/L	JEC	0.05	0.0483	96.60	114	81	0.038	0.04	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
LEAD-FURNACE N	mg/L	JEC	0.05	0.048	96.00	114	81	0.037	0.037	0.00	<0.005	0.005	0.05	0.05	100.00	123	61
COPPER-FURNACE P	mg/L	JEC	0.05	0.0475	95.00	103	79	0.04	0.04	0.00	<0.005	0.005	0.05	0.04	80.00	117	64
CHROMIUM-FURN P	mg/L	JEC	0.05	0.0488	97.60	126	78	0.058	0.058	0.00	<0.005	0.005	0.05	0.058	116.00	133	61
CHROMIUM-FURN N	mg/L	JEC	0.05	0.0432	86.40	126	78	0.039	0.041	5.00	<0.005	0.005	0.05	0.041	82.00	133	61
ALKALINITY	mg/L	REB	100	88	88.00	112	80	400	420	4.88	<10	10	50	50.1	100.20	120	62
MBAS	mg/L	JWR	1	1.07	107.00	113	71	0.3	0.4	28.57	<0.1	0.1	1	1.05	105.00	142	57
CYANIDE	mg/L	JWR	0.4	0.394	98.50	119	94	0.24	0.25	4.08	<0.01	0.01	0.2	0.188	94.00	121	86
COD	mg/L	PJH	1000	885	88.50	137	61	880	1000	12.77	<5	5	500	589	117.80	125	66
TOC	mg/L	DIH	25	25.2	100.80	124	89	< 1	< 1	0.00	<1	1	25	24.6	98.40	136	72
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.14	0.14	0.00	<0.02	0.02	0.1	0.093	93.00	148	64

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental vices

QUALITY ASSURANCE DAIL REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]es

QUALITY ASSURANCE DAI[illegible]PORT

OHIO VALLEY LABORATORY Date: 09/30/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64
SULFATE	mg/L	JWR	20	18.6	93.00	130	78	730	650	11.59	<2	2	10	10.3	103.00	127	85

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmenta' -vices

QUALITY ASSURANCE DA... REPORT

OHIO VALLEY LABORATORY Date: 09/29/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE G	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0048	96.00	125	73
CADMIUM-FURNACE E	mg/L	KHA	0.005	0.0047	94.00	119	83	0.005	0.005	0.00	<0.0005	0.0005	0.005	0.0051	102.00	125	73
CADMIUM-FURNACE F	mg/L	KHA	0.005	0.0051	102.00	119	83	0.005	0.005	0.00	<0.005	0.005	0.005	0.0051	102.00	125	73
SELENIUM-FURN E	mg/L	KHA	0.05	0.0525	105.00	117	84	0.049	0.049	0.00	<0.004	0.004	0.05	0.0493	98.60	130	69
TSS	mg/L	MZL	50	43	86.00	124	65	58	55	5.31	<5	5	50	49	98.00	130	60
COPPER-FURNACE F	mg/L	JEC	0.05	0.0479	95.80	103	79	0.054	0.055	1.83	<0.005	0.005	0.05	0.051	102.00	117	64
LEAD-FURNACE H	mg/L	JEC	0.05	0.0479	95.80	114	81	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	123	61
CHROMIUM-FURN G	mg/L	JEC	0.05	0.048	96.00	126	78	0.054	0.057	5.41	<0.005	0.005	0.05	0.054	108.00	133	61
ARSENIC-FURNACE C	mg/L	JEC	0.05	0.0499	99.80	120	80	0.04	0.038	5.13	<0.004	0.004	0.05	0.04	80.00	123	72
ARSENIC-FURNACE H	mg/L	JEC	0.05	0.053	106.00	120	80	0.049	0.047	4.17	<0.004	0.004	0.05	0.049	98.00	123	72
PHOSPHORUS	mg/L	REB	2	1.89	94.50	110	63	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.515	103.00	125	75
TKN	mg/L	REB	1	0.792	79.20	147	50	0.8	0.6	28.57	<0.1	0.1	0.5	0.391	78.20	151	49
SILVER-ICP	mg/L	JBC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.176	88.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.03	103.00	122	86	1.22	1.28	4.80	<0.1	0.1	1	0.92	92.00	131	63
BARIUM-ICP	mg/L	JBC	10	10	100.00	113	85	8.38	8.56	2.13	<0.01	0.01	10	8.5	85.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.995	99.50	110	88	0.855	0.869	1.62	<0.01	0.01	1	0.87	87.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1.03	103.00	112	83	0.875	0.891	1.81	<0.01	0.01	1	0.89	89.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.03	103.00	114	88	0.866	0.883	1.94	<0.02	0.02	1	0.88	88.00	113	80
MANGANESE-ICP	mg/L	JBC	1	1.01	101.00	112	89	0.855	0.871	1.85	<0.01	0.01	1	0.86	86.00	119	81
ZINC-ICP	mg/L	JBC	1	1.02	102.00	112	89	0.925	0.957	3.40	<0.01	0.01	1	0.9	90.00	122	71
ARSENIC-ICP	mg/L	JBC	1	1.04	104.00	123	76	0.899	0.964	6.98	<0.1	0.1	1	0.96	96.00	126	65
LEAD-ICP	mg/L	JBC	1	1.04	104.00	114	84	0.886	0.929	4.74	<0.1	0.1	1	0.92	92.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.997	99.70	117	80	0.853	0.935	9.17	<0.1	0.1	1	0.92	92.00	122	66
ANTIMONY-ICP	mg/L	JBC	1	0.984	98.40	119	80	0.813	0.856	5.15	<0.2	0.2	1	0.81	81.00	120	71
COBALT-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.848	0.859	1.29	<0.02	0.02	1	0.85	85.00	111	80
COPPER-ICP	mg/L	JBC	1	1.02	102.00	111	88	0.933	0.958	2.64	<0.02	0.02	1	0.86	86.00	111	67
NICKEL-ICP	mg/L	JBC	1	1.02	102.00	113	87	0.853	0.89	4.25	<0.04	0.04	1	0.86	86.00	113	76
VANADIUM-ICP	mg/L	JBC	1	0.992	99.20	111	86	0.825	0.839	1.68	<0.01	0.01	1	0.84	84.00	115	75
OIL & GREASE	mg/L	PJH	10	9.9	99.00	137	74	9.9	8.9	10.64	<1	1	10	8.9	89.00	154	67
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	10.2	10.3	0.98	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	1.04	1.05	0.96	<0.04	0.04	1	1.05	105.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	10.2	102.00	120	84	8.3	8.1	2.44	<1	1	10	8.3	83.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.1	101.00	109	87	9.8	10	2.02	<0.5	0.5	10	10.3	103.00	116	81
SODIUM-ICP	mg/L	JBC	10	10.1	101.00	112	87	8.5	10.1	17.20	<0.5	0.5	10	8.5	85.00	129	58
TOX	mg/L	RJS	0.1	0.102	102.00	133	55	0.2	0.21	4.88	<0.02	0.02	0.1	0.098	98.00	148	64
TDS	mg/L	MZL	500	480	96.00	106	84	8400	8300	1.20	<10	10	500	446	89.20	132	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/30/94 BLK FLNM: 3BK37122
INSTRUMENT: FINN3 LCS FLNM: 3QC37123
ANALYST(S): MBJ SHIFT: AM

SMPL NAME: 09-528-01
FILE NAME: 3MO37125
MS FLNM: 3MO37126
MSD FLNM: 3MO37127

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	18.7	93.7	43-129	0-273								33
BROMOMETHANE	10	BQL	20.7	103.7	62-115	0-242								22
VINYL CHLORIDE	10	BQL	20.4	101.9	47-128	0-251								18
CHLOROETHANE	10	BQL	25.8	129.1	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	24.0	120.1	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	22.1	110.4	66-138	0-234	0.0	41.9	42.5	83.9	84.9	61 - 145	1.2	31
1,1-DICHLOROETHANE	5	BQL	22.6	113.1	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	21.7	108.6	77-127	54-156								31
CHLOROFORM	5	BQL	23.2	116.2	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.3	96.4	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	22.1	110.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	22.7	113.7	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	20.1	100.7	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	21.2	105.9	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.9	114.3	80-146	0-227								40
TRICHLOROETHENE	5	BQL	22.1	110.5	83-129	71-157	46.4	81.2	80.8	69.6	68.8	71 - 120	1.1	14
DIBROMOCHLOROMETHA	5	BQL	20.4	102.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	21.4	107.2	86-127	52-150								21
BENZENE	5	BQL	21.9	109.3	87-120	37-151	0.0	50.9	50.1	101.8	100.2	76 - 127	1.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.9	84.3	48-108	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	23.5	117.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	20.7	103.4	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.1	95.4	78-124	46-147								17
TOLUENE	5	BQL	20.0	100.1	86-115	47-150	0.0	42.6	42.1	85.3	84.2	76 - 125	1.2	14
CHLOROBENZENE	5	BQL	20.7	103.4	85-119	37-160	0.0	51.0	49.9	102.0	99.8	75 - 130	2.2	14
ETHYLBENZENE	5	BQL	27.3	136.6	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.7	113.6	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.5	107.3	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	21.2	106.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	20.1	100.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 10/03/94 BLK FLNM: 3BK37140
INSTRUMENT: FINN3 LCS FLNM: 3QC37141
ANALYST(S): MBJ SHIFT: AM

SMPL NAME: 09-634-01
FILE NAME: 3AS37143
MS FLNM: 3AS37144
MSD FLNM: 3AS37145

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	16.5	82.6	43-129	0-273								33
BROMOMETHANE	10	BQL	18.2	91.2	62-119	0-242								22
VINYL CHLORIDE	10	BQL	19.5	97.3	47-128	0-251								18
CHLOROETHANE	10	BQL	19.2	96.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	22.8	114.0	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	19.8	99.4	66-138	0-234	0.0	35.8	37.0	71.6	74.1	61 - 145	3.4	31
1,1-DICHLOROETHANE	5	BQL	21.1	105.6	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	21.5	107.6	77-127	54-156								31
CHLOROFORM	5	BQL	22.6	113.0	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.5	97.5	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	22.1	110.7	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	22.5	112.4	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	20.0	100.1	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	21.3	106.6	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.8	113.8	80-146	0-227								40
TRICHLOROETHENE	5	BQL	21.5	107.4	83-129	71-157	0.0	45.4	45.3	90.8	90.5	71 - 120	0.3	14
DIBROMOCHLOROMETHA	5	BQL	20.1	100.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	21.4	107.2	86-127	52-150								21
BENZENE	5	BQL	21.7	108.6	87-120	37-151	0.0	50.6	50.9	101.1	101.7	76 - 127	0.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.7	83.7	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	24.2	121.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	21.6	107.8	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.2	96.2	78-124	46-147								17
TOLUENE	5	BQL	20.0	100.0	86-115	47-150	0.0	44.6	44.4	89.3	88.7	76 - 125	0.6	14
CHLOROBENZENE	5	BQL	21.2	105.9	85-119	37-160	0.0	50.4	50.9	100.8	101.8	75 - 130	1.0	14
ETHYLBENZENE	5	BQL	31.8	159.2	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	19.1	95.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	20.3	101.7	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	20.9	104.5	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	21.4	106.9	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

@VOAH2O

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94 SMPL NAM 09-514-02
TYPE: CONTINUOUS FILE NAME 4MO17761
BLK FLNM: 4BK17758 MS FLNM: -03 4MO17762
QC FLNM: 4QC17759 MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	61	122	61	13-132	0	7	13	14	26	7	13	60
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	61	122	61	48-115	0	5	14	10	28	5	14	95
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	24	48	48	32-115	0	20	22	40	44	40	44	10
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	37	74	74	35-124	0	30	33	60	66	60	66	10
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	27	54	54	29- 98	0	22	24	44	48	44	48	9
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	66	132	66	45-117	0	22	17	44	34	22	17	26
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	40	80	80	43-117	0	31	31	62	62	62	62	0

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/28/94 SMPL NAM 09-514-02
TYPE: CONTINUOUS FILE NAME 4MO17761
BLK FLNM: 4BK17758 MS FLNM: -03 4MO17762
QC FLNM: 4QC17759 MSD FLNM -04 4MO17763

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	58	116	58	1- 148	0	82	79	164	158	82	79	4
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	26	52	52	34-110	0	26	25	52	50	52	50	4
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	58	116	58	36-137	0	12	12	24	24	12	12	0
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	46	92	92	42-139	0	27	26	54	52	54	52	4
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

SUBCONTRACTED RESULTS

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-04
Lab ID: 077895-0008-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.500 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	1.7	
2,3,7,8-TCDF	ND	ng/L	1.7	
PeCDFs (total)	ND	ng/L	1.1	
1,2,3,7,8-PeCDF	ND	ng/L	1.1	
2,3,4,7,8-PeCDF	ND	ng/L	1.1	
HxCDFs (total)	ND	ng/L	1.6	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.6	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.6	
HpCDFs (total)	ND	ng/L	1.9	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.9	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.9	
OCDF	ND	ng/L	3.7	
Dioxins				
TCDDs (total)	ND	ng/L	1.5	
2,3,7,8-TCDD	ND	ng/L	1.5	
PeCDDs (total)	ND	ng/L	3.0	
1,2,3,7,8-PeCDD	ND	ng/L	3.0	
HxCDDs (total)	ND	ng/L	2.6	
1,2,3,4,7,8-HxCDD	ND	ng/L	2.6	
1,2,3,6,7,8-HxCDD	ND	ng/L	2.6	
1,2,3,7,8,9-HxCDD	ND	ng/L	2.6	
HpCDDs (total)	ND	ng/L	4.1	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	4.1	
OCDD	ND	ng/L	2.8	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer
Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-04
Lab ID: 077895-0008-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.500 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	94
13C-2,3,7,8-TCDD	100
13C-1,2,3,7,8-PeCDD	108
13C-1,2,3,6,7,8-HxCDD	101
13C-1,2,3,4,6,7,8-HpCDD	106
13C-OCDD	86

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

The cover letter is an integral part of this report.
Rev 230787

Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-05
Lab ID: 077895-0009-SA
Matrix: AQUEOUS
Authorized: 27 SEP 94

Sampled: Unknown
Prepared: 03 OCT 94

Received: 27 SEP 94
Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	1.7	
2,3,7,8-TCDF	ND	ng/L	1.7	
PeCDFs (total)	ND	ng/L	1.8	
1,2,3,7,8-PeCDF	ND	ng/L	1.8	
2,3,4,7,8-PeCDF	ND	ng/L	1.8	
HxCDFs (total)	ND	ng/L	1.6	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.6	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.6	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.6	
HpCDFs (total)	ND	ng/L	1.5	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.5	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.5	
OCDF	ND	ng/L	3.7	
Dioxins				
TCDDs (total)	ND	ng/L	0.73	
2,3,7,8-TCDD	ND	ng/L	0.73	
PeCDDs (total)	ND	ng/L	3.7	
1,2,3,7,8-PeCDD	ND	ng/L	3.7	
HxCDDs (total)	ND	ng/L	2.0	
1,2,3,4,7,8-HxCDD	ND	ng/L	2.0	
1,2,3,6,7,8-HxCDD	ND	ng/L	2.0	
1,2,3,7,8,9-HxCDD	ND	ng/L	2.0	
HpCDDs (total)	ND	ng/L	1.2	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	1.2	
OCDD	ND	ng/L	3.4	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer
Approved By: Robert Hrabak

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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-05
Lab ID: 077895-0009-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.501 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	67
13C-2,3,7,8-TCDD	73
13C-1,2,3,7,8-PeCDD	87
13C-1,2,3,6,7,8-HxCDD	89
13C-1,2,3,4,6,7,8-HpCDD	90
13C-OCDD	73

ND = Not detected
NA = Not applicable

Reported By: Emily Uebelhoer Approved By: Robert Hrabak

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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-06
Lab ID: 077895-0010-SA
Matrix: AQUEOUS
Sampled: Unknown
Received: 27 SEP 94
Authorized: 27 SEP 94
Prepared: 03 OCT 94
Analyzed: 05 OCT 94

Sample Amount 0.502 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.78	
2,3,7,8-TCDF	ND	ng/L	0.78	
PeCDFs (total)	ND	ng/L	0.97	
1,2,3,7,8-PeCDF	ND	ng/L	0.97	
2,3,4,7,8-PeCDF	ND	ng/L	0.97	
HxCDFs (total)	ND	ng/L	1.2	
1,2,3,4,7,8-HxCDF	ND	ng/L	1.2	
1,2,3,6,7,8-HxCDF	ND	ng/L	1.2	
2,3,4,6,7,8-HxCDF	ND	ng/L	1.2	
1,2,3,7,8,9-HxCDF	ND	ng/L	1.2	
HpCDFs (total)	ND	ng/L	1.4	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	1.4	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	1.4	
OCDF	ND	ng/L	2.3	
Dioxins				
TCDDs (total)	ND	ng/L	0.54	
2,3,7,8-TCDD	ND	ng/L	0.54	
PeCDDs (total)	ND	ng/L	3.1	
1,2,3,7,8-PeCDD	ND	ng/L	3.1	
HxCDDs (total)	ND	ng/L	1.6	
1,2,3,4,7,8-HxCDD	ND	ng/L	1.6	
1,2,3,6,7,8-HxCDD	ND	ng/L	1.6	
1,2,3,7,8,9-HxCDD	ND	ng/L	1.6	
HpCDDs (total)	ND	ng/L	0.95	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	0.95	
OCDD	ND	ng/L	1.9	

(continued on following page)

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Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: N4-09-528-06
Lab ID: 077895-0010-SA
Matrix: AQUEOUS Sampled: Unknown Received: 27 SEP 94
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 0.502 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	87
13C-2,3,7,8-TCDD	95
13C-1,2,3,7,8-PeCDD	107
13C-1,2,3,6,7,8-HxCDD	100
13C-1,2,3,4,6,7,8-HpCDD	105
13C-OCDD	93

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Quanterra
Environmental Services

QC LOT ASSIGNMENT REPORT
Special Services - Low Resolution Mass Spectrometry

Laboratory Sample Number	QC Matrix	QC Category	QC Lot Number (DCS)	QC Run Number (SCS/BLANK)
077895-0001-MB	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0001-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0002-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0003-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0004-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0005-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0006-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0007-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0008-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0009-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-
077895-0010-SA	AQUEOUS	DXNFUR-A	26 SEP 94-A	-

Quanterra Environmental Services

DUPLICATE CONTROL SAMPLE REPORT
Special Services - Low Resolution Mass Spectrometry

Analyte	Concentration Spiked	Measured DCS1	Measured DCS2	AVG	Accuracy Average(%) DCS	Accuracy Limits	Precisio (RPD) DCS	Lim
Category: DXNFUR-A								
Matrix: AQUEOUS								
QC Lot: 26 SEP 94-A								
Concentration Units: ng/sample								
2,3,7,8-TCDF	10	10.6	11.3	11.0	110	62-129	6.4	18
2,3,4,7,8-PeCDF	10	8.97	8.56	8.76	88	51-132	4.7	24
1,2,3,4,7,8-HxCDF	10	10.7	10.8	10.8	108	50-146	0.9	41
1,2,3,4,6,7,8-HpCDF	10	9.62	9.72	9.67	97	50-150	1.0	50
OCDF	70	68.6	68.9	68.8	98	50-150	0.4	28
2,3,7,8-TCDD	10	9.56	9.58	9.57	96	57-128	0.2	2
1,2,3,7,8-PeCDD	10	10.8	10.9	10.8	109	80-125	0.9	2
1,2,3,4,7,8-HxCDD	10	9.83	10.3	10.1	101	64-127	4.7	2
1,2,3,4,6,7,8-HpCDD	10	10.5	10.7	10.6	106	60-131	1.9	2
OCDD	50	51.2	53.7	52.4	105	50-147	4.8	2

Calculations are performed before rounding to avoid round-off errors in calculated result

Quanterra Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: Method Blank
Lab ID: 077895-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 1.0 L
Column Type DB-5

Parameter	Result	Units	Detection Limit	Data Qualifiers
Furans				
TCDFs (total)	ND	ng/L	0.41	
2,3,7,8-TCDF	ND	ng/L	0.41	
PeCDFs (total)	ND	ng/L	0.41	
1,2,3,7,8-PeCDF	ND	ng/L	0.41	
2,3,4,7,8-PeCDF	ND	ng/L	0.41	
HxCDFs (total)	ND	ng/L	0.42	
1,2,3,4,7,8-HxCDF	ND	ng/L	0.42	
1,2,3,6,7,8-HxCDF	ND	ng/L	0.42	
2,3,4,6,7,8-HxCDF	ND	ng/L	0.42	
1,2,3,7,8,9-HxCDF	ND	ng/L	0.42	
HpCDFs (total)	ND	ng/L	0.37	
1,2,3,4,6,7,8-HpCDF	ND	ng/L	0.37	
1,2,3,4,7,8,9-HpCDF	ND	ng/L	0.37	
OCDF	ND	ng/L	2.2	
Dioxins				
TCDDs (total)	ND	ng/L	0.23	
2,3,7,8-TCDD	ND	ng/L	0.23	
PeCDDs (total)	ND	ng/L	0.95	
1,2,3,7,8-PeCDD	ND	ng/L	0.95	
HxCDDs (total)	ND	ng/L	0.44	
1,2,3,4,7,8-HxCDD	ND	ng/L	0.44	
1,2,3,6,7,8-HxCDD	ND	ng/L	0.44	
1,2,3,7,8,9-HxCDD	ND	ng/L	0.44	
HpCDDs (total)	ND	ng/L	0.65	
1,2,3,4,6,7,8-HpCDD	ND	ng/L	0.65	
OCDD	ND	ng/L	0.49	

(continued on following page)

ND = Not detected
NA = Not applicable

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Quanterra
Environmental Services

POLYCHLORINATED DIOXINS/FURANS
ISOMER SPECIFIC ANALYSIS (CONT.)
LOW RESOLUTION

Client Name: Kemron Environmental
Client ID: Method Blank
Lab ID: 077895-0001-MB
Matrix: AQUEOUS Sampled: NA Received: NA
Authorized: 27 SEP 94 Prepared: 03 OCT 94 Analyzed: 05 OCT 94

Sample Amount 1.0 L
Column Type DB-5

	% Recovery
13C-2,3,7,8-TCDF	99
13C-2,3,7,8-TCDD	109
13C-1,2,3,7,8-PeCDD	115
13C-1,2,3,6,7,8-HxCDD	111
13C-1,2,3,4,6,7,8-HpCDD	110
13C-OCDD	100

ND = Not detected
NA = Not applicable

Reported By: Scott Barmby Approved By: Robert Hrabak

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KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 09/30/94
INSTRUMENT: FINN3
ANALYST(S): MBJ

BLK FLNM: 3BK37122
LCS FLNM: 3QC37123
SHIFT: AM

SMPL NAME: 09-528-01
FILE NAME: 3MO37125
MS FLNM: 3MO37126
MSD FLNM: 3MO37127

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	18.7	93.7	43-129	0-273								33
BROMOMETHANE	10	BQL	20.7	103.7	62-115	0-242								22
VINYL CHLORIDE	10	BQL	20.4	101.9	47-128	0-251								18
CHLOROETHANE	10	BQL	25.8	129.1	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	24.0	120.1	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	22.1	110.4	66-138	0-234	0.0	41.9	42.5	83.9	84.9	61 - 145	1.2	31
1,1-DICHLOROETHANE	5	BQL	22.6	113.1	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	21.7	108.6	77-127	54-156								31
CHLOROFORM	5	BQL	23.2	116.2	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.3	96.4	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	22.1	110.5	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	22.7	113.7	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	20.1	100.7	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	21.2	105.9	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.9	114.3	80-146	0-227								40
TRICHLOROETHENE	5	BQL	22.1	110.5	83-129	71-157	46.4	81.2	80.8	69.6	68.8	71 - 120	1.1	14
DIBROMOCHLOROMETHA	5	BQL	20.4	102.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	21.4	107.2	86-127	52-150								21
BENZENE	5	BQL	21.9	109.3	87-120	37-151	0.0	50.9	50.1	101.8	100.2	76 - 127	1.6	23
TRANS-1,3-DICHLOROPRO	5	BQL	16.9	84.3	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	23.5	117.5	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	20.7	103.4	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	19.1	95.4	78-124	46-147								17
TOLUENE	5	BQL	20.0	100.1	86-115	47-150	0.0	42.6	42.1	85.3	84.2	76 - 125	1.2	14
CHLOROBENZENE	5	BQL	20.7	103.4	85-119	37-160	0.0	51.0	49.9	102.0	99.8	75 - 130	2.2	14
ETHYLBENZENE	5	BQL	27.3	136.6	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	22.7	113.6	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	21.5	107.3	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	21.2	106.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	20.1	100.5	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

VOAH2O

ROUX

CHAIN O CUSTODY

№ 019 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO
PROJECT NUMBER: 06619.03
PROJECT LOCATION: NITRO, WV
SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZOFURAN	TOTAL BOTTLES	PRESERVATION
WT-6	9/23/94	1910	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-10B	9/23/94	2015	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-10C	9/23/94	2000	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-15A	9/23/94	2030	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-1	9/24/94	815	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-14A	9/24/94	905	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-8C	9/24/94	1000	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-1	9/24/94	1020	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-7	9/24/94	1130	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-8	9/24/94	1135	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Philip Chang	ROUX	9/24	1500	Y					
					Angelina Kemron		9/26	930	

DELIVERY METHOD: FED EX

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #s: 0020, 0021, 0022, 0023, 0024

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON
ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Purchase Order: 0125794
Invoice Number: 522889

Order #: N4-09-530
Date: December 1, 1994 15:17
Work ID: 06619JO3/Monsanto-Nitro
Date Received: 09/26/94
Date Completed: 11/08/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	MW-7	02	MW-8
03	SW-1	04	SW-2
05	MW-14	06	MW-15
07	FIELD BLANK 6	08	TRIP BLANK

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

REVISED REPORT 12/01/94

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

CASE NARRATIVE

M8270 SEMIVOLATILE ANALYSIS

The matrix spike and matrix spike duplicate of sample MW-7 extracted 09/30/94 had recoveries below advisory limits for spiked compounds. The laboratory control sample extracted with this batch showed acceptable spike recoveries. We attribute these reduced sample spike recoveries to matrix interference based on the observed reproducibility.

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **MW-7** Collected: **09/24/94 11:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	31	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	3.2	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.049	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.44	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.03	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.05	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.047	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.12	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **02** **MW-8** Collected: **09/24/94 11:35** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	83	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	1.1	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.015	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.11	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.04	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.06	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.038	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.14	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **03** **SW-1** Collected: **09/24/94 12:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	10	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.04	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.02	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **04** **SW-2** Collected: **09/24/94 12:30** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	6	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.04	0.02	mg/L Cl	09/30/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.02	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.01	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **05** **MW-14** Collected: **09/24/94 12:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	0.07	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.017	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.17	0.01	mg/L Ba	10/05/94	JBC	200.7/60
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/60
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.30	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.03	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.035	0.005	mg/L Pb	10/13/94	TAS	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.05	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	0.10	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

SAMPLE ID: **06** **MW-15** Collected: **09/24/94 13:15** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	2	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	0.015	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	0.99	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	0.02	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	0.20	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	0.20	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	0.20	0.005	mg/L Pb	10/17/94	KHA	239.2/7421
Mercury, Total	0.0003	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	0.28	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/78
Zinc, Total	0.77	0.01	mg/L Zn	10/05/94	JBC	200.7/60

SAMPLE ID: **07** **FIELD BLANK 6** Collected: **09/24/94 12:45** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	09/30/94	REB	415.1/9060
Total Organic Halides	<0.02	0.02	mg/L Cl	10/04/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	10/17/94	JEC	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	10/14/94	TAS	206.2/7060
Barium, Total	<0.01	0.01	mg/L Ba	10/05/94	JBC	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	10/05/94	JBC	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	10/05/94	JBC	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	10/05/94	JBC	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	10/05/94	JBC	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	10/17/94	KHA	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	10/05/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	10/05/94	JBC	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	10/14/94	TAS	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	10/05/94	JBC	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	10/16/94	TAS	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	10/05/94	JBC	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **09/24/94 11:30**
Sample Description: **MW-7** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39648
Instrument: FINN2 Injected: 10/06/94 Factor: 50 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	500
74-83-9	Bromomethane	ND	500
75-01-4	Vinyl chloride	ND	500
75-00-3	Chloroethane	ND	500
75-09-2	Methylene chloride	ND	250
67-64-1	Acetone	ND	5000
75-15-0	Carbon disulfide	ND	250
75-35-4	1,1-Dichloroethene	ND	250
75-34-3	1,1-Dichloroethane	ND	250
156-60-5	trans-1,2-Dichloroethene	ND	250
67-66-3	Chloroform	ND	250
107-06-2	1,2-Dichloroethane	ND	250
78-93-3	2-Butanone	ND	5000
71-55-6	1,1,1-Trichloroethane	ND	250
56-23-5	Carbon tetrachloride	ND	250
108-05-4	Vinyl acetate	ND	500
75-27-4	Bromodichloromethane	ND	250
78-87-5	1,2-Dichloropropane	ND	250
10061-01-5	cis-1,3-Dichloropropene	ND	250
79-01-6	Trichloroethene	ND	250
124-48-1	Dibromochloromethane	ND	250
79-00-5	1,1,2-Trichloroethane	ND	250
71-43-2	Benzene	3000	250
10061-02-6	trans-1,3-Dichloropropene	ND	250
110-75-8	2-Chloroethyl vinyl ether	ND	500
75-25-2	Bromoform	ND	250
108-10-1	4-Methyl-2-pentanone	ND	500
591-78-6	2-Hexanone	ND	500
127-18-4	Tetrachloroethene	ND	250
79-34-5	1,1,2,2,-Tetrachloroethane	ND	250
108-88-3	Toluene	ND	250
108-90-7	Chlorobenzene	ND	250
100-41-4	Ethyl benzene	ND	250
100-42-5	Styrene	ND	250
1330-20-7	Xylenes (Total)	1700	250
156-59-2	cis-1,2-Dichloroethene	6800	250
107-02-8	Acrolein	ND	5000
107-13-1	Acrylonitrile	ND	5000
75-71-8	Dichlorodifluoromethane	ND	500
75-69-4	Trichlorofluoromethane	ND	500
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	116 **	% Recovery	(76% - 114%)
Toluene-d8	107	% Recovery	(88% - 110%)
p-Bromofluorobenzene	119 **	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
**= REANALYSIS CONFIRMS SAMPLE MATRIX INTERFERENCE.
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **09/24/94 11:30**
Sample Description: **MW-7** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/30/94 File #: 4MO17669
Instrument: FINN4 Injected: 10/10/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	220	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	250	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	10	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	15	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	15	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	23	10
117-84-0	Di-n-octylphthalate	32	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **01E** Collected: **09/24/94 11:30**
Sample Description: **MW-7** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 09/30/94 File #: 4MO17669
Instrument: FINN4 Injected: 10/10/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	30	% Recovery (21% - 100%)
Phenol-d6	170 *	% Recovery (10% - 94%)
Nitrobenzene-d5	358 *	% Recovery (35% - 114%)
2-Fluorobiphenyl	24 *	% Recovery (43% - 116%)
2,4,6-Tribromophenol	84	% Recovery (10% - 123%)
p-Terphenyl-d14	15 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **09/24/94 11:35**
Sample Description: **MW-8** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39654
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	320	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	7	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	14	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	500	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	420	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	32	5
100-41-4	Ethyl benzene	10	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	130	5
156-59-2	cis-1,2-Dichloroethene	140	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	102	% Recovery (76% - 114%)
Toluene-d8	104	% Recovery (88% - 110%)
p-Bromofluorobenzene	103	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD
DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **09/24/94 11:35**
Sample Description: **MW-8** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17696
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	270	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **02E** Collected: **09/24/94 11:35**
Sample Description: **MW-8** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17696
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	61 % Recovery	(21% - 100%)
Phenol-d6	60 % Recovery	(10% - 94%)
Nitrobenzene-d5	90 % Recovery	(35% - 114%)
2-Fluorobiphenyl	90 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	67 % Recovery	(10% - 123%)
p-Terphenyl-d14	14 * % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/24/94 12:15**
Sample Description: **SW-1** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39650
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03D** Collected: **09/24/94 12:15**
Sample Description: **SW-1** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39640
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	95	% Recovery	(76% - 114%)
Toluene-d8	104	% Recovery	(88% - 110%)
p-Bromofluorobenzene	101	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/24/94 12:15**
Sample Description: **SW-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17697
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **03E** Collected: **09/24/94 12:15**
Sample Description: **SW-1** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17697
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	69 % Recovery	(21% - 100%)
Phenol-d6	73 % Recovery	(10% - 94%)
Nitrobenzene-d5	87 % Recovery	(35% - 114%)
2-Fluorobiphenyl	89 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	80 % Recovery	(10% - 123%)
p-Terphenyl-d14	39 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **04D** Collected: **09/24/94 12:30**
Sample Description: **SW-2** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39651
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	91 % Recovery	(76% - 114%)
Toluene-d8	94 % Recovery	(88% - 110%)
p-Bromofluorobenzene	92 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/24/94 12:30**
Sample Description: **SW-2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17698
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **04E** Collected: **09/24/94 12:30**
Sample Description: **SW-2** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17698
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	77 % Recovery	(21% - 100%)
Phenol-d6	72 % Recovery	(10% - 94%)
Nitrobenzene-d5	88 % Recovery	(35% - 114%)
2-Fluorobiphenyl	95 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	84 % Recovery	(10% - 123%)
p-Terphenyl-d14	34 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240**
Sample Description: **MW-14**
Test Description: **Volatile Organics**

Lab No: **05D**

Collected: **09/24/94 12:45**
Category: **WATER**
Method: **8240**

Analyst: PNW
File #: 2M039655
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	81	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103	% Recovery (76% - 114%)
Toluene-d8	98	% Recovery (88% - 110%)
p-Bromofluorobenzene	103	% Recovery (86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **05E** Collected: **09/24/94 12:45**
Sample Description: **MW-14** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17699
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **05E** Collected: **09/24/94 12:45**
Sample Description: **MW-14** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17699
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	82 % Recovery	(21% - 100%)
Phenol-d6	83 % Recovery	(10% - 94%)
Nitrobenzene-d5	102 % Recovery	(35% - 114%)
2-Fluorobiphenyl	100 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	90 % Recovery	(10% - 123%)
p-Terphenyl-d14	84 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **06D** Collected: **09/24/94 13:15**
Sample Description: **MW-15** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39656
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	94 % Recovery	(76% - 114%)
Toluene-d8	91 % Recovery	(88% - 110%)
p-Bromofluorobenzene	88 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **06E** Collected: **09/24/94 13:15**
Sample Description: **MW-15** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17700
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **06E** Collected: **09/24/94 13:15**
Sample Description: **MW-15** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17700
Instrument: FINN4 Injected: 10/11/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	28	% Recovery (21% - 100%)
Phenol-d6	39	% Recovery (10% - 94%)
Nitrobenzene-d5	104	% Recovery (35% - 114%)
2-Fluorobiphenyl	105	% Recovery (43% - 116%)
2,4,6-Tribromophenol	8 *	% Recovery (10% - 123%)
p-Terphenyl-d14	23 *	% Recovery (33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT
* = SAMPLE MATRIX INTERFERENCE

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **07D** Collected: **09/24/94 12:45**
Sample Description: **FIELD BLANK 6** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39659
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	89 % Recovery	(76% - 114%)
Toluene-d8	92 % Recovery	(88% - 110%)
p-Bromofluorobenzene	96 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **07E** Collected: **09/24/94 12:45**
Sample Description: **FIELD BLANK 6** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17701
Instrument: FINN4 Injected: 10/12/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

Test Code: **M8270** Lab No: **07E** Collected: **09/24/94 12:45**
Sample Description: **FIELD BLANK 6** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: SPL Extracted: 09/30/94 File #: 4MO17701
Instrument: FINN4 Injected: 10/12/94 Factor: 2 Units: ug/L Verified: CLC

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	99 % Recovery	(21% - 100%)
Phenol-d6	93 % Recovery	(10% - 94%)
Nitrobenzene-d5	100 % Recovery	(35% - 114%)
2-Fluorobiphenyl	104 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	107 % Recovery	(10% - 123%)
p-Terphenyl-d14	119 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **08A** Collected: **09/24/94**
Sample Description: **TRIP BLANK** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: PNW File #: 2MO39660
Instrument: FINN2 Injected: 10/06/94 Factor: 1 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
156-59-2	cis-1,2-Dichloroethene	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorofluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	103 % Recovery	(76% - 114%)
Toluene-d8	106 % Recovery	(88% - 110%)
p-Bromofluorobenzene	100 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY
NF = NOT FOUND

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

EPA Method 415.1/SW9060 - Total Organic Carbon

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

11/17/94

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JA - - Judy Amador
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SR - - Shahla Rogers
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON Environment vices

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/16/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0526	105.20	118	81	0.044	0.042	4.65	<0.004	0.004	0.05	0.0437	87.40	125	62
LEAD-FURNACE	mg/L	TAS	0.05	0.0456	91.20	114	81	0.05	0.049	2.02	<0.005	0.005	0.05	0.0495	99.00	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.055	110.00	124	76	0.057	0.058	1.74	<0.004	0.004	0.05	0.0535	107.00	126	68
TOC	mg/L	DIH	25	26.3	105.20	124	89	< 1	< 1	0.00	<1	1	25	25.8	103.20	136	72
THALLIUM-FURNACE	mg/L	TAS	0.05	0.0491	98.20	120	72	0.048	0.049	2.06	<0.005	0.005	0.05	0.048	96.00	112	86

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]ces

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/17/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	46.5	93.00	115	94	100	85	16.22	<2	2	50	40.7	81.40	120	86
CONDUCTIVITY	uS/cm	AJS	1413	1480	104.74	107	95	4700	4800	2.11	<1	1	---	---	---	125	75
COD	mg/L	PJH	1000	874	87.40	137	61	3000	3000	0.00	<5	5	500	432	86.40	125	66
TOC	mg/L	DIH	25	25.5	102.00	124	89	15	15	0.00	<0.5	0.5	25	24.9	99.60	136	72
LEAD-FURNACE R	mg/L	KHA	0.05	0.0501	100.20	114	81	0.046	0.047	2.15	<0.005	0.005	0.05	0.0465	93.00	123	61
LEAD-FURNACE T	mg/L	KHA	0.05	0.0488	97.60	114	81	20	17	16.22	<0.005	0.005	0.05	0.0442	88.40	123	61
TSS	mg/L	ALC	50	40	80.00	129	60	57	56	1.77	<5	5	50	41	82.00	132	67
PHOSPHORUS	mg/L	PJH	1	1.08	108.00	125	75	570	590	3.45	<0.05	0.05	0.5	0.304	60.80	125	75
ARSENIC-FURNACE R	mg/L	JEC	0.05	0.052	104.00	124	76	0.051	0.051	0.00	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE T	mg/L	JEC	0.05	0.053	106.00	124	76	3.1	3.4	9.23	<0.004	0.004	0.05	0.049	98.00	126	68
AMMONIA	mg/L	REB	2	1.93	96.50	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.978	97.80	142	76
SELENIUM-FURNACE	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
CADMIUM-ICP	mg/L	JBC	1	1.04	104.00	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.99	99.00	115	73
CHROMIUM-ICP	mg/L	JBC	1	1.06	106.00	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.98	98.00	113	80
ARSENIC-ICP	mg/L	JBC	1	1.01	101.00	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
LEAD-ICP	mg/L	JBC	1	1.13	113.00	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	1.06	106.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.95	95.00	122	66
ANTIMONY-FURN U	mg/L	JEC	0.05	0.0533	106.60	125	72	0.052	0.049	5.94	<0.02	0.02	0.05	0.052	104.00	120	63
SELENIUM-FURN U	mg/L	JEC	0.05	0.0576	115.20	118	81	0.049	0.052	5.94	<0.004	0.004	0.05	0.049	98.00	125	62
LEAD-FURNACE	mg/L	JEC	0.05	0.05	100.00	119	84	0.048	0.05	4.08	<0.005	0.005	0.05	0.048	96.00	117	67
SILVER-ICP	mg/L	JBC	0.2	0.226	113.00	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	1.07	107.00	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.98	98.00	131	63
BARIUM-ICP	mg/L	JBC	10	10.3	103.00	113	85	1.1	1.2	8.70	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	1.02	102.00	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	112	79
CALCIUM-ICP	mg/L	JBC	10	10.4	104.00	112	88	43	44	2.30	<0.2	0.2	10	8.5	85.00	123	75
COBALT-ICP	mg/L	JBC	1	1.05	105.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	80
COPPER-ICP	mg/L	JBC	1	1.03	103.00	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.96	96.00	111	67
IRON-ICP	mg/L	JBC	1	1.06	106.00	113	90	0.92	0.94	2.15	<0.04	0.04	1	0.96	96.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	11.4	114.00	120	84	4	4.3	7.23	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	10.2	102.00	109	87	19	20	5.13	<0.5	0.5	10	8.3	83.00	116	81
MANGANESE-ICP	mg/L	JBC	1	1.03	103.00	112	89	0.09	0.1	10.53	<0.01	0.01	1	0.78	78.00	119	81
SODIUM-ICP	mg/L	JBC	10	11	110.00	112	87	120	110	8.70	<0.5	0.5	10	8.1	81.00	129	58
NICKEL-ICP	mg/L	JBC	1	1.04	104.00	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	1	100.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	1.14	114.00	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.94	94.00	120	71
VANADIUM-ICP	mg/L	JBC	1	1	100.00	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.98	98.00	115	75
ZINC-ICP	mg/L	JBC	1	1.06	106.00	112	89	0.4	0.37	7.79	<0.01	0.01	1	0.98	98.00	122	71
MOLYBDENUM-ICP	mg/L	JBC	1	0.997	99.70	113	88	0.81	0.81	0.00	<0.1	0.1	1	0.8	80.00	116	87

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]s

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/14/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CHLORIDE	mg/L	DIH	50	50.4	100.80	115	94	58	57	1.74	<2	2	25	25.4	101.60	120	86
LEAD-FURNACE	mg/L	JKM	0.05	0.0499	99.98	114	81	0.043	0.044	2.30	<0.005	0.005	0.05	0.0429	85.80	123	61
ARSENIC-FURNACE	mg/L	TAS	0.05	0.058	116.00	124	76	0.0054	0.0057	5.41	<0.004	0.004	0.05	0.0524	104.80	126	68
SELENIUM-FURNACE	mg/L	TAS	0.05	0.0533	106.60	118	81	0.0562	0.0559	0.54	<0.004	0.004	0.05	0.0562	112.40	125	62
MERCURY	mg/L	TAS	0.01	0.0109	109.00	122	82	0.0113	0.0111	1.79	<0.0002	0.0002	0.01	0.0113	113.00	114	85

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/13/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ARSENIC-FURNACE L	mg/L	KHA	0.05	0.048	96.00	124	76	0.051	0.052	1.94	<0.004	0.004	0.05	0.051	102.00	126	68
ARSENIC-FURNACE E	mg/L	KHA	0.05	0.0489	97.80	124	76	0.041	0.044	7.06	<0.004	0.004	0.05	0.044	88.00	126	68
ARSENIC-FURNACE A	mg/L	KHA	0.05	0.0461	92.20	124	76	0.048	0.041	15.73	<0.004	0.004	0.05	0.048	96.00	126	68
LEAD-FURNACE	mg/L	TAS	0.05	0.0534	106.80	114	81	0.05	0.052	3.92	<0.005	0.005	0.05	0.05	100.00	123	61
LEAD-FURNACE O	mg/L	TAS	0.05	0.0458	91.60	114	81	0.061	0.062	1.63	<0.005	0.005	0.05	0.061	122.00	123	61

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
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RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S[illegible]es

QUALITY ASSURANCE DAIL[illegible] REPORT

OHIO VALLEY LABORATORY Date: 10/10/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK	MATRIX/MEDIA SPIKE					
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
THALLIUM-FURN E	mg/L	TAS	0.05	0.0452	90.40	120	72	0.053	0.054	1.87	<0.005	0.005	0.05	0.053	106.00	112	86
COPPER-FURNACE M	mg/L	TAS	0.05	0.0511	102.20	103	79	0.061	0.061	0.00	<0.005	0.005	0.05	0.061	122.00	117	64
COPPER-FURNACE E	mg/L	TAS	0.05	0.0499	99.80	103	79	0.054	0.06	10.53	<0.005	0.005	0.05	0.054	108.00	117	64
COPPER-FURNACE B	mg/L	TAS	0.05	0.0569	113.80	103	79	9.9	10	1.01	<0.005	0.005	0.05	0.053	106.00	117	64
CHROMIUM-FURN M	mg/L	KHA	0.05	0.0455	91.00	*	*	0.023	0.023	0.00	<0.005	0.005	0.025	0.023	92.00	125	75
CHROMIUM-FURN EE	mg/L	KHA	0.05	0.0472	94.40	*	*	0.019	0.018	5.41	<0.005	0.005	0.025	0.019	76.00	125	75
CHROMIUM-FURN G	mg/L	KHA	0.025	0.0257	102.80	*	*	0.027	0.027	0.00	<0.005	0.005	0.025	0.016	64.00	125	75
COPPER-FURNACE J	mg/L	TAS	0.05	0.0503	100.60	103	79	0.045	0.045	0.00	<0.005	0.005	0.05	0.045	90.00	117	64
COPPER-FURNACE I	mg/L	TAS	0.05	0.0481	96.20	103	79	0.043	0.042	2.35	<0.005	0.005	0.05	0.043	86.00	117	64
LEAD-FURNACE I	mg/L	TAS	0.05	0.0445	89.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE C	mg/L	TAS	0.05	0.0501	100.20	114	81	0.04	0.038	5.13	<0.005	0.005	0.05	0.04	80.00	123	61
CADMIUM-FURNACE I	mg/L	TAS	0.005	0.005	100.00	131	71	0.0048	0.0052	8.00	<0.0005	0.0005	0.005	0.0048	96.00	131	66
CADMIUM-FURNACE J	mg/L	TAS	0.005	0.0052	104.00	131	71	0.0052	0.0053	1.90	<0.0005	0.0005	0.005	0.0052	104.00	131	66
BARIUM-ICP	mg/L	JBC	10	10.9	109.00	113	85	1.28	1.22	4.80	<0.01	0.01	10	8.6	86.00	112	74
ALKALINITY	mg/L	REB	100	107	107.00	112	80	440	450	2.25	<10	10	50	48.7	97.40	120	62
NITRATE	mg/L	REB	0.5	0.51	102.00	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.268	107.20	134	77
TOX	mg/L	RJS	0.1	0.112	112.00	133	55	0.04	0.045	11.76	<0.02	0.02	0.1	0.104	104.00	148	64
SILVER-ICP	mg/L	JBC	0.2	0.187	93.50	113	83	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
ALUMINUM-ICP	mg/L	JBC	1	0.975	97.50	122	86	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.96	96.00	131	63
BARIUM-ICP	mg/L	JBC	10	9.26	92.60	113	85	0.025	0.025	0.00	<0.01	0.01	10	10.1	101.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.938	93.80	110	88	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.94	94.00	112	79
CALCIUM-ICP	mg/L	JBC	10	9.52	95.20	112	88	18.5	19.3	4.23	<0.2	0.2	10	11.1	111.00	123	75
CADMIUM-ICP	mg/L	JBC	1	0.968	96.80	112	83	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.9	90.00	115	73
COBALT-ICP	mg/L	JBC	1	0.959	95.90	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.9	90.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.972	97.20	114	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.93	93.00	113	80
COPPER-ICP	mg/L	JBC	1	0.942	94.20	111	88	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.95	95.00	111	67
IRON-ICP	mg/L	JBC	1	1.03	103.00	113	90	0.144	0.147	2.06	<0.04	0.04	1	1.08	108.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	9.37	93.70	120	84	1.56	1.73	10.33	<1	1	10	9.2	92.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.18	91.80	109	87	5.22	5.42	3.76	<0.5	0.5	10	10.2	102.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.945	94.50	112	89	0.027	0.028	3.64	<0.01	0.01	1	1.01	101.00	119	81
SODIUM-ICP	mg/L	JBC	10	9.54	95.40	112	87	13.7	14.4	4.98	<0.5	0.5	10	9.1	91.00	129	58
NICKEL-ICP	mg/L	JBC	1	0.963	96.30	113	87	< 0.04	< 0.04	0.00	<0.04	0.04	1	0.9	90.00	113	76
ANTIMONY-ICP	mg/L	JBC	1	0.925	92.50	119	80	< 0.2	< 0.2	0.00	<0.2	0.2	1	0.9	90.00	120	71
VANADIUM-ICP	mg/L	JBC	1	0.922	92.20	111	86	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.91	91.00	115	75
ZINC-ICP	mg/L	JBC	1	0.955	95.50	112	89	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.86	86.00	122	71
ARSENIC-ICP	mg/L	JBC	1	0.901	90.10	123	76	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.88	88.00	126	65
LEAD-ICP	mg/L	JBC	1	0.925	92.50	114	84	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.99	99.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.927	92.70	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	0.97	97.00	122	66

UCLx = Upper Control Limit (Standard)
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UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental S es

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 10/05/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
NITRATE	mg/L	REB	0.5	0.514	102.80	133	75	0.14	0.13	7.41	<0.05	0.05	0.25	0.255	102.00	134	77
CYANIDE	mg/L	JWR	0.2	0.221	110.50	119	94	---	---	---	<0.01	0.01	---	---	---	121	86
PHENOL	mg/L	REB	0.5	0.505	101.00	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.516	103.20	118	96
TOX	mg/L	RJS	0.1	0.0903	90.30	133	55	0.553	0.591	6.64	<0.02	0.02	0.1	0.08	80.00	148	64
MERCURY-D	mg/L	TAS	0.01	0.0101	101.00	121	77	0.0094	0.01	6.19	<0.0002	0.0002	0.01	0.01	100.00	124	76
LEAD-FURNACE B	mg/L	TAS	0.05	0.0592	118.40	119	84	7.8	8.6	9.76	<0.005	0.005	0.05	0.036	72.00	117	67
CHROMIUM-FURN B	mg/L	JEC	0.05	0.0509	101.80	126	78	5.6	5.8	3.51	<0.005	0.005	0.05	0.061	122.00	133	61
ANTIMONY-FURN N	mg/L	JEC	0.05	0.0484	96.80	125	72	0.038	0.036	5.41	<0.02	0.02	0.05	0.038	76.00	120	63
LEAD-FURNACE H	mg/L	JEC	0.05	0.051	102.00	119	84	0.048	0.047	2.11	<0.005	0.005	0.05	0.048	96.00	117	67
LEAD-FURNACE N	mg/L	JEC	0.05	0.0538	107.60	119	84	0.044	0.043	2.30	<0.005	0.005	0.05	0.044	88.00	117	67
CONDUCTIVITY	uS/cm	DIH	1413	1360	96.25	107	95	2200	2200	0.00	<1	1	---	---	---	---	---
BOD	mg/L	PJH	200	201	100.50	124	77	< 3	< 3	0.00	<3	3	200	198	99.00	133	71
CHROMIUM (6)	mg/L	PJH	0.1	0.106	106.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.111	111.00	120	77
SILVER-ICP	mg/L	JBC	0.2	0.185	92.50	113	83	0.19	0.19	0.00	<0.01	0.01	0.2	0.19	95.00	112	76
BARIUM-ICP	mg/L	JBC	10	9.28	92.80	113	85	9.4	9.5	1.06	<0.01	0.01	10	9.4	94.00	112	74
BERYLLIUM-ICP	mg/L	JBC	1	0.947	94.70	110	88	0.97	0.98	1.03	<0.01	0.01	1	0.97	97.00	112	79
CADMIUM-ICP	mg/L	JBC	1	1	100.00	112	83	1	1	0.00	<0.01	0.01	1	1.03	103.00	115	73
COBALT-ICP	mg/L	JBC	1	0.972	97.20	111	88	1	1	0.00	<0.02	0.02	1	1	100.00	111	80
CHROMIUM-ICP	mg/L	JBC	1	0.991	99.10	114	88	1	1	0.00	<0.02	0.02	1	1.01	101.00	113	80
COPPER-ICP	mg/L	JBC	1	0.946	94.60	111	88	0.96	0.97	1.04	<0.02	0.02	1	0.95	95.00	111	67
VANADIUM-ICP	mg/L	JBC	1	0.924	92.40	111	86	0.94	0.95	1.06	<0.01	0.01	1	0.94	94.00	115	75
ZINC-ICP	mg/L	JBC	1	0.983	98.30	112	89	1	1	0.00	<0.01	0.01	1	1	100.00	122	71
NICKEL-ICP	mg/L	JBC	1	0.969	96.90	113	87	0.99	1	1.01	<0.04	0.04	1	0.98	98.00	113	76
MBAS	mg/L	JWR	1	1.01	101.00	113	71	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.05	105.00	142	57
ALUMINUM-ICP	mg/L	JBC	1	0.968	96.80	122	86	0.986	1.02	3.39	<0.1	0.1	1	0.95	95.00	131	63
CALCIUM-ICP	mg/L	JBC	10	9.7	97.00	112	88	10.4	10.4	0.00	<0.2	0.2	10	10.1	101.00	123	75
IRON-ICP	mg/L	JBC	1	0.998	99.80	113	90	1.01	1.01	0.00	<0.04	0.04	1	0.99	99.00	111	87
POTASSIUM-ICP	mg/L	JBC	10	8.88	88.80	120	84	8.98	9.54	6.05	<1	1	10	9	90.00	128	65
MAGNESIUM-ICP	mg/L	JBC	10	9.3	93.00	109	87	9.64	9.74	1.03	<0.5	0.5	10	9.6	96.00	116	81
MANGANESE-ICP	mg/L	JBC	1	0.954	95.40	112	89	0.977	0.989	1.22	<0.01	0.01	1	0.98	98.00	119	81
SODIUM-ICP	mg/L	JBC	10	8.71	87.10	112	87	9.12	9.47	3.77	<0.5	0.5	10	9	90.00	129	58
ANTIMONY-ICP	mg/L	JBC	1	0.875	87.50	119	80	0.987	0.956	3.19	<0.2	0.2	1	0.98	98.00	120	71
ARSENIC-ICP	mg/L	JBC	1	1.02	102.00	123	76	1.02	1.06	3.85	<0.1	0.1	1	1.01	101.00	126	65
LEAD-ICP	mg/L	JBC	1	0.978	97.80	114	84	1.05	1.02	2.90	<0.1	0.1	1	1.04	104.00	115	60
SELENIUM-ICP	mg/L	JBC	1	0.988	98.80	117	80	0.942	0.977	3.65	<0.1	0.1	1	0.94	94.00	122	66

UCLx = Upper Control Limit (Standard)
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UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DATA REPORT

OHIO VALLEY LABORATORY Date: 10/04/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CADMIUM-FURNACE P	mg/L	KHA	0.005	0.005	100.00	125	73	0.0047	0.0046	2.15	<0.0005	0.0005	0.005	0.0047	94.00	115	74
CADMIUM-FURNACE N	mg/L	KHA	0.005	0.0044	88.00	125	73	0.004	0.0041	2.47	<0.0005	0.0005	0.005	0.0041	82.00	115	74
SELENIUM-FURN N	mg/L	TAS	0.05	0.0516	103.20	117	84	0.042	0.042	0.00	<0.004	0.004	0.05	0.042	84.00	130	69
SILVER-FURNACE E	mg/L	TAS	0.05	0.0463	92.60	112	81	0.044	0.043	2.30	<0.004	0.004	0.05	0.044	88.00	111	74
SILVER-FURNACE N	mg/L	TAS	0.05	0.0476	95.20	112	81	0.05	0.05	0.00	<0.004	0.004	0.05	0.05	100.00	111	74
SILVER-FURNACE P	mg/L	TAS	0.05	0.0512	102.40	112	81	0.055	0.052	5.61	<0.004	0.004	0.05	0.052	104.00	111	74
AMMONIA	mg/L	REB	2	1.76	88.00	117	80	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.03	103.00	142	76
TSS	mg/L	MZL	50	36	72.00	124	65	11	11	0.00	<5	5	50	49	98.00	130	60
COPPER-FURNACE N	mg/L	TAS	0.05	0.0474	94.80	103	79	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	117	64
TKN	mg/L	REB	1	1.11	111.00	131	67	0.51	0.41	21.74	<0.1	0.1	0.5	0.389	77.80	145	57
PHOSPHORUS	mg/L	REB	2	1.94	97.00	103	64	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.508	101.60	117	58
SULFATE	mg/L	JWR	20	19	95.00	130	78	930	940	1.07	<2	2	10	9.7	97.00	127	85
TOX	mg/L	RJS	0.1	0.099	99.00	133	55	0.032	0.028	13.33	<0.02	0.02	0.1	0.08	80.00	148	64
ARSENIC-FURNACE N	mg/L	TAS	0.05	0.0522	104.40	120	80	0.056	0.057	1.77	<0.004	0.004	0.05	0.056	112.00	123	72
THALLIUM-FURN B	mg/L	JEC	0.05	0.0482	96.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.054	108.00	112	86
THALLIUM-FURN K	mg/L	JEC	0.05	0.0522	104.40	120	72	< 0.25	< 0.25	0.00	<0.005	0.005	0.05	0.047	94.00	112	86
THALLIUM-FURN E	mg/L	JEC	0.05	0.0551	110.20	120	72	0.053	0.053	0.00	<0.005	0.005	0.05	0.053	106.00	112	86
THALLIUM-FURN H	mg/L	JEC	0.05	0.0483	96.60	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
THALLIUM-FURN N	mg/L	JEC	0.05	0.0409	81.80	120	72	0.048	0.046	4.26	<0.005	0.005	0.05	0.048	96.00	112	86
LEAD-FURNACE P	mg/L	JEC	0.05	0.049	98.00	119	84	0.047	0.047	0.00	<0.005	0.005	0.05	0.047	94.00	117	67
ANTIMONY-FURN B	mg/L	JEC	0.05	0.0449	89.80	125	72	< 1	< 1	0.00	<0.02	0.02	0.05	0.047	94.00	120	63
ANTIMONY-FURN H	mg/L	JEC	0.05	0.0452	90.40	125	72	0.048	0.045	6.45	<0.02	0.02	0.05	0.048	96.00	120	63

UCLx = Upper Control Limit (Standard)
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UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 09/30/94

Parameter	Units	Analyst	REFERENCE STANDARD Known	Result	Rec.(%)	UCLx	LCLx	DUPLICATE SAMPLE Result1	Result2	RPD (%)	BLANK Result	MDL	MATRIX/MEDIA SPIKE Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
HARDNESS	mg/L	PJH	100	106	106.00	106	93	130	130	0.00	<5	5	50	50	100.00	116	78
SELENIUM-FURN B	mg/L	JEC	0.05	0.0446	89.20	117	84	---	---	---	<0.004	0.004	0.05	0.053	106.00	130	69
ARSENIC-FURNACE B	mg/L	JEC	0.05	0.0521	104.20	120	80	---	---	---	<0.004	0.004	0.05	0.053	106.00	123	72
MERCURY-P	mg/L	JEC	0.01	0.0097	97.00	121	77	9.9	9.5	4.12	<0.0002	0.0002	0.01	0.0098	98.00	124	76
MERCURY-I	mg/L	JEC	0.01	0.0086	86.00	121	77	< 0.0005	< 0.0005	0.00	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-J	mg/L	JEC	0.01	0.0104	104.00	121	77	0.7	0.6	15.38	<0.0002	0.0002	0.01	0.01	100.00	124	76
MERCURY-G	mg/L	JEC	0.01	0.0102	102.00	121	77	9.8	10.2	4.00	<0.0002	0.0002	0.01	0.0098	98.00	124	76
PHENOL	mg/L	REB	0.5	0.522	104.40	110	99	< 0.005	< 0.005	0.00	<0.005	0.005	0.5	0.52	104.00	118	96
ARSENIC-FURNACE	mg/L	JEC	0.05	0.0521	104.20	120	80	13	14	7.41	<0.004	0.004	0.05	0.053	106.00	123	72
TOC	mg/L	REB	25	25.8	103.20	113	85	< 1	< 1	0.00	<1	1	25	25.2	100.80	115	63
CHLORIDE	mg/L	REB	50	51.6	103.20	115	94	4	4	0.00	<2	2	25	25.1	100.40	120	86
NITRATE	mg/L	REB	0.5	0.542	108.40	133	74	< 0.05	< 0.05	0.00	<0.05	0.05	0.25	0.258	103.20	134	77
MBAS	mg/L	REB	1	0.923	92.30	113	71	0.3	0.2	40.00	<0.1	0.1	1	0.956	95.60	142	57
MOLYBDENUM-ICP	mg/L	JBC	1	0.908	90.80	113	88	0.929	0.93	0.11	<0.1	0.1	1	0.93	93.00	116	87
BORON-ICP	mg/L	JBC	1	0.901	90.10	*	*	1.11	1.12	0.90	<0.5	0.5	1	0.89	89.00	125	75
TOX	mg/L	RJS	0.1	0.094	94.00	133	55	0.049	0.04	20.22	<0.02	0.02	0.1	0.087	87.00	148	64

UCLx = Upper Control Limit (Standard)
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UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 10/06/94
INSTRUMENT: FINN2
ANALYST(S): PNW

BLK FLNM: 2BK39646
LCS FLNM: 2QC39647
SHIFT: AM

SMPL NAME: 09-530-06
FILE NAME: 2MO39656
MS FLNM: 2MO39657
MSD FLNM: 2MO39658

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	19.6	98.0	43-129	0-273								33
BROMOMETHANE	10	BQL	23.0	115.0	82-115	0-242								22
VINYL CHLORIDE	10	BQL	20.4	102.0	47-128	0-251								18
CHLOROETHANE	10	BQL	20.0	100.0	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	22.3	111.5	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	21.9	109.5	66-138	0-234	0.0	29.1	32.0	58.2	64.0	61 - 145	9.5	31
1,1-DICHLOROETHANE	5	BQL	21.4	107.0	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	20.2	101.0	77-127	54-156								31
CHLOROFORM	5	BQL	18.9	94.5	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	16.8	84.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	19.2	96.0	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	19.9	99.5	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	19.1	95.5	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	21.1	105.5	78-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	22.1	110.5	80-146	0-227								40
TRICHLOROETHENE	5	BQL	20.0	100.0	83-129	71-157	0.0	41.5	47.8	83.0	95.6	71 - 120	14.1	14
DIBROMOCHLOROMETHA	5	BQL	19.9	99.5	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	18.1	90.5	86-127	52-150								21
BENZENE	5	BQL	19.0	95.0	87-120	37-151	0.0	36.5	40.3	73.0	80.6	76 - 127	9.9	23
TRANS-1,3-DICHLOROPRO	5	BQL	15.1	75.5	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.4	92.0	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	20.3	101.5	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	17.4	87.0	78-124	46-147								17
TOLUENE	5	BQL	19.6	98.0	86-115	47-150	0.0	41.4	44.9	82.8	89.8	78 - 125	8.1	14
CHLOROBENZENE	5	BQL	19.1	95.5	85-119	37-160	0.0	42.5	48.6	85.0	97.2	76 - 130	13.4	14
ETHYLBENZENE	5	BQL	17.5	87.5	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	25.7	128.5	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	22.9	114.5	76-109	18-190								18
1,3-DICHLOROBENZENE	5	BQL	23.2	116.0	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	22.8	114.0	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/30/94 SMPL NAM 09-530-01
TYPE: CONTINUOUS FILE NAME 4MO17669
BLK FLNM: 4BK17571 MS FLNM:
QC FLNM: 4QC17572 MSD FLNM

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	68	136	68	13-132	38	0	0	-76	-76	-38	-38	0
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	69	138	69	48-115	0	0	38	0	76	0	38	200
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	27	54	54	32-115	0	11	15	22	30	22	30	31
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	41	82	82	35-124	0	30	18	60	36	60	36	50
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	24	48	48	29- 98	0	11	14	22	28	22	28	24
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	72	144	72	45-117	0	66	45	132	90	66	45	38
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	38	76	76	43-117	0	18	17	36	34	36	34	6

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 09/30/94
TYPE: CONTINUOUS
BLK FLNM: 4BK17571
QC FLNM: 4QC17572

SMPL NAM 09-530-01
FILE NAME 4MO17669
MS FLNM:
MSD FLNM

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	58	116	58	1- 148	0	0	0	0	0	0	0	ERR
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	29	58	58	34-110	3	9	5	12	4	12	4	100
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	88	176	88	36-137	0	0	0	0	0	0	0	ERR
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	44	88	88	42-139	8	14	12	12	8	12	8	40
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD)PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01552

PAGE 1 OF 2

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WV

SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZOFURAN	TOTAL BOTTLES	PRESERVATION
WT-6	9/23/94	1910	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-10B	9/23/94	2015	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-10C	9/23/94	2000	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-15A	9/23/94	2030	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
TD-1	9/24/94	815	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-14A	9/24/94	905	AQ	2	2	1	1	1	2	9	HCl, H_2SO_4, HNO_3, ice
WT-8C	9/24/94	1000	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
WT-1	9/24/94	1020	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-7	9/24/94	1130	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-8	9/24/94	1135	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice

RELINQUISHED BY: SAMPLER'S (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Philip Chang	ROUX	9/24	1500	Y					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) Angelina Brown Kemron	FOR	DATE 9/26	TIME 9:30	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: FED EX

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #s: 0020, 0021, 0022, 0023, 0024

ROUX

CHAIN OF CUSTODY

№ 01933J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WV

SAMPLER(S): S. Anderson, J. VanderVliet, P. Chang

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCs BY 8240	BN/AE BY 8270	TOX	TOC	METALS	DIOXINS/DIBENZOFURAN	TOTAL BOTTLES	PRESERVATION
SW-1	9/24/94	1215	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
SW-2	9/24/94	1230	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-14	9/24/94	1245	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
MW-15	9/24/94	1315	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
FIELDBLANK 6	9/24/94	1245	AQ	2	2	1	1	1		7	HCl, H_2SO_4, HNO_3, ice
TRIP BLANK	9/24/94	—	AQ	2						2	HCl, ice
	ARB										

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S Philip Chang	ROUX	9/24	1500	Y					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) Angelina P. Bourkenron	FOR	DATE 9/26	TIME 9:00	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N

DELIVERY METHOD: FED EX

ANALYTICAL LABORATORY: KEMRON

COMMENTS: CUSTODY SEALS #s: 0020, 0021, 0022, 0023, 0024

Kemron
ENVIRONMENTAL SERVICES

SAMPLE CUSTODY

7.0 SAMPLE CUSTODY

In recognition of the critical nature of sample custody protocol, KEMRON Environmental Services has implemented stringent standard operating procedures, designed to ensure sample integrity and thorough documentation. This section provides a clear description of sample traceability from sampling kit to final sample disposition.

7.1 Sampling Kits

Kemron Environmental Services, Inc., at the client's request, will provide sampling kits, KEM-KITS, to the client. Additional information on KEM-KITS can be found under Section 6 of this SOP.

7.2 Field Custody Protocol (Also see Section 6.1.3)

A vital component of KEMRON's quality assurance program is to ensure that a clear and detailed record is kept of all samples and sampling activity. Field records (Figure 7-1) are kept in bound field notebooks and on standard monitoring well sampling forms, as well as custody forms. These books are kept in the appropriate project files. Water-proof ink is used to label samples as protection against loss of information due to accidental erasure. Waterproof ink is also used, when applicable, for field notebook entries and field sampling logs. KEMRON's sample custody protocol requires that the following information be kept in the project field notebook.

a. Sample date

b. Specific description of sample location. This will include a monitoring well number in the case of groundwater sampling. For soil sampling, sample points will be sketched on a site map and confirmed via surveying. For surface water and sediment sampling, the drum number, (if labeled), drum location, suspected contents, and phase of drum materials (liquid, solid or sludge) will be noted, as well as which layer or layers within the drum were sampled.

c. Name(s) of sampler(s) will be identified.

d. A description of weather conditions and general site conditions (disturbed soils, standing water, ongoing activities, etc.) will be provided.

e. A description of the sampling equipment used, including method for purging monitoring wells must be indicated.

f. The specific field ID number for a sample will be recorded as well as the sample sequence number, which is the order in which a particular sample was taken with respect to all other samples retrieved at the site.

g. Time of sample collection must be noted.

h. Components or constituents of sample to be analyzed are to be noted.

i. Signature(s) of sampler(s) will be provided.

j. Types of preservatives and, if necessary, the results of field checks (pH, etc.) must be recorded.

k. Field measurement data (such as OVA reading, pH, specific conductance) will be recorded.

7.3 Sample Transport

Samples are transported to KEMRON's laboratory by one of three modes:

7.3.1 On some projects, KEMRON will have responsibility for preparation of sample bottles, sample kit assembly and delivery of sample kits to the project site. KEMRON will also pick up the samples at the project site and transport them to the laboratory. KEMRON drivers will follow these established protocols:

a. The driver will carry proper KEMRON identification, which they will be prepared to display before entering project sites.

b. The KEMRON driver will sign the Chain-of-Custody forms (Figure 7-2) when picking up the samples.

c. The driver is responsible for the integrity and security of samples while in their custody.

d. The driver must secure the vehicle at all times when it is necessary to stop and be away from the vehicle for any reason during the transportation of samples to the laboratory.

e. All samples collected or picked up by KEMRON personnel are delivered immediately to the Sample Custodian in the sample logging station. The Shipping and Receiving entrance is to be used for such deliveries.

7.3.2 UPS or Other Common Carrier - Transporters are directed to the Shipping and Receiving entrance and the samples are delivered to the Sample Custodian.

7.3.3 Client Deliveries - Clients may deliver samples in person via the designated Receiving entrance, but must be escorted while within the facility.

7.4 Normal Laboratory Custody

The National Enforcement Investigations Center (NEIC) of EPA defines custody of evidence in the following manner:

a. It is in your possession, or

b. It is in your view, after being in your possession, or

c. It was in your possession and then you locked or sealed it to prevent tampering, or

d. It is in a secure area

For the purpose of sample custody, KEMRON Environmental Services maintains that the laboratory in its entirety is a secure area, and all samples received and logged into the laboratory remain in the custody of the Sample Custodian, Supervisor or Analyst, until time of disposal. Extended Laboratory Custody is available for special projects.

7.5 Extended Laboratory Custody (Optional)

In order to satisfy more stringent Chain-of-Custody requirements, the following standard operating procedures can be implemented by KEMRON Environmental Services, Inc. upon the request of the client.

a. Samples will be stored in a secure area

b. Refrigerators, freezers and other designated sample storage areas will be securely maintained or locked

c. Only the designated Sample Custodian or supervisory personnel will have keys to locked sample storage units until removed for sample preparation or analysis.

d. Samples will remain in secure sample storage units until removed for sample preparation or analysis.

e. All transfers of samples into and out of storage will be documented on the Sample Control Record. These records will be maintained in the project case files. (See Fig. 7-5)

f. After a sample or extract has been removed from storage, the analyst is responsible for the custody of the sample.

7.6 Sample Log-In

The Sample Custodian is solely responsible for logging all samples into the Sample Analysis Management (SAM) computer system, maintaining the KEMRON logbook, signing the Chain-of-Custody and sample receipt forms, initiating paperwork for report files and analytical worksheets, reporting all problems, inconsistencies, or anything questionable to the Project Manager, placing all samples in storage, monitoring conditions in sample storage areas, maintaining records for laboratory Chain-of-Custody and maintaining sample inventory and disposal schedule.

7.6.1 Receipt & Inspection

The Sample Custodian will receive all incoming samples. The Custodian will open the shipping containers and note the presence/absence of Chain-of-Custody forms and seals, airbills, or bills-of-lading. The Custodian will examine the shipping container to verify the integrity of the sample(s) and examine the sample documentation and identification to assure it is correct and the proper preservative has been used. If inspection indicates samples were damaged in transit, the shipping container will be moved to the hood in Log-In, assessments of the damage will be made and the Support Services Supervisor and the Project Manager will be notified. The client will be immediately contacted and determination of the degree of hazard will be made. If damage is minimal and the client requests it, an attempt to salvage the sample(s) will be made if it can be done safely. In the event of damaged hazardous samples, KEMRON's Spill Response Team will be notified per the Chemical Hygiene Plan.

Samples received after hours, when the Sample Custodian is absent, will be placed in the walk-in refrigerator. The person receiving the shipping container will sign for the container, and place the dated forms on the Custodian's desk. The Sample Custodian will log in the samples on the next business day. The logbook will indicate the actual date and time received and the original receipt of documentation will be attached to the Chain-of-Custody form.

7.6.2 Inspection

The Sample Custodian will compare the Chain-of-Custody forms and labels to verify agreement of information contained therein. If discrepancies are found, they will be noted in the Sample Analysis Management (SAM) system. The KEMRON Project Manager will be immediately notified. Written documentation of all problem resolutions will be placed in the project/case file. If there are no problems with the samples received, the Sample Custodian files the signed Chain-of-Custody form in the project/case file. After the sample is logged in, it will be immediately stored under the proper conditions.

Sample labels or other sample documents that appear to be contaminated due to sample breakage or other problems will be dried under a fume hood and be separately sealed in plastic bags prior to being placed in case files. The KEMRON Project Manager must also be notified.

7.6.3 Logging Procedures

As a new KEMRON work order (Figure 7-3) is initiated in the SAM computer system, the Sample Custodian will enter the following information about the project shipment. They will also begin a new entry in the KEMRON hard-bound logbook as backup.

a. KEMRON Work-Order Number (Assigned by SAM)

b. Client Sample Identification

c. Date and Time of Sample Collection

d. Project #/Work ID #/Sample ID #

e. Container size/type/matrix/condition/storage location/preservative

f. List of analyses

g. Date Received/Date Due

h. Mode of transportation/Sampler's name

i. Notation of problems or discrepancies

In order to maintain sample identity, each sample received will be assigned a unique sample I.D. number. The SAM system will assign the unique nine-digit KEMRON Sample Number at the time of log-in, as shown in the following example:

EXAMPLE: N212001-01

The first seven digits identify a group of related samples and become the work order number and report number. The two-digit number after the dash identifies a specific sample in the work order. These numbers are used by KEMRON for continuous identification of the sample from receipt to completion of analysis. Sample containers (i.e. bottles and extract vials) will be clearly identified with the appropriate sample number. The sample labeling process is accomplished by the SAM system which prints the required number of computer labels. On those projects where it is necessary to distinguish fractions or containers of the same sample source, alpha suffixes to further identify the sample bottles will be added to the number.

EXAMPLE: N212001-01A Volatile Organics Fraction
N212001-01B PCB Fraction

Extract vial numbers and metal digests will correspond to the KEMRON sample number from which they originated. These numbers will also be recorded on sample tracking documentation.

7.7 Sample Storage

Samples and extracts will be stored in uniquely identified refrigerators which are in secure areas of the laboratory. Each storage unit (i.e. refrigerator) has been assigned a unique identification number which is referenced in the logbook for each sample it contains.

The Sample Custodian or designated assistant will make a daily check of the

temperature of each refrigerator in the log-in area and maintain a record book. This record book will be reviewed on a monthly basis by the Support Services Supervisor to note any trends or inconsistencies. The acceptable range for sample storage is 4 degrees Celsius, + or - 2 degrees. The Sample Custodian will notify the Support Services Supervisor of any refrigerator temperature problem which cannot be corrected by simple thermostat adjustment. A list of emergency repair numbers for the refrigeration units is attached to the walk-in refrigerator's exterior.

7.8 Sample Distribution and Tracking

Both the preparation and the analysis of samples will be documented using special forms (logbooks). Each analyst will have permanent laboratory notebooks which will contain analytical information in sufficient detail to enable tracking. Once analysis is complete, the analyst will return the unused sample to the Sample Custodian area. The sample is then returned to the main cooler. Figure 7-5 provides a sample of the KEMRON sample control record form.

Samples and extracts will be returned to their original storage units after completion of analyses. Samples which have exceeded their regulated holding period will be placed in the Sample Archive Room. They are routinely stored in this area for a minimum of 14 days after the due date for the analytical report. They are then disposed per protocol listed in KEMRON's "Waste Management SOP".

It is important to note that samples received for analysis of volatile organic compounds (VOA) are segregated from other samples. Standards are also segregated from ALL samples in designated storage units.

7.9 Sample Security

The main walk-in sample storage refrigerator is equipped with a lock. The unit is kept locked and the area is monitored by the Sample Custodian or the Laboratory Supervisors. Only selected personnel have access (by key) to the sample storage unit. All samples, extracts and digests will be stored in segregated areas.

7.10 Laboratory Building Security

All access doors to the building, with the exception of the main entrance to the reception area, remain locked. Only select KEMRON employees have keys to the access doors to the building. The main entrance is unlocked only on business days between the hours of 8:00 AM and 5:00 PM. The facility is also equipped with an electronic alarm system and employees are assigned unique pass codes for entry.

7.10.1 Employee Access

a. All employees must enter the building through the main entrance. Keys are required except during normal business hours. Employees may exit through the main entrance when it is locked without the use of a key, but keys are required for re-entry.

b. At the end of the work day, employees must sign out and exit through the main entrance.

7.10.2 Visitors, Vendors and Deliveries

a. All visitors to the office or laboratory must enter the main lobby through the main entrance and sign in with the receptionist. Visitors must be escorted at all times and in all areas of the facility.

b. Vendors and delivery personnel are directed to use the door to the Shipping and Receiving area. Access to this door is controlled by the KEMRON employee on duty and, upon entrance, the visitor must be escorted at all times.

7.11 Sample Subcontracting/Shipping

For certain projects, it may be necessary for KEMRON to subcontract some analyses. Samples to be analyzed will be shipped to the contracted laboratory using the KEMRON KEM-KIT. To prevent sample breakage, only EPA-approved sample containers will be used. Freezer packs will be included in each KEM-KIT to serve as a separation divider for the samples and to increase the cooling capacity. In order to maintain the temperature of samples at 4 degrees Celsius, + or - 2 degrees, wet ice will be supplied by the client when required. Each shipping kit will contain the following:

a. Corrugated partitions to hold sample bottles

b. Freezer pack(s)

c. Chain-of-Custody form / Log-out form

Each styrofoam box will be placed in a KEMRON KEM-KIT corrugated box. The corrugated box top will be sealed with KEMRON Chain-of-Custody tape.

7.12 Electronic Data Security

Data integrity is insured through daily backups and multi-level security. Access to the specific user privileges can be individually controlled.

Each user has their own user name and password which allows certain privileges. Several pieces of hard copy documentation are generated for verification, but are unsigned. Signatures on the client's final report indicate that all of these forms have been reviewed. Reports are signed by the appropriate laboratory supervisors after reviewing all of the paper documentation from the labs.

These hard copy forms contain all of the data regarding a group of samples, and are kept in a folder. When the information in the folder is not consistent with information in the computer, a problem has been identified. As a rule, data is not electronically transferred to the client through modems or networks; however, KEMRON can provide copies of final reports on floppy disks. Since our existing software is licensed from another company, we do not maintain records on its documentation. Any minor modifications to our software are documented at the beginning of the program source code. This can be read, but not modified, by all users of the software.

Data entry will be verified by printing a review sheet. This sheet is to be compared to the sheet(s) from which the data was entered. This is done for every set of results (every test run). Software and equipment are tested by constant data verification. Data regarding samples is to be checked for accuracy four times, as follows:

a. When the samples are logged in

b. When permission is given to begin work on the samples and paper documentation associated with the samples is distributed, called transmittal

c. When the results are entered

d. When the client's report is generated

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

KEMRON ENVIRONMENTAL SERVICES

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Order #: N4-10-037
Date: October 25, 1994 14:39
Work ID: 06619J03/Monsanto-Nitro
Date Received: 10/03/94
Date Completed: 10/25/94

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	WT-11A Equipment Rinse	02	WT-11A

CC: Roux Associates
1222 Forest Parkway/Suite 190
W. Deptford, NJ 08066
ATT: Mark Tucker

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01A** Collected: **10/03/94 13:15**
Sample Description: **WT-11A Equipment Rinse** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 10/07/94 File #: 4MO17922
Instrument: FINN4 Injected: 10/21/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02A** Collected: **10/03/94 13:20**
Sample Description: **WT-11A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 10/07/94 File #: 4MO17923
Instrument: FINN4 Injected: 10/21/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02A** Collected: **10/03/94 13:20**
Sample Description: **WT-11A** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 10/07/94 File #: 4MO17923
Instrument: FINN4 Injected: 10/21/94 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	36 % Recovery	(21% - 100%)
Phenol-d6	21 % Recovery	(10% - 94%)
Nitrobenzene-d5	59 % Recovery	(35% - 114%)
2-Fluorobiphenyl	70 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	65 % Recovery	(10% - 123%)
p-Terphenyl-d14	92 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

SW-846 Method 8270

KEMRON ANALYST LIST

Ohio Valley Laboratory

09/07/94

AJS - - Ashlee J. Scott
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
EMG - - Eric M. Graban
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JBC - - Jim B. Crawford
JEC - - Jesse E. Chapman
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MAH - - Mary A. Haider
MBJ - - Matthew B. Jarrell
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SMC - - Susan M. Cunningham
SPL - - Steve P. Learn
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

39-48
+A4
+13P

WorkID# 10-03

Lab Name: Kenron-OVL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): MS177856 Date Analyzed: 10/18/94

Instrument ID: FIN-4 Time Analyzed: 1027

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	33430		138169		82996	
	UPPER LIMT	66860		276338		165992	
	LOWER LIMIT	16715		69085		41498	
	SAMPLE NO.						
01	4BK17860	40228		167753		93607	
02	4AS17861	41905		171372		104685	
03	4AS17862	41979		178080		105980	
04	4AS17863	42341		170970		99518	
05	4AS17864	41008		178208		102108	
06	4AS17865	43039		180689		105491	
07	4AS17866	41537		170329		99639	
08	4PA17867	42121		156916		103761	
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Kemron-OVL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): 4S17856 Date Analyzed: 10/18/94

Instrument ID: FIN-4 Time Analyzed: 1027

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	121150		116000		~~145000~~ 110832	
	UPPER LIMIT	242360		232000		221664	
	LOWER LIMIT	60590		58000		55416	
	SAMPLE NO.						
01	4BK17860	135815		118180		97502	
02	4AS17861	157767		157620		120871	
03	4AS17862	147309		149600		120833	
04	4AS17863	145408		135886		128578	
05	4AS17864	153441		160226		3605*	
06	4AS17865	159341		177115		111746	
07	4AS17866	148998		133774		121378	
08	4PA17867	150492		151655		130369	
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 10/07/94 SMPL NAM N/A
TYPE: SEPFUNNEL FILE NAME N/A
BLK FLNM: 4BK17860 MS FLNM: 4QC17830
QC FLNM: 4QC17830 MSD FLNM 4QC17881

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	200	29	58	29	13-132	0	29	25	58	50	29	25	15
BIS(2-CHLOROETHYL)ET	10	BQL					67- 97								
2-CHLOROPHENOL	10	BQL	200	52	104	52	48-115	0	52	44	104	88	52	44	17
1,3-DICHLOROBENZENE	10	BQL					34-115								
1,4-DICHLOROBENZENE	10	BQL	100	15	30	30	32-115	0	15	12	30	24	30	24	22
BENZYL ALCOHOL	10	BQL					15-110								
1,2-DICHLOROBENZENE	10	BQL					30-115								
2-METHYLPHENOL	10	BQL					D- 150								
BIS(-CHLOROISOPROPYL	10	BQL					58-112								
4-METHYLPHENOL	10	BQL					D- 150								
N-NITROSO-DI-N-PROPYL	10	BQL	100	25	50	50	35-124	0	25	21	50	42	50	42	17
HEXACHLOROETHANE	10	BQL					26- 76								
NITROBENZENE	10	BQL					51-112								
ISOPHORONE	10	BQL					48-110								
2-NITROPHENOL	10	BQL					23-130								
2,4-DIMETHYLPHENOL	10	BQL					49- 96								
BENZOIC ACID	50	BQL					15-110								
BIS(2-CHLOROETHOXY)M	10	BQL					57-104								
2,4-DICHLOROPHENOL	10	BQL					11-123								
1,2,4-TRICHLOROBENZE	10	BQL	100	16	32	32	29- 98	0	16	13	32	26	32	26	21
NAPHTHALENE	10	BQL					54-107								
4-CHLOROANILINE	10	BQL					D- 150								
HEXACHLOROBUTADIEN	10	BQL					28- 83								
4-CHLORO-3-METHYLPHE	10	BQL	200	72	144	72	45-117	0	72	68	144	136	72	68	6
2-METHYLNAPHTHALENE	10	BQL					35-125								
HEXACHLOROCYCLOPE	10	BQL					D- 144								
2,4,6-TRICHLOROPHENO	10	BQL					16-140								
2,4,5-TRICHLOROPHENO	50	BQL					25-135								
2-CHLORONAPHTHALEN	10	BQL					18-136								
2-NITROANALINE	50	BQL					D- 150								
DIMETHYLPHTHALATE	10	BQL					D- 37								
ACENAPHTHYLENE	10	BQL					62-101								
2,6-DINITROTOLUENE	10	BQL					53-123								
3-NITROANILINE	50	BQL					D- 150								
ACENAPHTHENE	10	BQL	100	30	60	60	43-117	0	30	27	60	54	60	54	11

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 10/07/94 SMPL NAM N/A
TYPE: SEPFUNNEL FILE NAME N/A
BLK FLNM: 4BK17860 MS FLNM: 4QC17830
QC FLNM: 4QC17830 MSD FLNM 4QC17881

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
2,4-DINITROPHENOL	50	BQL					D- 222								
4-NITROPHENOL	50	BQL	200	34	68	34	1- 148	0	34	27	68	54	34	27	23
DIBENZOFURAN	10	BQL					25-120								
2,6-DINITROTOLUENE	10	BQL					53-123								
2,4-DINITROTOLUENE	10	BQL	100	22	44	44	34-110	0	22	21	44	42	44	42	5
DIETHYLPHTHALATE	10	BQL					D- 105								
4-CHLORO-PHENYL ETHE	10	BQL					65-108								
FLUORENE	10	BQL					73-115								
4-NITROANILINE	50	BQL					D- 150								
4,6-DINITRO-2-METHYLPH	50	BQL					D- 180								
N-NITROSODIPHENYLAMI	10	BQL					138-237								
4-BROMOPHENYL-PHENY	10	BQL					69-105								
HEXACHLOROBENZENE	10	BQL					47-103								
PENTACHLOROPHENOL	50	BQL	200	67	134	67	36-137	0	67	69	134	138	67	69	3
PHENANTHRENE	10	BQL					72-108								
ANTHRACENE	10	BQL					76-111								
DI-N-BUTYLPHTHALATE	10	BQL					21- 89								
FLUORANTHENE	10	BQL					65-113								
PYRENE	10	BQL	100	43	86	86	42-139	0	43	43	86	86	86	86	0
BUTYLBENZYLPHTHALAT	10	BQL					24-120								
3,3'-DICHLOROBENZIDIN	20	BQL					4 -144								
BENZO(A)ANTHRACENE	10	BQL					76-131								
BIS(2-ETHYLHEXYL)PHTH	10	BQL					53-110								
CHRYSENE	10	BQL					60-109								
DI-N-OCTYL PHTHALATE	10	BQL					47-115								
BENZO(B)FLUORANTHEN	10	BQL					56-109								
BENZO(K)FLUORANTHEN	10	BQL					64-116								
BENZO(A)PYRENE	10	BQL					59-100								
INDENO(1,2,3-CD) PYREN	10	BQL					53-125								
DIBENZO(A,H)ANTHRACE	10	BQL					50-118								
BENZO(G,H,I)PERYLENE	10	BQL					49-111								

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

Kemron
ENVIRONMENTAL SERVICES

No 556

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Contact: Ronda Hooper

Turn Around Requirements: Standard

Project No.: 990-000

Project Name: Monsanto

Sampler (print): F. MONTGOMERY, R. MC DONALD

Signature: F. Montgomery, R. Mc Donald

Sample I.D. No.	Comp*	Grab	Date	Time	Protocol CWA	Protocol SW846	NUMBER OF ~~SAMPLES~~ Containers	Hold	BN/AE	ADDITIONAL REQUIREMENTS
WELL # WT-11A Equip Rinse		X	10-3-94	1315			2		2	
WELL # WT-11A		X	10-3-94	1320			2		2	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
F. Montgomery	10/3/94	1610					

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:
			Angelina B. Brown	10/3	16:10	

*Homogenize all composite samples prior to analysis

White – Lab Yellow – Office Pink – Field

Facility: Monsanto
Location: Nitro
Site #:
Field Representative: K. McDonald
Lab Sampled #:
Shipping Kit #:
Sample Point ID: WT-11A
Sample Matrix: water

WELL PURGE INFORMATION:

Method of Well Purge: Pump
Dedicated Y / (N)
Gascope Reading: %Gas: ____ %LEL: ____
Gascope Calibration: %Gas: ____ %LEL: ____
Date / Time Initiated: 10-3-94-1130
Total Well Depth (From Top of Riser), Feet: 40.03
Top of Riser Elevation, Feet/MSL: ____
Initial water level (Top of Riser to Water), Feet: 19.36
Riser Diameter, Inches: 2"
Well Volumes, Gallons: 3
Purge Rate, Gal / Min: ____
Initial Water Level, Feet/MSL: 19.36
Water Level After Purge (Top of Riser to Water), Feet: ____
Total Volume Purged, Gallons: 9.5
Date / Time Completed: 10-3-94
Purge Water Management: Containerized (✓)
Discharged on surface ( ) Other ( ): ____

SAMPLING INFORMATION:

Method of Well Purge: Pump
Dedicated Y / (N)
Collector: K. McDonald & F. Montgomery
Well Collection Sequence Number: 1
Date / Time: 10-3-94
Water Level @ Sampling, (Top of Riser to Water), Feet: ____
Parameters: Annual ( ) Semi Annual ( ) Quarterly ( ) Monthly ( ) Other ( ) ____

FIELD ANALYTICAL DATA:

	Temp.	pH	Cond.	Turb.	D.O. (Other)
Rep. 1	14	6.4	77		10.4
Rep. 2	14	4.9	287		6.5
Rep. 3					
Rep. 4					

INSTRUMENT CALIBRATION CHECK DATA:
pH Meter Serial #: ____
Conductivity Meter Serial #: ____
Turbidity Meter Serial #: ____
Turbidity: ____ NTU std. = ____ NTU ____ NTU std. = NTU ____
pH 4.0 std. @ 25 deg. C = 4.0
pH 7.0 std. @ 25 deg. C = 7.0
pH 10.0 std. @ 25 deg. C = 9.82
Conductivity: 1413 umhos/cm @ 25 deg. C = 1413
1000 umhos/cm @ 25 deg. C = 990

GENERAL INFORMATION:

Weather Conditions @ time of sampling: 55°F Cloudy
Sample Characteristics: Clear

ANALYTE COLLECTION ORDER, SAMPLE CONTAINERS, PRESERVATIVES AND TESTS TO BE PERFORMED: ____

COMMENTS AND OBSERVATIONS: ____

I certify that sampling procedures were in accordance with all applicable EPA, State and Local protocols

Date: 10/3/94 by K. McDonald
Company: Kemron

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Monsanto Chemical Co.
One Monsanto Road
Nitro, WV 25143

Attn: Ronda Hooper

Invoice Number: 523728

Order #: N4-12-244
Date: January 30, 1995 11:16
Work ID: 06619JO3/Monsanto Nitro
Date Received: 12/14/94
Date Completed: 01/04/95

Client Code: MONSAN_56188

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	SW-3	02	SW-4
03	Trip Blank		

*** REVISED REPORT 01/30/95 ***

All results on solids/sludges are reported "AS RECEIVED" unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

Certified by
Leslie Bucina

KEMRON ENVIRONMENTAL SERVICES
RESULTS BY SAMPLE

This is to certify that the following samples were analyzed using good laboratory practices to show the following results.

SAMPLE ID: **01** **SW-3** Collected: **12/13/94 15:35** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	12/15/94	PJH	9060
Total Organic Halides	0.08	0.02	mg/L Cl	12/15/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	12/27/94	SPL	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	12/22/94	SPL	206.2/7060
Barium, Total	0.01	0.01	mg/L Ba	12/27/94	JYH	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	12/27/94	JYH	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	12/27/94	JYH	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	12/27/94	JYH	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	12/27/94	JYH	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	12/21/94	SPL	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	12/20/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	12/27/94	JYH	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	12/28/94	JYH	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	12/27/94	JYH	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	12/21/94	AJS	279.2/7841
Zinc, Total	0.02	0.01	mg/L Zn	12/27/94	JYH	200.7/6010

SAMPLE ID: **02** **SW-4** Collected: **12/13/94 15:05** Category: **WATER**

TEST DESCRIPTION	RESULT	DETECTION LIMIT	UNITS	DATE ANALYZED	BY	METHOD
Total Organic Carbon	<1	1	mg/L	12/15/94	PJH	9060
Total Organic Halides	0.02	0.02	mg/L Cl	12/15/94	RJS	9020
Antimony, Total	<0.02	0.02	mg/L Sb	12/27/94	SPL	204.2/7041
Arsenic, Total	<0.004	0.004	mg/L As	12/22/94	SPL	206.2/7060
Barium, Total	0.03	0.01	mg/L Ba	12/27/94	JYH	200.7/6010
Beryllium, Total	<0.01	0.01	mg/L Be	12/27/94	JYH	200.7/6010
Cadmium, Total	<0.01	0.01	mg/L Cd	12/27/94	JYH	200.7/6010
Chromium, Total	<0.02	0.02	mg/L Cr	12/27/94	JYH	200.7/6010
Copper, Total	<0.02	0.02	mg/L Cu	12/27/94	JYH	200.7/6010
Lead, Total	<0.005	0.005	mg/L Pb	12/21/94	SPL	239.2/7421
Mercury, Total	<0.0002	0.0002	mg/L Hg	12/20/94	TAS	245.1/7470
Nickel, Total	<0.04	0.04	mg/L Ni	12/27/94	JYH	200.7/6010
Selenium, Total	<0.004	0.004	mg/L Se	12/28/94	JYH	270.2/7740
Silver, Total	<0.01	0.01	mg/L Ag	12/27/94	JYH	200.7/6010
Thallium, Total	<0.005	0.005	mg/L Tl	12/21/94	AJS	279.2/7841
Zinc, Total	<0.01	0.01	mg/L Zn	12/27/94	JYH	200.7/6010

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **01D** Collected: **12/13/94 15:35**
Sample Description: **SW-3** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M012541
Instrument: FINN_5 Injected: 12/15/94 Factor: 1 Units: ug/L Verified: DAB

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorotrifluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	97	% Recovery	(76% - 114%)
Toluene-d8	108	% Recovery	(88% - 110%)
p-Bromofluorobenzene	96	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **12/13/94 15:35**
Sample Description: **SW-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 12/15/94 File #: 4MO18927
Instrument: FINN4 Injected: 01/03/95 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **01E** Collected: **12/13/94 15:35**
Sample Description: **SW-3** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 12/15/94 File #: 4MO18927
Instrument: FINN4 Injected: 01/03/95 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	44 % Recovery	(21% - 100%)
Phenol-d6	31 % Recovery	(10% - 94%)
Nitrobenzene-d5	66 % Recovery	(35% - 114%)
2-Fluorobiphenyl	65 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	72 % Recovery	(10% - 123%)
p-Terphenyl-d14	82 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **02D** Collected: **12/13/94 15:05**
Sample Description: **SW-4** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M012542
Instrument: FINN_5 Injected: 12/15/94 Factor: 1 Units: ug/L Verified: DAB

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorotrifluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	109 % Recovery	(76% - 114%)
Toluene-d8	108 % Recovery	(88% - 110%)
p-Bromofluorobenzene	100 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **12/13/94 15:05**
Sample Description: **SW-4** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 12/15/94 File #: 4MO18928
Instrument: FINN4 Injected: 01/03/95 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
108-95-2	Phenol	ND	10
111-44-4	bis(2-Chloroethyl)ether	ND	10
95-57-8	2-Chlorophenol	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
100-51-6	Benzyl alcohol	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
95-48-7	2-Methylphenol	ND	10
108-60-1	bis(2-Chloroisopropyl)ether	ND	10
106-44-5	4-Methylphenol	ND	10
621-64-7	N-Nitroso-di-n-propylamine	ND	10
67-72-1	Hexachloroethane	ND	10
98-95-3	Nitrobenzene	ND	10
78-59-1	Isophorone	ND	10
88-75-5	2-Nitrophenol	ND	10
105-67-9	2,4-Dimethylphenol	ND	10
65-85-0	Benzoic acid	ND	50
111-91-1	bis(2-Chloroethoxy)methane	ND	10
120-83-2	2,4-Dichlorophenol	ND	10
120-82-1	1,2,4-Trichlorobenzene	ND	10
91-20-3	Naphthalene	ND	10
106-47-8	4-Chloroaniline	ND	10
87-68-3	Hexachlorobutadiene	ND	10
59-50-7	4-Chloro-3-methylphenol	ND	10
91-57-6	2-Methylnaphthalene	ND	10
77-47-4	Hexachlorocyclopentadiene	ND	10
88-06-2	2,4,6-Trichlorophenol	ND	10
95-95-4	2,4,5-Trichlorophenol	ND	50
91-58-7	2-Chloronaphthalene	ND	10
88-74-4	2-Nitroaniline	ND	50
131-11-3	Dimethylphthalate	ND	10
208-96-8	Acenaphthylene	ND	10
606-20-2	2,6-Dinitrotoluene	ND	10
99-09-2	3-Nitroaniline	ND	50
83-32-9	Acenaphthene	ND	10
51-28-5	2,4-Dinitrophenol	ND	50
100-02-7	4-Nitrophenol	ND	50
132-64-9	Dibenzofuran	ND	10
121-14-2	2,4-Dinitrotoluene	ND	10
84-66-2	Diethylphthalate	ND	10
7005-72-3	4-Chlorophenyl-phenyl ether	ND	10
86-73-7	Fluorene	ND	10
100-01-6	4-Nitroaniline	ND	50
534-52-1	4,6-Dinitro-2-methylphenol	ND	50
86-30-6	N-Nitrosodiphenylamine	ND	10
101-55-3	4-Bromophenyl-phenylether	ND	10
118-74-1	Hexachlorobenzene	ND	10
87-86-5	Pentachlorophenol	ND	50
85-01-8	Phenanthrene	ND	10
120-12-7	Anthracene	ND	10
84-74-2	Di-n-butylphthalate	ND	10
206-44-0	Fluoranthene	ND	10
129-00-0	Pyrene	ND	10
85-68-7	Butylbenzylphthalate	ND	10
91-94-1	3,3-Dichlorobenzidine	ND	20
56-55-3	Benzo(a)anthracene	ND	10
218-01-9	Chrysene	ND	10
117-81-7	bis(2-Ethylhexyl)phthalate	ND	10
117-84-0	Di-n-octylphthalate	ND	10
205-99-2	Benzo(b)fluoranthene	ND	10
207-08-9	Benzo(k)fluoranthene	ND	10

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8270** Lab No: **02E** Collected: **12/13/94 15:05**
Sample Description: **SW-4** Category: **WATER**
Test Description: **Semivolatile Compounds** Method: **8270**

Analyst: MDC Extracted: 12/15/94 File #: 4MO18928
Instrument: FINN4 Injected: 01/03/95 Factor: 2 Units: ug/L Verified: RJW

CAS#	COMPOUND	RESULT	DETECTION LIMIT
50-32-8	Benzo(a)pyrene	ND	10
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10
53-70-3	Dibenzo(a,h)anthracene	ND	10
191-24-2	Benzo(g,h,i)perylene	ND	10

SURROGATES:

2-Fluorophenol	40 % Recovery	(21% - 100%)
Phenol-d6	31 % Recovery	(10% - 94%)
Nitrobenzene-d5	65 % Recovery	(35% - 114%)
2-Fluorobiphenyl	69 % Recovery	(43% - 116%)
2,4,6-Tribromophenol	64 % Recovery	(10% - 123%)
p-Terphenyl-d14	87 % Recovery	(33% - 141%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
NA = NOT ANALYZED
DL = DILUTED OUT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **M8240** Lab No: **03A** Collected: **12/13/94**
Sample Description: **Trip Blank** Category: **WATER**
Test Description: **Volatile Organics** Method: **8240**

Analyst: SLM File #: 5M012543
Instrument: FINN_5 Injected: 12/15/94 Factor: 1 Units: ug/L Verified: DAB

CAS#	COMPOUND	RESULT	DETECTION LIMIT
74-87-3	Chloromethane	ND	10
74-83-9	Bromomethane	ND	10
75-01-4	Vinyl chloride	ND	10
75-00-3	Chloroethane	ND	10
75-09-2	Methylene chloride	ND	5
67-64-1	Acetone	ND	100
75-15-0	Carbon disulfide	ND	5
75-35-4	1,1-Dichloroethene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
67-66-3	Chloroform	ND	5
107-06-2	1,2-Dichloroethane	ND	5
78-93-3	2-Butanone	ND	100
71-55-6	1,1,1-Trichloroethane	ND	5
56-23-5	Carbon tetrachloride	ND	5
108-05-4	Vinyl acetate	ND	10
75-27-4	Bromodichloromethane	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
79-01-6	Trichloroethene	ND	5
124-48-1	Dibromochloromethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
71-43-2	Benzene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
110-75-8	2-Chloroethyl vinyl ether	ND	10
75-25-2	Bromoform	ND	5
108-10-1	4-Methyl-2-pentanone	ND	10
591-78-6	2-Hexanone	ND	10
127-18-4	Tetrachloroethene	ND	5
79-34-5	1,1,2,2,-Tetrachloroethane	ND	5
108-88-3	Toluene	ND	5
108-90-7	Chlorobenzene	ND	5
100-41-4	Ethyl benzene	ND	5
100-42-5	Styrene	ND	5
1330-20-7	Xylenes (Total)	ND	5
107-02-8	Acrolein	ND	100
107-13-1	Acrylonitrile	ND	100
75-71-8	Dichlorodifluoromethane	ND	10
75-69-4	Trichlorotrifluoromethane	ND	10
630-20-6	1,1,1,2-Tetrachloroethane	NF	

SURROGATES:

1,2-Dichloroethane-d4	101	% Recovery	(76% - 114%)
Toluene-d8	108	% Recovery	(88% - 110%)
p-Bromofluorobenzene	99	% Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE
ND = NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
* = SEMI-QUANTITATIVE SCREEN ONLY

EPA Method 200.7/6010 (ICP) - Silver

SW-846 Method SW7060 - Arsenic (GFAA)

EPA Method 200.7/SW6010 (ICP) - Barium

EPA Method 200.7/SW6010 (ICP) - Beryllium

EPA Method 200.7/SW6010 (ICP) - Cadmium

EPA Method 200.7/SW6010 (ICP) - Chromium

EPA Method 200.7/SW6010 (ICP) - Copper

EPA Method SW3005 and/or SW3020 - Metals Digestion

EPA Method 245.1/SW7470 (Cold Vapor) - Mercury

SW-846 Method 8240 - Volatile Organics (MODIFIED FOR MEGABORE COLUMN)

SW-846 Method 8270

EPA Method 200.7/SW6010 (ICP) - Nickel

EPA Method 239.2/SW7421 (GFAA) - Lead

EPA Method 204.2/SW7041 (GFAA) - Antimony

SW-846 Method SW7740 - Selenium (GFAA)

EPA Method 279.2/SW7841 (GFAA) - Thallium

SW-846 Method 9060 - Total Organic Carbon (Quadruplicate Analysis)

SW9020 - Total Organic Halides

EPA Method 200.7/SW6010 (ICP) - Zinc

KEMRON ANALYST LIST

Ohio Valley Laboratory

01/09/95

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BAR - - Beth A. Raper
BMK - - Bently M. Knight
CEB - - Chad E. Barnes
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
GSS - - Greg S. Smith
HV - - Hema Vilasagar
JEC - - Jesse E. Chapman
JYH - - Ji Y. Hu
JKM - - June K. Morris
JLH - - Janice L. Holland
JLL - - Janice L. Landshof
JMM - - Jim M. Monk
JWR - - John W. Richards
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MLS - - Michael L. Schimmel
MZL - - Melanie Z. Lewis
PJH - - Pamela J. Holtz
PNW - - Phillip N. Wright
PST - - Pam S. Tornes
REB - - Russell E. Burton
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLM - - Stephanie L. Mossburg
SPL - - Steve P. Learn
SSS - - Susan S. Snodgrass
TAS - - Tamela A. Sams
TKT - - Tonya K. Troutner
TLD - - Teresa L. Davis
WCD - - Wade C. Dawson
WDL - - William D. Landshof

INORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/28/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SELENIUM-FURNACE	mg/L	TAS	0.025	0.0211	84.40	125	75	0.022	0.021	4.65	<0.004	0.004	0.025	0.022	88.00	125	75
CHROMIUM-FURN B	mg/L	TAS	0.025	0.0251	100.40	131	66	0.022	0.021	4.65	<0.005	0.005	0.025	0.022	88.00	138	74
SELENIUM-FURN S	mg/L	JYH	0.025	0.0251	100.40	125	75	0.024	0.024	0.00	<0.004	0.004	0.025	0.024	96.00	125	75
SELENIUM-FURN C	mg/L	JYH	0.025	0.0259	103.60	125	75	0.026	0.026	0.00	<0.004	0.004	0.025	0.026	104.00	125	75
CADMIUM-FURNACE B	mg/L	TAS	0.002	0.0026	130.00	128	72	0.0023	0.0025	8.33	<0.0005	0.0005	0.0025	0.0025	100.00	131	62
MERCURY A	mg/L	AJS	1	0.96	96.00	135	49	0.98	0.97	1.03	0.0002	0.0002	1	0.98	98.00	127	59
SILVER-ICP	mg/L	JYH	0.2	0.218	109.00	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.215	107.50	125	75
ALUMINUM-ICP	mg/L	JYH	1	1.087	108.70	*	*	0.02	0.01	66.67	<0.1	0.1	1	1.082	108.20	125	75
BARIUM-ICP	mg/L	JYH	10	10.43	104.30	*	*	0.56	0.56	0.00	<0.01	0.01	10	10.25	102.50	125	75
BERYLLIUM-ICP	mg/L	JYH	1	1.051	105.10	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	1	1.03	103.00	125	75
CALCIUM-ICP	mg/L	JYH	10	10.79	107.90	*	*	250	250	0.00	<0.2	0.2	10	10.57	105.70	125	75
CADMIUM-ICP	mg/L	JYH	1	1.103	110.30	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	1	1.083	108.30	125	75
COBALT-ICP	mg/L	JYH	1	1.094	109.40	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	1.069	106.90	125	75
CHROMIUM-ICP	mg/L	JYH	1	1.098	109.80	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	1.071	107.10	125	75
COPPER-ICP	mg/L	JYH	1	1.07	107.00	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	1.056	105.60	125	75
IRON-ICP	mg/L	JYH	1	1.077	107.70	*	*	15	15	0.00	<0.04	0.04	1	1.085	108.50	125	75
POTASSIUM-ICP	mg/L	JYH	10	11.11	111.10	*	*	15	14	6.90	<1	1	10	10.34	103.40	125	75
MAGNESIUM-ICP	mg/L	JYH	10	10.55	105.50	*	*	61	61	0.00	<0.5	0.5	10	10.37	103.70	125	75
MANGANESE-ICP	mg/L	JYH	1	1.081	108.10	*	*	1.63	1.63	0.00	<0.01	0.01	1	1.059	105.90	125	75
SODIUM-ICP	mg/L	JYH	10	10.59	105.90	*	*	300	290	3.39	<0.5	0.5	10	10.51	105.10	125	75
NICKEL-ICP	mg/L	JYH	1	1.077	107.70	*	*	0.07	0.08	13.33	<0.04	0.04	1	1.076	107.60	125	75
ANTIMONY-ICP	mg/L	JYH	1	1.109	110.90	*	*	< 0.2	< 0.2	0.00	<0.2	0.2	1	1.091	109.10	125	75
VANADIUM-ICP	mg/L	JYH	1	0.966	96.60	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	1	1.023	102.30	125	75
ZINC-ICP	mg/L	JYH	1	1.018	101.80	*	*	0.01	0.01	0.00	<0.01	0.01	1	1.075	107.50	125	75
ARSENIC-ICP	mg/L	JYH	1	1.089	108.90	*	*	0.12	0.14	15.38	<0.1	0.1	1	1.048	104.80	125	75
LEAD-ICP	mg/L	JYH	1	1.093	109.30	*	*	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.067	106.70	125	75
SELENIUM-ICP	mg/L	JYH	1	0.998	99.80	*	*	< 0.1	< 0.1	0.00	<0.1	0.1	1	1.097	109.70	125	75
SULFATE	mg/L	REB	20	19.9	99.50	106	75	170	170	0.00	<2	2	10	9.76	97.60	126	72
AMMONIA	mg/L	JWR	2	2.03	101.50	115	60	7.6	7.6	0.00	<0.1	0.1	1	0.686	68.60	131	40
IODIDE	mg/L	SCM	20	11.9	59.50	*	*	3200	3300	3.08	<2	2	---	---	---	---	---
TOX	mg/L	ALC	0.1	0.089	89.00	136	62	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.09	90.00	127	67

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/27/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
ANTIMONY-FURN J	mg/L	SPL	0.025	0.0274	109.60	126	76	0.027	0.029	7.14	<0.02	0.02	0.025	0.027	108.00	125	56
CONDUCTIVITY	uS/cm	MZL	1413	1480	104.74	107	95	3600	3700	2.74	<1	1	---	---	---	---	---
NITRATE	mg/L	REB	1	1.01	101.00	108	88	0.9	0.9	0.00	<0.05	0.05	0.5	0.476	95.20	116	77
FLUORIDE	mg/L	REB	2	2.24	112.00	120	88	0.1	0.1	0.00	<0.1	0.1	0.4	0.365	91.25	122	78
CYANIDE	mg/L	JWR	0.4	0.339	84.75	122	84	1.5	1.5	0.00	<0.01	0.01	0.2	0.162	81.00	117	87
LEAD-FURNACE X	mg/L	SPL	0.025	0.0231	92.40	120	81	9.6	8.2	15.73	<0.005	0.005	0.025	0.024	96.00	120	72
LEAD-FURNACE B	mg/L	SPL	0.025	0.0242	96.80	120	81	0.021	0.021	0.00	<0.005	0.005	0.025	0.021	84.00	120	72
ARSENIC-FURNACE B	mg/L	AJS	0.025	0.0251	100.40	121	76	0.024	0.022	8.70	<0.004	0.004	0.025	0.024	96.00	140	32
SILVER-ICP	mg/L	JEC	0.2	0.209	104.50	113	83	0.175	0.18	2.82	<0.01	0.01	0.2	0.175	87.50	112	76
BARIUM-ICP	mg/L	JEC	10	10.3	103.00	113	85	8.86	8.98	1.35	<0.01	0.01	10	8.61	86.10	112	74
CADMIUM-ICP	mg/L	JEC	1	1	100.00	112	83	1.01	1.02	0.99	<0.01	0.01	1	1.01	101.00	115	73
CHROMIUM-ICP	mg/L	JEC	1	1.03	103.00	114	88	0.971	0.983	1.23	<0.02	0.02	1	0.971	97.10	113	80
LEAD-ICP	mg/L	JEC	1	1.01	101.00	114	84	1.03	1.06	2.87	<0.1	0.1	1	1.03	103.00	115	60
ARSENIC-ICP	mg/L	JEC	1	0.93	93.00	123	76	1.04	0.887	15.88	<0.1	0.1	1	1.04	104.00	126	65
SELENIUM-ICP	mg/L	JEC	1	1.01	101.00	117	80	0.93	0.947	1.81	<0.1	0.1	1	0.93	93.00	122	66
IRON-ICP	mg/L	JEC	1	1.02	102.00	113	90	0.956	0.965	0.94	<0.04	0.04	1	0.956	95.60	111	87
SODIUM-ICP	mg/L	JEC	10	10.5	105.00	112	87	1200	1200	0.00	<0.5	0.5	10	---	---	129	58
NICKEL-ICP	mg/L	JEC	1	1.02	102.00	113	87	1.04	1.06	1.90	<0.04	0.04	1	1	100.00	113	76
ZINC-ICP	mg/L	JEC	1	0.979	97.90	112	89	1.31	1.34	2.26	<0.01	0.01	1	1.14	114.00	122	71
COPPER-FURNACE B	mg/L	AJS	0.025	0.0249	99.60	121	73	0.4	0.4	0.00	<0.005	0.005	0.025	0.021	84.00	130	56
CADMIUM-FURNACE	mg/L	TAS	0.025	0.0256	102.40	125	75	< 0.0005	< 0.0005	0.00	<0.0005	0.0005	0.0025	0.0029	116.00	125	75
ARSENIC-FURN PE	mg/L	JYH	0.025	0.0248	99.20	125	75	0.024	0.025	4.08	<0.004	0.004	0.025	0.025	100.00	125	75
TOC	mg/L	REB	25	24.2	96.80	125	75	< 1	< 1	0.00	<1	1	25	23.6	94.40	134	88
TDS	mg/L	REB	500	512	102.40	111	85	590	580	1.71	14	10	500	526	105.20	131	70
ARSENIC-FURN A2	mg/L	AJS	0.025	0.0238	95.20	121	76	0.02	0.021	4.88	<0.004	0.004	0.025	0.021	84.00	140	32
ALUMINUM-ICP	mg/L	JEC	1	0.988	98.80	122	86	0.05	0.04	22.22	<0.1	0.1	1	1.08	108.00	133	63
TOX	mg/L	ALC	0.1	0.112	112.00	136	62	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.11	110.00	127	67
ANTIMONY-FURN J	mg/L	SPL	0.025	0.0274	109.60	121	81	0.027	0.029	7.14	<0.02	0.02	0.025	0.027	108.00	120	65
BERYLLIUM-ICP	mg/L	JYH	1	0.943	94.30	*	*	0.94	0.927	1.39	<0.01	0.01	1	0.94	94.00	125	75
COPPER-ICP	mg/L	JYH	1	0.962	96.20	*	*	0.96	0.954	0.63	0.02	0.02	1	0.96	96.00	125	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/22/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
SULFITE	mg/L	SCM	200	165	82.50	110	65	190	190	0.00	<2	2	100	81.5	81.50	125	75
SULFATE	mg/L	JWR	20	18.9	94.50	106	75	20	20	0.00	<2	2	10	10.6	106.00	126	72
CYANIDE	mg/L	RJS	0.4	0.417	104.25	122	84	< 0.5	< 0.5	0.00	<0.5	0.5	0.2	0.181	90.50	117	87
TOC	mg/L	PJH	25	27.2	108.80	125	75	39	39	0.00	<1	1	25	30.5	122.00	134	88
COD	mg/L	PJH	100	96	96.00	144	87	110	110	0.00	<5	5	50	48	96.00	151	69
FLUORIDE-DIST	mg/L	PJH	2	1.76	88.00	132	59	0.7	0.8	13.33	<0.1	0.1	1	1.03	103.00	147	32
OIL & GREASE	mg/L	ALC	10	11.1	111.00	124	81	11	7	44.44	<1	1	10	7.1	71.00	148	50
TDS	mg/L	ALC	500	494	98.80	111	85	7800	8000	2.53	<10	10	500	490	98.00	131	70
ARSENIC-FURNACE	mg/L	KHA	0.025	0.024	96.00	121	76	< 0.004	< 0.004	0.00	<0.004	0.004	0.05	0.054	108.00	140	32
ARSENIC-FURNACE K	mg/L	KHA	0.025	0.0274	109.60	121	76	1.4	1.1	24.00	<0.004	0.004	0.05	0.051	102.00	140	32
ARSENIC-FURNACE J	mg/L	KHA	0.025	0.0246	98.40	121	76	0.023	0.024	4.26	<0.004	0.004	0.025	0.024	96.00	140	32
SILVER-FURNACE K	mg/L	SPL	0.025	0.0291	116.40	129	67	0.025	0.02	22.22	<0.004	0.004	0.025	0.025	100.00	118	72
LEAD-FURNACE V	mg/L	AJS	0.025	0.0241	96.40	120	81	< 0.005	< 0.005	0.00	<0.005	0.005	0.025	0.024	96.00	120	52
BARIUM-ICP	mg/L	JYH	10	9.6	96.00	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	10	8.8	88.00	125	75
BERYLLIUM-ICP	mg/L	JYH	1	0.932	93.20	*	*	< 0.5	< 0.5	0.00	<0.5	0.5	1	0.82	82.00	125	75
CHROMIUM-ICP	mg/L	JYH	1	0.97	97.00	*	*	< 1	< 1	0.00	<1	1	1	1.167	116.70	125	75
POTASSIUM-ICP	mg/L	JYH	10	10.09	100.90	*	*	230	202.7	12.62	<50	50	10	9.386	93.86	125	75
SODIUM-ICP	mg/L	JYH	10	9.482	94.82	*	*	46.61	45.43	2.56	<25	25	10	10.85	108.50	125	75
NICKEL-ICP	mg/L	JYH	1	0.966	96.60	*	*	10.39	8.55	19.43	2	2	1	1.047	104.70	125	75
BOD	mg/L	SCM	200	224	112.00	129	60	160	160	0.00	<3	3	200	208	104.00	128	62
ALUMINUM-ICP	mg/L	JYH	1	0.999	99.90	*	*	1.396	1.508	7.71	<5	5	1	0.932	93.20	125	75
SILVER-ICP	mg/L	JYH	0.2	0.202	101.00	*	*	0.205	0.217	5.69	0.5	0.2	0.2	0.179	89.50	125	75
CADMIUM-ICP	mg/L	JYH	1	0.965	96.50	*	*	1.032	1.077	4.27	0.5	0.5	1	1.032	103.20	125	75
COBALT-ICP	mg/L	JYH	1	0.956	95.60	*	*	1.035	1.09	5.18	<1	1	1	1.035	103.50	125	75
MANGANESE-ICP	mg/L	JYH	1	0.96	96.00	*	*	1.0401	1.094	5.05	<0.5	0.5	1	1.041	104.10	125	75
COPPER-ICP	mg/L	JYH	1	0.963	96.30	*	*	1.037	1.08	4.06	<1	1	1	1.037	103.70	125	75
IRON-ICP	mg/L	JYH	1	1.04	104.00	*	*	0.802	1.171	37.40	<1	1	1	1.171	117.10	125	75
MAGNESIUM-ICP	mg/L	JYH	10	9.505	95.05	*	*	10.42	10.74	3.02	<25	25	10	10.42	104.20	125	75
CALCIUM-ICP	mg/L	JYH	10	9.463	94.63	*	*	10.272	10.772	4.75	<10	10	10	10.272	102.72	125	75
VANADIUM-ICP	mg/L	JYH	1	0.925	92.50	*	*	0.99	0.96	3.08	<0.5	0.5	1	0.99	99.00	125	75
ANTIMONY-ICP	mg/L	JYH	1	0.958	95.80	*	*	0.9	1.077	17.91	,1	1	1	0.9	90.00	125	75
ZINC-ICP	mg/L	JYH	1	0.966	96.60	*	*	1.036	1.078	3.97	0.5	0.5	1	1.036	103.60	125	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/21/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
AMMONIA-PROBE	mg/L	SCM	0.5	0.481	96.20	128	75	< 0.1	< 0.1	0.00	<0.1	0.1	0.5	0.525	105.00	142	66
COD	mg/L	SCM	100	90.3	90.30	144	87	< 5	< 5	0.00	<5	5	50	45.2	90.40	151	69
CHLORIDE	mg/L	DIH	50	52.9	105.80	113	82	140	140	0.00	<2	2	20	20.2	101.00	124	67
TOC	mg/L	PJH	25	29.2	116.80	125	75	7	5	33.33	<1	1	25	28.2	112.80	134	88
THALLIUM-FURN J	mg/L	AJS	0.025	0.0226	90.40	126	64	0.023	0.022	4.44	<0.005	0.005	0.025	0.023	92.00	124	69
THALLIUM-FURN K	mg/L	AJS	0.025	0.0232	92.80	126	64	< 0.25	< 0.25	0.00	<0.005	0.005	0.025	0.025	100.00	124	69
LEAD-FURNACE K	mg/L	SPL	0.025	0.0207	82.80	120	81	5.2	3.4	41.86	<0.005	0.005	0.05	0.045	90.00	120	72
LEAD-FURNACE J	mg/L	SPL	0.025	0.0217	86.80	120	81	0.047	0.045	4.35	<0.005	0.005	0.05	0.047	94.00	120	72
CADMIUM-FURNACE P	mg/L	AJS	0.003	0.0034	113.33	125	75	0.0027	0.0027	0.00	<0.005	0.005	0.025	0.027	108.00	125	75
CADMIUM-FURNACE K	mg/L	AJS	0.002	0.0027	135.00	125	75	0.07	0.063	10.53	<0.0005	0.0005	0.005	0.0044	88.00	125	75
ANTIMONY-FURN K	mg/L	SPL	0.025	0.0234	93.60	126	76	< 1	< 1	0.00	<0.02	0.02	0.05	0.04	80.00	125	56
ANTIMONY-FURN Z	mg/L	SPL	0.025	0.0242	96.80	126	76	0.023	0.023	0.00	<0.02	0.02	0.025	0.023	92.00	125	56
ANTIMONY-FURN P	mg/L	SPL	0.025	0.0239	95.60	126	76	0.025	0.027	7.69	<0.02	0.02	0.025	0.025	100.00	125	56
LEAD-ICP	mg/L	JEC	1	0.987	98.70	114	84	2.44	2.58	5.58	<0.1	0.1	1	0.806	80.60	115	60

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
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UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Services

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/20/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CONDUCTIVITY	uS/cm	MZL	1413	1490	105.45	107	95	1200	1200	0.00	<1	1	---	---	---	---	---
PHENOL	mg/L	REB	0.5	0.475	95.00	112	84	1.3	1.3	0.00	<0.005	0.005	0.5	0.493	98.60	120	83
PHOSPHORUS	mg/L	SCM	1	0.932	93.20	111	90	0.1	0.09	10.53	<0.1	0.1	0.5	0.425	85.00	143	34
OIL & GREASE	mg/L	PJH	10	10.3	103.00	124	81	10	10	0.00	<1	1	10	10.2	102.00	126	71
TSS	mg/L	ALC	50	44	88.00	116	61	890	1100	21.11	<5	5	50	59	118.00	126	71
LEAD-FURNACE P	mg/L	SPL	0.025	0.0238	95.20	120	81	0.021	0.02	4.88	<0.005	0.005	0.025	0.021	84.00	120	72
CADMIUM-FURNACE Q	mg/L	TAS	0.002	0.003	120.00	125	75	0.0029	0.0028	3.51	<0.0005	0.0005	0.0025	0.0028	112.00	125	75
CADMIUM-FURNACE Z	mg/L	TAS	0.002	0.0026	104.00	125	75	0.0028	0.0027	3.64	<0.0005	0.0005	0.0025	0.0027	108.00	125	75
LEAD-FURNACE E	mg/L	SPL	0.05	0.0434	86.80	118	74	0.024	0.024	0.00	<0.005	0.005	0.025	0.024	96.00	121	54
LEAD-FURNACE Z	mg/L	SPL	0.025	0.0232	92.80	118	74	0.021	0.023	9.09	<0.005	0.005	0.025	0.023	92.00	121	54
SELENIUM-FURN N	mg/L	JYH	0.025	0.0257	102.80	125	75	0.024	0.024	0.00	<0.004	0.004	0.025	0.024	96.00	125	75
SELENIUM-FURN U	mg/L	JYH	0.025	0.0245	98.00	125	75	0.027	0.026	3.77	<0.004	0.004	0.025	0.025	100.00	125	75
ALUMINUM-ICP	mg/L	JEC	1	0.902	90.20	122	86	1.09	1.04	4.69	<0.1	0.1	1	1.08	108.00	131	63
SILVER-ICP	mg/L	JYH	0.2	0.196	98.00	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.193	96.50	125	75
ALUMINUM-ICP	mg/L	JYH	1	0.98	98.00	*	*	1.7	1.7	0.00	<0.1	0.1	1	0.985	98.50	125	75
BARIUM-ICP	mg/L	JYH	10	9.62	96.20	*	*	9.6	9.7	1.04	<0.01	0.01	10	9.4	94.00	125	75
BERYLLIUM-ICP	mg/L	JYH	1	0.979	97.90	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.946	94.60	125	75
CALCIUM-ICP	mg/L	JYH	10	9.81	98.10	*	*	33	34	2.99	<0.2	0.2	10	8	80.00	125	75
CADMIUM-ICP	mg/L	JYH	1	0.983	98.30	*	*	< 0.01	< 0.01	0.00	<0.01	0.01	1	0.969	96.90	125	75
COBALT-ICP	mg/L	JYH	1	0.996	99.60	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.966	96.60	125	75
CHROMIUM-ICP	mg/L	JYH	1	1	100.00	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.971	97.10	125	75
COPPER-ICP	mg/L	JYH	1	0.984	98.40	*	*	< 0.02	< 0.02	0.00	<0.02	0.02	1	0.949	94.90	125	75
POTASSIUM-ICP	mg/L	JYH	10	10.4	104.00	*	*	14	15	6.90	<1	1	10	9.73	97.30	125	75
MAGNESIUM-ICP	mg/L	JYH	10	9.63	96.30	*	*	16	16	0.00	0.5	0.5	10	9.01	90.10	125	75
MANGANESE-ICP	mg/L	JYH	1	0.98	98.00	*	*	0.96	0.96	0.00	<0.01	0.01	1	0.963	96.30	125	75
SODIUM-ICP	mg/L	JYH	10	9.63	96.30	*	*	36	36	0.00	<0.5	0.5	---	---	---	125	75
NICKEL-ICP	mg/L	JYH	1	0.995	99.50	*	*	1	1	0.00	<0.04	0.04	1	0.997	99.70	125	75
ANTIMONY-ICP	mg/L	JYH	1	1.01	101.00	*	*	1	1	0.00	<0.2	0.2	1	0.998	99.80	125	75
VANADIUM-ICP	mg/L	JYH	1	0.953	95.30	*	*	0.91	0.91	0.00	<0.01	0.01	1	0.913	91.30	125	75
ZINC-ICP	mg/L	JYH	1	0.986	98.60	*	*	1.01	1.01	0.00	<0.01	0.01	1	1.01	101.00	125	75
TDS	mg/L	ALC	500	494	98.80	111	85	470	470	0.00	<10	10	500	518	103.60	131	70
IRON-ICP	mg/L	JYH	1	0.989	98.90	*	*	1	1	0.00	<0.04	0.04	1	0.95	95.00	125	75
CHROMIUM-FURN J	mg/L	AJS	0.025	0.0285	114.00	115	85	0.026	0.026	0.00	<0.005	0.005	0.025	0.026	104.00	139	70
CHROMIUM-FURN Q	mg/L	AJS	0.025	0.0289	115.60	115	85	0.015	0.012	22.22	<0.005	0.005	0.025	0.015	60.00	139	70
CHROMIUM-FURN E	mg/L	AJS	0.025	0.0268	107.20	115	85	0.025	0.026	3.92	<0.005	0.005	0.025	0.025	100.00	139	70
MERCURY A	mg/L	TAS	0.01	0.0096	96.00	135	49	0.0095	0.0097	2.08	<0.0002	0.0002	0.01	0.0097	97.00	127	59
MERCURY K	mg/L	TAS	0.01	0.0085	85.00	135	49	0.0086	0.0097	12.02	<0.0002	0.0002	0.01	0.0097	97.00	127	59
CYANIDE	mg/L	RJS	0.4	0.437	109.25	122	84	0.48	0.46	4.26	<0.01	0.01	0.2	0.239	119.50	117	87

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

KEMRON Environmental Se[illegible]s

QUALITY ASSURANCE DAILY REPORT

OHIO VALLEY LABORATORY Date: 12/15/94

			REFERENCE STANDARD					DUPLICATE SAMPLE			BLANK		MATRIX/MEDIA SPIKE				
Parameter	Units	Analyst	Known	Result	Rec.(%)	UCLx	LCLx	Result1	Result2	RPD (%)	Result	MDL	Conc.	Recovery	Rec.(%)	UCLs (%)	LCLs (%)
CONDUCTIVITY	uS/cm	MZL	1413	1370	96.96	107	95	410	410	0.00	<1	1	---	---	---	---	---
STRONTIUM-ICP	mg/L	JEC	1	1.02	102.00	114	90	1.47	1.43	2.76	<0.01	0.01	1	0.972	97.20	123	73
ARSENIC-FURNACE R	mg/L	SPL	0.025	0.0252	100.80	131	75	0.6	0.8	28.57	<0.004	0.004	0.05	0.037	74.00	118	63
ANTIMONY-FURN B	mg/L	TAS	0.025	0.0247	98.80	128	75	< 2	< 2	0.00	<0.02	0.02	0.025	0.022	88.00	133	56
ANTIMONY-FURNACE	mg/L	TAS	0.025	0.0254	101.60	128	75	0.042	0.042	0.00	<0.02	0.02	0.05	0.042	84.00	133	56
ANTIMONY-FURN X	mg/L	TAS	0.025	0.0258	103.20	128	75	0.024	0.022	8.70	<0.02	0.02	0.025	0.024	96.00	133	56
ANTIMONY-FURN A	mg/L	TAS	0.025	0.0229	91.60	128	75	0.021	0.021	0.00	<0.02	0.02	0.025	0.021	84.00	133	56
ANTIMONY-FURN V	mg/L	TAS	0.025	0.0233	93.20	128	75	0.018	0.019	5.41	<0.02	0.02	0.025	0.019	76.00	133	56
BERYLLIUM-FURN B	mg/L	SPL	0.002	0.0021	105.00	119	77	0.0025	0.0025	0.00	<0.0005	0.0005	0.0025	0.0025	100.00	158	64
MERCURY	mg/L	JKM	0.01	0.0107	107.00	135	49	< 0.25	< 0.25	0.00	<0.0002	0.0002	0.01	0.01	100.00	127	59
MERCURY K	mg/L	JKM	0.01	0.0096	96.00	135	49	< 0.0002	< 0.0002	0.00	<0.0002	0.0002	0.01	0.0095	95.00	127	59
MERCURY M	mg/L	JKM	0.01	0.0102	102.00	135	49	0.009	0.0092	2.20	<0.0002	0.0002	0.01	0.0099	99.00	127	59
MERCURY B	mg/L	JKM	0.01	0.0098	98.00	135	49	0.0087	0.0082	5.92	<0.0002	0.0002	0.01	0.01	100.00	127	59
LEAD-FURNACE R	mg/L	AJS	0.025	0.0258	103.20	118	74	1.4	1.8	25.00	<0.005	0.005	0.025	0.028	112.00	121	54
CONDUCTIVITY	uS/cm	MZL	1413	1370	96.96	107	95	410	410	0.00	<1	1	---	---	---	125	75
CHROMIUM (6)	mg/L	PJH	0.1	0.097	97.00	114	89	< 0.01	< 0.01	0.00	<0.01	0.01	0.1	0.084	84.00	120	77
COD	mg/L	PJH	100	109	109.00	144	87	< 5	< 5	0.00	<5	5	50	56	112.00	151	69
CYANIDE	mg/L	RJS	0.4	0.38	95.00	122	84	< 0.01	< 0.01	0.00	<0.01	0.01	0.2	0.17	85.00	121	86
AMMONIA	mg/L	JWR	2	1.97	98.50	115	60	0.64	0.64	0.00	<0.03	0.03	1	0.921	92.10	131	40
OIL & GREASE	mg/L	ALC	10	10.9	109.00	124	81	11	11	0.00	<1	1	10	11	110.00	148	50
LEAD-ICP	mg/L	JEC	1	1.1	110.00	114	84	3.43	2.85	18.47	<0.1	0.1	1	1.12	112.00	115	60
COPPER-ICP D	mg/L	JEC	1	0.961	96.10	111	88	1.78	1.74	2.27	<0.02	0.02	1	0.66	66.00	111	67
TSS	mg/L	REB	50	41	82.00	116	61	17	13	26.67	<5	5	50	45	90.00	126	71
TDS	mg/L	REB	500	480	96.00	111	88	18000	18000	0.00	<10	10	500	692	138.40	113	87
TOC	mg/L	PJH	25	28.1	112.40	116	61	< 1	< 1	0.00	<1	1	25	29.8	119.20	126	71
CADMIUM-FURNACE K	mg/L	SPL	0.002	0.0025	100.00	124	79	0.0021	0.0021	0.00	<0.0005	0.0005	0.0025	0.0021	84.00	121	74
CADMIUM-FURNACE	mg/L	SPL	0.002	0.0021	84.00	124	79	0.0017	0.0017	0.00	<0.0005	0.0005	0.0025	0.0017	68.00	121	74
CADMIUM-FURNACE X	mg/L	SPL	0.002	0.0023	92.00	125	75	0.0025	0.0023	8.33	<0.0005	0.0005	0.0025	0.0025	100.00	125	75
CADMIUM-FURNACE S	mg/L	SPL	0.002	0.002	80.00	125	75	0.0022	0.0022	0.00	<0.0005	0.0005	0.0025	0.0022	88.00	125	75
CADMIUM-FURNACE V	mg/L	SPL	0.002	0.0024	96.00	125	75	0.0022	0.0022	0.00	<0.0005	0.0005	0.0025	0.0022	88.00	125	75
CADMIUM-FURNACE A	mg/L	SPL	0.002	0.0024	96.00	125	75	0.0022	0.0024	8.70	<0.0005	0.0005	0.0025	0.0024	96.00	125	75
CADMIUM-FURNACE	mg/L	SPL	0.002	0.0024	96.00	125	75	0.0025	0.0026	3.92	<0.0005	0.0005	0.0025	0.0025	100.00	125	75
SELENIUM K	mg/L	JYH	0.025	0.0252	100.80	125	75	0.025	0.025	0.00	<0.004	0.004	0.025	0.025	100.00	125	75
SELENIUM B	mg/L	JYH	0.025	0.0229	91.60	125	75	< 0.004	< 0.004	0.00	<0.004	0.004	0.025	0.024	96.00	125	75
SELENIUM A	mg/L	JYH	0.025	0.0264	105.60	125	75	0.023	0.023	0.00	<0.004	0.004	0.025	0.023	92.00	125	75
ARSENIC E	mg/L	JYH	0.025	0.0267	106.80	125	75	0.012	0.015	22.22	<0.004	0.004	0.05	0.048	96.00	125	75
ARSENIC R	mg/L	JYH	0.025	0.0246	98.40	125	75	0.025	0.024	4.08	<0.004	0.004	0.025	0.024	96.00	125	75
TOX	mg/L	RJS	0.116	0.1	86.21	138	60	0.2	0.2	0.00	<0.02	0.02	---	---	---	125	75

UCLx = Upper Control Limit (Standard)
LCLx = Lower Control Limit (Standard)
UCLr = Upper Control Limit (Range)
RPD (%) = Relative Percent Difference
* = Initial Data Collection

UCLb = Upper Control Limit (Blank)
MDL = Method Detection Limit
UCLs (%) = Upper Control Limit (Spike Recovery)
LCLs (%) = Lower Control Limit (Spike Recovery)
Post-digestion spikes on sodium, potassium, calcium, and magnesium

ORGANIC QA/QC

KEMRON ENVIRONMENTAL SERVICES, INC.
MARIETTA, OH
QUALITY CONTROL / VOLATILE WATER

RUN DATE: 12/15/94 BLK FLNM: 5BK12529
INSTRUMENT: FINN 5 LCS FLNM: 5QC12530
ANALYST(S): SLM SHIFT: AM

SMPL NAME: 12-247-02
FILE NAME: 5CY12532
MS FLNM: 5CY12533
MSD FLNM: 5CY12534

VOA COMPOUND	PRACTICAL QUANTITATION LIMIT (PQL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	WARNING LIMITS %REC	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
CHLOROMETHANE	10	BQL	18.4	91.9	43-129	0-273								33
BROMOMETHANE	10	BQL	20.5	102.7	62-115	0-242								22
VINYL CHLORIDE	10	BQL	18.7	93.6	47-128	0-251								18
CHLOROETHANE	10	BQL	20.1	100.3	60-138	14-230								40
METHYLENE CHLORIDE	5	BQL	20.2	100.9	72-160	0-221								33
ACETONE	100	BQL			30-165	30-165								40
CARBON DISULFIDE	5	BQL			45-165	45-165								40
1,1-DICHLOROETHENE	5	BQL	17.8	88.8	66-138	0-234	0.0	54.7	55.4	109.4	110.7	61 - 145	1.2	31
1,1-DICHLOROETHANE	5	BQL	20.1	100.4	71-149	59-155								50
1,2-DICHLOROETHENE (T	5	BQL	16.8	84.2	77-127	54-156								31
CHLOROFORM	5	BQL	19.4	97.2	82-124	51-138								22
1,2-DICHLOROETHANE	5	BQL	19.8	99.0	87-118	49-155								32
2-BUTANONE	100	BQL			35-160	35-160								40
1,1,1-TRICHLOROETHANE	5	BQL	20.0	100.2	85-120	52-162								14
CARBON TETRACHLORID	5	BQL	19.6	97.8	70-140	70-140								29
VINYL ACETATE	10	BQL			40-170	40-170								40
BROMODICHLOROMETHA	5	BQL	20.0	99.8	80-118	35-155								20
1,2-DICHLOROPROPANE	5	BQL	20.3	101.5	76-134	0-210								40
CIS-1,3-DICHLOROPROPE	5	BQL	19.9	99.6	80-146	0-227								40
TRICHLOROETHENE	5	BQL	19.8	99.0	83-129	71-157	0.0	51.6	53.3	103.2	106.7	71 - 120	3.4	14
DIBROMOCHLOROMETHA	5	BQL	19.0	95.0	75-114	53-149								30
1,1,2-TRICHLOROETHANE	5	BQL	19.4	97.1	86-127	52-150								21
BENZENE	5	BQL	20.9	104.4	87-120	37-151	0.0	53.2	51.0	106.4	102.1	76 - 127	4.1	23
TRANS-1,3-DICHLOROPRO	5	BQL	19.1	95.4	48-106	17-183								40
2-CHLOROETHYLVINYL ET	10	BQL			10-305	10-305								40
BROMOFORM	5	BQL	18.8	93.8	66-113	45-169								32
2-HEXANONE	10	BQL			45-150	45-150								40
4-METHYL 2-PENTANONE	10	BQL			40-160	40-160								40
TETRACHLOROETHENE	5	BQL	19.8	98.8	87-121	64-168								57
1,1,2,2-TETRACHLOROET	5	BQL	18.4	92.0	78-124	46-147								17
TOLUENE	5	BQL	19.8	99.0	86-115	47-150	0.0	49.0	48.8	98.1	97.6	76 - 125	0.5	14
CHLOROBENZENE	5	BQL	19.6	98.0	85-119	37-160	0.0	55.1	53.9	110.1	107.8	75 - 130	2.1	14
ETHYLBENZENE	5	BQL	21.2	106.0	75-153	37-162								13
STYRENE	5	BQL			40-160	17-181								40
XYLENES, TOTAL	5	BQL			40-135	40-135								40
TRICHLOROFLUOROMETH	5	BQL	17.5	87.7	37-142	17-181								24
1,2-DICHLOROBENZENE	5	BQL	19.0	94.8	76-109	18-190								16
1,3-DICHLOROBENZENE	5	BQL	19.0	95.2	79-109	59-156								17
1,4-DICHLOROBENZENE	5	BQL	18.4	91.8	80-109	18-190								14
ACROLEIN	100	BQL												
ACRYLONITRILE	100	BQL												

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KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE:	12/15/94	SMPL	12-216-06
TYPE:	SEPFUNNEL	FILE N	4CY18870
BLK FLNM:	4BK18868	MS FL	4CY18871
QC FLNM:	4QC18869	MSD FL	4CY18872

SEMIVOA COMPOUND LI	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCEN RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
PHENOL	10	BQL	100	13	26	26	13-132	0	18	18	36	36	36	36	0
BIS(2-CHLOROETHYL)ET	10	BQL	100	24	48	48	67- 97	0	23	23	46	46	46	46	0
2-CHLOROPHENOL	10	BQL	100	17	34	34	48-115	0	19	22	38	44	38	44	15
1,3-DICHLOROBENZENE	10	BQL	100	22	44	44	34-115	1	22	22	42	42	42	42	0
1,4-DICHLOROBENZENE	10	BQL	100	23	46	46	32-115	35	39	39	8	8	8	8	0
1,2-DICHLOROBENZENE	10	BQL	100	23	46	46	30-115	204	123	117	-162	-174	-162	-174	7
BIS(-CHLOROISOPROPYL	10	BQL	100	26	52	52	58-112	0	24	24	48	48	48	48	0
N-NITROSO-DI-N-PROPYL	10	BQL	100	29	58	58	35-124	0	27	26	54	52	54	52	4
HEXACHLOROETHANE	10	BQL	100	21	42	42	26- 76	0	21	22	42	44	42	44	5
NITROBENZENE	10	BQL	100	26	52	52	51-112	2	25	25	46	46	46	46	0
ISOPHORONE	10	BQL	100	32	64	64	48-110	0	32	31	64	62	64	62	3
2-NITROPHENOL	10	BQL	100	14	28	28	23-130	0	19	25	38	50	38	50	27
2,4-DIMETHYLPHENOL	10	BQL	100	31	62	62	49- 96	0	2	2	4	4	4	4	0
BIS(2-CHLOROETHOXY)M	10	BQL	100	29	58	58	15-110	0	29	28	58	56	58	56	4
2,4-DICHLOROPHENOL	10	BQL	100	19	38	38	11-123	0	20	24	40	48	40	48	18
1,2,4-TRICHLOROBENZE	10	BQL	100	27	54	54	29- 98	0	27	26	54	52	54	52	4
NAPHTHALENE	10	BQL	100	28	56	56	54-107	0	28	27	56	54	56	54	4
HEXACHLOROBUTADIEN	10	BQL	100	23	46	46	28- 83	0	23	23	46	46	46	46	0
4-CHLORO-3-METHYLPHE	10	BQL	100	32	64	64	45-117	3	25	26	44	46	44	46	4
HEXACHLOROCYCLOPE	10	BQL	100	16	32	32	D- 144	0	17	21	34	42	34	42	21
2,4,6-TRICHLOROPHENO	10	BQL	100	16	32	32	16-140	0	16	21	32	42	32	42	27
2-CHLORONAPHTHALEN	10	BQL	100	31	62	62	18-136	0	32	31	64	62	64	62	3
DIMETHYLPHTHALATE	10	BQL	100	4	8	8	D- 37	0	3	6	6	12	6	12	67
ACENAPHTHYLENE	10	BQL	100	34	68	68	62-101	0	35	33	70	66	70	66	6
ACENAPHTHENE	10	BQL	100	36	72	72	D- 150	0	35	34	70	68	70	68	3
2,4-DINITROPHENOL	50	BQL	100	0	0	0	43-117	0	0	0	0	0	0	0	ERR

KEMRON ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL / SEMIVOLATILE WATER

EXT DATE: 12/15/94 SMPL NAME 12-216-06
TYPE: SEPFUNNEL FILE NAME: 4CY18870
BLK FLNM: 4BK18868 MS FLNM: 4CY18871
QC FLNM: 4QC18869 MSD FLNM: 4CY18872

SEMIVOA COMPOUND LIS	PRACTICAL QUANTITATI LIMIT	METHOD BLANK	LABORATORY CONTROL SAMPLE CONC. SPIKE ADDED	INSTR. RESULT	SPIKE CONC.	PERCEN RECOVE	ADVISOR LIMITS	SAMPLE RESULT	MS INSTR RESU	MSD INSTR. RESULT	MS CONC.	MSD CONC.	MS PERCENT RECOVER	MSD PERCEN RECOVE	PERCENT RPD
	ug/L	ug/L	ug/L	ug/L	ug/L	%		ug/L	ug/L	ug/L	ug/L	ug/L	%	%	%
4-NITROPHENOL	50	BQL	100	0	0	0	D- 222	0	16	13	32	26	32	26	21
2,6-DINITROTOLUENE	10	BQL	100	36	72	72	25-120	0	41	36	82	72	82	72	13
2,4-DINITROTOLUENE	10	BQL	100	37	74	74	53-123	0	41	35	82	70	82	70	16
DIETHYLPHTHALATE	10	BQL	100	20	40	40	34-110	0	18	22	36	44	36	44	20
4-CHLORO-PHENYL ETHE	10	BQL	100	36	72	72	D- 105	0	37	34	74	68	74	68	8
FLUORENE	10	BQL	100	38	76	76	65-108	0	39	35	78	70	78	70	11
4,6-DINITRO-2-METHYLPH	50	BQL	100	11	22	22	D- 150	0	14	21	28	42	28	42	40
N-NITROSODIPHENYLAMI	10	BQL	100	49	98	98	D- 180	0	50	49	100	98	100	98	2
4-BROMOPHENYL-PHENY	10	BQL	100	40	80	80	138-237	0	40	39	80	78	80	78	3
HEXACHLOROBENZENE	10	BQL	100	38	76	76	69-105	0	37	37	74	74	74	74	0
PENTACHLOROPHENOL	50	BQL	100	12	24	24	47-103	0	4	7	8	14	8	14	55
PHENANTHRENE	10	BQL	100	42	84	84	36-137	0	43	40	86	80	86	80	7
ANTHRACENE	10	BQL	100	44	88	88	72-108	0	46	42	92	84	92	84	9
DI-N-BUTYLPHTHALATE	10	BQL	100	36	72	72	76-111	0	40	38	80	76	80	76	5
FLUORANTHENE	10	BQL	100	46	92	92	21- 89	0	47	42	94	84	94	84	11
PYRENE	10	BQL	100	46	92	92	65-113	0	51	52	102	104	102	104	2
BUTYLBENZYLPHTHALAT	10	BQL	100	32	64	64	42-139	0	41	44	82	88	82	88	7
3,3'-DICHLOROBENZIDIN	20	BQL	100	44	88	88	24-120	0	49	38	98	76	98	76	25
BENZO(A)ANTHRACENE	10	BQL	100	47	94	94	4 -144	0	51	46	102	92	102	92	10
BIS(2-ETHYLHEXYL)PHTH	10	BQL	100	56	112	112	76-131	1	61	60	120	118	120	118	2
CHRYSENE	10	BQL	100	48	96	96	53-110	0	51	47	102	94	102	94	8
DI-N-OCTYL PHTHALATE	10	BQL	100	64	128	128	60-109	0	71	73	142	146	142	146	3
BENZO(B)FLUORANTHEN	10	BQL	100	55	110	110	47-115	0	57	54	114	108	114	108	5
BENZO(K)FLUORANTHEN	10	BQL	100	51	102	102	56-109	0	57	53	114	106	114	106	7
BENZO(A)PYRENE	10	BQL	100	50	100	100	64-116	0	54	49	108	98	108	98	10
INDENO(1,2,3-CD)PYREN	10	BQL	100	56	112	112	59-100	0	55	46	110	92	110	92	18
DIBENZO(A,H)ANTHRACE	10	BQL	100	53	106	106	53-125	0	56	45	112	90	112	90	22
BENZO(G,H,I)PERYLENE	10	BQL	100	53	106	106	50-118	0	53	46	106	92	106	92	14
N-NITROSODIMETHYLAMI	10	BQL	100	20	40	40		0	22	23	44	46	44	46	4
BENZIDINE	100	BQL	100	6	12	6	49-111	0	7	5	14	10	14	10	33

NOTE => ADVISORY LIMITS APPLY TO LCS, MS, AND MSD RECOVERY

ROUX

CHAIN OF CUSTODY

№ 01916 J

Ground-Water Consultants
ROUX ASSOCIATES INC
1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

PROJECT NAME: MONSANTO NITRO

PROJECT NUMBER: 06619J03

PROJECT LOCATION: NITRO, WEST VIRGINIA

SAMPLER(S): J. CLIFFORD, J. LUPER

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOCS BY USEPA SW-846 METHOD 8240	BN/AE COMPOUNDS BY USEPA SW-846 METHOD 8270	METALS BY USEPA SW-846 6000 AND 7000 SERIES	TOTAL ORGANIC CARBON BY USEPA METHOD 9060	TOTAL ORGANIC HALOGENS BY USEPA SW-846 METHOD 9020	TOTAL BOTTLES	PRESERVATION
SW-3	12/13/94	3:35 pm	WATER	X	X	X	X	X	10	VOC - HCL; BN - 4C; metals - HNO3; TOC - H2SO4; TOX - H2SO4
SW-4	12/13/94	3:05 pm	WATER	X	X	X	X	X	8	VOC - HCL; BN - 4C; metals - HNO3; TOC - H2SO4; TOX - H2SO4
FIELD BLANK	12/13/94		WATER	X	X	X	X	X		
TRIP BLANK	12/13/94		WATER	X						

RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
SAMPLER'S		12-13-94	5:10						
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE) Tom Woodall	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) Pamela Murphy Kemron	FOR	DATE 12/14/94	TIME 1000	SEAL INTACT Y OR N

DELIVERY METHOD: OVERNIGHT EXPRESS

ANALYTICAL LABORATORY: KEMRON ENVIRONMENTAL SERVICES, INC

COMMENTS: Field Blank not collected, extra bottles returned empty.
Sent via Airborne Express Air-bill 9721610883
One extra bottle each for TOX, TOC was collected at SW-3

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: Kemron OVL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID (Standard): 5ST12524 Date Analyzed: 12/15/95

Instrument ID: Finn 5 Time Analyzed: —

Matrix: (soil/water) Water Level: (low/med) Low Column: (pack/cap) Cap

	IS1 (BCM) AREA #	RT	IS2 (DFB) AREA #	RT	IS3 (CBZ) AREA #	RT
12 HOUR STD	36056		218398		196561	
UPPER LIMIT	72112		436796		393122	
LOWER LIMIT	18028		109199		98280	
EPA SAMPLE NO.						
01 5BK12529	40505		246646		203228	
02 5QC12530	35366		211073		186086	
03 5CY12531	37373		206029		181131	
04 5CY12532	40138		230717		194965	
05 5CY12533	37752		211770		187574	
06 5CY12534	67756		388292		352273	
07 5CY12535	36174		207634		186904	
08 5CY12536	34431		198196		175666	
09 5CY12537	36315		204855		182844	
10 5CY12538	38082		212833		186969	
11 5CY12539	39821		213902		187246	
12 5CY12540	39070		210880		185798	
13 5M012541	37960		203873		180732	
14 5M012542	35346		198628		179622	
15 5M012543	35328		191081		173376	
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Kemron-OUC Contract:

Project No.: Site: Location: Group:

Lab File ID (Standard): 4S118863 Date Analyzed: 12/27/91

Instrument ID: Finn-4 Time Analyzed: 1351

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	71460		57101		50153	
	UPPER LIMIT	142920		114202		100306	
	LOWER LIMIT	35730		28551		25077	
	SAMPLE NO.						
01	4BR18864	59541		37165		31713	
02	4BR18865	81027		66500		37446	
03	4QC18866	91193		76522		52873	
04	4BR18867	73189		51510		32035	
05	4BR18868	60064		38777		30399	
06	4QC18869	63761		48793		34605	
07	4CY18870	55427		42567		32789	
08	4CY18871	56297		46440		28702	
09	4CY18872	51048		32031		19811*	
10	4CY18873	43546		27427*		21901*	
11	4CY18874	39421		23676*		17650*	
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

8B

SOIL ISUC 12/22
Sep BLK 12/15 TLS

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Kemron-OVC Contract:

Project No.: Site: Location: Group:

Lab File ID (Standard): 4ST18863 Date Analyzed: 12/27/14

Instrument ID: FINN-4 Time Analyzed: 1351

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	22923		87056		50758	
	UPPER LIMT	45846		174112		101516	
	LOWER LIMIT	11462		43528		25379	
	SAMPLE NO.						
01	4BR18864	20644		77220		42200	
02	4BK18865	26598		97174		53184	
03	4QC18866	26680		103299		59061	
04	4BR18867	27163		93173		54033	
05	4BK18868	20295		77439		43804	
06	4QC18869	19429		76523		45330	
07	4C418870	18658		71215		39058	
08	4C418871	18284		68654		39142	
09	4C418872	18704		69456		38324	
10	4C418873	16051		59982		32820	
11	4C418874	15367		55644		29514	
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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