

Craig Branch ERCS



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Location: 501 Fields Residence (Orville Rd.)

Laboratory Number: 2185

Requested:

DATE: 02/11/91
LAB: AS 11182/WCS ASD 11140

Date Sampled: 02/11/91
Date Received: 02/11/91

Submitted:

J. M. Wight

Sample of: CLIENT

030491 2513

ANALYSIS FOR REQUESTED PARAMETERS
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED
					DATE/TIME/ANALYST
Chloride	ND	0.02	MG/L	SW9010	02/19/91 09:00 TF
Total Recoverable Phenolics	ND	0.005	MG/L	SW9065	02/14/91 08:00 TF

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

REF: USEPA; Test Methods for Evaluating Solid Waste; SW-846, 3rd Ed.; Nov, 1986.

AR100020



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Location: Services-Newark/Buchnowski

Laboratory Number: 41165

Responsible:
Submitted:

STA. X01 FIELD RESIDENCE (CRAIGS BR)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91
Date Received 02/11/91

T.M. Wright

Sampled by CLIENT

030491 1518

PRIORITY POLLUTANT/METALS ANALYSIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Arsenic (Total)	ND	0.10	MG/L	SW6010	02/22/91 17:14 TM
Cadmium (Total)	ND	0.007	MG/L	SW6010	02/22/91 17:14 TM
Chromium (Total)	ND	0.025	MG/L	SW6010	02/22/91 17:14 TM
Lead (Total)	ND	0.085	MG/L	SW6010	02/22/91 17:14 TM
Selenium (Total)	ND	0.2	MG/L	SW6010	02/22/91 17:14 TM
Silver (Total)	ND	0.01	MG/L	SW6010	02/22/91 17:14 TM
Copper (Total)	0.022	0.012	MG/L	SW6010	02/22/91 17:14 TM
Nickel (Total)	ND	0.034	MG/L	SW6010	02/22/91 17:14 TM
Zinc (Total)	0.15	0.004	MG/L	SW6010	02/22/91 17:14 TM
Antimony (Total)	ND	0.08	MG/L	SW6010	02/22/91 11:15 TM
Thallium (Total)	ND	0.25	MG/L	SW6010	02/22/91 17:14 TM
Barium (Total)	ND	0.001	MG/L	SW6010	02/22/91 17:14 TM
Mercury (Total)	ND	0.0005	MG/L	SW7470	02/15/91 14:00 SG

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

REF: USEPA; Test Methods For Evaluating Solid Waste; SW-846, 3rd Ed.; Nov, 1986.

AR100021

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bocnowski

Laboratory Number 11165

Respectfully
Submitted:

101 FIELD RESIDENCE (SRAIGS AVE)
102 AS 11/25/91 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

A. M. Wright

Sampled by CLIENT

030491 1813

EXTRACTABLE ORGANICS-PESTICIDES & PCB'S
Water Procedure/Liquid:Liquid Extraction (PP-6080-BASE-WATER)

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
alpha-BHC[313-84-61]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
beta-BHC[319-83-71]	ND	0.2	ug/L	SW8080	02/15/91 13:08 SC
gamma-BHC[319-83-71]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
delta-BHC[319-86-81]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
heptachlor[76-44-81]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
hidram[309-00-21]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
heptachlor epoxide[1021-37-31]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
Endosulfan I[959-98-81]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
Endosulfan S[959-97-11]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
Endosulfan Q[959-98-81]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
Endosulfan Sulfate[1031-07-31]	ND	0.3	ug/L	SW8080	02/15/91 13:08 SC
Endrin Aldehyde[7421-93-41]	ND	1.0	ug/L	SW8080	02/15/91 13:08 SC
Chlorobenzene[74-83-1]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
Hexachlorobenzene[1001-35-21]	ND	1.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1016)[12674-11-21]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1221)[11104-28-21]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1232)[11141-16-51]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1242)[53469-21-91]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1248)[1267-29-11]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1254)[11097-69-11]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC
CB(as Arochlor 1260)[11096-82-51]	ND	0.5	ug/L	SW8080	02/15/91 13:08 SC

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Extraction Method 3510, Analytical Method 3080

USEPA: Test Methods for Evaluating Solid Waste; SW-846, 2nd Ed.; Nov., 1986.

AR100022

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725
4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400
CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Marshall Env. Services-Newark/Bochnowski

Laboratory Number 11155

Respectfully
Submitted:

STA. W01 FIELD RESIDENCE (CRAIG BR)
MOE MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

T. M. Wright

Supplied by CLIENT

030491 1613

PRIORITY POLLUTANTS:VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Chloromethane[74-87-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Bromomethane[74-83-9]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Vinyl Chloride[75-01-4]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Chloroethane[75-00-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Tetrachloroethane[75-07-2]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1-Dichloroethane[75-35-4]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1-Dichloroethane[75-34-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Trans-1,2-Dichloroethane[156-60-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Chloroform[67-66-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1-Dichloroethane[107-06-2]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1,1-Trichloroethane[71-95-6]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Carbon Tetrachloride[56-23-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Bromodichloromethane[75-27-4]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,2-Dichloropropane[78-07-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Trans-1,3-Dichloropropane[10061-02-8]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Cis-1,3-Dichloropropane[10061-01-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Trichloroethene[75-91-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Bromochloromethane[124-46-1]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1,2-Trichloroethane[73-00-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
2-Chloroethylvinylether[110-75-6]	ND	20	ug/L	SW8240	02/22/91 12:42 CLF
Bromoform[75-25-2]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
1,1,2,2-Tetrachloroethane[79-34-5]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Tetrachloroethene[127-18-4]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Benzene[71-43-2]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Toluene[108-88-3]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Ethylbenzene[100-41-4]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Chlorobenzene[108-90-7]	ND	10	ug/L	SW8240	02/22/91 12:42 CLF
Acrylonitrile[107-13-1]	ND	100	ug/L	SW8240	02/22/91 12:42 CLF

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

** Result is lower than the normally acceptable value.

AR100023



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number M1162

Respectfully
Submitted:

STA. #01 FIELD RESIDENCE (CRAIGS BR)
#W02 MS 11:23/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1513
PAGE 2

PRIORITY POLLUTANTS:VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Benzene107-02-83	ND	100	ug/L	SW8240	02/22/91 12:42 CLF
SURROGATE RECOVERY-VOLATILE FRACTION					
1,2-Dichloroethane-d4 (SURROGATE)	60	-----	X REC	SW8240	02/22/91 12:42 CLF **
Toluene-d8 (SURROGATE)	37	-----	X REC	SW8240	02/22/91 12:42 CLF **
Bromofluorobenzene (SURROGATE)	73	-----	X REC	SW8240	02/22/91 12:42 CLF **

ND: Not detected at concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

** Result is lower than the normally acceptable value.

AR100024

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725
4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400
CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Boonowski

Laboratory Number: M1163

Respectfully
Submitted:

ETA, NO1 FIELD RESIDENCE (CRAIGS BR)
AOR MS 11:25/W03 MSD 11:40)

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1513

PRIORITY POLLUTANTS: ACID EXTRACTABLE FRACTION
Liquid: Liquid Extraction
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Phenol [108-95-2]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
2-Chlorophenol [95-57-8]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
4-Nitrophenol [88-75-5]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
1,4-Dimethylphenol [105-67-9]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
1,4-Dichlorophenol [120-83-2]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
1-Chloro-3-methylphenol [57-50-7]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
2,4,6-Trichlorophenol [88-06-2]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
2,4-Dinitrophenol [51-28-5]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
4-Nitrophenol [100-02-7]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
2-Ethyl-4,6-dinitrophenol [534-52-1]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
Pentachlorophenol [87-86-5]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
SURROGATE RECOVERY-ACID FRACTION					
2-Fluorophenol (SURROGATE)	23	-----	X REC	SW8270	02/14/91 15:04 JR
Phenol-d6 (SURROGATE)	18	-----	X REC	SW8270	02/14/91 15:04 JR
2,4,6-Trichlorophenol (SURROGATE)	14	-----	X REC	SW8270	02/14/91 15:04 JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

AR100025

1255 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725
4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400
CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Sochnowski

Laboratory Number #1165

Respectfully
Submitted:

37A, W01 WELLS RESIDENCE (CRAIGS DR)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030431 1313

PRIORITY POLLUTANTS:BASE/NEUTRAL EXTRACTABLE FRACTION

Liquid:Liquid Extraction

ALL RESULTS ARE ON FM AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
4-Nitrosodimethylamine[62-73-93]	ND	50	ug/L	SW8270	02/14/91 15:04	JR
Bis(2-chloroethoxy)ethene[111-44-41]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
1,3-Dichlorobenzene[541-73-13]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
1,4-Dichlorobenzene[105-46-71]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
1,2-Dichlorobenzene[95-50-11]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
Bis(2-chloroisopropyl) ether[39633-32-91]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
4-Nitrosodi-n-propylamine[621-64-73]	ND	20	ug/L	SW8270	02/14/91 15:04	JR
4-tropbenzene[98-95-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
hexachloroethane[67-72-11]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
4-phenone[78-59-13]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
Bis(2-Chloroethoxy)methane[111-91-13]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
1,2,4-Trichlorobenzene[120-82-13]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
naphthalene[91-80-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
hexachlorocyclopentadiene[37-63-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
hexachlorocyclopentadiene[77-47-41]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
2-Chloronaphthalene[91-58-73]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
Dimethylphthalate[131-11-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
acenaphthylene[208-96-83]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
acenaphthene[83-32-93]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
2,6-Dinitrotoluene[806-20-83]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
2,4-Dinitrotoluene[121-14-23]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
fluorene[86-73-73]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
4-Chlorodiphenylether[7005-72-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
1,2-Dimethylpiperazine[122-66-73]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
Dichlorophthalate[84-66-83]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
4-Nitrosodiphenylamine[86-30-63]	ND	20	ug/L	SW8270	02/14/91 15:04	JR
hexachlorobenzene[118-74-11]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
4-Bromophenylphenylether[101-55-33]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
phenanthrene[85-01-81]	ND	10	ug/L	SW8270	02/14/91 15:04	JR
Anthracene[120-12-73]	ND	10	ug/L	SW8270	02/14/91 15:04	JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

AR100026

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0077



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-rlwark/Gochnowski

Laboratory Number M1163

Respectfully
Submitted:

STA. 401 FIELD RESIDENCE (CRAIGS BR)
WOR MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:40
Date Received 02/11/91

T. M. Weigh

Sampled by CLIENT

030492 1313
PAGE 2

PRIORITY POLLUTANTS:BASE/NEUTRAL EXTRACTABLE FRACTION
Liquid:Liquid Extraction
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	DATE/TIME/ANALYST
Di-n-butylphthalate[64-74-2]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Fluoranthene[206-44-0]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Pyrene[123-00-0]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Benzidine[92-87-5]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
Butylbenzylphthalate[85-66-7]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Di-(2-ethylhexyl) phthalate[117-81-7]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Chrysenes[18-01-3]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Benzo(a)anthracene[56-55-3]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
3,3'-Dichlorobenzidine[91-94-1]	ND	50	ug/L	SW8270	02/14/91 15:04 JR
Di-n-octylphthalate[117-84-0]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Benzo(b)fluoranthene[205-99-2]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Benzo(k)fluoranthene[207-08-9]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Benzo(a)pyrene[50-32-8]	ND	10	ug/L	SW8270	02/14/91 15:04 JR
Indeno(1,2,3-cd)pyrene[193-39-5]	ND	20	ug/L	SW8270	02/14/91 15:04 JR
Benzo(a,h,i)anthracene[53-70-3]	ND	20	ug/L	SW8270	02/14/91 15:04 JR
Benzo(ghi)perylene[191-24-2]	ND	20	ug/L	SW8270	02/14/91 15:04 JR
SURROGATE RECOVERY-BASE/NEUTRAL FRACTION					
Indroperzene[98-95-3]	49	-----	X REC	SW8270	02/14/91 15:04 JR
2-Fluorobiphenyl(SURROGATE)	66	-----	X REC	SW8270	02/14/91 15:04 JR
2-phenyl-d14(SURROGATE)	45	-----	X REC	SW8270	02/14/91 15:04 JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA:"Methods for Evaluating Solid Waste":SW-846(2nd Ed.)

AR100027



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Martian Env. Services-Newark/Bochnowski

Laboratory Number P1165

Respectfully
Submitted:

17A, WOI FIELD RESIDENCE (CRAIGS BR)
W02 NS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wight
030491 1310

Sampled by CLIENT

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery

10 Matrix Spike/Matrix Spike Duplicates				
17-anide				
Matrix Spike (Result 1)	46.9	50.0	UG	93.6%
Matrix Spike Duplicate (Result 2)	52.4	50.0	UG	105%
Relative % Difference Between Spikes	11.3%			
Total Recoverable Phenolics				
Matrix Spike (Result 1)	114	125	UG	91.2%
Matrix Spike Duplicate (Result 2)	128	125	UG	102%
Relative % Difference Between Spikes	11.2%			

All spike results are corrected for the sample background.

RESULT

Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent difference = $\frac{[\text{Result 1} - \text{Result 2}]}{[\text{Result 1} + \text{Result 2}]/2} \times 100$ Expressed as an absolute value

AR100028



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bocannonville

Laboratory number M1185

Respectfully
Submitted:

STA. W01 FIELD RESIDENCE (CRAIGS BR)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

T. N. Wright

Sampled by CLIENT

030491 1213

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
GC Matrix Spike/Matrix Spike Duplicates				
Arsenic (Total)				
Matrix Spike (Result 1)	1960	2000	UG/L	98.0%
Matrix Spike Duplicate (Result 2)	1980	2000	UG/L	99.0%
Relative % Difference Between Spikes	1.0%			
Cadmium (Total)				
Matrix Spike (Result 1)	31.9	30.0	UG/L	63.8%
Matrix Spike Duplicate (Result 2)	30.0	30.0	UG/L	60.0%
Relative % Difference Between Spikes	6.1%			
Chromium (Total)				
Matrix Spike (Result 1)	208	200	UG/L	104%
Matrix Spike Duplicate (Result 2)	178	200	UG/L	89.0%
Relative % Difference Between Spikes	15%			
Lead (Total)				
Matrix Spike (Result 1)	515	500	UG/L	103%
Matrix Spike Duplicate (Result 2)	560	500	UG/L	132%
Relative % Difference Between Spikes	25%			
Selenium (Total)				
Matrix Spike (Result 1)	2320	2000	UG/L	116%
Matrix Spike Duplicate (Result 2)	2220	2000	UG/L	111%
Relative % Difference Between Spikes	4.4%			

All spike results are corrected for the sample background.

RESULT
Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent difference = $\frac{(\text{Result 1} - \text{Result 2})}{(\text{Result 1} + \text{Result 2})/2} \times 100$ Expressed as an absolute value

AR100029



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Hewark/Bochnowski

Laboratory Number M1185

Respectfully
Submitted:

ETA, WOI FIELD RESIDENCE (CRAIGS BR)
WOE MS 11:25/WO3 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1313
PAGE 2

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
Silver(Total)				
Matrix Spike(Result 1)	36.5	50.0	UG/L	73.0%
Matrix Spike Duplicate(Result 2)	39.5	50.0	UG/L	79.0%
Relative % Difference Between Spikes	7.9%			
Copper(Total)				
Matrix Spike(Result 1)	246	250	UG/L	98.4%
Matrix Spike Duplicate(Result 2)	285	250	UG/L	114%
Relative % Difference Between Spikes	15%			
Nickel(Total)				
Matrix Spike(Result 1)	535	500	UG/L	107%
Matrix Spike Duplicate(Result 2)	605	500	UG/L	121%
Relative % Difference Between Spikes	12%			
Zinc(Total)				
Matrix Spike(Result 1)	535	500	UG/L	107%
Matrix Spike Duplicate(Result 2)	488	500	UG/L	97.6%
Relative % Difference Between Spikes	9.2%			
Thallium(Total)				
Matrix Spike(Result 1)	2620	2000	UG/L	131%
Matrix Spike Duplicate(Result 2)	2800	2000	UG/L	140%

All spike results are corrected for the sample background.

$$\text{Percent Recovery} = \frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$$

$$\text{Relative Percent difference} = \frac{|\text{Result 1} - \text{Result 2}|}{(\text{Result 1} + \text{Result 2})/2} \times 100 \quad \text{Expressed as an absolute value}$$

AR100030



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number M1165

Respectfully
Submitted:

STA. W01 FIELD RESIDENCE (CRAIGS BR)
(W02 MS 11:25/W03 MSB 11:40)

Date Sampled 02/11/91 11:10

Date Received 02/11/91

J. M. Wright

Sampled by CLIENT

030491 1313

PAGE 3

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
Relative % Difference Between Spikes	6.6%			
Cerium (Total)				
Matrix Spike (Result 1)	50.5	50.0	UG/L	101%
Matrix Spike Duplicate (Result 2)	50.5	50.0	UG/L	101%
Relative % Difference Between Spikes	0.0%			

All spike results are corrected for the sample background.

$$\text{Percent Recovery} = \frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$$

$$\text{Relative Percent difference} = \frac{[\text{Result 1} - \text{Result 2}]}{[\text{Result 1} + \text{Result 2}] / 2} \times 100 \quad \text{Expressed as an absolute value}$$

AR100031



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Rochinowski

Laboratory Number M163

Respectfully
Submitted:

STA. W01 FIELD RESIDENCE (CRAIGS BR)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. M. Wright

Sampled by CLIENT

030491 1813

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
GC Matrix Spike/Matrix Spike Duplicates				
Lindane[50-89-93]				
Matrix Spike (Result 1)	1700	2000	UG/L	85.0%
Matrix Spike Duplicate (Result 2)	1420	2000	UG/L	71.0%
Relative % Difference Between Spikes	13%			
Heptachlor[76-44-83]				
Matrix Spike (Result 1)	1822	1840	UG/L	99.0%
Matrix Spike Duplicate (Result 2)	1509	1840	UG/L	82.0%
Relative % Difference Between Spikes	19%			
Aldrin[309-00-83]				
Matrix Spike (Result 1)	1189	1450	UG/L	82.0%
Matrix Spike Duplicate (Result 2)	1117	1450	UG/L	77.0%
Relative % Difference Between Spikes	6.3%			
Dieldrin[60-57-11]				
Matrix Spike (Result 1)	1224	1800	UG/L	68%
Matrix Spike Duplicate (Result 2)	1188	1800	UG/L	66%
Relative % Difference Between Spikes	3.0%			
Endrin[72-20-83]				
Matrix Spike (Result 1)	2029	1970	UG/L	103%
Matrix Spike Duplicate (Result 2)	1714	1970	UG/L	87.0%
Relative % Difference Between Spikes	17%			

All spike results are corrected for the sample background.

RESULT

Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent Difference = $\frac{|\text{Result 1} - \text{Result 2}|}{(\text{Result 1} + \text{Result 2})/2} \times 100$ Expressed as an absolute value

AR100032



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Technoscan

Laboratory Number #1163

Respectfully
submitted:

STA. W01 FIELD RESIDENCE (CRAIGS BR)
(WOR MS 11:25/W03 MSD 11:40)

Date Sampled 02/11/91 11:10
Date Received 02/11/91

A. N. Wright

Sampled by CLIENT

030491 1313
PAGE 2

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
4, 4'-DDTCSO-29-31				
Matrix Spike (Result 1)	1543	1580	UG/L	104%
Matrix Spike Duplicate (Result 2)	1074	1580	UG/L	68.0%
Relative % Difference Between Spi es	42%			

All spike results are corrected for the sample background.

RESULT
Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent difference = $\frac{(\text{Result 1} - \text{Result 2})}{(\text{Result 1} + \text{Result 2})/2} \times 100$ Expressed as an absolute value

AR100033



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number M1165

Respectfully
Submitted:

17A W01 FIELD RESIDENCE (CRAIGS BR)
W02 MS 11:25/W03 MSD 11:40

Date Samples 08/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1513

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY: SEMI-VOLATILE ORGANICS

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
AC Matrix Spike/Matrix Spike Duplicates				
Phenol[108-95-2]				
Matrix Spike (Result 1)	18.5	50.0	UG/L	37.0%
Matrix Spike Duplicate (Result 2)	26.6	50.0	UG/L	53.2%
Relative % Difference Between Spikes	31%			
2-Chlorophenol[95-57-8]				
Matrix Spike (Result 1)	28.0	50.0	UG/L	56.0%
Matrix Spike Duplicate (Result 2)	37.1	50.0	UG/L	74.2%
Relative % Difference Between Spikes	28%			
1,4-Dichlorobenzene[106-46-7]				
Matrix Spike (Result 1)	30.1	50.0	UG/L	60.2%
Matrix Spike Duplicate (Result 2)	36.2	50.0	UG/L	72.4%
Relative % Difference Between Spikes	18%			
4-Nitrosodiphenylamine[85-30-5]				
Matrix Spike (Result 1)	50.1	50.0	UG/L	100.2%
Matrix Spike Duplicate (Result 2)	50.4	50.0	UG/L	100.8%
Relative % Difference Between Spikes	1%			
1,2,4-Trichlorobenzene[120-02-1]				
Matrix Spike (Result 1)	30.1	50.0	UG/L	60.2%
Matrix Spike Duplicate (Result 2)	32.2	50.0	UG/L	64.4%
Relative % Difference Between Spikes	6.7%			

All spike results are corrected for the sample background.

RESULT

$$\text{Percent Recovery} = \frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$$

$$\text{Relative Percent difference} = \frac{[\text{Result 1} - \text{Result 2}]}{[\text{Result 1} + \text{Result 2}]/2} \times 100 \quad \text{Expressed as an absolute value}$$

AR100034



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Me.ark/Bocznowski

Laboratory Number H1165

Respectfully

Submitted:

ITAL WVI FIELD RESIDENCE (CRAIGS BR)

Date Sampled 02/11/91 11:19

MOE MS 10:25/403 MSD 11:00

Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1213

PAGE 2

MATRIX SP / MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY: SEMI-VOLATILE ORGANICS

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
4-Chloro-3-methylpheno 0109-50-71				
Matrix Spike (Result 1)	31.3	50.0	UG/L	62.6%
Matrix Spike Duplicate (Result 2)	31.7	50.0	UG/L	63.4%
Relative % Difference Between Spikes	1.3%			
Acenaphthene 033-82-91				
Matrix Spike (Result 1)	38.4	50.0	UG/L	76.8%
Matrix Spike Duplicate (Result 2)	41.1	50.0	UG/L	82.2%
Relative % Difference Between Spikes	6.8%			
Litropene 0100-02-71				
Matrix Spike (Result 1)	14.0	50.0	UG/L	28.0%
Matrix Spike Duplicate (Result 2)	12.3	50.0	UG/L	24.6%
Relative % Difference Between Spikes	9.0%			
1,4-Dinitrobenzene 0121-14-33				
Matrix Spike (Result 1)	29.5	50.0	UG/L	59.0%
Matrix Spike Duplicate (Result 2)	30.7	50.0	UG/L	61.4%
Relative % Difference Between Spikes	4.0%			
Pentachloropheno 037-86-51				
Matrix Spike (Result 1)	22.5	50.0	UG/L	45.0%
Matrix Spike Duplicate (Result 2)	29.8	50.0	UG/L	59.6%
Relative % Difference Between Spikes	28%			

All spike results are corrected for the sample background.

RESULT

Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

[Result 1 - Result 2]

Relative Percent difference = $\frac{\text{[Result 1 - Result 2]}}{\text{[Result 1 + Result 2] / 2}} \times 100$ Expressed as an absolute value

[Result 1 + Result 2] / 2

AR100035

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number F1165

Respectfully
Submitted:

ETA. W01 FIELD RESIDENCE (CRANFORD BR)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J.M. Weigh

Sampled by CLIENT

030491 1013
PAGE 3

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY: SEMI-VOLATILE ORGANICS

Parameter Description	RESULT	SPIKE LEVEL	Percent UNITS Recovery

Sample 129-00-01			
Matrix Spike (Result 1)	27.6	50.0	UG/L 115%
Matrix Spike Duplicate (Result 2)	27.7	50.0	UG/L 135%
Relative % Difference Between Spikes	1%		

All spike results are corrected for the sample background.

Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent difference = $\frac{[\text{Result 1} - \text{Result 2}]}{[\text{Result 1} + \text{Result 2}]/2} \times 100$ Expressed as an absolute value

AR100036



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bocconowish

Laboratory Number H1185

Respectfully
Submitted:

37A, W01 FIELD RESIDENCE (CRAIGS BA)
W02 MS 11:25/W03 MSD 11:40

Date Sampled 02/11/91 11:10
Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030431 1413

MATRIX SPIKE/MATRIX SPIKE DUPLICATE ANALYSIS SUMMARY:VOLATILE ORGANICS

Parameter Description	RESULT	SPIKE LEVEL	UNITS	Percent Recovery
GC Matrix Spike/Matrix Spike Duplicates				
1,1-Dichloroethene(78-35-43)				
Matrix Spike (Result 1)	9.7	10.0	UG/L	97.0%
Matrix Spike Duplicate (Result 2)	9.7	10.0	UG/L	97.0%
Relative % Difference Between Spikes	11%			
Trichloroethene(79-01-61)				
Matrix Spike (Result 1)	9.3	10.0	UG/L	93.0%
Matrix Spike Duplicate (Result 2)	9.2	10.0	UG/L	92.0%
Relative % Difference Between Spikes	1.1%			
Benzene(71-43-21)				
Matrix Spike (Result 1)	11.2	10.0	UG/L	112%
Matrix Spike Duplicate (Result 2)	10.8	10.0	UG/L	108%
Relative % Difference Between Spikes	3.5%			
oluene(108-88-31)				
Matrix Spike (Result 1)	9.7	10.0	UG/L	97.0%
Matrix Spike Duplicate (Result 2)	9.1	10.0	UG/L	91.0%
Relative % Difference Between Spikes	6.4%			
Chlorobenzene(108-90-73)				
Matrix Spike (Result 1)	8.3	10.0	UG/L	83.0%
Matrix Spike Duplicate (Result 2)	7.7	10.0	UG/L	77.0%
Relative % Difference Between Spikes	7.5			

All spike results are corrected for the sample background.

RESULT

Percent Recovery = $\frac{\text{RESULT}}{\text{SPIKE LEVEL}} \times 100$

Relative Percent difference = $\frac{|\text{Result 1} - \text{Result 2}|}{(\text{Result 1} + \text{Result 2})/2} \times 100$ Expressed as an absolute value

AR100037



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Client: *W* *W* *W* Services-Newark/Brownwood

Laboratory Number: P1158

Reportedly
Submitted:

(FA. W. New York (Larids ER.)

Date Sampled: 02/11/91 11:10

Date Received: 02/11/91

A. N. Wright

Sampled by Client:

030491 1744

ANALYSIS FOR REQUESTED PARAMETERS
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Chloride	ND	0.02	MG/L	SW610	02/12/91 09:00 TF
Total Recoverable Phenolics	ND	0.005	MG/L	SW9055	02/14/91 09:00 TF

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

REF: USEPA; Test Methods For Evaluating Solid Waste; SW-846, 3rd Ed.; Nov, 1986.

AR100038

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-9872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bocanowski

Laboratory Number M166

Respectfully
Submitted:

STA. 404 NEW WELL (CRAIG BR.)

Date Sampled 02/11/91

Date Received 02/11/91

J. M. Wright

Sampled by CLIENT

030191 1744

PRIORITY POLLUTANTS: METALS ANALYSIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
Arsenic(Total)	ND	0.10	MG/L	SW6010	02/22/91	17:22 TM
Barium(Total)	ND	0.007	MG/L	SW6010	02/22/91	17:22 TM
Chromium(Total)	ND	0.025	MG/L	SW6010	02/22/91	17:22 TM
Lead(Total)	ND	0.025	MG/L	SW6010	02/22/91	17:22 TM
Selenium(Total)	ND	0.2	MG/L	SW6010	02/22/91	17:22 TM
Silver(Total)	ND	0.01	MG/L	SW6010	02/22/91	17:22 TM
Copper(Total)	ND	0.012	MG/L	SW6010	02/22/91	17:22 TM
Nickel(Total)	ND	0.034	MG/L	SW6010	02/22/91	17:22 TM
Zinc(Total)	ND	0.004	MG/L	SW6010	02/22/91	17:22 TM
Antimony(Total)	ND	0.08	MG/L	SW6010	02/22/91	11:20 TM
Thallium(Total)	ND	0.25	MG/L	SW6010	02/22/91	17:22 TM
Cadmium(Total)	ND	0.001	MG/L	SW6010	02/22/91	17:22 TM
Mercury(Total)	ND	0.0005	MG/L	SW7470	02/15/91	14:00 SG

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

REF: USEPA; Test Methods For Evaluating Solid Waste; SW-846, 3rd Ed.; Nov, 1986.

AR100039

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number 41166

Resubmitted:
Submitted:

STA. W04 NEW WELL (CRAIGS BR.)

Date Sampled 02/11/91 11:10

Date Received 02/11/91

J. M. Wright

Sampled by CLIENT

030492 1744

EXTRACTABLE ORGANICS-PESTICIDES & PCB'S Water Procedure/Liquid:Liquid Extraction (PP-3)80-88E-WATER)

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Alpha-BHC[319-84-82]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Beta-BHC[319-85-73]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Gamma-BHC[319-86-82]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Delta-BHC[319-86-82]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Heptachlor[76-44-82]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Aldrin[309-00-23]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Heptachlor Epoxide[1024-57-31]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Endosulfan IC959-99-83	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Dieldrin[69-57-13]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Chlordane[72-89-81]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Endosulfan III[33813-65-91]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
4,4'-DDE[72-85-93]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
4,4'-DDE[72-84-82]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
4,4'-DDT[50-29-32]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Endosulfan Sulfate[1031-07-83]	ND	0.3	ug/L	SW8080	02/15/91 15:30 SC
Aldrin Aldehyde[7421-53-43]	ND	1.0	ug/L	SW8080	02/15/91 15:30 SC
Chlordane[37-74-51]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
Toxaphene[3001-35-82]	ND	1.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1016)[12674-11-83]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1221)[11104-28-23]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1232)[11141-16-92]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1242)[53469-21-93]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1248)[1267-29-11]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1254)[11097-69-13]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC
PCB(as Arochlor 1260)[11096-82-57]	ND	0.5	ug/L	SW8080	02/15/91 15:30 SC

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Extraction Method 3510, Analytical Method 8080

EPA: Test Methods for Evaluating Solid Waste; SW-846, 2nd Ed.; Nov., 1986.

ARI00040



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Marshall Env. Services-Newark/Eschmohr

Laboratory Number 11156

Respectfully

Submitted:

17A, 204 NEW WELL (CRAIGS BR.)

Date Sampled 02/11/91 11:10

Date Received 02/11/91

J. M. Wright

Sampled by CLIENT

030491 1744

PRIORITY POLLUTANTS:VOLATILE FRACTION

Purge/Trap/Desorb

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
Chloromethane[74-87-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Bromomethane[74-83-92]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Vinyl Chloride[75-01-42]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Chloroethane[75-30-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Ethylene Chloride[75-34-82]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,1-Dichloroethane[75-35-42]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,1-Dichloroethane[75-34-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
trans-1,2-Dichloroethene[156-80-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Chloroform[67-66-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,2-Dichloroethane[107-06-22]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,1,1-Trichloroethane[71-35-62]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Carbon tetrachloride[56-23-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Bromodichloromethane[75-27-42]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,2-Dichloropropane[78-87-52]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
trans-1,3-Dichloropropene[10061-02-22]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
cis-1,3-Dichloropropene[10061-01-52]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Trichloroethene[79-01-62]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1-bromo-2-chloroethane[124-48-12]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,1,2-Trichloroethane[79-00-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
2-Chloroethylvinyl ether[110-75-82]	ND	20	ug/L	SW8240	02/22/91 15:34	CLF
Bromoform[75-25-22]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
1,1,2,2-Tetrachloroethane[79-34-52]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Tetrachloroethene[127-18-42]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Benzene[71-43-22]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Toluene[108-88-32]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Ethylbenzene[100-41-42]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF
Chlorobenzene[108-90-72]	ND	10	ug/L	SW8240	02/22/91 15:34	CLF

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste" (SW-846, 2nd Ed.)

AR100041

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Marplan Env. Services-Newark/Bochnowski

Laboratory Number 41166

Respectfully
Submitted:

STA. W04 NEW WELL (CRAIGS BR.)

Date Sampled 02/11/91 11:10

Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030491 1744

PAGE 2

PRIORITY POLLUTANTS:VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Nylontrile(107-13-13)	ND	100	ug/L	SW8240	02/22/91 15:34 CLF
Norolein(107-02-8J)	ND	100	ug/L	SW8240	02/22/91 15:34 CLF
SURROGATE RECOVERY-VOLATILE FRACTION					
1,2-Dichloroethane-d4(SURROGATE)	86	-----	X REC	SW8240	02/22/91 15:34 CLF
Toluene-d8(SURROGATE)	99	-----	X REC	SW8240	02/22/91 15:34 CLF
Bromofluorobenzene(SURROGATE)	90	-----	X REC	SW8240	02/22/91 15:34 CLF

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA:"Methods for Evaluating Solid Waste":SW-846(2nd Ed.)

AR100042



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number 81166

Respectfully
Submitted:

STA. W04 NEW WELL (CRAIGS BR.)

Date Sampled 02/11/91 11:10

Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030401 1744

PRIORITY POLLUTANTS/ACID EXTRACTABLE FRACTION

Liquid/Liquid Extraction

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED
					DATE/TIME/ANALYST
Phenol[C108-95-83]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2-Chlorophenol[C95-57-83]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2-Nitrophenol[C88-79-51]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2,4-Dimethylphenol[C105-67-93]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2,4-Dichlorophenol[C120-83-21]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
4-Chloro-3-methylphenol[C39-50-73]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2,4,6-Trichlorophenol[C88-06-23]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
2,4-Dinitrophenol [51-28-53]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
4-Nitrophenol[C100-02-71]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
1-Methyl-4,6-dinitrophenol[C54-52-13]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
Pentachlorophenol[C87-86-53]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
SURROGATE RECOVERY-ACID FRACTION					
2-Fluorophenol (SURROGATE)	40	-----	X REC	SW8270	02/14/91 15:56 JR
Phenol-66 (SURROGATE)	23	-----	X REC	SW8270	02/14/91 15:56 JR
2,4,6-Tribromophenol (SURROGATE)	30	-----	X REC	SW8270	02/14/91 15:56 JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

AR100043

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Bochnowski

Laboratory Number M1166

Respectfully

10A, 804 NEW WELL (CRAIGS BR.)

Date Sampled 02/11/91 11:10

Submitted:

Date Received 02/11/91

J. N. Wright

Sampled by CLIENT

030/91 1/44

PRIORITY POLLUTANTS:BASE/NEUTRAL EXTRACTABLE FRACTION

Liquid:Liquid Extraction

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
n-Nitrosodimethylamine[62-75-93]	ND	30	ug/L	SW8270	02/14/91 15:56 JR
Bis(2-ethoxyethyl) ether[111-44-43]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,3-Dichlorobenzene[541-73-11]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,4-Dichlorobenzene[106-46-72]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,2-Dichlorobenzene[95-50-11]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Bis(2-chloroisopropyl) ether[39638-32-93]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
n-Nitrosodi-n-propylamine[621-64-73]	ND	20	ug/L	SW8270	02/14/91 15:56 JR
Nitrobenzene[98-95-31]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
n-Propyl acetate[67-72-13]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,4-Dichlorobenzene[95-50-11]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Bis(2-chloroethoxy) methane[111-91-13]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,2,4-Trichlorobenzene[120-82-13]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Naphthalene[91-20-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Hexachlorocyclopentadiene[97-47-43]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1-Chloronaphthalene[91-58-72]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1-Methylphthalate[131-11-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Naphthalene[91-20-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Naphthalene[91-20-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,6-Dinitrotoluene[506-20-23]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,4-Dinitrotoluene[121-14-23]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Fluorene[85-73-72]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
n-Chlorophenylphenylether[7005-72-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,2-Diphenylhydrazine[122-66-73]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Diethylphthalate[64-66-23]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
n-Nitrosodiphenylamine[36-30-63]	ND	20	ug/L	SW8270	02/14/91 15:56 JR
Hexachlorobenzene[118-74-13]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
n-Bromophenylphenylether[101-55-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Phenanthrene[85-01-83]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Anthracene[120-12-73]	ND	10	ug/L	SW8270	02/14/91 15:56 JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA:"Methods for Evaluating Solid Waste":SW-846(2nd Ed.)

AR100044



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Meward/Dobrowski

Laboratory number 41155

Resubmitted/
Submitted:

STA. W04 NEW WELL JARVIS BR.

Date Sampled 02/11/91 11:10

Date received 02/11/91

J. W. Wright

Sampled by CLIENT

030491 1744

PAGE 2

PRIORITY POLLUTANTS:BASE/NEUTRAL EXTRACTABLE FRACTION

Liquid:Liquid Extraction

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED
					DATE/TIME/ANALYST
Di-n-octylphthalate[84-74-82]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Fluoranthene[206-44-01]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Pyrene[129-00-31]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Benztidine[92-87-52]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
Butylbenzylphthalate[85-88-73]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Diis(2-ethylhexyl)phthalate[117-81-73]	10	10	ug/L	SW8270	02/14/91 15:56 JR
Chrysene[118-01-91]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,2(a)anthracene[56-55-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
1,4-Dichlorobenzidine[91-84-11]	ND	50	ug/L	SW8270	02/14/91 15:56 JR
Di-n-octylphthalate[117-84-03]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Benzo(b)fluoranthene[205-99-23]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Benzo(k)fluoranthene[207-08-93]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Benzo(a)pyrene[50-32-33]	ND	10	ug/L	SW8270	02/14/91 15:56 JR
Indeno(1,2,3-cd)pyrene[193-39-51]	ND	20	ug/L	SW8270	02/14/91 15:56 JR
Dibenzo(a,h)anthracene[53-70-31]	ND	20	ug/L	SW8270	02/14/91 15:56 JR
Benzo(g,h)perylene[191-24-82]	ND	20	ug/L	SW8270	02/14/91 15:56 JR
SURROGATE RECOVERY-BASE/NEUTRAL FRACTION					
Nitrobenzene[98-95-33]	31	-----	% REC	SW8270	02/14/91 15:56 JR
4-Fluorobiphenyl(SURROGATE)	61	-----	% REC	SW8270	02/14/91 15:56 JR
Terphenyl-d14(SURROGATE)	39	-----	% REC	SW8270	02/14/91 15:56 JR

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

AR100045

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 247-7400

CINCINNATI, OHIO AREA — TELEPHONE 513 421-3872 OR 606 344-0084

CHAIN OF CUSTODY RECORD

REC 7
Curtis Bldg., 6th & Walnut Sts.,
Pitts. delphia, Pennsylvania 19106

PROJ. NO.	PROJECT NAME	STATION LOCATION		NO. OF CONTAINERS	NO. OF CONTAINERS		REMARKS
		DATE	TIME		GRAB	COM. TAINERS	
SAMPLES: (Signature) <i>Jeffrey A. Dwyer</i>							
STA. NO. DATE TIME COMP. GRAB STATION LOCATION NO. OF CONTAINERS							
W01	2/11/91	1110	X		7	1	77116-66-4238 Please Reult Results Harrison Murphy 5 Lindenwood Ct. Piquette, NJ 08875
W02	2/11/91	1125	X	Fields Residence HS	7	1	
W03	2/11/91	1140	X	Fields Residence MSD	7	1	
W04	2/11/91	1210	X	New Well	7	2	
Retinquished by: (Signature) _____ Date / Time _____ Received by: (Signature) _____ Date / Time _____							
Retinquished by: (Signature) _____ Date / Time _____ Received by: (Signature) _____ Date / Time _____							
Retinquished by: (Signature) _____ Date / Time _____ Received for Laboratory by: (Signature) _____ Date / Time _____							
Retinquished by: (Signature) _____ Date / Time _____ Remarks _____							

Vol (Vol)
 Poly Bottle (CN)
 Poly Bottle (CN)
 White Glass (BND)
 Amber Glass (Red/Red)
 Amber Glass (Pheol)



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Client: Env. Services-Newark/Concord

Report Number: 81004

45-1 WILMOTA RESIDENCE
CRACK WATER DRILL DUMP

Date Sampled: 03/14/71 10:00
Date Received: 03/14/71

A.M.W.

Sample: 10-30000

PRIORITY POLLUTANTS/VOLATILE FRACTION

Range: Trace to 500

NLE RESULTS ARE UN BR BS RECEIVED UNITS

PARAMETER	RESULT	UN	BR	BS	RETRAO	DATE TIME
Carbon disulfide 100-117-01	ND	10	10	10	SW21-9	03/21/71
Chloroform 100-117-02	ND	10	10	10	SW21-9	03/21/71
1,1-Dichloroethane 100-117-03	ND	10	10	10	SW21-9	03/21/71
1,1,1-Trichloroethane 100-117-04	ND	10	10	10	SW21-9	03/21/71
1,1,2-Trichloroethane 100-117-05	ND	10	10	10	SW21-9	03/21/71
1,2-Dichloroethane 100-117-06	ND	10	10	10	SW21-9	03/21/71
1,2-Dichlorobenzene 100-117-07	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-08	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-09	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-10	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-11	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-12	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-13	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-14	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-15	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-16	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-17	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-18	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-19	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-20	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-21	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-22	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-23	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-24	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-25	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-26	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-27	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-28	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-29	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-30	ND	10	10	10	SW21-9	03/21/71
1,2,4-Trichlorobenzene 100-117-31	ND	10	10	10	SW21-9	03/21/71

ND: Not detected at a concentration greater than or equal to the ND - listed below.

Method Reference: USEPA: "Methods for Evaluating Solid Waste" 1980 Chapter 81.

Result was higher than the normally acceptable value.

AR100047



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Client: Env. Services/DeWitt/Edmonski

Laboratory Number: M0904

Report

Site: MILLER RESIDENCE
CITY OF BRANCH DRUM BUMP

Date Sampled: 03/14/91 13:02
Date Received: 03/14/91

Sample

J.M.U.

Sample of: SW 115

30

PRIORITY POLLUTANTS: CHLORIDE FRACTION
(Purge/Trap/Desorb)
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MCL	UNITS	METHOD	DATE/TIME
Chloride Fraction (SW 115)	48	10	mg/L	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	48	10	mg/L	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	1	100	mg/L	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	1	100	mg/L	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	100	-----	W REC	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	100	-----	W REC	SM8249	03/23/91 13:02
Chloride Fraction (SW 115)	100	-----	W REC	SM8249	03/23/91 13:02

Method Reference: USEPA: Methods for Evaluating Solid Waste (SM-846 (2nd Ed.))

Note: Result is higher than the normally acceptable value.

AR100048



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Hewlett/Economich

Laboratory Number 70000

Order

18-B FIELDS RESIDENCE
CRAIG BRANCH DRUM BUMP

Date Sampled 03/14/91 13:30
Date Received 03/14/91

Subst

J.N.

Sampled by GUARIS

PRIORITY POLLUTANTS/VOLATILE FRACTION
Purge/Trap/Desorb

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MFL	UNIT	METHOD	DATE TIME
Chloroform#1173-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1-Trichloroethane#1174-03-03	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,2-Trichloroethane#1175-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1176-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,2,2-Tetrachloroethane#1177-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,2,2-Tetrachloroethane#1178-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,1-Tetrachloroethane#1179-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1180-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,2,2-Tetrachloroethane#1181-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1182-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1183-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1184-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1185-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1186-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1187-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1188-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1189-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1190-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1191-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1192-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1193-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1194-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1195-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1196-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1197-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1198-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1199-01-01	ND	10	ug/L	SW8240	03/14/91 13:30
1,1,1,2-Tetrachloroethane#1200-01-01	ND	10	ug/L	SW8240	03/14/91 13:30

ND: Not detected at a concentration greater than or equal to the MFL - Method Detection

Method Reference: USEPA: "Methods for Evaluating Solid Waste" 800-046 (2nd Ed.)

AR100049



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Newark/Economohans

Laboratory Number 10366

Residue

WS-6 FIELDS RESIDENCE
CRAIG BRANCH DRUM DUMP

Date Sampled 03/14/91 10:30
Date Received 03/14/91

J.M.W.

Sampled by BURRIS

PRIORITY POLLUTANTS-VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYST
Acetone	ND	100	ug/L	8260-B	03/14/91
Acetone	ND	100	ug/L	8260-B	03/14/91
PRIORITY POLLUTANTS-VOLATILE FRACTION					
Chloroform	11	100	ug/L	8260-B	03/14/91
Chloroform	11	100	ug/L	8260-B	03/14/91
Chloroform	11	100	ug/L	8260-B	03/14/91

ND: Not Detected at a concentration greater than or equal to the MDL - Method Detected

Method Reference: USEPA: "Methods for Evaluating Solid Waste": 8W-346 (2nd Ed.)

ARI00050



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Location: Env. Services/Health/Recreation

Laboratory Number: M30398

Requester:

POLLUTANT METHOD: SLURRY FOR SW/EPOL

Date Received: 05/27/91

J.M.W.

Page

PRIORITY POLLUTANTS: VOLATILE FRACTION
Furnace/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE	RECEIVED DATE
Chlorobenzene#179-17-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
Bromobenzene#179-18-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,2-Dichloroethane#179-19-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1-Dichloroethene#179-20-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
Meth Chloroform#179-21-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,1-Trichloroethane#179-22-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2-Trichloroethane#179-23-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-24-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,1,1-Tetrahydrofuran#179-25-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-26-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-27-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-28-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-29-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-30-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-31-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-32-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-33-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-34-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-35-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-36-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-37-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-38-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-39-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-40-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-41-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-42-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-43-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-44-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-45-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-46-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-47-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-48-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-49-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-50-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-51-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-52-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-53-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-54-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-55-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-56-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-57-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-58-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-59-01	ND	10	ug/L	SW8240	05/28/91	05/27/91
1,1,2,2-Tetrachloroethane#179-60-01	ND	10	ug/L	SW8240	05/28/91	05/27/91

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit

Method Reference: USEPA: "Methods for Evaluating Solid Waste" SW-846 (2nd Ed.)

AR100051



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services/ Newark/Economic

Laboratory Number 43389A

Requester
Name:

VOLATILE METHOD BLANK FOR 3/22/91

Date Received 03/27/91

J.M.L.

PAH/PAH POLYAROMATIC HYDROCARBONS
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYST DATE/TIME
Acetylene (C ₂ H ₂)	ND	100	PPM	84829A	03/22/91
Acetylene (C ₂ H ₂)	ND	100	PPM	84829A	03/22/91
VOLATILE ORGANIC COMPOUND FRACTION					
Chloroform (CHCl ₃)	ND	-----	PPM	84829A	03/22/91
Dichloromethane (CH ₂ Cl ₂)	ND	-----	PPM	84829A	03/22/91
Trichloroethylene (C ₂ HCl ₃)	ND	-----	PPM	84829A	03/22/91

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit

Method Reference: USEPA: "Methods for Evaluating Solid Waste": 846-846 (2nd Ed.)

AR100052



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Material Inv. Services/Repair/Economics

Location: Home

NO. 1 GARAGE RESIDENCE
CAFES BRANCH DRUM DUMP

Spec. Number: 03/14/71 13100
Date Received: 03/14/71

J.M.W.

Sampled by: BARRIS

PERCENTAGE POLYCYCLODIC BLENDED ANALYSIS

PARAMETER	RESULT	ML	UNITS	METHOD	DATE
Asbestos (Total)	ND	0.15	MG/L	840019	03/14/71
Cadmium (Total)	ND	0.100	MG/L	840019	03/14/71
Chromium (Total)	ND	0.100	MG/L	840019	03/14/71
Lead (Total)	ND	0.100	MG/L	840019	03/14/71
Iron (Total)	ND	0.100	MG/L	840019	03/14/71
Copper (Total)	ND	0.100	MG/L	840019	03/14/71
Nickel (Total)	ND	0.100	MG/L	840019	03/14/71
Zinc (Total)	ND	0.100	MG/L	840019	03/14/71
Antimony (Total)	ND	0.100	MG/L	840019	03/14/71
Selenium (Total)	ND	0.100	MG/L	840019	03/14/71
Vanadium (Total)	ND	0.100	MG/L	840019	03/14/71
Cobalt (Total)	ND	0.100	MG/L	840019	03/14/71

ND: Not detected at a concentration greater than or equal to the MCL - Method Detectable

REF: USEPA: Test Methods For Evaluating Solid Waste: 1-5-6, 8-11
AR 100053



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Guardian Env. Services-Henrik/Echochowski

Laboratory Number 10085

Analyst
Searle

4076 FIELDS RESIDENCE
CRAIG BRANCH DRUM DUMP

Date Sampled 03/14/91 13:20
Date Received 03/14/91

J.M.

Sampled by BURRES

PRIORITY POLLUTANTS: METALS ANALYSIS

PARAMETER	RESULT	MCL	UNITS	METHOD	ANALYST	DATE/TIME
Arsenic (Total)	ND	2.0	MG/L	SW6819		03/18/91
Cadmium (Total)	ND	0.2	MG/L	SW6810		03/18/91
Chromium (Total)	ND	0.2	MG/L	SW6810		03/18/91
Copper (Total)	ND	2.0	MG/L	SW6810		03/18/91
Lead (Total)	ND	1.0	MG/L	SW6810		03/18/91
Manganese (Total)	ND	0.2	MG/L	SW6810		03/18/91
Nickel (Total)	ND	0.05	MG/L	SW6810		03/18/91
Iron (Total)	ND	0.7	MG/L	SW6810		03/18/91
Zinc (Total)	ND	0.2	MG/L	SW6810		03/18/91
Antimony (Total)	ND	1.0	MG/L	SW6810		03/18/91
Thallium (Total)	ND	0.0	MG/L	SW6810		03/18/91
Beryllium (Total)	ND	0.02	MG/L	SW6810		03/18/91
Mercury (Total)	ND	0.01	MG/L	SW6810		03/18/91

ND: Not detected at a concentration greater than or equal to the MCL - Method Detected

REF: USEPA; Test Methods For Evaluating Solid Waste; SW-846, 3rd Ed.; Nov, 1986.

AR100054



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

Analysis Date: 03/27/81

Lab. Accession Number: 836808

Requester:
SW-61

Analysis Method: SW-61 FOR 8, 10, 11

Date Received: 03/27/81

J. N. W.

PROBABLE SOURCE: INDUSTRIAL ANALYSIS

PARAMETER	RESULT	MCL	UNITS	METHOD	ANALYST DATE/TIME
Asbestos (Total)	ND	0.10	MG/L	SW6819	03/18/81
Cadmium (Total)	ND	0.01	MG/L	SW6819	03/18/81
Chromium (Total)	ND	0.05	MG/L	SW6819	03/18/81
Lead (Total)	0.11	0.05	MG/L	SW6819	03/18/81
Mercury (Total)	ND	0.01	MG/L	SW6819	03/18/81
Nickel (Total)	ND	0.10	MG/L	SW6819	03/18/81
Iron (Total)	ND	0.10	MG/L	SW6819	03/18/81
Manganese (Total)	ND	0.05	MG/L	SW6819	03/18/81
Selenium (Total)	ND	0.05	MG/L	SW6819	03/18/81
Zinc (Total)	ND	0.10	MG/L	SW6819	03/18/81

ND: Not detected at a concentration greater than or equal to the MCL - Method Detected

Ref: USEPA: Test Methods For Evaluating Solid Waste; SW-61, 3rd Ed.; Nov, 1986.

AR100055

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: TTL-CHARLESTON Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Lab File ID: PC22BFBA.D BFB Injection Date: 3-22-91
 Instrument ID: MSD#2 BFB Injection Time: 1143
 Matrix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	46.6
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	0 (0) 1
174	Greater than 50.0% of mass 95	86
175	5.0 - 9.0% of mass 174	6.6 (7.7) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.2 (95.6) 1
177	5.0 - 9.0% of mass 176	4.9 (8.4) 2

1-Value is % mass 174

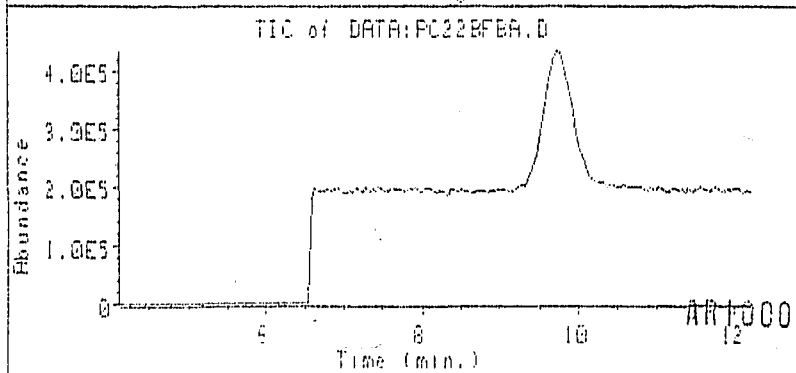
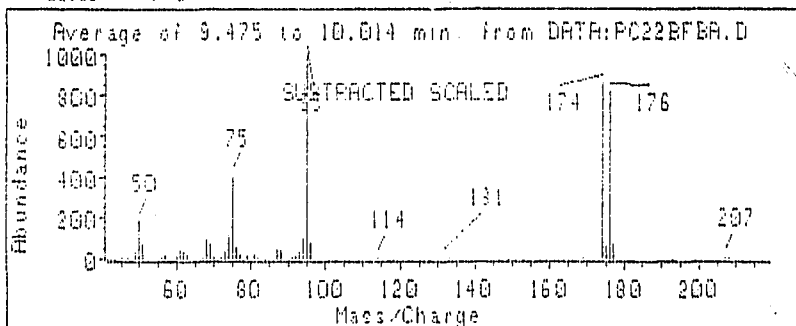
2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					ART00056
21					
22					

Average of 3.475 to 10.014 min. from DATA:PC22BFBA.D
 2ul BFB TUNING COMPOUND 3-22-81 1143 CLF

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
41.00	-4	63.00	24	85.00	6	131.00	4
42.00	-4	67.00	3	86.00	1	133.00	1
43.00	-4	68.00	96	87.00	40	135.00	1
44.00	-21	69.00	72	88.00	44	139.00	2
45.00	8	70.00	6	89.00	-2	141.00	2
46.00	2	71.00	2	91.00	10	147.00	1
47.00	11	72.00	5	92.00	14	149.00	-4
49.00	37	73.00	33	93.00	38	156.00	-1
50.00	133	74.00	113	94.00	88	169.00	5
51.00	68	75.00	406	95.00	1000	174.00	860
53.00	-1	76.00	54	96.00	79	175.00	66
55.00	4	77.00	23	97.00	-2	176.00	822
56.00	13	78.00	2	105.00	-2	177.00	69
57.00	20	79.00	14	111.00	3	193.00	-5
58.00	2	81.00	26	112.00	-1	207.00	11
59.00	-1	82.00	7	113.00	-1	208.00	6
60.00	12	83.00	4	114.00	5	209.00	1
61.00	43	84.00	-5	119.00	2	219.00	-1
62.00	34						



FOR=====

0

Technical Testing Laboratories, Charleston
GC/MS VOA Initial Calibration Table
Mean Response Factor (RF) Summary:

LEVEL gc/ms
1 2
2 2
3 2
4 2
5 2

Date
3-22-91
3-22-91
3-22-91
3-22-91
3-22-91

Accept 30 %RSD

GC/MS: 2 :<<<<<
Prepared by: CLF :<<<<<
Date: 3-22-91 :<<<<<

Signed: Qu

	Mean	RF	%RSD	Status	sd	n
CHLOROMETHANE.....	0.298	17.645	accept	0.052623	5	
BROMOMETHANE.....	0.527	11.851	accept	0.062480	5	
VINYL CHLORIDE.....	0.347	24.928	accept	0.088421	5	
CHLOROETHANE.....	0.297	17.948	accept	0.053222	5	
METHYLENE CL.....	0.711	14.830	accept	0.105467	5	
Acetone.....	0.107	5.901	accept	0.006330	4	
Carbon Disulfide.....	2.118	12.503	accept	0.264790	5	
ACROLEIN.....	0.008	20.657	accept	0.001635	3	
ACRYLONITRILE.....	0.125	8.281	accept	0.010317	5	
TRICHLMETHAN.....	2.359	9.627	accept	0.227095	5	
1-DICLETHENE.....	0.862	7.039	accept	0.060704	5	
1-1DICLETHANE.....	1.774	8.114	accept	0.143902	5	
t-1,2DICLETHE.....	2.148	6.990	accept	0.149949	5	
CHLOROFORM.....	2.201	5.073	accept	0.111625	5	
DICLET 4-3 <S>.....	0.293	7.411	accept	0.009998	5	
1,2DICLEHTANE.....	1.482	6.013	accept	0.089117	5	
ME.....	0.051	14.705	accept	0.007560	5	
1,1,1TRICLETH.....	0.441	7.705	accept	0.033975	5	
CARBON TET.....	0.391	9.982	accept	0.039064	5	
Vinyl Acetate.....	0.018	16.939	accept	0.003029	4	
BRDICLMETHANE.....	0.045	8.142	accept	0.003686	5	
1,2DICLPROPAN.....	0.281	5.404	accept	0.015171	5	
t-1,3DICLPROP.....	0.307	5.598	accept	0.017208	5	
C-1,3DICLPROP.....	0.430	6.832	accept	0.029402	5	
TRICLETHENE.....	0.389	7.016	accept	0.027274	5	
DIBRCLMETHANE.....	0.357	10.832	accept	0.038673	5	
BENZENE.....	0.663	5.359	accept	0.035509	5	
1,1,2TRICLETH.....	0.270	15.671	accept	0.042373	5	
2-CEVE.....	0.041	4.633	accept	0.001892	5	
BROMOFORM.....	0.392	17.217	accept	0.067440	5	
MIBK.....	0.014	16.372	accept	0.002278	4	
MBK.....	0.160	9.564	accept	0.015269	4	
1122TETCLETHA.....	0.416	22.699	accept	0.094403	5	
TETRACLETHENE.....	0.423	5.758	accept	0.024330	5	
TOLUENE d-8<S>.....	1.005	3.599	accept	0.036177	5	
TOLUENE.....	0.549	3.449	accept	0.018929	5	
CHLOROBENZENE.....	0.824	3.874	accept	0.031915	5	
ETHYLBENZENE.....	0.330	5.530	accept	0.018225	5	
Styrene.....	0.198	27.131	accept	0.053844	5	
4-BFB <S>.....	0.606	29.202	accept	0.176839	5	

AR10058

o-XYLENE..... 0.450 4.436 accept 0.019577 5
p/m-XYLENE..... 0.444 4.456 accept 0.019776 5

Mean RF 2 CLF 3-22-91

AR100059

ENVIRONMENTAL PROTECTION AGENCY
OH / Enforcement

REV. 1-73

Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	STATION LOCATION	NO OF CONTAINERS	DATE	TIME	COM	LAB	RECEIVED BY: (Signature)	DATE / TIME	RELINQUISHED BY: (Signature)	DATE / TIME	REMARKS
	Craig Branch Drum Dump											
WS 5	3/27/91 1305	Walker Residence	4			X						Please Remit results to -
WS 6	3/27/91 1320	Fields Residence	4			X						Guardian Environmental Service 630 Church St. Newark DE 19702 # (302) 456-0700
												Please Remit conval results to Marian Murphy 511 Anderson St Delran NJ 08023 # (609) 461-4003
												Please include with results. Calibration Data GC/MS Trace Data Method blank results.
Relinquished by: (Signature)												
Received by: (Signature)												
Relinquished by: (Signature)												
Received for Laboratory by: (Signature)												
Relinquished by: (Signature)												

3/27/91
REMARKS
773024-25

Distribution: Original Accompanies Shipment; Col. to Coordinator Field Files



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number: 4643

Respectfully
Submitted:

W. T. FIELDS RESIDENCE
CRAIG BRANCH DRUM DUMP

Date Sampled 05/07/91 11:00
Date Received 05/07/91

J. M. Wright

Sampled by CLIENT

464301 LB.

PRIORITY POLLUTANTS: METALS ANALYSIS

PARAMETER	RESULT	MCL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
Arsenic (Total)	ND	0.05	MG/L	EPA8205.2	05/22/91 17:00	SG
Calcium (Total)	ND	0.25	MG/L	EPA8210.1	05/22/91 08:45	TH
Chromium (Total)	ND	0.25	MG/L	EPA8210.1	05/23/91 10:30	TH
Lead (Total)	ND	0.2	MG/L	EPA8209.1	05/13/91 11:30	TH
Selenium (Total)	ND	0.2	MG/L	EPA8209.7	05/24/91 17:00	TH
Silver (Total)	ND	0.05	MG/L	EPA8205.1	05/18/91 14:30	TH
Copper (Total)	ND	0.10	MG/L	EPA8209.1	05/19/91 13:00	TH
Nickel (Total)	ND	0.15	MG/L	EPA8205.1	05/19/91 10:30	TH
Zinc (Total)	0.15	0.02	MG/L	EPA8205.1	05/19/91 10:00	TH
Antimony (Total)	ND	0.07	MG/L	EPA8209.7	05/25/91 17:00	TH
Barium (Total)	ND	0.3	MG/L	EPA8209.7	05/25/91 17:00	TH
Beryllium (Total)	ND	0.05	MG/L	EPA8210.1	05/21/91 15:00	TH
Mercury (Total)	ND	0.005	MG/L	EPA8205.1	05/22/91 17:00	TH

ND: Not Detected at a concentration greater than or equal to the MCL - Method Detection Limit.

REF: USEPA; Methods For Chemical Analysis Of Water And Wastes; March, 1980.

ARI00061



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

ELKADIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number: M-333

Responsibility
Submitted:

95-7 FIELDS RESIDENCE
CRAGO BRANCH DRUM DUMP

Date Sampled 05/07/91 11:20
Date Received 05/07/91

J. M. Wright

Sampled by CLIENT

050591 13.

PRIORITY POLLUTANTS: VOLATILE FRACTION

Purge/Trap/Desorb

ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
Chloromethane(74-87-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Bromomethane(74-83-9)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Vinyl Chloride(75-01-4)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Chloroethane(78-90-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Acetylene Chloride(78-09-2)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloroethane(78-35-4)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloroethane(78-34-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Fluoro-1,2-Dichloroethene(156-60-6)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Chloroform(67-66-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloroethane(107-96-2)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1,1-Trichloroethane(71-36-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Carbon Tetrachloride(76-15-6)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloropropane(78-67-4)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloropropane(78-67-5)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Trichloro-1,2-Dichloropropane(10061-02-6)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1,1,3-Tetrachloropropane(10061-01-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Trichloroethene(78-31-6)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Bromochloroethane(124-48-1)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1,1-Trichloroethane(78-90-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1-Chloro-2,2-Dimethylpropane(119-75-8)	ND	20	ug/L	SW8240	05/29/91 20:07	MAN
Chloroform(78-35-4)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1,1,2-Tetrachloroethane(79-34-5)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloroethane(78-34-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1-Dichloroethane(78-35-4)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Trichloroethene(78-31-6)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
1,1,1-Trichloroethane(78-90-3)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN
Chloroethane(78-10-7)	ND	10	ug/L	SW8240	05/29/91 20:07	MAN

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: Methods for Evaluating Solid Waste: SW-846: 8000 Et.

AR100062

1256 GREENBRIER STREET, CHARLESTON, WEST VIRGINIA 25311 — TELEPHONE 304 346-0725

4643 BENSON AVENUE, BALTIMORE, MARYLAND 21227 — TELEPHONE 301 217-7400

4440 GLEN ESTE — WITHAMSVILLE RD., SUITE 900, CINCINNATI, OHIO 45245 — TELEPHONE 513 752-9696



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number M8885

Respectfully
Submitted:

WS-7 FIELDS RESIDENCE
CRAIG BRANCH DRUM DUMP

Date Sampled 05/07/91 11:20
Date Received 05/07/91

J. N. Wight

Sampled by CLIENT

000531 IS
PAGE

PRIORITY POLLUTANTS: VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Acrylonitrile[107-13-1]	ND	100	ug/L	SW8240	05/20/91 20:07 MAM
Acrolein[107-02-8]	ND	100	ug/L	SW8240	05/20/91 20:07 MAM
SURROGATE RECOVERY-VOLATILE FRACTION					
1,2-Dichloroethane-d4(SURROGATE)	95	-----	% REC	SW8240	05/20/91 20:07 MAM
Toluene-d8(SURROGATE)	83	-----	% REC	SW8240	05/20/91 20:07 MAM
Bromofluorobenzene(SURROGATE)	88	-----	% REC	SW8240	05/20/91 20:07 MAM

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method Reference: USEPA: "Methods for Evaluating Solid Waste": SW-846 (2nd Ed.)

ARI00063



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

INDUSTRIAL ENVIRONMENTAL SERVICES, INC.

Laboratory Number: 407000 BLA-04 Requested by:
Submitted:

GLASSILES' METHOD BLANK
FOR MAY 29, 1991

J. M. Wright
300591 134

PRIORITY POLLUTANTS-VOLATILE FRACTION
Purge/Trap, Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED	
					DATE/TIME	ANALYST
Chloromethane[74-87-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Bromomethane[74-83-91]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Vinyl Chloride[75-01-41]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Chloroethane[75-00-21]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Methylene Chloride[75-09-21]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1-Dichloroethane[75-35-41]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1-Dichloroethane[75-34-31]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Trans-1,2-Dichloroethane[156-59-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Chloroform[67-68-81]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,2-Dichloroethane[107-96-21]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1,1-Trichloroethane[71-35-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Carbon Tetrachloride[76-12-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Bromochloroethane[75-47-41]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1-Dichloroethane[78-67-51]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
trans-1,2-Dichloroethane[156-59-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
cis-1,2-Dichloroethane[156-59-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Trichloroethane[79-01-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Dibromochloroethane[124-48-11]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1,2-Trichloroethane[79-00-21]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
2-Chloroethylvinyl ether[110-77-01]	ND	20	ug/L	EP4624	05/29/91	16:16 MAH
Bromoform[75-43-01]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
1,1,2,2-Tetrachloroethane[79-34-51]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Tetrachloroethane[117-16-11]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Benzene[71-43-21]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Toluene[108-10-31]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Ethylbenzene[100-41-41]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Chlorobenzene[108-90-71]	ND	10	ug/L	EP4624	05/29/91	16:16 MAH
Acrylonitrile[107-13-31]	ND	100	ug/L	EP4624	05/29/91	16:16 MAH

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

Method 8240B; 42 CFR PART 136, Federal Register, Oct 26, 1984

** Result is lower than the normally acceptable value.

AR100064



TECHNICAL TESTING LABORATORIES

A DIVISION OF COMMERCIAL TESTING & ENGINEERING CO.

LABORATORY ANALYSIS REPORT

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number METHOD BLANK Respectfully
Submitted:

VOLATILES' METHOD BLANK
FOR MAY 20, 1991

J. N. Wright

060591 15.
PAGE

PRIORITY POLLUTANTS: VOLATILE FRACTION
Purge/Trap/Desorb
ALL RESULTS ARE ON AN AS RECEIVED BASIS

PARAMETER	RESULT	MDL	UNITS	METHOD	ANALYZED DATE/TIME/ANALYST
Acrolein(107-02-31)	ND	100	ug/L	EPA824	05/20/91 14:10 MAM
SURROGATE RECOVERY-VOLATILE FRACTION					
1,2-Dichloroethane-d4(SURROGATE)	95	----	% REC	EPA824	05/20/91 16:16 MAM
Toluene-d8(SURROGATE)	84	----	% REC	EPA824	05/20/91 16:16 MAM
Bromofluorobenzene(SURROGATE)	84	----	% REC	EPA824	05/20/91 16:16 MAM

ND: Not detected at a concentration greater than or equal to the MDL - Method Detection Limit.

METHOD 524; USEPA; 40 CFR PART 136, Federal Register, Oct 26, 1984

** Result is lower than the normally acceptable value.

AR100065

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

RE 3

Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	STATION LOCATION			REMARKS
SAMPLERS: (Signature)	DATE	TIME	COMP.	GRAB	17 (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30)	(31) (32) (33)
	Craig Branch Dryer Dump	4				Please Report Results to: Guaracion Environmental Services 630 Churchmans Rd Ste 607 Newark, DE 19702 #(302) 456-0700
	<i>Phyllis A. Dorgan</i>					Please Report Results to: Marian Murphy 5 Underwood Ct. Delran NJ 08075 #(609) 461-4003
						Please include with results Calibration Data GC/MS Trace Data Method Blank Results
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<i>[Signature]</i>	5/21/85	<i>[Signature]</i>	5/21/85			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks		
		<i>[Signature]</i>	5/21/85	5/21/85 11:55		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

T-3-00292

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: TTL Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Lab File ID: DE20BFB A BFB Injection Date: 5-20-91
 Instrument ID: #1 BFB Injection Time: 0906
 ANALYST: MM

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	16.8
75	30.0 - 60.0% of the base peak	41.4
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of the base peak	2.0
173	Less than 2.0% of mass 174	4 (<1) 1
174	Greater than 50.0% of the base peak	79.8
175	5.0 - 9.0% of mass 174	6.7 (8.4) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.9 (98.9) 1
177	5.0 - 9.0% of mass 176	5.2 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

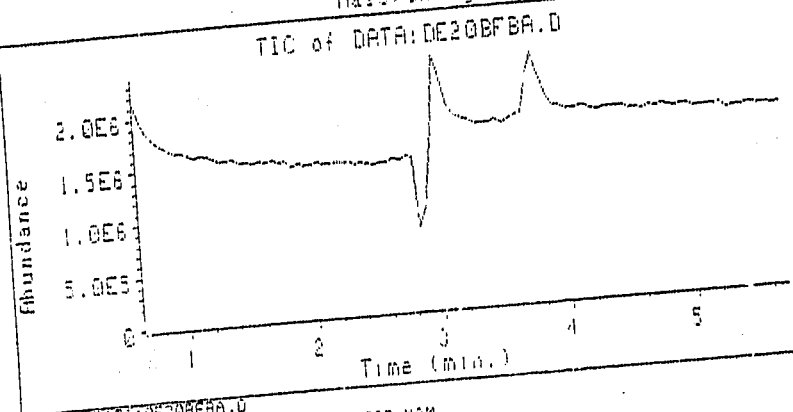
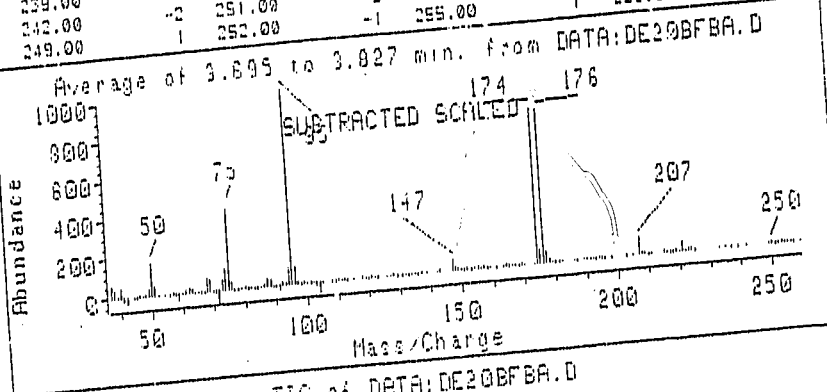
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE OF ANALYSIS	TIME OF ANALYSIS
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

AP100057

Average of 3.695 to 3.827 min. from DATA:DE20BFBA.D
 2ul BFB TUNING COMPOUND 8-20-91 0906 MAM

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.00	-4	250.00	7	253.00	-1	256.00	-2
242.00	-2	251.00	-3	254.00	1	257.00	-9
249.00	1	252.00	-1	255.00	1	262.00	-2



TIC of DATA:DE20BFBA.D
 2ul BFB TUNING COMPOUND 8-20-91 0906 MAM

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.012	BBA	0.169	136476722	2.926	3.339
2	3.762	PV	0.121	43913724	3.612	3.919

ARI00068

Average of 3.695 to 3.627 min. from DATA:DEC20BFBA.D
 2ul BFP TUNING COMPOUND 2-20-91 0906 MAM

m/z	abund.	m/z	abund	m/z	abund.	m/z	abund.
36.00	3	79.00	-5	123.00	-4	176.00	789
37.00	53	79.00	1	126.00	4	177.00	50
38.00	40	80.00	5	127.00	-2	178.00	14
39.00	10	91.00	-6	128.00	10	179.00	-1
40.00	46	92.00	1	129.00	-6	180.00	-9
41.00	-15	93.00	-5	131.00	-3	181.00	-5
42.00	-26	94.00	-3	132.00	1	182.00	3
43.00	-72	95.00	4	133.00	-6	186.00	2
44.00	-4	96.00	6	134.00	-2	187.00	-10
45.00	-10	97.00	3E	135.00	-1	189.00	3
46.00	5	98.00	33	136.00	-4	190.00	3
47.00	4	99.00	-5	137.00	5	191.00	-2
48.00	7	90.00	-8	139.00	3	192.00	3
49.00	42	91.00	-29	140.00	3	193.00	-6
50.00	169	92.00	17	143.00	5	194.00	2
51.00	43	93.00	10	147.00	52	195.00	-5
52.00	-1	94.00	86	148.00	13	196.00	-3
54.00	2	95.00	1000	149.00	9	197.00	1
56.00	-3	96.00	80	150.00	1	198.00	-4
57.00	5	97.00	9	151.00	-9	203.00	-3
58.00	-7	98.00	-9	152.00	8	205.00	2
59.00	-30	99.00	8	153.00	-3	207.00	82
60.00	1	100.00	3	154.00	-2	208.00	12
61.00	15	101.00	-5	155.00	8	209.00	8
62.00	26	102.00	2	156.00	1	210.00	-3
63.00	14	103.00	-17	157.00	5	211.00	2
64.00	1	104.00	-49	158.00	-3	215.00	11
65.00	-1	105.00	-8	159.00	2	216.00	2
66.00	-4	106.00	-7	161.00	-4	217.00	-3
67.00	-3	108.00	-7	163.00	-2	218.00	-6
68.00	57	110.00	9	164.00	5	219.00	6
69.00	63	111.00	1	165.00	-5	220.00	-2
70.00	-3	112.00	5	166.00	-1	221.00	46
71.00	-6	113.00	-3	167.00	1	222.00	-2
72.00	-65	115.00	1	168.00	-3	223.00	5
73.00	53	119.00	6	169.00	10	224.00	5
74.00	108	119.00	4	170.00	-1	225.00	-4
75.00	414	120.00	-6	173.00	4	233.00	4
76.00	37	121.00	7	174.00	798	235.00	2
77.00	-10	122.00	-2	175.00	67	237.00	-10

AR100069

* Menu= ALL Z
 FOR===== 0

Print= ALL T

SAVE = ALT S

Technical Testing Laboratories, Charleston
 GC/MS VQA Initial Calibration Table
 Mean Response Factor (RF) Summary

GC/MS DATE
 1 5-20-91 GC/MS: <<<<<<
 1 5-20-91 Prepared by: <<<<<<
 1 5-20-91 Date: <<<<<<
 2 5-20-91

Signed:

	Mean RF	%RSD	Status	sd	
Chloromethane.....	0.5112	7.365	accept	0.024519	5
Vinyl Chloride.....	0.316	8.573	accept	0.027129	5
Bromomethane.....	0.327	5.285	accept	0.019577	5
Chloroethane.....	0.117	11.031	accept	0.023940	5
Dichlorodifluoromethane....	0.499	11.12	accept	0.037317	5
Trichlorofluoromethane.....	0.377	11.023	accept	0.033308	5
Methylene Chloride.....	0.235	7.525	accept	0.015745	5
Acetone.....	0.041	100.000	REJECT	0.042323	4
trans-1,2-Dichloroethene...	0.774	8.085	accept	0.022823	5
1,1-Dichloroethene.....	0.193	5.423	accept	0.016137	5
2,2-Dichloropropane.....	0.475	7.002	accept	0.042793	5
cis-1,2-Dichloroethene.....	0.306	7.737	accept	0.023710	5
1,1-Dichloroethane.....	0.365	5.777	accept	0.033787	5
Bromochloromethane.....	0.162	0.897	accept	0.007611	5
Chloroform.....	0.574	7.517	accept	0.045713	5
1,2-Dichloroethane-d3 (SP)	0.045	12.004	accept	0.007703	5
2-Butanone (MEK).....	0.007	31.000	REJECT	0.002309	3
1,1,1-Trichloroethane.....	0.521	7.704	accept	0.040145	5
1,1-Dichloropropene.....	0.540	9.996	accept	0.053936	5
Carbon Tetrachloride.....	0.503	6.549	accept	0.032850	5
Benzene.....	0.355	15.182	accept	0.129487	5
1,2-Dichloromethane.....	0.350	5.015	accept	0.010623	5
Trichloroethene.....	0.357	11.000	accept	0.037061	5
1,2-Dichloropropane.....	0.307	11.000	accept	0.031143	5
Bromodichloromethane.....	0.391	10.000	accept	0.035312	5
Dibromomethane.....	0.109	11.000	accept	0.009115	5
Toluene-d3 (SP).....	0.722	11.000	accept	0.157133	5
1-Butene.....	0.756	12.000	accept	0.070964	5
1,1,2-Trichloroethane.....	0.135	11.000	accept	0.007529	5
tetrachloroethane.....	0.300	11.000	accept	0.021404	5
1,3-Dichloropropane.....	0.300	11.000	accept	0.003725	5
Dibromo Ethane.....	0.300	11.000	accept	0.017710	5

00100070

Chlorobenzene	710. 10.22	9.848	15.158	accept	0.0125801	5
ETHylbenzene	328. 104	9.848	15.158	accept	0.011818	5
1,1,1,2-tetrachloroethane	210. 42	9.848	15.158	accept	0.031609	5
m-p-Xylene	210. 42	9.848	15.158	accept	0.037794	5
o-Xylene	210. 42	9.848	15.158	accept	0.030511	5
Styrene	425. 153	9.570	11.370	accept	0.098938	5
Cumene	351. 97	9.548	10.887	accept	0.027172	5
Bromoform		9.177	8.364	accept	0.012543	5
1,1,2,2-Tetrachloroethane		9.131	8.444	accept	0.006720	5
1,2,3-Trichlorobenzene		9.145	12.757	accept	0.018537	5
o-Bromofluorobenzene (BRF)	670. 124	9.604	10.950	accept	0.121155	5
n-Propylbenzene		9.345	10.541	accept	0.036385	5
Bromobenzene		9.360	10.087	accept	0.036322	5
1,3,5-Trimethylbenzene	459. 96	9.444	13.135	accept	0.058324	5
o-Chlorotoluene	432. 93	9.609	12.585	accept	0.076625	5
n-Chlorotoluene	429. 93	9.604	12.478	accept	0.075577	5
t-Butylbenzene		9.368	10.474	accept	0.028117	5
s-Butylbenzene		9.528	11.298	accept	0.037042	5
p-isoPropyltoluene		9.294	11.377	accept	0.038248	5
1,3-Dichlorobenzene		9.375	9.127	accept	0.024905	5
1,4-Dichlorobenzene		9.344	9.094	accept	0.023765	5
n-Butylbenzene		9.345	11.112	accept	0.038115	5
1,2-Dichlorobenzene		9.324	8.933	accept	0.020171	5
1,2-Dibromo-3-Chloropropane		9.027	145.233	ACCEPT	0.040846	5
1,2,3-Trichlorobenzene		9.132	8.807	accept	0.011360	5
Hexachlorocyclopentadiene		9.360	11.252	accept	0.054051	5
Naphthalene		9.277	11.357	accept	0.028320	5
1,2,3-trichlorobenzene		9.145	12.757	accept	0.010262	5
2-Hexanone (HEX)		9.197	11.157	accept	0.004101	5
4-Methyl-2-Pentylone (MPE)		9.001	10.771	accept	0.001745	5
1,2,4-Trimethylbenzene	506. 101	9.700	11.111	accept	0.056777	5

ARI00071

SAVE = ALT S

ALT Z = MENU

ALT H = PRINT

REFERENCE FACTOR (RF)
SUMMARY

LEVEL	FILENAME	DATE	TIME	ANALYST	SCANS	#
LEVEL 1	DE206064	5-20-71	1457	MMH		
LEVEL 2	DE206064	5-20-71	1350	MMH		1
LEVEL 3	DE206064	5-20-71	1244	MMH		1
LEVEL 4	DE206064	5-20-71	1135	MMH		1
LEVEL 5	DE206064	5-20-71	1027	MMH		1

	L1	L2	L3	L4	L5
Chloromethane.....	0.502	0.294	0.335	0.340	0.285
Vinyl Chloride.....	0.292	0.289	0.542	0.347	0.314
Bromomethane.....	0.323	0.318	0.325	0.340	0.308
Chloroethane.....	0.251	0.201	0.205	0.233	0.125
Dichlorodifluoromethane.....	0.450	0.387	0.425	0.426	0.355
Trichlorofluoromethane.....	0.667	0.632	0.667	0.727	0.472
Methylene Chloride.....	0.306	0.281	0.274	0.225	0.255
acetone.....	0.007	0.014	0.042	0.100	0.000
trans-1,2-Dichloroethene...	0.362	0.353	0.356	0.408	0.327
1,1-Dichloroethene.....	0.191	0.177	0.175	0.207	0.209
2,2-Dichloropropane.....	0.448	0.071	0.455	0.525	0.518
cis-1,2-Dichloroethene.....	0.291	0.238	0.226	0.331	0.334
1,1-Dichloroethane.....	0.047	0.037	0.074	0.141	0.099
Bromochloromethane.....	0.166	0.164	0.155	0.172	0.154
Chloroform.....	0.304	0.359	0.574	0.639	0.525
1,1,1-Trichloroethane.....	0.051	0.054	0.045	0.039	0.055
2-Butanone (MEK).....	0.036	0.038	0.005	0.000	0.000
1,1,1-Trichloroethane.....	0.504	0.481	0.494	0.565	0.564
1,1-Dichloropropene.....	0.495	0.491	0.517	0.609	0.585
Carbon Tetrachloride.....	0.489	0.407	0.484	0.545	0.550
Benzene.....	0.355	0.317	0.555	1.000	0.231
1,2-Dichloroethane.....	0.299	0.126	0.185	0.202	0.213
Trichloroethene.....	0.400	0.405	0.387	0.518	0.505
1,2-Dichloropropane.....	0.517	0.316	0.305	0.350	0.341
Bromodichloromethane.....	0.322	0.325	0.305	0.405	0.445
Dibromomethane.....	0.187	0.187	0.150	0.169	0.155
Toluene-d3 (TMS).....	0.537	0.735	0.782	0.747	0.255
Toluene.....	0.462	0.535	0.541	0.659	0.490
1,1,2-Trichloroethane.....	0.142	0.175	0.123	0.141	0.140
Tetrachloroethene.....	0.713	0.755	0.772	0.497	0.472
1,1,2-Trichloroethane.....	0.255	0.255	0.255	0.271	0.257
1,1,1-Trichloroethane.....	0.255	0.255	0.255	0.271	0.257

AR 100 72

Toluene	0.237	0.208	0.207	0.213	0.255	
1,1,1,2-Tetrachloroethane	0.285	0.290	0.299	0.287	0.350	.366
m-Xylene	0.180	0.177	0.176	0.174	0.254	.205
p-Xylene	0.154	0.175	0.187	0.202	0.285	.229
Styrene	0.190	0.203	0.201	0.202	0.286	.790
Xylene	0.211	0.205	0.210	0.207	0.267	.326
Bromoform	0.308	0.210	0.179	0.193	0.195	
1,1,2,2-Tetrachloroethane	0.157	0.157	0.141	0.150	0.152	
1,2,3-Trichloropropane	0.136	0.158	0.157	0.145	0.157	.277
Bromofluorobenzene <SR>	0.425	0.590	0.594	0.670	0.751	.756
n-Propylbenzene	0.306	0.328	0.334	0.302	0.354	
Bromobenzene	0.317	0.342	0.345	0.401	0.395	
1,3,5-Trimethylbenzene	0.374	0.398	0.445	0.459	0.504	.447
o-Chlorotoluene	0.521	0.562	0.584	0.702	0.675	.638
p-Chlorotoluene	0.536	0.560	0.580	0.696	0.673	.638
n-Butylbenzene	0.344	0.347	0.255	0.309	0.296	
isobutylbenzene	0.351	0.379	0.346	0.375	0.359	
isopropyltoluene	0.353	0.356	0.381	0.321	0.345	
1,3-Dichlorobenzene	0.349	0.357	0.364	0.299	0.300	
1,4-Dichlorobenzene	0.343	0.348	0.350	0.386	0.293	
n-Butylbenzene	0.306	0.311	0.331	0.362	0.400	
o-Dichlorobenzene	0.210	0.217	0.212	0.240	0.254	
1,1-Dibromo-3-Chloropropane	0.937	0.937	0.934	0.924	0.924	.868
1,2,4-Trichlorobenzene	0.135	0.137	0.134	0.131	0.150	
1,2,4-Trichlorobutadiene	0.307	0.317	0.309	0.305	0.351	.492
Naphthalene	0.308	0.304	0.303	0.319	0.314	
1,2,3-Trichlorobenzene	0.679	0.679	0.685	0.671	0.694	
Hexanone (MEK)	0.941	0.941	0.948	0.909	0.900	
1,4-Dimethyl-2-Pentanone (MIBK)	0.913	0.908	0.909	0.908	0.900	
1,2,4-Trimethylbenzene	0.446	0.469	0.494	0.566	0.539	.492

ARI00073

Bridgeport Environmental Inc.

Licensed Analytical Laboratories
08555



P.O. Box 247
510 Heron Drive Suite 107
Bridgeport NJ 08014-0247

609/467-0380

WESTON

PROJECT: CRAIG BRANCH DRUM DUMP

DATE RECEIVED: 12/18/90

REPORT NO: E7022-E7031

BRIDGEPORT ENVIRONMENTAL, INC.

Richard W. Lynch
RICHARD W. LYNCH
LABORATORY MANAGER

AR100074

SAMPLE LOCATION AND IDENTIFICATION

ANALYSIS NO.

CLIENT ID

E 7022	S 1 - Punctured drum Surface
E 7023	S 2 - Punctured Drum Depth
E 7024	S 3 - Thick Paint Surface
E 7025	S 4 - Thick Paint Depth
E 7026	L 5 - Drum Sludge
E 7027	L 6 - Runoff Stream
E 7028	R 1 - Walker Residence
E 7029	R 2 - Feilds Residence
E 7030	R 3 - Ross Residence
E 7031	R 4 - Smith Residence

ARI00075

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

E7020 - E7020

CHAIN OF CUSTODY RECORD

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

STATION NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	NO. OF VIALS		REMARKS
							1	2	
SAMPLERS: (signature) <i>William D. Dwyer</i>									
PROJECT NAME: <i>Cery Branch Drum Dump</i>									
S1	12/5/80	1115	X		inclured Drum Sample	3	2	1	Refer to Purchase Order for QAC Description Please Fax Results ASAP to Jeff Dwyer Fax # (304) 233-7983 1st James Humphrey # (602) 482-6758 Please Ref# Handcarried to Maria Murphy 53 Hadden Field rd. Suite 308 Cherry Hill, NJ 08002 PH: (609) 482-0882 JPD
S2	12/5/80	1130	X		Patched Drum Depth	3	2	1	
S3	12/5/80	1145	X		Track Paint Surface	3	2	1	
S4	12/5/80	1200	X		Track Paint Depth	3	2	1	
S15	12/5/80	1215	X		Drum Sludge	1	1	1	
Refiniquished by: (signature) <i>William D. Dwyer</i>									
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received for Laboratory by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received for Laboratory by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received for Laboratory by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received for Laboratory by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received for Laboratory by: (signature)	Refiniquished by: (signature)		Date / Time
Date / Time						Received by: (signature)	Refiniquished by: (signature)		Date / Time

ARI0007

NO. OF VIALS
2 - 8oz Glass Jar

Distributions: Original Accompanies Shipment; Copy to Confidential Field Files

E7027 - E7021

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO. OF CONTAINERS	STATION LOCATION	DATE	TIME	COMP.	GRAB	REMARKS
	Craig Branch Dr. (Dumfries)							
SAMPLERS: (Signature) <i>Jeffrey D. Dragan</i>								
L6	174561300	X	Runoff Stream					Refer to Purchase Order for
R1	174701150	X	Walker Residence					QA/QC Description:
R2	174901615	X	Fields Residence					Please Fax Results to
R3	174561640	X	Ross Residence					Jeff Dragan Fax # (304) 333-7983
R4	174501730	X	Smith Residence					Ms. Maria Murphy Fax # (609) 480-6788
								Please Fax Results ASAP!
								Please Remit Handcopy Results to:
								Marian Murphy
								53 Haddonfield Rd. Suite 306
								Cherry Hill NJ 08002
								PH: (609) 482-0222
								and: Jeff Dragan
								1025 Main St Suite 436
								Wheeling, WV 26003
								PH: (304) 533-1610
Relinquished by: (Signature) <i>Jeffrey D. Dragan</i>	Date / Time 12/17/00 1600	Received by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Received by: (Signature)		
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Relinquished by: (Signature)	Date / Time	Received by: (Signature)		
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) <i>Kendal J. Jones</i>	Date / Time	Relinquished by: (Signature)	Date / Time	Received by: (Signature)		
								Date / Time Remarks
								12/19/00 1600 <i>page 2</i>

METHODOLOGY SUMMARY

PURCEABLES

U.S.E.P.A. Method 624 - This is a purge and trap Gas Chromatograph/Mass Spectrometer (GC/MS) method applicable to the determination of the compounds listed in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

An HP5996 GC/MS was used with a capillary column.

Method detection limits are as stated.

Soil samples are prepared for analysis as prescribed in Method 8240 from SW846.

ACID EXTRACTABLES
BASE NEUTRALS

U.S.E.P.A. Method 625 - This method covers the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography. This is a gas chromatography/mass spectrometer (GC/MS) method applicable to the determination of the compounds listed in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

A HP5970 was used with a DB-5 FSCC.

Method detection limits are as stated.

Soil samples were prepared for analysis as prescribed in Method 3550 from SW846.

PESTICIDES/PCB's

U.S.E.P.A. Method 608 - This method covers the determination of pesticides and PCB's in samples by extraction/concentration with organic solvents and subsequent qualification/quantification by Gas Chromatography. The gas chromatograph utilizes an electron capture detector (ECD) which is applicable for the determination of the compounds listed for this method in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

Soil samples were prepared as prescribed in Method 3550 from SW846.

AR100078

METHODOLOGY SUMMARY

METALS

Soil Samples for metal analysis were run in accordance with the methods prescribed in SW846. This includes a nitric acid digestion followed by either Furnace, Flame Atomic absorption, Flameless Atomic Absorption, or Inductively Coupled Plasma analysis.

Aqueous samples for metals analysis were run in accordance with the methods prescribed in Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 March 1983.

PHENOLS

Analysis performed according to U.S.E.P.A. 420.1 (Spectrophotometric, Manual 4AAP with distillation). Phenolic materials react with four (4) Aminoantipyrine and Potassium Ferricyanide at pH 10. Red color is read at 510 nm.

CYANIDE

Analysis performed according to U.S.E.P.A. 335.2 (Spectrophotometric with distillation). Sample is reacted with Chloramine-T to produce Cyanogen Chloride, CNCl. Red color develops when combined with Pyridine/Barbituric Acid Reagent; which is red at 578 nm.

Soil samples are prepared for analysis as prescribed in Method 9010 from SW846.

PETROLEUM HYDROCARBONS

Aqueous samples were analyzed following Method 4.18.1 as prescribed in Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 March 1983.

Soil Samples were extracted in accordance with the methods prescribed in SW-846 and subsequently analyzed as stated above.

AR100079

LABORATORY CHRONICLE

RECEIPT/REFRIGERATION _____ 12/18/90 _____

ORGANICS
EXTRACTION

1. Acids _____ NA _____
2. Base/Neutrals _____ NA _____
3. Pesticides/PCB's/Herbicides _____ NA _____
4. Petroleum Hydrocarbons _____ NA _____

ANALYSIS

1. Volatiles _____ 12/18/90 - 12/19/90 _____
2. Acids _____ NA _____
3. Base/Neutrals _____ NA _____
4. Pesticides/PCB's/Herbicides _____ NA _____
5. Petroleum Hydrocarbons _____ NA _____
6. Total Organic Carbon _____ NA _____

Section Supervisor
Review & Approval _____

Paul Feraio

INORGANICS

1. Metals _____ 12/18/90 - 12/19/90 _____
2. Cyanides _____ NA _____
3. Phenols _____ NA _____

OTHER ANALYTES

Section Supervisor
Review & Approval _____

Paul M...

Quality Control Supervisor
Review & Approval _____

G. S. Col...

Laboratory Director
Review & Approval _____

R...

AR100080

If fractions are re-extracted and re-analyzed because initial endeavors did not meet quality control acceptance criteria, include dates for both.

RESULT SUMMARY

AR100081

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(solid)

SAMPLE ID: E7022

CLIENT ID: S1

SAMPLE DATE: 12/15/90

METALS	MDL (mg/Kg)	RESULT (mg/Kg)
ANTIMONY	0.13	N.D.
ARSENIC	0.13	13.9
BERYLLIUM	0.50	N.D.
CADMIUM	0.50	51.2
CHROMIUM	0.50	52.8
COPPER	0.50	36.2
LEAD	2.50	229
MERCURY	0.05	N.D.
NICKEL	2.50	15.4
SELENIUM	0.13	0.43
SILVER	0.50	N.D.
THALLIUM	2.50	N.D.
ZINC	0.50	43.5

AR100082

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER		MATRIX	Soil
SAMPLE NUMBER	2292	DILUTION FACTOR	1.2500
CLIENT ID		QA BATCH	
DATA FILE	2292	DATE ANALYZED	12/19/90

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	770000	Bromodichloromethane	ND	380000
Bromomethane	ND	770000	2-Chloroethoxyvinyl ether	ND	770000
Vinyl Chloride	ND	770000	trans-1,3-Dichloropropene	ND	380000
Chloroethane	ND	770000	Toluene	12000000	380000
Acrolein	ND	3800000	cis-1,3-Dichloropropene	ND	380000
1,1-Dichloroethene	ND	380000	1,1,2,2-Tetrachloroethane	ND	380000
Acrylonitrile	ND	3800000	1,1,2-Trichloroethane	ND	380000
Methylene Chloride	2300000	380000	Tetrachloroethene	ND	380000
1,2-Dichloroethene(trans)	ND	380000	Dibromochloromethane	ND	380000
1,1-Dichloroethane	ND	380000	Chlorobenzene	ND	380000
Chloroform	ND	380000	Ethylbenzene	1500000	380000
1,1,1-Trichloroethane	ND	380000	m,p-Xylenes	2500000	380000
Carbon Tetrachloride	ND	380000	o-Xylene	2300000	380000
1,2-Dichloroethane	ND	380000	Bromoform	ND	380000
Benzene	ND	380000	m-Dichlorobenzene	ND	380000
Trichloroethene	ND	380000	p-Dichlorobenzene	ND	380000
1,2-Dichloropropane	ND	380000	o-Dichlorobenzene	ND	380000

SUBSTITUTE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,1-Dichloroethane-d4	89.9	63 - 133	OK
Toluene-d8	88.6	73 - 129	OK
Bromofluorobenzene	87.9	67 - 133	OK

Percent Spild of 61.5 is used for all Target compounds.

(J) Indicates detected below MDL
(E) Indicates also present in blank
(ND) Indicates compound not detected

AR100083

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(solid)

SAMPLE ID: 27023

CLIENT ID: S2

SAMPLE DATE: 12/15/90

METALS	MDL (mg/Kg)	RESULT (mg/Kg)
ANTIMONY	0.13	N.D.
ARSENIC	0.13	9.42
BERYLLIUM	0.50	0.93
CADMIUM	0.50	2.81
CHROMIUM	0.50	6.96
COPPER	0.50	24.7
LEAD	2.50	4.22
MERCURY	0.05	N.D.
NICKEL	2.50	17.4
SELENIUM	0.13	N.D.
SILVER	0.50	N.D.
THALLIUM	2.50	N.D.
ZINC	0.50	67.3

AR100084

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Soil
SAMPLE NUMBER	55003	DILUTION FACTOR	2500
CLIENT ID	_____	CR BATCH	_____
DATA FILE	149841	DATE ANALYZED	12/19/90

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	33000	Bromodichloromethane	ND	16000
Bromomethane	ND	33000	2-Chloroethylvinylether	ND	33000
Vinyl Chloride	ND	33000	trans-1,3-Dichloropropene	ND	16000
Chloroethane	ND	33000	Toluene	240000	16000
Acetoin	ND	160000	cis-1,3-Dichloropropene	ND	16000
1,1-Dichloroethane	ND	16000	1,1,2,2-Tetrachloroethane	ND	16000
Acrylonitrile	ND	160000	1,1,2-Trichloroethane	ND	16000
Methylene Chloride	81000 (B)	16000	Tetrachloroethene	ND	16000
1,2-Dichloroethene(trans)	ND	16000	Dibromochloromethane	ND	16000
1,1-Dichloroethane	ND	16000	Chlorobenzene	ND	16000
Chloroform	ND	16000	Ethylbenzene	190000	16000
1,1,1-Trichloroethane	ND	16000	m-Xylenes	240000	16000
Carbon Tetrachloride	ND	16000	p-Xylene	170000	16000
1,2-Dichloroethane	ND	16000	Bromoform	ND	16000
Benzene	ND	16000	m-Dichlorobenzene	ND	16000
Trichloroethene	ND	16000	p-Dichlorobenzene	ND	16000
1,2-Dichloropropane	ND	16000	o-Dichlorobenzene	ND	16000

SUBSTITUTE COMPOUNDS	% FREQUENCY	LIMITS	STATUS
1,2-Dichloroethane-d4	25.2	63 - 173	OK
Toluene-d8	73.7	73 - 129	OK
Bromofluorobenzene	114	57 - 133	OK

Percent Ratio of 75.5 is used for all Target compounds.

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

AR100085

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(solid)

SAMPLE ID: E7024

CLIENT ID: S3

SAMPLE DATE: 12/15/90

METALS	MDL (mg/Kg)	RESULT (mg/Kg)
ANTIMONY	0.13	N.D.
ARSENIC	0.13	4.94
BERYLLIUM	0.50	N.D.
CADMIUM	0.50	3.06
CHROMIUM	0.50	33.4
COPPER	0.50	11.3
LEAD	2.50	163
MERCURY	0.05	0.44
NICKEL	2.50	6.53
SELENIUM	0.13	0.18
SILVER	0.50	N.D.
THALLIUM	2.50	N.D.
ZINC	0.5	24.6

AR100086

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Soil
SAMPLE NUMBER	37026	DILUTION FACTOR	50000
CLIENT ID	_____	QA BATCH	_____
DATA FILE	34810	DATE ANALYZED	12/19/98

COMPOUND	UG/KG	MDL	COMPOUND	UG/KG	MDL
Chloromethane	ND	500000	Bromodichloromethane	ND	320000
Bromomethane	ND	500000	2-Chloroethylvinylether	ND	650000
Vinyl Chloride	ND	650000	trans-1,3-Dichloropropene	ND	320000
Chloroethane	ND	500000	Toluene	11000000	320000
Acrolein	ND	3200000	cis-1,3-Dichloropropene	ND	320000
1,1-Dichloroethene	ND	320000	1,1,2,2-Tetrachloroethane	ND	320000
Acrylonitrile	ND	3200000	1,1,2-Trichloroethane	ND	320000
Methylene Chloride	1700000 (B)	320000	Tetrachloroethene	ND	320000
1,2-Dichloroethene(trans)	ND	320000	Dibromochloromethane	ND	320000
1,1-Dichloroethane	ND	320000	Chlorobenzene	ND	320000
Chloroform	ND	320000	Ethylbenzene	4300000	320000
1,1,1-Trichloroethane	ND	320000	m,p-Xylenes	5000000	320000
Carbon Tetrachloride	ND	320000	o-Xylene	2600000	320000
1,2-Dichloroethane	ND	320000	Bromoform	ND	320000
Benzene	ND	320000	m-Dichlorobenzene	ND	320000
Trichloroethene	ND	320000	p-Dichlorobenzene	ND	320000
1,2-Dichloropropane	ND	320000	o-Dichlorobenzene	ND	320000

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	96.6	65 - 133	OK
Toluene-d8	95.6	73 - 129	OK
Bromofluorobenzene	100	57 - 111	OK

Percent Solid of 22.1 is used for all Target compounds.

- (D) Indicates detected below MDL
- (B) Indicates also present in blank
- (ND) Indicates compound not detected

AR100087

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(solid)

SAMPLE ID: 87025

CLIENT ID: 94

SAMPLE DATE: 12/15/90

METALS	MDL (mg/Kg)	RESULT (mg/Kg)
ANTIMONY	0.13	N.D.
ARSENIC	0.13	7.70
BERYLLIUM	0.50	0.78
CADMIUM	0.50	4.13
CHROMIUM	0.50	63.3
COPPER	0.50	21.8
LEAD	2.50	284
MERCURY	0.05	N.D.
NICKEL	2.50	16.9
SELENIUM	0.13	0.40
SILVER	0.50	N.D.
THALLIUM	2.50	N.D.
ZINC	0.50	54.8

AR100088

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER		MATRIX	Soil
SAMPLE NUMBER	27025	DILUTION FACTOR	500.00
CLIENT ID		QA BATCH	
DATA FILE	149830	DATE ANALYZED	12/18/90

COMPOUND	UG/KG	MOL	COMPOUND	UG/KG	MOL
Chloromethane	ND	34000	Bromochloromethane	ND	17000
Bromomethane	ND	34000	2-Chloroethylvinylether	ND	34000
Vinyl Chloride	ND	34000	trans-1,3-Dichloropropene	ND	17000
Chloroethane	ND	34000	Toluene	310000	17000
Acrolein	ND	170000	cis-1,3-Dichloropropene	ND	17000
1,1-Dichloroethene	ND	17000	1,1,2,2-Tetrachloroethene	ND	17000
Acyronitrile	ND	170000	1,1,2-Trichloroethane	ND	17000
Methylene Chloride	54000 (B)	17000	Tetrachloroethene	ND	17000
1,2-Dichloroethene(trans)	ND	17000	Dibromochloromethane	ND	17000
1,1-Dichloroethane	ND	17000	Chlorobenzene	ND	17000
Chloroform	ND	17000	Ethylbenzene	22000	17000
1,1,1-Trichloroethane	ND	17000	m,p-Xylenes	140000	17000
Carbon Tetrachloride	ND	17000	o-Xylene	55000	17000
1,2-Dichloroethane	ND	17000	Bromoform	ND	17000
Benzene	ND	17000	m-Dichlorobenzene	ND	17000
Trichloroethene	ND	17000	p-Dichlorobenzene	ND	17000
1,2-Dichloropropane	ND	17000	o-Dichlorobenzene	ND	17000

SUBSTRATE COMPOUND	% RECOVERY	LIMIT	STATUS
1,2-Dichloroethane-d4	103	63 - 133	OK
Toluene-d8	119	73 - 129	OK
Bromochlorobenzene	99.5	67 - 133	OK

Percent Solid of 73.0 is used for all Target compounds.

- (D) Indicates detected below MDL
- (B) Indicates also present in blank
- (ND) Indicates compound not detected

BR100089

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(solid)

SAMPLE ID: E7026

CLIENT ID: L5

SAMPLE DATE: 12/15/90

METALS	MDL (mg/Kg)	RESULT (mg/Kg)
ANTIMONY	0.13	N.D.
ARSENIC	0.13	N.D.
BERYLLIUM	0.50	N.D.
CADMIUM	0.50	N.D.
CHROMIUM	0.50	99.7
COPPER	0.50	43.8
LEAD	2.50	550
MERCURY	0.05	0.56
NICKEL	2.50	2.20
SELENIUM	0.13	N.D.
SILVER	0.50	N.D.
THALLIUM	2.50	N.D.
ZINC	0.50	4.75

AR100090

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	_____
SAMPLE NUMBER	8706	DILUTION FACTOR	200000
CLIENT ID	_____	QA BATCH	_____
DATA FILE	8706	DATE ANALYZED	12/19/80

COMPOUND	UG/KG	MCL	COMPOUND	UG/KG	MCL
Chloromethane	ND	2000000	Bromodichloromethane	ND	1000000
Bromomethane	ND	2000000	2-Chloroethoxyvinyl ether	ND	2000000
Vinyl Chloride	ND	2000000	trans-1,3-Dichloropropene	ND	1000000
Chloroethane	ND	2000000	Toluene	150000	1000000
Acrolein	ND	10000000	cis-1,3-Dichloropropene	ND	1000000
1,1-Dichloroethene	ND	1000000	1,1,1,2-Tetrachloroethane	ND	1000000
Acrylonitrile	ND	1000000	1,1,2-Trichloroethane	ND	1000000
Methylene Chloride	450000000	1000000	Tetrachloroethene	ND	1000000
1,2-Dichloroethane-trans	ND	1000000	Dibromochloromethane	ND	1000000
1,2-Dichloroethane	ND	1000000	Chlorobenzene	ND	1000000
Chloroform	ND	1000000	Ethylbenzene	21000000	1000000
1,1,1-Trichloroethane	ND	1000000	m,p-Xylenes	16000000	1000000
Carbon Tetrachloride	ND	1000000	o-Xylene	3000000	1000000
1,2-Dichloroethane	ND	1000000	Bromoform	ND	1000000
Benzene	ND	1000000	m-Dichlorobenzene	ND	1000000
Trichloroethene	ND	1000000	p-Dichlorobenzene	ND	1000000
1,2-Dichloropropane	ND	1000000	o-Dichlorobenzene	ND	1000000

APPROXIMATE COMPOUND	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91.6	13 - 133	OK
Toluene-d8	76.1	73 - 120	OK
Bromofluorobenzene	74.8	57 - 133	OK

(D) indicates detected below MCL
(B) indicates also present in blank
(ND) indicates compound not detected

ARI00091

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(aqueous)

SAMPLE ID: R7027

CLIENT ID: L6

SAMPLE DATE: 12/15/90

METALS	MDL (mg/L)	RESULT (mg/L)
ANTIMONY	0.005	N.D.
ARSENIC	0.005	N.D.
BERYLLIUM	0.01	N.D.
CADMIUM	0.01	N.D.
CHROMIUM	0.01	N.D.
COPPER	0.01	0.02
LEAD	0.05	N.D.
MERCURY	0.0005	0.0006
NICKEL	0.05	0.06
SELENIUM	0.005	N.D.
SILVER	0.01	N.D.
THALLIUM	0.1	N.D.
ZINC	0.01	0.14

AR100092

Bridgport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	E7027	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	B0396	DATE ANALYZED	12/18/90

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	10	Bromodichloromethane	ND	5
Bromomethane	N)	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	N)	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	140	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethene	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	6.2	5	Tetrachloroethane	ND	5
1,2-Dichloroethene(trans)	14	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	ND	5	Ethylbenzene	ND	5
1,1,1-Trichloroethane	18	5	m,p-Xylenes	47	5
Carbon Tetrachloride	ND	5	o-Xylene	ND	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethene	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	93.7	76 - 114	OK
Toluene-d8	87.5	88 - 110	
Bromofluorobenzene	44.2	86 - 115	

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

AR100093

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(aqueous)

SAMPLE ID: E702B

CLIENT ID: R1

SAMPLE DATE: 12/15/90

METALS	MDL (mg/L)	RESULT (mg/L)
ANTIMONY	0.005	N.D.
ARSENIC	0.005	N.D.
BERYLLIUM	0.01	N.D.
CADMIUM	0.01	N.D.
CHROMIUM	0.01	N.D.
COPPER	0.01	0.04
LEAD	0.05	N.D.
MERCURY	0.0005	N.D.
NICKEL	0.05	N.D.
SELENIUM	0.005	N.D.
SILVER	0.01	N.D.
THALLIUM	0.1	N.D.
ZINC	0.01	0.06

AR100094

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	F7028	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	180397	DATE ANALYZED	12/18/90

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	10	Bromodichloromethane	ND	5
Bromomethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	2.1 J	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethane	ND	5	1,1,2,2-Tetrachloroethane	NS	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	2.5 J	5	Tetrachloroethane	ND	5
1,2-Dichloroethane(trans)	ND	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	ND	5	Ethylbenzene	ND	5
1,1,1-Trichloroethane	ND	5	m,p-xylenes	3.4 J	5
Carbon Tetrachloride	ND	5	o-Xylene	1.3 J	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethane	7.3	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	87.8	76 - 114	OK
Toluene-d8	87.7	88 - 110	
Bromofluorobenzene	104	86 - 115	OK

(J) Indicates detected below MCL
(B) Indicates also present in blank
(ND) Indicates compound not detected

AR100095

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(aqueous)

SAMPLE ID: E7029

CLIENT ID: R2

SAMPLE DATE: 12/15/90

METALS	MDL (mg/L)	RESULT (mg/L)
ANTIMONY	0.005	N.D.
ARSENIC	0.005	N.D.
BERYLLIUM	0.01	N.D.
CADMIUM	0.01	N.D.
CHROMIUM	0.01	0.02
COPPER	0.01	0.07
LEAD	0.05	N.D.
MERCURY	0.0005	0.0011
NICKEL	0.05	N.D.
SELENIUM	0.005	N.D.
SILVER	0.01	N.D.
THALLIUM	0.1	N.D.
ZINC	0.01	1.04

AR100096

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER		MATRIX	Water
SAMPLE NUMBER	E7029	DILUTION FACTOR	10.00
CLIENT ID		QA BATCH	
DATA FILE	>B0405	DATE ANALYZED	12/19/90

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	100	Bromodichloroethane	31 J	50
Bromomethane	ND	100	2-Chloroethylvinylether	ND	100
Vinyl Chloride	ND	100	trans-1,3-Dichloropropene	ND	50
Chloroethane	ND	100	Toluene	1500	50
Acrolein	ND	500	cis-1,3-Dichloropropene	ND	50
1,1-Dichloroethene	ND	50	1,1,2,2-Tetrachloroethane	ND	50
Acrylonitrile	ND	500	1,1,2-Trichloroethane	ND	50
Methylene Chloride	160	50	Tetrachloroethane	ND	50
1,2-Dichloroethane(trans)	46 J	50	Dibromochloromethane	ND	50
1,1-Dichloroethane	ND	50	Chlorobenzene	ND	50
Chloroform	1300	50	Ethylbenzene	1700	50
1,1,1-Trichloroethane	ND	50	m-xylenes	1500	50
Carbon Tetrachloride	ND	50	o-xylene	2200	50
1,2-Dichloroethane	ND	50	Bromoform	ND	50
Benzene	16 J	50	m-Dichlorobenzene	ND	50
Trichloroethane	120	50	p-Dichlorobenzene	ND	50
1,2-Dichloropropane	ND	50	o-Dichlorobenzene	ND	50

<u>SURROGATE COMPOUNDS</u>	<u>% RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	100	76 - 114	OK
Toluene-d8	93.3	88 - 110	OK
Bromofluorobenzene	98.4	86 - 115	OK

(J) Indicates detected below MDL
 (B) Indicates also present in blank
 (ND) Indicates compound not detected

ARI00097

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(aqueous)

SAMPLE ID: E7030

CLIENT ID: R3

SAMPLE DATE: 12/15/90

METALS	MDL (mg/L)	RESULT (mg/L)
ANTIMONY	0.005	N.D.
ARSENIC	0.005	N.D.
BERYLLIUM	0.01	N.D.
CADMIUM	0.01	N.D.
CHROMIUM	0.01	N.D.
COPPER	0.01	0.03
LEAD	0.05	N.D.
MERCURY	0.0005	N.D.
NICKEL	0.05	N.D.
SELENIUM	0.005	N.D.
SILVER	0.01	N.D.
THALLIUM	0.1	N.D.
ZINC	0.01	0.11

AR100098

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	E7030	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	80398	DATE ANALYZED	12/18/90

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	10	Bromodichloromethane	ND	5
Bromomethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	ND	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethane	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	ND B	5	Tetrachloroethane	ND	5
1,2-Dichloroethene(trans)	1.2 J	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	ND	5	Ethylbenzene	ND	5
1,1,1-Trichloroethane	ND	5	m&p-Xylenes	ND	5
Carbon Tetrachloride	ND	5	o-Xylene	ND	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethene	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	93.0	76 - 114	OK
Toluene-d8	98.9	88 - 110	OK
Bromofluorobenzene	102	86 - 115	OK

(J) Indicates detec'd below MDL
 (B) Indicates also present in blank
 (ND) Indicates compound not detected

AR100099

CERTIFICATE OF ANALYSIS

PRIORITY POLLUTANT LIST
(aqueous)

SAMPLE ID: E7031

CLIENT ID: K4

SAMPLE DATE: 12/15/90

METALS	MDL (mg/L)	RESULT (mg/L)
ANTIMONY	0.005	N.D.
ARSENIC	0.005	C.006
BERYLLIUM	0.01	N.D.
CADMIUM	0.01	N.D.
CHROMIUM	0.01	N.D.
COPPER	0.01	0.01
LEAD	0.05	N.D.
MERCURY	0.0005	N.D.
NICKEL	0.05	N.D.
SELENIUM	0.005	N.D.
SILVER	0.01	N.D.
THALLIUM	0.1	N.D.
ZINC	0.01	0.02

AR100100

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	F2031	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	80402	DATE ANALYZED	12/19/90

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	10	Bromodichloromethane	ND	5
Bromomethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	4.7 J	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethane	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	2.7 J	5	Tetrachloroethene	ND	5
1,2-Dichloroethane (trans)	ND	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	ND	5	Ethylbenzene	ND	5
1,1,1-Trichloroethane	ND	5	m,p-Xylenes	9.6	5
Carbon Tetrachloride	ND	5	o-Xylene	1.3 J	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethene	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	102	76 - 114	OK
Toluene-d8	95.5	88 - 110	OK
Bromofluorobenzene	98.3	86 - 115	OK

(J) Indicates detected below MDL
(B) Indicates also present in blank
(ND) Indicates compound not detected

ARI00101

Bridgeport Environmental Inc.

Licensed Analytical Laboratories
08555



P.O. Box 247
510 Heron Drive Suite 107
Bridgeport, NJ 08014-0247

609/467-0380

WESTON

PROJECT: CRAIG BRANCH DRUM DUMP

DATE RECEIVED: DECEMBER 20, 1990

REPORT NO: E7071-E7074

BRIDGEPORT ENVIRONMENTAL, INC.

Richard W. Lynch
RICHARD W. LYNCH
LABORATORY MANAGER

AR100102

SAMPLE LOCATION AND IDENTIFICATION

ANALYSIS NO.

CLIENT ID

E 7071

WS1 - Field's Residence

E 7072

WS2 - Field's Residence

E 7073

WS3 - Field's Residence

E 7074

WS4 - Field's Residence Spigot

AR100103

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

CHAIN OF CUSTODY RECORD

E7071 - E7074

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

PROJ. NO. PROJECT NAME

Craig Branch Debris Dump
[Signature]

SAMPLERS: (Signature) *[Signature]*

STA. NO. DATE TIME COMP. GRAB STATION LOCATION

NO. OF CONTAINERS

40ml VOA
- 1.14ml pol

REMARKS

AR100101

WS1 12/16/90 1440 ✓ Field's residence

WS2 12/16/90 1540 ✓ Field's residence

WS3 12/16/90 1640 ✓ Field's residence

WS4 12/16/90 1730 ✓ Field's residence

Submitted to Tetra Tech, North CA

5314 Dalton Field Road, Suite 306

Cherry Hill, NJ 08002

c/o Roy E. Wilton, Inc.

Phone #: (609) 482-0222

Relinquished by: (Signature) *[Signature]* Date / Time 12/19/90 1815

Relinquished by: (Signature) Date / Time Received by: (Signature)

Relinquished by: (Signature) Date / Time

Relinquished by: (Signature) Date / Time Received by: (Signature)

Relinquished by: (Signature) Date / Time

Relinquished by: (Signature) Date / Time Received by: (Signature)

Received for Laboratory by: *[Signature]*

Distribution: Original Accompanies Shipment: Copy to Coordinator Field Files

METHODOLOGY SUMMARY

METALS

Soil Samples for metal analysis were run in accordance with the methods prescribed in SW846. This includes a nitric acid digestion followed by either Furnace, Flame Atomic absorption, Flameless Atomic Absorption, or Inductively Coupled Plasma analysis.

Aqueous samples for metals analysis were run in accordance with the methods prescribed in Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 March 1983.

PHENOLS

Analysis performed according to U.S.E.P.A. 420.1 (Spectrophotometric, Manual 4AAP with distillation). Phenolic materials react with four (4) Aminoantipyrine and Potassium Ferricyanide at pH 10. Red color is read at 510 nm.

CYANIDE

Analysis performed according to U.S.E.P.A. 135.2 (Spectrophotometric with distillation). Sample is reacted with Chloramine-T to produce Cyanogen Chloride, CNCl. Red color develops when combined with Pyridine/Barbituric Acid Reagent; which is red at 578 nm.

Soil samples are prepared for analysis as prescribed in Method 9010 from SW846.

PETROLEUM HYDROCARBONS

Aqueous samples were analyzed following Method 4.18.1 as prescribed in Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 March 1983.

Soil Samples were extracted in accordance with the methods prescribed in SW-846 and subsequently analyzed as stated above.

AR100105

METHODOLOGY SUMMARY

PURGEABLES

U.S.E.P.A. Method 624 - This is a purge and trap Gas Chromatograph/Mass Spectrometer (GC/MS) method applicable to the determination of the compounds listed in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

An HP5996 GC/MS was used with a capillary column.

Method detection limits are as stated.

Soil samples are prepared for analysis as prescribed in Method 8240 from SW846.

ACID EXTRACTABLES

BASE NEUTRALS

U.S.E.P.A. Method 625 - This method covers the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography. This is a gas chromatography/mass spectrometer (GC/MS) method applicable to the determination of the compounds listed in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

A HP5970 was used with a DB-5 FSCC.

Method detection limits are as stated.

Soil samples were prepared for analysis as prescribed in Method 3550 from SW846.

PESTICIDES/PCB's

U.S.E.P.A. Method 608 - This method covers the determination of pesticides and PCB's in samples by extraction/concentration with organic solvents and subsequent qualification/quantification by Gas Chromatography. The gas chromatograph utilizes an electron capture detector (ECD) which is applicable for the determination of the compounds listed for this method in the U.S.E.P.A. Manual entitled "Test Procedures for the Analysis of Organic Pollutants".

Soil samples were prepared as prescribed in Method 3550 from SW846.

AR100106

LABORATORY CHRONICLE

RECEIPT/REFRIGERATION _____ 12/20/90 _____

ORGANICS
EXTRACTION

1. Acids _____ NA _____
2. Base/Neutrals _____ NA _____
3. Pesticides/PCB's/Herbicides _____ NA _____
4. Petroleum Hydrocarbons _____ NA _____

ANALYSIS

1. Volatiles _____ 1/2/91 ~ 1/3/91 _____
2. Acids _____ NA _____
3. Base/Neutrals _____ NA _____
4. Pesticides/PCB's/Herbicides _____ NA _____
5. Petroleum Hydrocarbons _____ NA _____
6. Total Organic Carbon _____ NA _____

Section Supervisor _____
Review & Approval Paul Tarala _____

INORGANICS

1. Metals _____ 12/21/90 - 12/26/90 _____
2. Cyanides _____ NA _____
3. Phenols _____ NA _____

OTHER ANALYTES

Section Supervisor _____
Review & Approval _____

Quality Control Supervisor _____
Review & Approval J. S. Gal _____

Laboratory Director _____
Review & Approval RW _____

AR100107

If fractions are re-extracted and re-analyzed because initial endeavors did not meet quality control acceptance criteria, include dates for both.

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER _____ MATRIX Water
 SAMPLE NUMBER 57071 4 DILUTION FACTOR 1.00
 CLIENT ID _____ QA BATCH _____
 DATA FILE 580521 DATE ANALYZED 01/02/91

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	10	Bromodichloromethane	25	5
Bromoethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	160	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethene	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	2.0 J	5	Tetrachloroethane	ND	5
1,2-Dichloroethene(trans)	29	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	220	5	Ethylbenzene	220	5
1,1,1-Trichloroethane	ND	5	mda-Xylenes	160	5
Carbon Tetrachloride	ND	5	o-Xylene	ND	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	2.0	5	m-Dichlorobenzene	ND	5
Trichloroethane	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

<u>SUBSTITUTE COMPOUNDS</u>	<u>% RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	105	76 - 114	OK
Toluene-d8	10.5	88 - 110	CUT
Bromofluorobenzene	90.0	86 - 115	OK

(J) Indicates detected below MDL
 (B) Indicates also present in blank
 (ND) Indicates compound not detected

AR100108

CERTIFICATE OF ANALYSIS
PRIORITY POLLUTANT

ANALYSIS NO: E 7071
CLIENT ID: W51 - Field's Residence
SAMPLE DATE: 12/19/90

<u>METALS</u>	<u>MDL (mg/L)</u>	<u>RESULT (mg/L)</u>
Antimony	0.005	N.D.
Arsenic	0.005	N.D.
Beryllium	0.01	N.D.
Cadmium	0.01	N.D.
Chromium	0.01	0.02
Copper	0.01	0.06
Lead	0.05	N.D.
Mercury	0.0005	N.D.
Nickel	0.05	N.D.
Selenium	0.005	N.D.
Silver	0.01	N.D.
Thallium	0.10	N.D.
Zinc	0.01	0.95

AR100109

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	E2072 W	DILUTION FACTOR	10.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	B0572	DATE ANALYZED	01/02/91

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloromethane	ND	100	Bromodichloromethane	ND	50
Bromomethane	ND	100	2-Chloroethylvinylether	ND	100
Vinyl Chloride	ND	100	trans-1,3-Dichloropropene	ND	50
Chloroethane	ND	100	Toluene	1500	50
Acetone	ND	500	cis-1,3-Dichloropropene	ND	50
1,1-Dichloroethene	ND	50	1,1,2,2-Tetrachloroethane	ND	50
Acrylonitrile	ND	500	1,1,2-Trichloroethane	ND	50
Methylene Chloride	94 B	50	Tetrachloroethene	ND	50
1,2-Dichloroethene(trans)	ND	50	Dibromochloromethane	ND	50
1,1-Dichloroethane	ND	50	Chlorobenzene	ND	50
Chloroform	350	50	Ethylbenzene	1400	50
1,1,1-Trichloroethane	ND	50	m,p-Xylenes	1400	50
Carbon Tetrachloride	ND	50	o-Xylene	2000	50
1,2-Dichloroethane	ND	50	Bromoform	ND	50
Benzene	ND	50	m-Dichlorobenzene	ND	50
Trichloroethene	ND	50	p-Dichlorobenzene	ND	50
1,2-Dichloropropane	ND	50	o-Dichlorobenzene	ND	50

<u>SURROGATE COMPOUNDS</u>	<u>% RECOVERY</u>	<u>LIMITS</u>	<u>STATUS</u>
1,2-Dichloroethane-d4	110	76 - 114	OK
Toluene-d8	95.3	88 - 110	OK
Bromofluorobenzene	95.1	86 - 115	OK

(J) Indicates detected below MDL
 (B) Indicates also present in blank
 (ND) Indicates compound not detected

AR100110

CERTIFICATE OF ANALYSIS
PRIORITY POLLUTANT

ANALYSIS NO: E 7072

CLIENT ID: WS2 - Field's Residence

SAMPLE DATE: 12/19/90

<u>METALS</u>	<u>MDL (mg/L)</u>	<u>RESULT (mg/L)</u>
Antimony	0.005	N.D.
Arsenic	0.005	0.007
Beryllium	0.01	N.D.
Cadmium	0.01	N.D.
Chromium	0.01	0.03
Copper	0.01	0.08
Lead	0.05	N.D.
Mercury	0.0005	0.0006
Nickel	0.05	N.D.
Selenium	0.005	N.D.
Silver	0.01	N.D.
Thallium	0.10	N.D.
Zinc	0.01	1.07

AR100111

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	E2073 W	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	>B0573	DATE ANALYZED	01/02/91

COMPOUND	UG/L	MDL	COMPOUND	UG/L	MDL
Chloroethane	ND	10	Bromodichloromethane	15	5
Bromomethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	92	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethene	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	22	5	Tetrachloroethane	ND	5
1,2-Dichloroethene(trans)	130	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	630 E	5	Ethylbenzene	57	5
1,1,1-Trichloroethane	ND	5	m&p-Xylenes	75	5
Carbon Tetrachloride	ND	5	o-Xylene	ND	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethane	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	113	76 - 114	OK
Toluene-d8	5.9	88 - 110	OUT
Bromofluorobenzene	91.1	86 - 115	OK

- (J) Indicates detected below MDL
 (B) Indicates also present in blank
 (E) Exceeds maximum calibration
 (ND) Indicates compound not detected

AR100112

CERTIFICATE OF ANALYSIS
PRIORITY POLLUTANT

ANALYSIS NO: E 7073
CLIENT ID: WS3 - Field's Residence
SAMPLE DATE: 12/19/90

<u>METALS</u>	<u>MDL (mg/L)</u>	<u>RESULT (mg/L)</u>
Antimony	0.005	N.D.
Arsenic	0.005	0.036
Beryllium	0.01	N.D.
Cadmium	0.01	N.D.
Chromium	0.01	0.07
Copper	0.01	0.31
Lead	0.05	0.11
Mercury	0.0005	0.0009
Nickel	0.05	0.13
Selenium	0.005	N.D.
Silver	0.01	N.D.
Thallium	0.10	N.D.
Zinc	0.01	3.52

AR100113

Bridgeport Environmental
VOLATILE ORGANIC ANALYSIS DATA

JOB NUMBER	_____	MATRIX	Water
SAMPLE NUMBER	87074 4	DILUTION FACTOR	1.00
CLIENT ID	_____	QA BATCH	_____
DATA FILE	>B0574	DATE ANALYZED	01/02/91

COMPOUND	UG/L	MCL	COMPOUND	UG/L	MCL
Chloromethane	ND	10	Bromodichloromethane	17	5
Bromomethane	ND	10	2-Chloroethylvinylether	ND	10
Vinyl Chloride	ND	10	trans-1,3-Dichloropropene	ND	5
Chloroethane	ND	10	Toluene	95	5
Acrolein	ND	50	cis-1,3-Dichloropropene	ND	5
1,1-Dichloroethane	ND	5	1,1,2,2-Tetrachloroethane	ND	5
Acrylonitrile	ND	50	1,1,2-Trichloroethane	ND	5
Methylene Chloride	5.7 B	5	Tetrachloroethane	ND	5
1,2-Dichloroethene(trans)	51	5	Dibromochloromethane	ND	5
1,1-Dichloroethane	ND	5	Chlorobenzene	ND	5
Chloroform	390	5	Ethylbenzene	79	5
1,1,1-Trichloroethane	ND	5	m,p-Xylenes	40	5
Carbon Tetrachloride	ND	5	o-Xylene	ND	5
1,2-Dichloroethane	ND	5	Bromoform	ND	5
Benzene	ND	5	m-Dichlorobenzene	ND	5
Trichloroethane	ND	5	p-Dichlorobenzene	ND	5
1,2-Dichloropropane	ND	5	o-Dichlorobenzene	ND	5

SURROGATE COMPOUNDS	% RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	105	76 - 114	OK
Toluene-d8	13.0	93 - 110	OUT
Bromofluorobenzene	91.1	86 - 115	OK

(J) Indicates detected below MCL
(Q) Indicates also present in blank
(ND) Indicates compound not detected

AR100114

CERTIFICATE OF ANALYSIS
PRIORITY POLLUTANT

ANALYSIS NO: E 7074
CLIENT ID: WS4 - Field's Residence Spigot
SAMPLE DATE:

<u>METALS</u>	<u>MDL (mg/L)</u>	<u>RESULT (mg/L)</u>
Antimony	0.005	N.D.
Arsenic	0.005	0.038
Beryllium	0.01	0.01
Cadmium	0.01	N.D.
Chromium	0.01	0.15
Copper	0.01	0.61
Lead	0.05	0.07
Mercury	0.0005	N.D.
Nickel	0.05	0.41
Selenium	0.005	N.D.
Silver	0.01	N.D.
Thallium	0.10	N.D.
Zinc	0.01	8.34

AR100115