ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260357

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	29.1	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	1.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	1.8	mg/kg	0.5	014901300
Chromium	17.	mg/kg	5.	015101300
Copper	5.	mg/kg	2.	015301300
Lead	9.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	6.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	14,200.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 2.0	mg/kg	2.08	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.2	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100426

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Biological & Environmental Testing

146 02913 110.00 150000

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

LL Sample No. SW 1260357

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Antimony	< 7.0	mg/kg	7.	014402500
Arsenic	1.4	mg/kg	1.	014503300
Beryllium	< 0.70	mg/kg	0.7	014703300
Cadmium	2.54	mg/kg	0.7	014901300
Chromium	24.0	mg/kg	7.	015101300
Copper	7.1	mg/kg	3.	015301300
Lead	12.7	mg/kg	7.	015501300
Mercury	< 0.10	mg/kg	0.1	015903300
Nickel	8.5	mg/kg	6.	016103300
Selenium	< 0.70	mg/kg	0.7	016403300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	20,000.	mg/kg	3.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.070	mg/kg	0.07	023701300
Dioxin Screen	< 3.0	mg/kg	3.	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.28	mg/kg	0.1	043416000
Purgables Method # 624		attached		052016000
Thallium	< 30.	mg/kg	30.	052516000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100427

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 • 717/656-2301 • Telex 867-104

Lab Sample No. SV 1260357

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 50.	mg/kg	50.	060900000N
Beta BHC	< 10.	mg/kg	10.	061000000N
Gamma BHC - Lindane	< 50.	mg/kg	50.	045300000N
Delta BHC	< 50.	mg/kg	50.	061200000N
Heptachlor	< 50.	mg/kg	50.	045400000N
Aldrin	< 50.	mg/kg	50.	045500000N
Heptachlor Epoxide	< 50.	mg/kg	50.	061500000N
DDE	< 50.	mg/kg	50.	061600000N
DDD	< 50.	mg/kg	50.	061700000N
DDT	< 50.	mg/kg	50.	047800000N
Dieldrin	< 5.	mg/kg	5.	046900000N
Endrin	< 5.	mg/kg	5.	047700000N
Chlordane	< 500.	mg/kg	500.	062500000N
Toxaphene	< 500.	mg/kg	500.	062600000N
Endosulfan I	< 5.	mg/kg	5.	062700000N
Endosulfan II	< 5.	mg/kg	5.	062800000N
Endosulfan Sulfate	< 20.	mg/kg	20.	062900000N
Endrin Aldehyde	< 50.	mg/kg	50.	063800000N
PCB-1016	< 1,000.	mg/kg	1000.	063900000N
PCB-1221	< 1,000.	mg/kg	1000.	064000000N
PCB-1232	< 1,000.	mg/kg	1000.	064100000N
PCB-1242	< 1,000.	mg/kg	1000.	064200000N
PCB-1248	< 1,000.	mg/kg	1000.	064300000N
PCB-1254	< 1,000.	mg/kg	1000.	064400000N
PCB-1260	< 1,000.	mg/kg	1000.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

AR100428

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 · 5904 · (717) 656-2301

Lab. Sample No. SW 260357

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Pesticides/PCB's				
Alpha BHC	< 70.	mg/kg	70.	060900000N
Beta BHC	< 10.	mg/kg	10.	061000000N
Gamma BHC - Lindane	< 70.	mg/kg	70.	045300000N
Delta BHC	< 70.	mg/kg	70.	061200000N
Heptachlor	< 70.	mg/kg	70.	045400000N
Aldrin	< 70.	mg/kg	70.	045500000N
Heptachlor Epoxide	< 70.	mg/kg	70.	061500000N
DDE	< 70.	mg/kg	70.	061600000N
DDD	< 70.	mg/kg	70.	061700000N
DDT	< 70.	mg/kg	70.	047800000N
Dieldrin	< 7.0	mg/kg	7.	046900000N
Endrin	< 7.0	mg/kg	7.	047700000N
Chlordane	< 700.	mg/kg	700.	062500000N
Toxaphene	< 700.	mg/kg	700.	062600000
Endosulfan I	< 7.0	mg/kg	7.	062700000N
Endosulfan II	< 7.0	mg/kg	7.	062800000N
Endosulfan Sulfate	< 30.	mg/kg	30.	062900000N
Endrin Aldehyde	< 70.	mg/kg	70.	063800000N
PCB-1016	< 1,000.	mg/kg	1000.	063900000N
PCB-1221	< 1,000.	mg/kg	1000.	064000000N
PCB-1232	< 1,000.	mg/kg	1000.	064100000N
PCB-1242	< 1,000.	mg/kg	1000.	064200000N
PCB-1248	< 1,000.	mg/kg	1000.	064300000N
PCB-1254	< 1,000.	mg/kg	1000.	064400000N
PCB-1260	< 1,000.	mg/kg	1000.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

AR100429

The American Association for Laboratory Accreditation Chemical & Biological & Environmental Testing.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

25 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Sample No. SW 1260357

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	< 500.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	083700000N
Carbon Tetrachloride	< 500.	ug/kg	500.	083800000N
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	< 500.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100430

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LL Sample No. SW 1260357

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 700.	ug/kg	700.	083100000N
Trichlorofluoromethane	< 700.	ug/kg	700.	079000000N
1,1-Dichloroethene	< 700.	ug/kg	700.	083200000N
1,1-Dichloroethane	< 700.	ug/kg	700.	083300000N
trans-1,2-Dichloroethene	< 700.	ug/kg	700.	083400000N
Chloroform	< 700.	ug/kg	700.	083500000N
1,2-Dichloroethane	< 700.	ug/kg	700.	083600000N
1,1,1-Trichloroethane	< 700.	ug/kg	700.	083700000
Carbon Tetrachloride	< 700.	ug/kg	700.	083800000
Bromodichloromethane	< 700.	ug/kg	700.	083900000N
1,1,2,2-Tetrachloroethane	< 700.	ug/kg	700.	084900000N
1,2-Dichloropropane	< 700.	ug/kg	700.	084000000N
trans-1,3-Dichloropropene	< 700.	ug/kg	700.	084100000N
Trichloroethene	< 700.	ug/kg	700.	084200000N
Dibromochloromethane	< 700.	ug/kg	700.	084600000N
1,1,2-Trichloroethane	< 700.	ug/kg	700.	084500000N
Benzene	< 700.	ug/kg	700.	084300000N
cis-1,3-Dichloropropene	< 700.	ug/kg	700.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 700.	ug/kg	700.	084700000N
Tetrachloroethene	< 700.	ug/kg	700.	084800000N
Toluene	< 700.	ug/kg	700.	085000000N
Chlorobenzene	< 700.	ug/kg	700.	085100000N
Ethylbenzene	< 700.	ug/kg	700.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100431

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved By:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation
Soil, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SU 160357

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 166.	mg/kg	166.	064600000N
phenol	< 166.	mg/kg	166.	065500000N
2-nitrophenol	< 166.	mg/kg	166.	065100000N
2,4-dimethylphenol	< 166.	mg/kg	166.	064800000N
2,4-dichlorophenol	< 166.	mg/kg	166.	064700000N
4-chloro-3-methylphenol	< 166.	mg/kg	166.	065300000N
2,4,6-trichlorophenol	< 166.	mg/kg	166.	065600000N
2,4-dinitrophenol	< 416.	mg/kg	416.	065000000N
4-nitrophenol	< 416.	mg/kg	416.	065200000N
2-methyl-4,6-dinitrophenol	< 416.	mg/kg	416.	064900000N
pentachlorophenol	< 416.	mg/kg	416.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR 004432

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SU-126157

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 200.	mg/kg	200.	064600000N
phenol	< 200.	mg/kg	200.	065500000N
2-nitrophenol	< 200.	mg/kg	200.	065100000N
2,4-dimethylphenol	< 200.	mg/kg	200.	064800000N
2,4-dichlorophenol	< 200.	mg/kg	200.	064700000N
4-chloro-3-methylphenol	< 200.	mg/kg	200.	065300000N
2,4,6-trichlorophenol	< 200.	mg/kg	200.	065600000N
2,4-dinitrophenol	< 600.	mg/kg	600.	065000000N
4-nitrophenol	< 600.	mg/kg	600.	065200000N
2-methyl-4,6-dinitrophenol	< 600.	mg/kg	600.	064900000N
pentachlorophenol	< 600.	mg/kg	600.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR 100433

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (A.L.A.) in Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

1425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SU 1260357

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Base Neutrals				
N-nitrosodimethylamine	< 166.	mg/kg	166.	069700000N
bis (2-chloroethyl) ether	< 166.	mg/kg	166.	066700000N
1,3-dichlorobenzene	< 166.	mg/kg	166.	067700000N
1,4-dichlorobenzene	< 166.	mg/kg	166.	067800000N
1,2-dichlorobenzene	< 166.	mg/kg	166.	067600000N
bis (2-chloroisopropyl) ether	< 166.	mg/kg	166.	066800000N
hexachloroethane	< 166.	mg/kg	166.	069200000N
N-nitrosodi-n-propylamine	< 166.	mg/kg	166.	069800000N
nitrobenzene	< 166.	mg/kg	166.	069600000N
isophorone	< 166.	mg/kg	166.	069400000N
bis (2-chloroethoxy) methane	< 166.	mg/kg	166.	066600000N
1,2,4-trichlorobenzene	< 166.	mg/kg	166.	070200000N
naphthalene	< 166.	mg/kg	166.	069500000N
hexachlorobutadiene	< 166.	mg/kg	166.	069000000N
hexachlorocyclopentadiene	< 166.	mg/kg	166.	069100000N
2-chloronaphthalene	< 166.	mg/kg	166.	067200000N
acenaphthylene	< 166.	mg/kg	166.	065800000N
dimethyl phthalate	< 166.	mg/kg	166.	068100000N
2,6-dinitrotoluene	< 166.	mg/kg	166.	068400000N
acenaphthene	< 166.	mg/kg	166.	065700000N
2,4-dinitrotoluene	< 166.	mg/kg	166.	068300000N
fluorene	< 166.	mg/kg	166.	068800000N
4-chlorophenyl phenyl ether	< 166.	mg/kg	166.	067300000N
diethyl phthalate	< 166.	mg/kg	166.	068000000N
1,2-diphenylhydrazine	< 166.	mg/kg	166.	068600000N
N-nitrosodiphenylamine	< 166.	mg/kg	166.	069900000N
4-bromophenyl phenyl ether	< 166.	mg/kg	166.	067000000N
hexachlorobenzene	< 166.	mg/kg	166.	068900000N
phenanthrene	< 166.	mg/kg	166.	070000000N

1 COPY TO ERM Midwest, Inc.

ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SV 126057

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Base Neutrals				
N-nitrosodimethylamine	< 200.	mg/kg	200.	069700000N
bis (2-chloroethyl) ether	< 200.	mg/kg	200.	066700000N
1,3-dichlorobenzene	< 200.	mg/kg	200.	067700000N
1,4-dichlorobenzene	< 200.	mg/kg	200.	067800000N
1,2-dichlorobenzene	< 200.	mg/kg	200.	067600000N
bis (2-chloroisopropyl) ether	< 200.	mg/kg	200.	066800000N
hexachloroethane	< 200.	mg/kg	200.	069200000N
N-nitrosodi-n-propylamine	< 200.	mg/kg	200.	069800000N
nitrobenzene	< 200.	mg/kg	200.	069600000N
isophorone	< 200.	mg/kg	200.	069400000N
bis (2-chloroethoxy) methane	< 200.	mg/kg	200.	066600000N
1,2,4-trichlorobenzene	< 200.	mg/kg	200.	070200000N
naphthalene	< 200.	mg/kg	200.	069500000N
hexachlorobutadiene	< 200.	mg/kg	200.	069000000
hexachlorocyclopentadiene	< 200.	mg/kg	200.	069100000N
2-chloronaphthalene	< 200.	mg/kg	200.	067200000N
acenaphthylene	< 200.	mg/kg	200.	065800000N
dimethyl phthalate	< 200.	mg/kg	200.	068100000N
2,6-dinitrotoluene	< 200.	mg/kg	200.	068400000N
acenaphthene	< 200.	mg/kg	200.	065700000N
2,4-dinitrotoluene	< 200.	mg/kg	200.	068300000N
fluorene	< 200.	mg/kg	200.	068800000N
4-chlorophenyl phenyl ether	< 200.	mg/kg	200.	067300000N
diethyl phthalate	< 200.	mg/kg	200.	068000000N
1,2-diphenylhydrazine	< 200.	mg/kg	200.	068600000N
N-nitrosodiphenylamine	< 200.	mg/kg	200.	069900000N
4-bromophenyl phenyl ether	< 200.	mg/kg	200.	067000000N
hexachlorobenzene	< 200.	mg/kg	200.	068900000N
phenanthrene	< 200.	mg/kg	200.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR-00435

The American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SW-160357

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 166.	mg/kg	166.	065900000N
di-n-butyl phthalate	< 166.	mg/kg	166.	068200000N
fluoranthene	< 166.	mg/kg	166.	068700000N
pyrene	< 166.	mg/kg	166.	070100000N
benzidine	< 416.	mg/kg	416.	066000000N
butyl benzyl phthalate	< 166.	mg/kg	166.	067100000N
benzo (a) anthracene	< 166.	mg/kg	166.	066100000N
chrysene	< 166.	mg/kg	166.	067400000N
3,3'-dichlorobenzidine	< 416.	mg/kg	416.	067900000N
bis (2-ethylhexyl) phthalate	< 166.	mg/kg	166.	066900000N
di-n-octyl phthalate	< 166.	mg/kg	166.	068500000N
benzo (b) fluoranthene	< 166.	mg/kg	166.	066300000N
benzo (K) fluoranthene	< 166.	mg/kg	166.	066500000N
benzo (a) pyrene	< 166.	mg/kg	166.	066200000N
indeno (1,2,3-cd) pyrene	< 166.	mg/kg	166.	069300000N
dibenzo (a,h) anthracene	< 166.	mg/kg	166.	067500000N
benzo (ghi) perylene	< 166.	mg/kg	166.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SU 1260357

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-8 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 200.	mg/kg	200.	065900000N
di-n-butyl phthalate	< 200.	mg/kg	200.	068200000N
fluoranthene	< 200.	mg/kg	200.	068700000N
pyrene	< 200.	mg/kg	200.	070100000N
benzidine	< 600.	mg/kg	600.	066000000N
butyl benzyl phthalate	< 200.	mg/kg	200.	067100000N
benzo (a) anthracene	< 200.	mg/kg	200.	066100000N
chrysene	< 200.	mg/kg	200.	067400000N
3,3'-dichlorobenzidine	< 600.	mg/kg	600.	067900000N
bis (2-ethylhexyl) phthalate	< 200.	mg/kg	200.	066900000N
di-n-octyl phthalate	< 200.	mg/kg	200.	068500000N
benzo (b) fluoranthene	< 200.	mg/kg	200.	066300000N
benzo (K) fluoranthene	< 200.	mg/kg	200.	066500000N
benzo (a) pyrene	< 200.	mg/kg	200.	06620000[illegible]
indeno (1,2,3-cd) pyrene	< 200.	mg/kg	200.	069300000[illegible]
dibenzo (a,h) anthracene	< 200.	mg/kg	200.	067500000N
benzo (ghi) perylene	< 200.	mg/kg	200.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1689, 2425 New Holland Pike, Lancaster, PA 17601 · 717/656-2301

#02123 D 1 44

LL Sample No. GW 1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	3.3	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	< 1.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	< 5.	mg/kg	5.	015101300
Copper	11.	mg/kg	2.	015301300
Lead	7.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	< 4.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	10.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 2.5	mg/kg	2.5	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.8	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved

AR190438

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Biological & Environmental Testing

146 02913 110.00 150000

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

Sample No. SV 1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT.	BASIS	LIMIT OF DETECTION	LAB CODE
Antimony	< 5.0	mg/kg	5.	014402500
Arsenic	< 1.0	mg/kg	1.	014503300
Beryllium	< 0.50	mg/kg	0.5	014703300
Cadmium	< 0.50	mg/kg	0.5	014901300
Chromium	< 5.0	mg/kg	5.	015101300
Copper	11.4	mg/kg	2.	015301300
Lead	7.2	mg/kg	5.	015501300
Mercury	< 0.10	mg/kg	0.1	015901300
Nickel	< 4.0	mg/kg	4.	016101300
Selenium	< 0.50	mg/kg	0.5	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	10.3	mg/kg	2.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.050	mg/kg	0.05	023701300
Dioxin Screen	< 3.0	mg/kg	3.	038201300
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.83	mg/kg	0.1	043401300
Purgables Method # 624		attached		052001300
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Environmental & Environmental Testing

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601, 888-[illegible] (717) 656-2301

LL Sample No. SW 1260358

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 5.	mg/kg	5.	060900000N
Beta BHC	< 5.	mg/kg	5.	061000000N
Gamma BHC - Lindane	< 5.	mg/kg	5.	045300000N
Delta BHC	< 5.	mg/kg	5.	061200000N
Heptachlor	< 5.	mg/kg	5.	045400000N
Aldrin	< 5.	mg/kg	5.	045500000N
Heptachlor Epoxide	< 5.	mg/kg	5.	061500000N
DDE	< 5.	mg/kg	5.	061600000N
DDD	< 5.	mg/kg	5.	061700000N
DDT	< 5.	mg/kg	5.	047800000N
Dieldrin	< 1.	mg/kg	1.	046900000N
Endrin	< 20.	mg/kg	20.	047700000N
Chlordane	< 50.	mg/kg	50.	062500000N
Toxaphene	< 50.	mg/kg	50.	062600000N
Endosulfan I	< 1.	mg/kg	1.	062700000N
Endosulfan II	< 1.	mg/kg	1.	062800000N
Endosulfan Sulfate	< 5.	mg/kg	5.	062900000N
Endrin Aldehyde	< 20.	mg/kg	20.	063800000N
PCB-1016	< 100.	mg/kg	100.	063900000N
PCB-1221	< 100.	mg/kg	100.	064000000N
PCB-1232	< 100.	mg/kg	100.	064100000N
PCB-1242	< 100.	mg/kg	100.	064200000N
PCB-1248	< 100.	mg/kg	100.	064300000N
PCB-1254	< 100.	mg/kg	100.	064400000N
PCB-1260	< 100.	mg/kg	100.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LL# Sample No. SV 1260358

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 5.0	mg/kg	5.	060900000N
Beta BHC	< 5.0	mg/kg	5.	061000000N
Gamma BHC - Lindane	< 5.0	mg/kg	5.	045300000N
Delta BHC	< 5.0	mg/kg	5.	061200000N
Heptachlor	< 5.0	mg/kg	5.	045400000N
Aldrin	< 5.0	mg/kg	5.	045500000N
Heptachlor Epoxide	< 5.0	mg/kg	5.	061500000N
DDE	< 5.0	mg/kg	5.	061600000N
DDD	< 5.0	mg/kg	5.	061700000N
DDT	< 5.0	mg/kg	5.	047800000N
Dieldrin	< 1.0	mg/kg	1.	046900000N
Endrin	< 20.	mg/kg	20.	047700000N
Chlordane	< 50.	mg/kg	50.	062500000N
Toxaphene	< 50.	mg/kg	50.	062600000N
Endosulfan I	< 1.0	mg/kg	1.	062700000N
Endosulfan II	< 1.0	mg/kg	1.	062800000N
Endosulfan Sulfate	< 5.0	mg/kg	5.	062900000N
Endrin Aldehyde	< 20.	mg/kg	20.	063800000N
PCB-1016	< 100.	mg/kg	100.	063900000N
PCB-1221	< 100.	mg/kg	100.	064000000N
PCB-1232	< 100.	mg/kg	100.	064100000N
PCB-1242	< 100.	mg/kg	100.	064200000N
PCB-1248	< 100.	mg/kg	100.	064300000N
PCB-1254	< 100.	mg/kg	100.	064400000N
PCB-1260	< 100.	mg/kg	100.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

Lab Sample No. SV 1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ORIGINAL (Red)

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 20,000.	ug/kg	20000.	082700000N
Bromomethane	< 20,000.	ug/kg	20000.	082800000N
Vinyl Chloride	< 20,000.	ug/kg	20000.	082900000N
Chloroethane	< 20,000.	ug/kg	20000.	083000000N
Acrolein	< 200,000.	ug/kg	200000.	082400000N
Acrylonitrile	< 200,000.	ug/kg	200000.	082500000N
Methylene Chloride	< 10,000.	ug/kg	10000.	083100000N
Trichlorofluoromethane	< 10,000.	ug/kg	10000.	079000000N
1,1-Dichloroethene	< 10,000.	ug/kg	10000.	083200000N
1,1-Dichloroethane	< 10,000.	ug/kg	10000.	083300000N
trans-1,2-Dichloroethene	< 10,000.	ug/kg	10000.	083400000N
Chloroform	< 10,000.	ug/kg	10000.	083500000N
1,2-Dichloroethane	< 10,000.	ug/kg	10000.	083600000N
1,1,1-Trichloroethane	< 10,000.	ug/kg	10000.	083700000N
Carbon Tetrachloride	< 10,000.	ug/kg	10000.	083800000N
Bromodichloromethane	< 10,000.	ug/kg	10000.	083900000N
1,1,2,2-Tetrachloroethane	< 10,000.	ug/kg	10000.	084900000N
1,2-Dichloropropane	< 10,000.	ug/kg	10000.	084000000N
trans-1,3-Dichloropropene	< 10,000.	ug/kg	10000.	084100000N
Trichloroethene	< 10,000.	ug/kg	10000.	084200000N
Dibromochloromethane	< 10,000.	ug/kg	10000.	084600000N
1,1,2-Trichloroethane	< 10,000.	ug/kg	10000.	084500000N
Benzene	< 10,000.	ug/kg	10000.	084300000N
cis-1,3-Dichloropropene	< 10,000.	ug/kg	10000.	084400000N
2-Chloroethylvinyl ether	< 20,000.	ug/kg	20000.	082600000N
Bromoform	< 10,000.	ug/kg	10000.	084700000N
Tetrachloroethene	< 10,000.	ug/kg	10000.	084800000N
Toluene	< 10,000.	ug/kg	10000.	085000000N
Chlorobenzene	< 10,000.	ug/kg	10000.	085100000N
Ethylbenzene	< 10,000.	ug/kg	10000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AR10442

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

Lab Sample No. SW 1260358

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 20,000.	ug/kg	20000.	082700000N
Bromomethane	< 20,000.	ug/kg	20000.	082800000N
Vinyl Chloride	< 20,000.	ug/kg	20000.	082900000N
Chloroethane	< 20,000.	ug/kg	20000.	083000000N
Acrolein	< 200,000.	ug/kg	200000.	082400000N
Acrylonitrile	< 200,000.	ug/kg	200000.	082500000N
Methylene Chloride	< 10,000.	ug/kg	10000.	083100000N
Trichlorofluoromethane	< 10,000.	ug/kg	10000.	079000000N
1,1-Dichloroethene	< 10,000.	ug/kg	10000.	083200000N
1,1-Dichloroethane	< 10,000.	ug/kg	10000.	083300000N
trans-1,2-Dichloroethene	< 10,000.	ug/kg	10000.	083400000N
Chloroform	< 10,000.	ug/kg	10000.	083500000N
1,2-Dichloroethane	< 10,000.	ug/kg	10000.	083600000N
1,1,1-Trichloroethane	< 10,000.	ug/kg	10000.	083700000N
Carbon Tetrachloride	< 10,000.	ug/kg	10000.	083800000N
Bromodichloromethane	< 10,000.	ug/kg	10000.	083900000N
1,1,2,2-Tetrachloroethane	< 10,000.	ug/kg	10000.	084900000N
1,2-Dichloropropane	< 10,000.	ug/kg	10000.	084000000N
trans-1,3-Dichloropropene	< 10,000.	ug/kg	10000.	084100000N
Trichloroethene	< 10,000.	ug/kg	10000.	084200000N
Dibromochloromethane	< 10,000.	ug/kg	10000.	084600000N
1,1,2-Trichloroethane	< 10,000.	ug/kg	10000.	084500000N
Benzene	< 10,000.	ug/kg	10000.	084300000N
cis-1,3-Dichloropropene	< 10,000.	ug/kg	10000.	084400000N
2-Chloroethylvinyl ether	< 20,000.	ug/kg	20000.	082600000N
Bromoform	< 10,000.	ug/kg	10000.	084700000N
Tetrachloroethene	< 10,000.	ug/kg	10000.	084800000N
Toluene	< 10,000.	ug/kg	10000.	085000000N
Chlorobenzene	< 10,000.	ug/kg	10000.	085100000N
Ethylbenzene	< 10,000.	ug/kg	10000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100443

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

LL Sample No. SV-1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 500.	mg/kg	500.	064600000N
phenol	< 500.	mg/kg	500.	065500000N
2-nitrophenol	< 500.	mg/kg	500.	065100000N
2,4-dimethylphenol	< 500.	mg/kg	500.	064800000N
2,4-dichlorophenol	< 500.	mg/kg	500.	064700000N
4-chloro-3-methylphenol	< 500.	mg/kg	500.	065300000N
2,4,6-trichlorophenol	< 500.	mg/kg	500.	065600000N
2,4-dinitrophenol	< 1,250.	mg/kg	1250.	065000000N
4-nitrophenol	< 1,250.	mg/kg	1250.	065200000N
2-methyl-4,6-dinitrophenol	< 1,250.	mg/kg	1250.	064900000N
pentachlorophenol	< 1,250.	mg/kg	1250.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100444

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 • (717) 656-2301

Lab Sample No. SY 1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 500.	mg/kg	500.	064600000N
phenol	< 500.	mg/kg	500.	065500000N
2-nitrophenol	< 500.	mg/kg	500.	065100000N
2,4-dimethylphenol	< 500.	mg/kg	500.	064800000N
2,4-dichlorophenol	< 500.	mg/kg	500.	064700000N
4-chloro-3-methylphenol	< 500.	mg/kg	500.	065300000N
2,4,6-trichlorophenol	< 500.	mg/kg	500.	065600000N
2,4-dinitrophenol	< 1,000.	mg/kg	1000.	065000000N
4-nitrophenol	< 1,000.	mg/kg	1000.	065200000N
2-methyl-4,6-dinitrophenol	< 1,000.	mg/kg	1000.	064900000N
pentachlorophenol	< 1,000.	mg/kg	1000.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AP-0045

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

Lancaster, PA 17601-5994 (717) 656-2301

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127·05
Rel.

ORIGINAL (Red)

D·22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N·nitrosodimethylamine	< 500.	mg/kg	500.	069700000N
bis (2·chloroethyl) ether	< 500.	mg/kg	500.	066700000N
1,3·dichlorobenzene	< 500.	mg/kg	500.	067700000N
1,4·dichlorobenzene	< 500.	mg/kg	500.	067800000N
1,2·dichlorobenzene	< 500.	mg/kg	500.	067600000N
bis (2·chloroisopropyl) ether	< 500.	mg/kg	500.	066800000N
hexachloroethane	< 500.	mg/kg	500.	069200000N
N·nitrosodi·n·propylamine	< 500.	mg/kg	500.	069800000N
nitrobenzene	< 500.	mg/kg	500.	069600000N
isophorone	< 500.	mg/kg	500.	069400000N
bis (2·chloroethoxy) methane	< 500.	mg/kg	500.	066600000N
1,2,4·trichlorobenzene	< 500.	mg/kg	500.	070200000N
naphthalene	< 500.	mg/kg	500.	069500000N
hexachlorobutadiene	< 500.	mg/kg	500.	069000000N
hexachlorocyclopentadiene	< 500.	mg/kg	500.	069100000N
2·chloronaphthalene	< 500.	mg/kg	500.	067200000N
acenaphthylene	< 500.	mg/kg	500.	065800000N
dimethyl phthalate	< 500.	mg/kg	500.	068100000N
2,6·dinitrotoluene	< 500.	mg/kg	500.	068400000N
acenaphthene	< 500.	mg/kg	500.	065700000N
2,4·dinitrotoluene	< 500.	mg/kg	500.	068300000N
fluorene	< 500.	mg/kg	500.	068800000N
4·chlorophenyl phenyl ether	< 500.	mg/kg	500.	067300000N
diethyl phthalate	< 500.	mg/kg	500.	068000000N
1,2·diphenylhydrazine	< 500.	mg/kg	500.	068600000N
N·nitrosodiphenylamine	630.	mg/kg	50.	069900000N
4·bromophenyl phenyl ether	< 500.	mg/kg	500.	067000000N
hexachlorobenzene	< 500.	mg/kg	500.	068900000N
phenanthrene	< 500.	mg/kg	500.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved

AR400446

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260358

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 500.	mg/kg	500.	069700000N
bis (2-chloroethyl) ether	< 500.	mg/kg	500.	066700000N
1,3-dichlorobenzene	< 500.	mg/kg	500.	067700000N
1,4-dichlorobenzene	< 500.	mg/kg	500.	067800000N
1,2-dichlorobenzene	< 500.	mg/kg	500.	067600000N
bis (2-chloroisopropyl) ether	< 500.	mg/kg	500.	066800000N
hexachloroethane	< 500.	mg/kg	500.	069200000N
N-nitrosodi-n-propylamine	< 500.	mg/kg	500.	069800000N
nitrobenzene	< 500.	mg/kg	500.	069600000N
isophorone	< 500.	mg/kg	500.	069400000N
bis (2-chloroethoxy) methane	< 500.	mg/kg	500.	066600000N
1,2,4-trichlorobenzene	< 500.	mg/kg	500.	070200000N
naphthalene	< 500.	mg/kg	500.	069[illegible]000N
hexachlorobutadiene	< 500.	mg/kg	500.	069[illegible]000
hexachlorocyclopentadiene	< 500.	mg/kg	500.	069[illegible]00000
2-chloronaphthalene	< 500.	mg/kg	500.	067200000N
acenaphthylene	< 500.	mg/kg	500.	065800000N
dimethyl phthalate	< 500.	mg/kg	500.	068100000N
2,6-dinitrotoluene	< 500.	mg/kg	500.	068400000N
acenaphthene	< 500.	mg/kg	500.	065700000N
2,4-dinitrotoluene	< 500.	mg/kg	500.	068300000N
fluorene	< 500.	mg/kg	500.	068800000N
4-chlorophenyl phenyl ether	< 500.	mg/kg	500.	067300000N
diethyl phthalate	< 500.	mg/kg	500.	068000000N
1,2-diphenylhydrazine	< 500.	mg/kg	500.	068600000N
N-nitrosodiphenylamine	651.	mg/kg	50.	069900000N
4-bromophenyl phenyl ether	< 500.	mg/kg	500.	067000000N
hexachlorobenzene	< 500.	mg/kg	500.	068900000N
phenanthrene	< 500.	mg/kg	500.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Fields of Testing)

Member American Council of Independent Laboratories Inc.

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ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260358

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 500.	mg/kg	500.	065900000N
di-n-butyl phthalate	< 500.	mg/kg	500.	068200000N
fluoranthene	< 500.	mg/kg	500.	068700000N
pyrene	< 500.	mg/kg	500.	070100000N
benzidine	< 1,250.	mg/kg	1250.	066000000N
butyl benzyl phthalate	< 500.	mg/kg	500.	067100000N
benzo (a) anthracene	< 500.	mg/kg	500.	066100000N
chrysene	< 500.	mg/kg	500.	067400000N
3,3'-dichlorobenzidine	< 1,250.	mg/kg	1250.	067900000N
bis (2-ethylhexyl) phthalate	< 500.	mg/kg	500.	066900000N
di-n-octyl phthalate	< 500.	mg/kg	500.	068500000N
benzo (b) fluoranthene	< 500.	mg/kg	500.	066300000N
benzo (K) fluoranthene	< 500.	mg/kg	500.	066500000N
benzo (a) pyrene	< 500.	mg/kg	500.	066200000N
indeno (1,2,3-cd) pyrene	< 500.	mg/kg	500.	069300000N
dibenzo (a,h) anthracene	< 500.	mg/kg	500.	067500000N
benzo (ghi) perylene	< 500.	mg/kg	500.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

A170448

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 • (717) 656-2301

LL Sample No. SW 1260358

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-22 Solid From Drum Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDH

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 500.	mg/kg	500.	065900000N
di-n-butyl phthalate	< 500.	mg/kg	500.	068200000N
fluoranthene	< 500.	mg/kg	500.	068700000N
pyrene	< 500.	mg/kg	500.	070100000N
benzidine	< 1,000.	mg/kg	1000.	066000000N
butyl benzyl phthalate	< 500.	mg/kg	500.	067100000N
benzo (a) anthracene	< 500.	mg/kg	500.	066100000N
chrysene	< 500.	mg/kg	500.	067400000N
3,3'-dichlorobenzidine	< 1,000.	mg/kg	1000.	067900000N
bis (2-ethylhexyl) phthalate	< 500.	mg/kg	500.	066900000N
di-n-octyl phthalate	< 500.	mg/kg	500.	068500000N
benzo (b) fluoranthene	< 500.	mg/kg	500.	066300000N
benzo (K) fluoranthene	< 500.	mg/kg	500.	066500000N
benzo (a) pyrene	< 500.	mg/kg	500.	066200000N
indeno (1,2,3-cd) pyrene	< 500.	mg/kg	500.	069300000N
dibenzo (a,h) anthracene	< 500.	mg/kg	500.	067500000N
benzo (ghi) perylene	< 500.	mg/kg	500.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100449

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

[illegible]

LLI Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	12.5	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	3.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	9.	mg/kg	5.	015101300
Copper	11.	mg/kg	2.	015301300
Lead	< 5.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	8.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	13.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.8	mg/kg	0.8	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	1.7	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

AR100450

Richard S. Rodgers, B.S.
Group Leader, GC/MS

146 02913 110.00 150000

American Association for Laboratory Accreditation Biologics & Environmental Testing.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

LLI Sample No.: SV 1260351

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT.	BASIS	LIMIT OF DETECTION	LAB CODE
Antimony	< 6.0	mg/kg	6.	014402500
Arsenic	3.4	mg/kg	1.	014503300
Beryllium	< 0.60	mg/kg	0.6	014703300
Cadmium	< 0.60	mg/kg	0.6	014901300
Chromium	10.3	mg/kg	6.	015101300
Copper	12.6	mg/kg	2.	015301300
Lead	< 6.0	mg/kg	6.	015501300
Mercury	< 0.10	mg/kg	0.1	015901300
Nickel	9.1	mg/kg	5.	016101300
Selenium	< 0.60	mg/kg	0.6	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	14.9	mg/kg	2.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.060	mg/kg	0.06	0237013[illegible]
Dioxin Screen	< 0.90	mg/kg	0.9	03821600
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	1.94	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052523000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100451

The American Association for Laboratory Accreditation
Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

125 Nevin Avenue, P.O. Box 12425, Lancaster, PA 17603 (717) 656-2301

Lab Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 1.	mg/kg	1.	060900000N
Beta BHC	< 1.	mg/kg	1.	061000000N
Gamma BHC - Lindane	< 1.	mg/kg	1.	045300000N
Delta BHC	< 1.	mg/kg	1.	061200000N
Heptachlor	< 2.	mg/kg	2.	045400000N
Aldrin	< 1.	mg/kg	1.	045500000N
Heptachlor Epoxide	< 1.	mg/kg	1.	061500000N
DDE	< 1.	mg/kg	1.	061600000N
DDD	< 0.2	mg/kg	0.2	061700000N
DDT	< 0.2	mg/kg	0.2	047800000N
Dieldrin	< 0.5	mg/kg	0.5	046900000N
Endrin	< 0.5	mg/kg	0.5	047700000N
Chlordane	< 1.	mg/kg	1.	062500000N
Toxaphene	< 2.	mg/kg	2.	062600000N
Endosulfan I	< 1.	mg/kg	1.	062700000N
Endosulfan II	< 0.5	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 1.	mg/kg	1.	062900000N
Endrin Aldehyde	< 5.	mg/kg	5.	063800000N
PCB-1016	< 20.	mg/kg	20.	063900000N
PCB-1221	< 20.	mg/kg	20.	064000000N
PCB-1232	< 20.	mg/kg	20.	064100000N
PCB-1242	< 20.	mg/kg	20.	064200000N
PCB-1248	< 20.	mg/kg	20.	064300000N
PCB-1254	< 5.	mg/kg	5.	064400000N
PCB-1260	< 5.	mg/kg	5.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation (Chemical, Biological & Environmental fields of testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

AR100452

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 1.0	mg/kg	1.	060900000N
Beta BHC	< 1.0	mg/kg	1.	061000000N
Gamma BHC - Lindane	< 1.0	mg/kg	1.	045300000N
Delta BHC	< 1.0	mg/kg	1.	061200000N
Heptachlor	< 2.0	mg/kg	2.	045400000N
Aldrin	< 1.0	mg/kg	1.	045500000N
Heptachlor Epoxide	< 1.0	mg/kg	1.	061500000N
DDE	< 1.0	mg/kg	1.	061600000N
DDD	< 0.20	mg/kg	0.2	061700000N
DDT	< 0.20	mg/kg	0.2	047800000N
Dieldrin	< 0.60	mg/kg	0.6	046900000N
Endrin	< 0.60	mg/kg	0.6	047700000N
Chlordane	< 1.0	mg/kg	1.	062500000N
Toxaphene	< 2.0	mg/kg	2.	062600000
Endosulfan I	< 1.0	mg/kg	1.	062700000
Endosulfan II	< 0.60	mg/kg	0.6	062800000N
Endosulfan Sulfate	< 1.0	mg/kg	1.	062900000N
Endrin Aldehyde	< 6.0	mg/kg	6.	063800000N
PCB-1016	< 20.	mg/kg	20.	063900000N
PCB-1221	< 20.	mg/kg	20.	064000000N
PCB-1232	< 20.	mg/kg	20.	064100000N
PCB-1242	< 20.	mg/kg	20.	064200000N
PCB-1248	< 20.	mg/kg	20.	064300000N
PCB-1254	< 6.0	mg/kg	6.	064400000N
PCB-1260	< 6.0	mg/kg	6.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

ARI 00453

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mber American Council of
ependent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 10,000.	ug/kg	10000.	082700000N
Bromomethane	< 10,000.	ug/kg	10000.	082800000N
Vinyl Chloride	< 10,000.	ug/kg	10000.	082900000N
Chloroethane	< 10,000.	ug/kg	10000.	083000000N
Acrolein	< 100,000.	ug/kg	100000.	082400000N
Acrylonitrile	< 100,000.	ug/kg	100000.	082500000N
Methylene Chloride	< 5,000.	ug/kg	5000.	083100000N
Trichlorofluoromethane	< 5,000.	ug/kg	5000.	079000000N
1,1-Dichloroethene	< 5,000.	ug/kg	5000.	083200000N
1,1-Dichloroethane	< 5,000.	ug/kg	5000.	083300000N
trans-1,2-Dichloroethene	< 5,000.	ug/kg	5000.	083400000N
Chloroform	< 5,000.	ug/kg	5000.	083500000N
1,2-Dichloroethane	< 5,000.	ug/kg	5000.	083600000N
1,1,1-Trichloroethane	< 5,000.	ug/kg	5000.	083700000N
Carbon Tetrachloride	< 5,000.	ug/kg	5000.	083800000N
Bromodichloromethane	< 5,000.	ug/kg	5000.	083900000N
1,1,2,2-Tetrachloroethane	< 5,000.	ug/kg	5000.	084900000N
1,2-Dichloropropane	< 5,000.	ug/kg	5000.	084000000N
trans-1,3-Dichloropropene	< 5,000.	ug/kg	5000.	084100000N
Trichloroethene	< 5,000.	ug/kg	5000.	084200000N
Dibromochloromethane	< 5,000.	ug/kg	5000.	084600000N
1,1,2-Trichloroethane	< 5,000.	ug/kg	5000.	084500000N
Benzene	< 5,000.	ug/kg	5000.	084300000N
cis-1,3-Dichloropropene	< 5,000.	ug/kg	5000.	084400000N
2-Chloroethylvinyl ether	< 10,000.	ug/kg	10000.	082600000N
Bromoform	< 5,000.	ug/kg	5000.	084700000N
Tetrachloroethene	< 5,000.	ug/kg	5000.	084800000N
Toluene	< 5,000.	ug/kg	5000.	085000000N
Chlorobenzene	< 5,000.	ug/kg	5000.	085100000N
Ethylbenzene	< 5,000.	ug/kg	5000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

ART0454

American Association for Laboratory Accreditation
Chem., Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 10,000.	ug/kg	10000.	082700000N
Bromomethane	< 10,000.	ug/kg	10000.	082800000N
Vinyl Chloride	< 10,000.	ug/kg	10000.	082900000N
Chloroethane	< 10,000.	ug/kg	10000.	083000000N
Acrolein	< 100,000.	ug/kg	100000.	082400000N
Acrylonitrile	< 100,000.	ug/kg	100000.	082500000N
Methylene Chloride	< 6,000.	ug/kg	6000.	083100000N
Trichlorofluoromethane	< 6,000.	ug/kg	6000.	079000000N
1,1-Dichloroethene	< 6,000.	ug/kg	6000.	083200000N
1,1-Dichloroethane	< 6,000.	ug/kg	6000.	083300000N
trans-1,2-Dichloroethene	< 6,000.	ug/kg	6000.	083400000N
Chloroform	< 6,000.	ug/kg	6000.	083500000N
1,2-Dichloroethane	< 6,000.	ug/kg	6000.	083600000N
1,1,1-Trichloroethane	< 6,000.	ug/kg	6000.	083700000
Carbon Tetrachloride	< 6,000.	ug/kg	6000.	08380000
Bromodichloromethane	< 6,000.	ug/kg	6000.	083900000N
1,1,2,2-Tetrachloroethane	< 6,000.	ug/kg	6000.	084900000N
1,2-Dichloropropane	< 6,000.	ug/kg	6000.	084000000N
trans-1,3-Dichloropropene	< 6,000.	ug/kg	6000.	084100000N
Trichloroethene	< 6,000.	ug/kg	6000.	084200000N
Dibromochloromethane	< 6,000.	ug/kg	6000.	084600000N
1,1,2-Trichloroethane	< 6,000.	ug/kg	6000.	084500000N
Benzene	< 6,000.	ug/kg	6000.	084300000N
cis-1,3-Dichloropropene	< 6,000.	ug/kg	6000.	084400000N
2-Chloroethylvinyl ether	< 10,000.	ug/kg	10000.	082600000N
Bromoform	< 6,000.	ug/kg	6000.	084700000N
Tetrachloroethene	< 6,000.	ug/kg	6000.	084800000N
Toluene	< 6,000.	ug/kg	6000.	085000000N
Chlorobenzene	< 6,000.	ug/kg	6000.	085100000N
Ethylbenzene	< 6,000.	ug/kg	6000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AR109455

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Fields of Testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

715 New Holland Rd. Lancaster, PA 17601 (717) 656-2301

LLT Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 17.	mg/kg	17.	064600000N
phenol	< 17.	mg/kg	17.	065500000N
2-nitrophenol	< 17.	mg/kg	17.	065100000N
2,4-dimethylphenol	< 17.	mg/kg	17.	064800000N
2,4-dichlorophenol	< 17.	mg/kg	17.	064700000N
4-chloro-3-methylphenol	< 17.	mg/kg	17.	065300000N
2,4,6-trichlorophenol	< 17.	mg/kg	17.	065600000N
2,4-dinitrophenol	< 41.6	mg/kg	41.6	065000000N
4-nitrophenol	< 41.6	mg/kg	41.6	065200000N
2-methyl-4,6-dinitrophenol	< 41.6	mg/kg	41.6	064900000N
pentachlorophenol	< 41.6	mg/kg	41.6	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2120 Nevin Holland Pike, Lancaster, PA 17601 (717) 656-2301

ILT Sample No. SW 1260551

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 20.	mg/kg	20.	064600000N
phenol	< 20.	mg/kg	20.	065500000N
2-nitrophenol	< 20.	mg/kg	20.	065100000N
2,4-dimethylphenol	< 20.	mg/kg	20.	064800000N
2,4-dichlorophenol	< 20.	mg/kg	20.	064700000N
4-chloro-3-methylphenol	< 20.	mg/kg	20.	065300000N
2,4,6-trichlorophenol	< 20.	mg/kg	20.	065600000N
2,4-dinitrophenol	< 50.	mg/kg	50.	065000000N
4-nitrophenol	< 50.	mg/kg	50.	065200000N
2-methyl-4,6-dinitrophenol	< 50.	mg/kg	50.	064900000N
pentachlorophenol	< 50.	mg/kg	50.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100457

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LL# Sample No. SW 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 17.	mg/kg	17.	069700000N
bis (2-chloroethyl) ether	< 17.	mg/kg	17.	066700000N
1,3-dichlorobenzene	< 17.	mg/kg	17.	067700000N
1,4-dichlorobenzene	< 17.	mg/kg	17.	067800000N
1,2-dichlorobenzene	< 17.	mg/kg	17.	067600000N
bis (2-chloroisopropyl) ether	< 17.	mg/kg	17.	066800000N
hexachloroethane	< 17.	mg/kg	17.	069200000N
N-nitrosodi-n-propylamine	266.	mg/kg	17.	069800000N
nitrobenzene	< 17.	mg/kg	17.	069600000N
isophorone	< 17.	mg/kg	17.	069400000N
bis (2-chloroethoxy) methane	< 17.	mg/kg	17.	066600000N
1,2,4-trichlorobenzene	< 17.	mg/kg	17.	070200000N
naphthalene	< 17.	mg/kg	17.	069500000N
hexachlorobutadiene	< 17.	mg/kg	17.	069000000N
hexachlorocyclopentadiene	< 17.	mg/kg	17.	069100000N
2-chloronaphthalene	< 17.	mg/kg	17.	067200000N
acenaphthylene	< 17.	mg/kg	17.	065800000N
dimethyl phthalate	< 17.	mg/kg	17.	068100000N
2,6-dinitrotoluene	< 17.	mg/kg	17.	068400000N
acenaphthene	< 17.	mg/kg	17.	065700000N
2,4-dinitrotoluene	< 17.	mg/kg	17.	068300000N
fluorene	< 17.	mg/kg	17.	068800000N
4-chlorophenyl phenyl ether	< 17.	mg/kg	17.	067300000N
diethyl phthalate	< 17.	mg/kg	17.	068000000N
1,2-diphenylhydrazine	< 17.	mg/kg	17.	068600000N
N-nitrosodiphenylamine	< 17.	mg/kg	17.	069900000N
4-bromophenyl phenyl ether	< 17.	mg/kg	17.	067000000N
hexachlorobenzene	< 17.	mg/kg	17.	068900000N
phenanthrene	< 17.	mg/kg	17.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100458

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SV 1260351

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Base Neutrals				
N-nitrosodimethylamine	< 20.	mg/kg	20.	069700000N
bis (2-chloroethyl) ether	< 20.	mg/kg	20.	066700000N
1,3-dichlorobenzene	< 20.	mg/kg	20.	067700000N
1,4-dichlorobenzene	< 20.	mg/kg	20.	067800000N
1,2-dichlorobenzene	< 20.	mg/kg	20.	067600000N
bis (2-chloroisopropyl) ether	< 20.	mg/kg	20.	066800000N
hexachloroethane	< 20.	mg/kg	20.	069200000N
N-nitrosodi-n-propylamine	304.	mg/kg	20.	069800000N
nitrobenzene	< 20.	mg/kg	20.	069600000N
isophorone	< 20.	mg/kg	20.	069400000N
bis (2-chloroethoxy) methane	< 20.	mg/kg	20.	066600000N
1,2,4-trichlorobenzene	< 20.	mg/kg	20.	070200000N
naphthalene	< 20.	mg/kg	20.	069500000N
hexachlorobutadiene	< 20.	mg/kg	20.	06900000[illegible]
hexachlorocyclopentadiene	< 20.	mg/kg	20.	06910000[illegible]
2-chloronaphthalene	< 20.	mg/kg	20.	067200000N
acenaphthylene	< 20.	mg/kg	20.	065800000N
dimethyl phthalate	< 20.	mg/kg	20.	068100000N
2,6-dinitrotoluene	< 20.	mg/kg	20.	068400000N
acenaphthene	< 20.	mg/kg	20.	065700000N
2,4-dinitrotoluene	< 20.	mg/kg	20.	068300000N
fluorene	< 20.	mg/kg	20.	068800000N
4-chlorophenyl phenyl ether	< 20.	mg/kg	20.	067300000N
diethyl phthalate	< 20.	mg/kg	20.	068000000N
1,2-diphenylhydrazine	< 20.	mg/kg	20.	068600000N
N-nitrosodiphenylamine	< 20.	mg/kg	20.	069900000N
4-bromophenyl phenyl ether	< 20.	mg/kg	20.	067000000N
hexachlorobenzene	< 20.	mg/kg	20.	068900000N
phenanthrene	< 20.	mg/kg	20.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100459

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LLT Sample No.: SV 1260351

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 17.	mg/kg	17.	065900000N
di-n-butyl phthalate	< 17.	mg/kg	17.	068200000N
fluoranthene	< 17.	mg/kg	17.	068700000N
pyrene	< 17.	mg/kg	17.	070100000N
benzidine	< 41.6	mg/kg	41.6	066000000N
butyl benzyl phthalate	< 17.	mg/kg	17.	067100000N
benzo (a) anthracene	< 17.	mg/kg	17.	066100000N
chrysene	< 17.	mg/kg	17.	067400000N
3,3'-dichlorobenzidine	< 41.6	mg/kg	41.6	067900000N
bis (2-ethylhexyl) phthalate	< 17.	mg/kg	17.	066900000N
di-n-octyl phthalate	< 17.	mg/kg	17.	068500000N
benzo (b) fluoranthene	< 17.	mg/kg	17.	066300000N
benzo (K) fluoranthene	< 17.	mg/kg	17.	066500000N
benzo (a) pyrene	< 17.	mg/kg	17.	066200000N
indeno (1,2,3-cd) pyrene	< 17.	mg/kg	17.	069300000N
dibenzo (a,h) anthracene	< 17.	mg/kg	17.	067500000N
benzo (ghi) perylene	< 17.	mg/kg	17.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100460

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Biological & Environmental Testing

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Road, P.O. Box 12425, Lancaster, PA 17601-5994 • (717) 656-2301

LLT Sample No. SV 1260351

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA. 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-31 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Base Neutrals (cont)				
anthracene	< 20.	mg/kg	20.	065900000N
di-n-butyl phthalate	< 20.	mg/kg	20.	068200000N
fluoranthene	< 20.	mg/kg	20.	068700000N
pyrene	< 20.	mg/kg	20.	070100000N
benzidine	< 50.	mg/kg	50.	066000000N
butyl benzyl phthalate	< 20.	mg/kg	20.	067100000N
benzo (a) anthracene	< 20.	mg/kg	20.	066100000N
chrysene	< 20.	mg/kg	20.	067400000N
3,3'-dichlorobenzidine	< 50.	mg/kg	50.	067900000N
bis (2-ethylhexyl) phthalate	< 20.	mg/kg	20.	066900000N
di-n-octyl phthalate	< 20.	mg/kg	20.	068500000N
benzo (b) fluoranthene	< 20.	mg/kg	20.	066300000N
benzo (K) fluoranthene	< 20.	mg/kg	20.	066500000N
benzo (a) pyrene	< 20.	mg/kg	20.	06620000[illegible]
indeno (1,2,3-cd) pyrene	< 20.	mg/kg	20.	06930000[illegible]
dibenzo (a,h) anthracene	< 20.	mg/kg	20.	067500000N
benzo (ghi) perylene	< 20.	mg/kg	20.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	1.0	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	< 1.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	< 5.	mg/kg	5.	015101300
Copper	< 2.	mg/kg	2.	015301300
Lead	< 5.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	< 4.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	11.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.4	mg/kg	0.4	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.1	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100462

146 02913 110.00 150000

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

[illegible] NEW HOLLAND PIKE LANCASTER PA 17601 (717) 656-2301 [illegible]

Date Reported [illegible]/88

Charleston, W. VA 25313-1577 Discard Date 7/[illegible]

Collected by CBR

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

P.O. CW127-05
Rel.

ORIGINAL (Red)

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CO
Antimony	< 5.0	mg/kg	5.	0144025
Arsenic	< 1.0	mg/kg	1.	0145033
Beryllium	< 0.50	mg/kg	0.5	0147033
Cadmium	< 0.50	mg/kg	0.5	0149013
Chromium	< 5.0	mg/kg	5.	0151013
Copper	< 2.0	mg/kg	2.	0153013
Lead	< 5.0	mg/kg	5.	0155013
Mercury	< 0.10	mg/kg	0.1	0159013
Nickel	< 4.0	mg/kg	4.	0161013
Selenium	< 0.50	mg/kg	0.5	0164013
Silver	< 1.0	mg/kg	1.	0166013
Zinc	11.1	mg/kg	2.	0172013
Pesticides/PCB's		attached		0178013
Cyanide, Total	< 0.050	mg/kg	0.05	0237013
Dioxin Screen	< 0.40	mg/kg	0.4	0382160
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.10	mg/kg	0.1	043[illegible]
Purgables Method # 624		attached		0520[illegible]
Thallium	< 20.	mg/kg	20.	0525230
Acid Extractables		attached		0552170
Base Neutrals		attached		0553290
Base Neutrals (cont)		attached		0554000
Forensic storage	Complete		0.	0944000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:
Richard S. Rodgers, B.S.
Group Leader, GC/MS

ARI 00463

The American Association for Laboratory Accreditation
Biological fields of testing

Member American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

Lab Sample No. SW-1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 10.	mg/kg	10.	060900000N
Beta BHC	< 10.	mg/kg	10.	061000000N
Gamma BHC - Lindane	< 10.	mg/kg	10.	045300000N
Delta BHC	< 10.	mg/kg	10.	061200000N
Heptachlor	< 10.	mg/kg	10.	045400000N
Aldrin	< 10.	mg/kg	10.	045500000N
Heptachlor Epoxide	< 10.	mg/kg	10.	061500000N
DDE	< 10.	mg/kg	10.	061600000N
DDD	< 10.	mg/kg	10.	061700000N
DDT	< 10.	mg/kg	10.	047800000N
Dieldrin	< 0.5	mg/kg	0.5	046900000N
Endrin	< 0.5	mg/kg	0.5	047700000N
Chlordane	< 50.	mg/kg	50.	062500000N
Toxaphene	< 100.	mg/kg	100.	062600000N
Endosulfan I	< 2.	mg/kg	2.	062700000N
Endosulfan II	< 0.5	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 1.	mg/kg	1.	062900000N
Endrin Aldehyde	< 5.	mg/kg	5.	063800000N
PCB-1016	< 200.	mg/kg	200.	063900000N
PCB-1221	< 200.	mg/kg	200.	064000000N
PCB-1232	< 200.	mg/kg	200.	064100000N
PCB-1242	< 200.	mg/kg	200.	064200000N
PCB-1248	< 200.	mg/kg	200.	064300000N
PCB-1254	< 200.	mg/kg	200.	064400000N
PCB-1260	< 200.	mg/kg	200.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation (Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLT Sample No. SV 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 10.	mg/kg	10.	060900000N
Beta BHC	< 10.	mg/kg	10.	061000000N
Gamma BHC - Lindane	< 10.	mg/kg	10.	045300000N
Delta BHC	< 10.	mg/kg	10.	061200000N
Heptachlor	< 10.	mg/kg	10.	045400000N
Aldrin	< 10.	mg/kg	10.	045500000N
Heptachlor Epoxide	< 10.	mg/kg	10.	061500000N
DDE	< 10.	mg/kg	10.	061600000N
DDD	< 10.	mg/kg	10.	061700000N
DDT	< 10.	mg/kg	10.	047800000N
Dieldrin	< 0.50	mg/kg	0.5	046900000N
Endrin	< 0.50	mg/kg	0.5	047700000N
Chlordane	< 50.	mg/kg	50.	062500000N
Toxaphene	< 100.	mg/kg	100.	062600000N
Endosulfan I	< 2.0	mg/kg	2.	062700000N
Endosulfan II	< 0.50	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 1.0	mg/kg	1.	062900000N
Endrin Aldehyde	< 5.0	mg/kg	5.	063800000N
PCB-1016	< 200.	mg/kg	200.	063900000N
PCB-1221	< 200.	mg/kg	200.	064000000N
PCB-1232	< 200.	mg/kg	200.	064100000N
PCB-1242	< 200.	mg/kg	200.	064200000N
PCB-1248	< 200.	mg/kg	200.	064300000N
PCB-1254	< 200.	mg/kg	200.	064400000N
PCB-1260	< 200.	mg/kg	200.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR 0046

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

The American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	< 500.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	083700000N
Carbon Tetrachloride	< 500.	ug/kg	500.	083800000N
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	< 500.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100466

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No. SW 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	< 500.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	083700000N
Carbon Tetrachloride	< 500.	ug/kg	500.	083800000N
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	< 500.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AR00467

The American Association for Laboratory Accreditation Certified Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

F02123

L.L. Sample No. SW-1260352

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 8.3	mg/kg	8.3	064600000N
phenol	< 8.3	mg/kg	8.3	065500000N
2-nitrophenol	< 8.3	mg/kg	8.3	065100000N
2,4-dimethylphenol	< 8.3	mg/kg	8.3	064800000N
2,4-dichlorophenol	< 8.3	mg/kg	8.3	064700000N
4-chloro-3-methylphenol	< 8.3	mg/kg	8.3	065300000N
2,4,6-trichlorophenol	< 8.3	mg/kg	8.3	065600000N
2,4-dinitrophenol	< 20.	mg/kg	20.8	065000000N
4-nitrophenol	< 20.	mg/kg	20.8	065200000N
2-methyl-4,6-dinitrophenol	< 20.	mg/kg	20.8	064900000N
pentachlorophenol	< 20.	mg/kg	20.8	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR-CD 0468

American Association for Laboratory Accreditation Biological & Environmental Testing

American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

Lab Sample No. SW-1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 8.0	mg/kg	8.	064600000N
phenol	< 8.0	mg/kg	8.	065500000N
2-nitrophenol	< 8.0	mg/kg	8.	065100000N
2,4-dimethylphenol	< 8.0	mg/kg	8.	064800000N
2,4-dichlorophenol	< 8.0	mg/kg	8.	064700000N
4-chloro-3-methylphenol	< 8.0	mg/kg	8.	065300000N
2,4,6-trichlorophenol	< 8.0	mg/kg	8.	065600000N
2,4-dinitrophenol	< 20.	mg/kg	20.	065000000N
4-nitrophenol	< 20.	mg/kg	20.	065200000N
2-methyl-4,6-dinitrophenol	< 20.	mg/kg	20.	064900000N
pentachlorophenol	< 20.	mg/kg	20.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100469

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

New Holland Pike, Lancaster, PA 17601-5994 717/656-2301

F02123 D. 1 44

L.L. Sample No. SV 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 8.3	mg/kg	8.3	069700000N
bis (2-chloroethyl) ether	< 8.3	mg/kg	8.3	066700000N
1,3-dichlorobenzene	< 8.3	mg/kg	8.3	067700000N
1,4-dichlorobenzene	< 8.3	mg/kg	8.3	067800000N
1,2-dichlorobenzene	< 8.3	mg/kg	8.3	067600000N
bis (2-chloroisopropyl) ether	< 8.3	mg/kg	8.3	066800000N
hexachloroethane	< 8.3	mg/kg	8.3	069200000N
N-nitrosodi-n-propylamine	< 8.3	mg/kg	8.3	069800000N
nitrobenzene	< 8.3	mg/kg	8.3	069600000N
isophorone	< 8.3	mg/kg	8.3	069400000N
bis (2-chloroethoxy) methane	< 8.3	mg/kg	8.3	066600000N
1,2,4-trichlorobenzene	< 8.3	mg/kg	8.3	070200000N
naphthalene	< 8.3	mg/kg	8.3	069500000N
hexachlorobutadiene	< 8.3	mg/kg	8.3	069000000N
hexachlorocyclopentadiene	< 8.3	mg/kg	8.3	069100000N
2-chloronaphthalene	< 8.3	mg/kg	8.3	067200000N
acenaphthylene	< 8.3	mg/kg	8.3	065800000N
dimethyl phthalate	< 8.3	mg/kg	8.3	068100000N
2,6-dinitrotoluene	< 8.3	mg/kg	8.3	068400000N
acenaphthene	< 8.3	mg/kg	8.3	065700000N
2,4-dinitrotoluene	< 8.3	mg/kg	8.3	068300000N
fluorene	< 8.3	mg/kg	8.3	068800000N
4-chlorophenyl phenyl ether	< 8.3	mg/kg	8.3	067300000N
diethyl phthalate	< 8.3	mg/kg	8.3	068000000N
1,2-diphenylhydrazine	< 8.3	mg/kg	8.3	068600000N
N-nitrosodiphenylamine	< 8.3	mg/kg	8.3	069900000N
4-bromophenyl phenyl ether	< 8.3	mg/kg	8.3	067000000N
hexachlorobenzene	< 8.3	mg/kg	8.3	068900000N
phenanthrene	< 8.3	mg/kg	8.3	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100470

Respectfully Submitted
Lancaster Laboratories, Inc.
Revieved and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260352

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127·05
Rel.

D·32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N·nitrosodimethylamine	< 8.0	mg/kg	8.	069700000N
bis (2·chloroethyl) ether	< 8.0	mg/kg	8.	066700000N
1,3·dichlorobenzene	< 8.0	mg/kg	8.	067700000N
1,4·dichlorobenzene	< 8.0	mg/kg	8.	067800000N
1,2·dichlorobenzene	< 8.0	mg/kg	8.	067600000N
bis (2·chloroisopropyl) ether	< 8.0	mg/kg	8.	066800000N
hexachloroethane	< 8.0	mg/kg	8.	069200000N
N·nitrosodi·n·propylamine	< 8.0	mg/kg	8.	069800000N
nitrobenzene	< 8.0	mg/kg	8.	069600000N
isophorone	< 8.0	mg/kg	8.	069400000N
bis (2·chloroethoxy) methane	< 8.0	mg/kg	8.	066600000N
1,2,4·trichlorobenzene	< 8.0	mg/kg	8.	070200000N
naphthalene	< 8.0	mg/kg	8.	069500000N
hexachlorobutadiene	< 8.0	mg/kg	8.	069000000N
hexachlorocyclopentadiene	< 8.0	mg/kg	8.	069100000N
2·chloronaphthalene	< 8.0	mg/kg	8.	067200000N
acenaphthylene	< 8.0	mg/kg	8.	065800000N
dimethyl phthalate	< 8.0	mg/kg	8.	068100000N
2,6·dinitrotoluene	< 8.0	mg/kg	8.	068400000N
acenaphthene	< 8.0	mg/kg	8.	065700000N
2,4·dinitrotoluene	< 8.0	mg/kg	8.	068300000N
fluorene	< 8.0	mg/kg	8.	068800000N
4·chlorophenyl phenyl ether	< 8.0	mg/kg	8.	067300000N
diethyl phthalate	< 8.0	mg/kg	8.	068000000N
1,2·diphenylhydrazine	< 8.0	mg/kg	8.	068600000N
N·nitrosodiphenylamine	< 8.0	mg/kg	8.	069900000N
4·bromophenyl phenyl ether	< 8.0	mg/kg	8.	067000000N
hexachlorobenzene	< 8.0	mg/kg	8.	068900000N
phenanthrene	< 8.0	mg/kg	8.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

102123 D 1 44

LL Sample No. SW 1260352

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 8.3	mg/kg	8.3	065900000N
di-n-butyl phthalate	< 8.3	mg/kg	8.3	068200000N
fluoranthene	< 8.3	mg/kg	8.3	068700000N
pyrene	< 8.3	mg/kg	8.3	070100000N
benzidine	< 20.	mg/kg	20.8	066000000N
butyl benzyl phthalate	< 8.3	mg/kg	8.3	067100000N
benzo (a) anthracene	< 8.3	mg/kg	8.3	066100000N
chrysene	< 8.3	mg/kg	8.3	067400000N
3,3'-dichlorobenzidine	< 20.	mg/kg	20.8	067900000N
bis (2-ethylhexyl) phthalate	< 8.3	mg/kg	8.3	066900000N
di-n-octyl phthalate	< 8.3	mg/kg	8.3	068500000N
benzo (b) fluoranthene	< 8.3	mg/kg	8.3	066300000N
benzo (K) fluoranthene	< 8.3	mg/kg	8.3	066500000N
benzo (a) pyrene	< 8.3	mg/kg	8.3	066200000N
indeno (1,2,3-cd) pyrene	< 8.3	mg/kg	8.3	069300000N
dibenzo (a,h) anthracene	< 8.3	mg/kg	8.3	067500000N
benzo (ghi) perylene	< 8.3	mg/kg	8.3	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100472

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Biological & Environmental Testing

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Member American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LL Sample No. SW 1260352

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-32 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 8.0	mg/kg	8.	065900000N
di-n-butyl phthalate	< 8.0	mg/kg	8.	068200000N
fluoranthene	< 8.0	mg/kg	8.	068700000N
pyrene	< 8.0	mg/kg	8.	070100000N
benzidine	< 20.	mg/kg	20.	066000000N
butyl benzyl phthalate	< 8.0	mg/kg	8.	067100000N
benzo (a) anthracene	< 8.0	mg/kg	8.	066100000N
chrysene	< 8.0	mg/kg	8.	067400000N
3,3'-dichlorobenzidine	< 20.	mg/kg	20.	067900000N
bis (2-ethylhexyl) phthalate	< 8.0	mg/kg	8.	066900000N
di-n-octyl phthalate	< 8.0	mg/kg	8.	068500000N
benzo (b) fluoranthene	< 8.0	mg/kg	8.	066300000N
benzo (K) fluoranthene	< 8.0	mg/kg	8.	066500000N
benzo (a) pyrene	< 8.0	mg/kg	8.	066200000
indeno (1,2,3-cd) pyrene	< 8.0	mg/kg	8.	069300000N
dibenzo (a,h) anthracene	< 8.0	mg/kg	8.	067500000N
benzo (ghi) perylene	< 8.0	mg/kg	8.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100473

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

Pennsylvania Association for Laboratory Accreditation in Biological & Environmental Fields of Testing

Member American Council of Independent Laboratories

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLL Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	34.7	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	1.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	1.7	mg/kg	0.5	014901300
Chromium	6.	mg/kg	5.	015101300
Copper	20.	mg/kg	2.	015301300
Lead	6.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	14.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	10,600.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 2.1	mg/kg	2.1	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.7	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100474

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

146 02913 110.00 150000

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 · 589-2431 (717) 656-2301

02123 D 1 44

LL Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT.	BASIS	LIMIT OF DETECTION	LAB CODE
Antimony	< 8.0	mg/kg	8.	014402500
Arsenic	< 2.0	mg/kg	2.	014503300
Beryllium	< 0.80	mg/kg	0.8	014703300
Cadmium	2.60	mg/kg	0.8	014901300
Chromium	9.2	mg/kg	8.	015101300
Copper	30.6	mg/kg	3.	015301300
Lead	9.2	mg/kg	8.	015501300
Mercury	< 0.20	mg/kg	0.2	015903300
Nickel	21.4	mg/kg	6.	016103300
Selenium	< 0.80	mg/kg	0.8	016403300
Silver	< 2.0	mg/kg	2.	016601300
Zinc	16,200.	mg/kg	3.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.080	mg/kg	0.08	023701300
Dioxin Screen	< 3.0	mg/kg	3.	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	1.07	mg/kg	0.2	043404000
Purgables Method # 624		attached		052023000
Thallium	< 30.	mg/kg	30.	052523000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AA 1014475

The American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

F02123 D 1 44

L.L. Sample No. SW-1260353

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 50.	mg/kg	50.	060900000N
Beta BHC	< 50.	mg/kg	50.	061000000N
Gamma BHC · Lindane	< 10.	mg/kg	10.	045300000N
Delta BHC	< 50.	mg/kg	50.	061200000N
Heptachlor	< 50.	mg/kg	50.	045400000N
Aldrin	< 50.	mg/kg	50.	045500000N
Heptachlor Epoxide	< 50.	mg/kg	50.	061500000N
DDE	< 50.	mg/kg	50.	061600000N
DDD	< 50.	mg/kg	50.	061700000N
DDT	< 50.	mg/kg	50.	047800000N
Dieldrin	< 5.	mg/kg	5.	046900000N
Endrin	< 5.	mg/kg	5.	047700000N
Chlordane	< 500.	mg/kg	500.	062500000N
Toxaphene	< 500.	mg/kg	500.	062600000N
Endosulfan I	< 5.	mg/kg	5.	062700000N
Endosulfan II	< 5.	mg/kg	5.	062800000N
Endosulfan Sulfate	< 20.	mg/kg	20.	062900000N
Endrin Aldehyde	< 50.	mg/kg	50.	063800000N
PCB-1016	< 1,000.	mg/kg	1000.	063900000N
PCB-1221	< 1,000.	mg/kg	1000.	064000000N
PCB-1232	< 1,000.	mg/kg	1000.	064100000N
PCB-1242	< 1,000.	mg/kg	1000.	064200000N
PCB-1248	< 1,000.	mg/kg	1000.	064300000N
PCB-1254	< 1,000.	mg/kg	1000.	064400000N
PCB-1260	< 1,000.	mg/kg	1000.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100476

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation
Chemical Biological & Environmental fields of testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

Mailing: Home Office: 1526 Lancaster Pike, Lancaster, PA 17601 (717) 656-2301

LLT Sample No. SW 1260353

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 80.	mg/kg	80.	060900000N
Beta BHC	< 80.	mg/kg	80.	061000000N
Gamma BHC · Lindane	< 20.	mg/kg	20.	045300000N
Delta BHC	< 80.	mg/kg	80.	061200000N
Heptachlor	< 80.	mg/kg	80.	045400000N
Aldrin	< 80.	mg/kg	80.	045500000N
Heptachlor Epoxide	< 80.	mg/kg	80.	061500000N
DDE	< 80.	mg/kg	80.	061600000N
DDD	< 80.	mg/kg	80.	061700000N
DDT	< 80.	mg/kg	80.	047800000N
Dieldrin	< 8.0	mg/kg	8.	046900000N
Endrin	< 8.0	mg/kg	8.	047700000N
Chlordane	< 800.	mg/kg	800.	062500000N
Toxaphene	< 800.	mg/kg	800.	062600000
Endosulfan I	< 8.0	mg/kg	8.	062700000
Endosulfan II	< 8.0	mg/kg	8.	062800000N
Endosulfan Sulfate	< 30.	mg/kg	30.	062900000N
Endrin Aldehyde	< 80.	mg/kg	80.	063800000N
PCB-1016	< 2,000.	mg/kg	2000.	063900000N
PCB-1221	< 2,000.	mg/kg	2000.	064000000N
PCB-1232	< 2,000.	mg/kg	2000.	064100000N
PCB-1242	< 2,000.	mg/kg	2000.	064200000N
PCB-1248	< 2,000.	mg/kg	2000.	064300000N
PCB-1254	< 2,000.	mg/kg	2000.	064400000N
PCB-1260	< 2,000.	mg/kg	2000.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100477

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

The American Association for Laboratory Accreditation
Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

[illegible] Pike, Lancaster, PA [illegible] 717/656-2301

LLT Sample No. SW 1260353

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 10,000.	ug/kg	10000.	082700000N
Bromomethane	< 10,000.	ug/kg	10000.	082800000N
Vinyl Chloride	< 10,000.	ug/kg	10000.	082900000N
Chloroethane	< 10,000.	ug/kg	10000.	083000000N
Acrolein	< 100,000.	ug/kg	100000.	082400000N
Acrylonitrile	< 100,000.	ug/kg	100000.	082500000N
Methylene Chloride	< 5,000.	ug/kg	5000.	083100000N
Trichlorofluoromethane	< 5,000.	ug/kg	5000.	079000000N
1,1-Dichloroethene	< 5,000.	ug/kg	5000.	083200000N
1,1-Dichloroethane	< 5,000.	ug/kg	5000.	083300000N
trans-1,2-Dichloroethene	< 5,000.	ug/kg	5000.	083400000N
Chloroform	< 5,000.	ug/kg	5000.	083500000N
1,2-Dichloroethane	< 5,000.	ug/kg	5000.	083600000N
1,1,1-Trichloroethane	< 5,000.	ug/kg	5000.	083700000N
Carbon Tetrachloride	< 5,000.	ug/kg	5000.	083800000N
Bromodichloromethane	< 5,000.	ug/kg	5000.	083900000N
1,1,2,2-Tetrachloroethane	< 5,000.	ug/kg	5000.	084900000N
1,2-Dichloropropane	< 5,000.	ug/kg	5000.	084000000N
trans-1,3-Dichloropropene	< 5,000.	ug/kg	5000.	084100000N
Trichloroethene	< 5,000.	ug/kg	5000.	084200000N
Dibromochloromethane	< 5,000.	ug/kg	5000.	084600000N
1,1,2-Trichloroethane	< 5,000.	ug/kg	5000.	084500000N
Benzene	< 5,000.	ug/kg	5000.	084300000N
cis-1,3-Dichloropropene	< 5,000.	ug/kg	5000.	084400000N
2-Chloroethylvinyl ether	< 10,000.	ug/kg	10000.	082600000N
Bromoform	< 5,000.	ug/kg	5000.	084700000N
Tetrachloroethene	< 5,000.	ug/kg	5000.	084800000N
Toluene	< 5,000.	ug/kg	5000.	085000000N
Chlorobenzene	< 5,000.	ug/kg	5000.	085100000N
Ethylbenzene	< 5,000.	ug/kg	5000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100478

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDH

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 20,000.	ug/kg	20000.	082700000N
Bromomethane	< 20,000.	ug/kg	20000.	082800000N
Vinyl Chloride	< 20,000.	ug/kg	20000.	082900000N
Chloroethane	< 20,000.	ug/kg	20000.	083000000N
Acrolein	< 200,000.	ug/kg	200000.	082400000N
Acrylonitrile	< 200,000.	ug/kg	200000.	082500000N
Methylene Chloride	< 8,000.	ug/kg	8000.	083100000N
Trichlorofluoromethane	< 8,000.	ug/kg	8000.	079000000N
1,1-Dichloroethene	< 8,000.	ug/kg	8000.	083200000N
1,1-Dichloroethane	< 8,000.	ug/kg	8000.	083300000N
trans-1,2-Dichloroethene	< 8,000.	ug/kg	8000.	083400000N
Chloroform	< 8,000.	ug/kg	8000.	083500000N
1,2-Dichloroethane	< 8,000.	ug/kg	8000.	083600000N
1,1,1-Trichloroethane	< 8,000.	ug/kg	8000.	083700000N
Carbon Tetrachloride	< 8,000.	ug/kg	8000.	083800000
Bromodichloromethane	< 8,000.	ug/kg	8000.	083900000
1,1,2,2-Tetrachloroethane	< 8,000.	ug/kg	8000.	084900000N
1,2-Dichloropropane	< 8,000.	ug/kg	8000.	084000000N
trans-1,3-Dichloropropene	< 8,000.	ug/kg	8000.	084100000N
Trichloroethene	< 8,000.	ug/kg	8000.	084200000N
Dibromochloromethane	< 8,000.	ug/kg	8000.	084600000N
1,1,2-Trichloroethane	< 8,000.	ug/kg	8000.	084500000N
Benzene	< 8,000.	ug/kg	8000.	084300000N
cis-1,3-Dichloropropene	< 8,000.	ug/kg	8000.	084400000N
2-Chloroethylvinyl ether	< 20,000.	ug/kg	20000.	082600000N
Bromoform	< 8,000.	ug/kg	8000.	084700000N
Tetrachloroethene	< 8,000.	ug/kg	8000.	084800000N
Toluene	< 8,000.	ug/kg	8000.	085000000N
Chlorobenzene	< 8,000.	ug/kg	8000.	085100000N
Ethylbenzene	< 8,000.	ug/kg	8000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/HS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA 17603 (717) 656-2301 [illegible]

LL Sample No. SW 1260353

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127·05
Rel.

D·40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2·chlorophenol	< 166.	mg/kg	166.	064600000N
phenol	< 166.	mg/kg	166.	065500000N
2·nitrophenol	< 166.	mg/kg	166.	065100000N
2,4·dimethylphenol	< 166.	mg/kg	166.	064800000N
2,4·dichlorophenol	< 166.	mg/kg	166.	064700000N
4·chloro·3·methylphenol	< 166.	mg/kg	166.	065300000N
2,4,6·trichlorophenol	< 166.	mg/kg	166.	065600000N
2,4·dinitrophenol	< 416.	mg/kg	416.	065000000N
4·nitrophenol	< 416.	mg/kg	416.	065200000N
2·methyl·4,6·dinitrophenol	< 416.	mg/kg	416.	064900000N
pentachlorophenol	< 416.	mg/kg	416.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LL Sample No. SW-1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 300.	mg/kg	300.	064600000N
phenol	< 300.	mg/kg	300.	065500000N
2-nitrophenol	< 300.	mg/kg	300.	065100000N
2,4-dimethylphenol	< 300.	mg/kg	300.	064800000N
2,4-dichlorophenol	< 300.	mg/kg	300.	064700000N
4-chloro-3-methylphenol	< 300.	mg/kg	300.	065300000N
2,4,6-trichlorophenol	< 300.	mg/kg	300.	065600000N
2,4-dinitrophenol	< 600.	mg/kg	600.	065000000N
4-nitrophenol	< 600.	mg/kg	600.	065200000N
2-methyl-4,6-dinitrophenol	< 600.	mg/kg	600.	064900000N
pentachlorophenol	< 600.	mg/kg	600.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100481

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 17601 [illegible] (717) 656-2301 [illegible]

LLL Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 166.	mg/kg	166.	069700000N
bis (2-chloroethyl) ether	< 166.	mg/kg	166.	066700000N
1,3-dichlorobenzene	< 166.	mg/kg	166.	067700000N
1,4-dichlorobenzene	< 166.	mg/kg	166.	067800000N
1,2-dichlorobenzene	< 166.	mg/kg	166.	067600000N
bis (2-chloroisopropyl) ether	< 166.	mg/kg	166.	066800000N
hexachloroethane	< 166.	mg/kg	166.	069200000N
N-nitrosodi-n-propylamine	< 166.	mg/kg	166.	069800000N
nitrobenzene	< 166.	mg/kg	166.	069600000N
isophorone	< 166.	mg/kg	166.	069400000N
bis (2-chloroethoxy) methane	< 166.	mg/kg	166.	066600000N
1,2,4-trichlorobenzene	< 166.	mg/kg	166.	070200000N
naphthalene	< 166.	mg/kg	166.	069500000N
hexachlorobutadiene	< 166.	mg/kg	166.	069000000N
hexachlorocyclopentadiene	< 166.	mg/kg	166.	069100000N
2-chloronaphthalene	< 166.	mg/kg	166.	067200000N
acenaphthylene	< 166.	mg/kg	166.	065800000N
dimethyl phthalate	< 166.	mg/kg	166.	068100000N
2,6-dinitrotoluene	< 166.	mg/kg	166.	068400000N
acenaphthene	< 166.	mg/kg	166.	065700000N
2,4-dinitrotoluene	< 166.	mg/kg	166.	068300000N
fluorene	< 166.	mg/kg	166.	068800000N
4-chlorophenyl phenyl ether	< 166.	mg/kg	166.	067300000N
diethyl phthalate	< 166.	mg/kg	166.	068000000N
1,2-diphenylhydrazine	< 166.	mg/kg	166.	068600000N
N-nitrosodiphenylamine	< 166.	mg/kg	166.	069900000N
4-bromophenyl phenyl ether	< 166.	mg/kg	166.	067000000N
hexachlorobenzene	< 166.	mg/kg	166.	068900000N
phenanthrene	< 166.	mg/kg	166.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100482

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member: American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 300.	mg/kg	300.	069700000N
bis (2-chloroethyl) ether	< 300.	mg/kg	300.	066700000N
1,3-dichlorobenzene	< 300.	mg/kg	300.	067700000N
1,4-dichlorobenzene	< 300.	mg/kg	300.	067800000N
1,2-dichlorobenzene	< 300.	mg/kg	300.	067600000N
bis (2-chloroisopropyl) ether	< 300.	mg/kg	300.	066800000N
hexachloroethane	< 300.	mg/kg	300.	069200000N
N-nitrosodi-n-propylamine	< 300.	mg/kg	300.	069800000N
nitrobenzene	< 300.	mg/kg	300.	069600000N
isophorone	< 300.	mg/kg	300.	069400000N
bis (2-chloroethoxy) methane	< 300.	mg/kg	300.	066600000N
1,2,4-trichlorobenzene	< 300.	mg/kg	300.	070200000N
naphthalene	< 300.	mg/kg	300.	069500000
hexachlorobutadiene	< 300.	mg/kg	300.	06900000
hexachlorocyclopentadiene	< 300.	mg/kg	300.	069100000N
2-chloronaphthalene	< 300.	mg/kg	300.	067200000N
acenaphthylene	< 300.	mg/kg	300.	065800000N
dimethyl phthalate	< 300.	mg/kg	300.	068100000N
2,6-dinitrotoluene	< 300.	mg/kg	300.	068400000N
acenaphthene	< 300.	mg/kg	300.	065700000N
2,4-dinitrotoluene	< 300.	mg/kg	300.	068300000N
fluorene	< 300.	mg/kg	300.	068800000N
4-chlorophenyl phenyl ether	< 300.	mg/kg	300.	067300000N
diethyl phthalate	< 300.	mg/kg	300.	068000000N
1,2-diphenylhydrazine	< 300.	mg/kg	300.	068600000N
N-nitrosodiphenylamine	< 300.	mg/kg	300.	069900000N
4-bromophenyl phenyl ether	< 300.	mg/kg	300.	067000000N
hexachlorobenzene	< 300.	mg/kg	300.	068900000N
phenanthrene	< 300.	mg/kg	300.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (ALA) Biological & Environmental Areas of Testing.

Member American Council of

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 166.	mg/kg	166.	065900000N
di-n-butyl phthalate	< 166.	mg/kg	166.	068200000N
fluoranthene	< 166.	mg/kg	166.	068700000N
pyrene	< 166.	mg/kg	166.	070100000N
benzidine	< 416.	mg/kg	416.	066000000N
butyl benzyl phthalate	< 166.	mg/kg	166.	067100000N
benzo (a) anthracene	< 166.	mg/kg	166.	066100000N
chrysene	< 166.	mg/kg	166.	067400000N
3,3'-dichlorobenzidine	< 416.	mg/kg	416.	067900000N
bis (2-ethylhexyl) phthalate	< 166.	mg/kg	166.	066900000N
di-n-octyl phthalate	< 166.	mg/kg	166.	068500000N
benzo (b) fluoranthene	< 166.	mg/kg	166.	066300000N
benzo (K) fluoranthene	< 166.	mg/kg	166.	066500000N
benzo (a) pyrene	< 166.	mg/kg	166.	066200000N
indeno (1,2,3-cd) pyrene	< 166.	mg/kg	166.	069300000N
dibenzo (a,h) anthracene	< 166.	mg/kg	166.	067500000N
benzo (ghi) perylene	< 166.	mg/kg	166.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100484

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LLL Sample No. SW 1260353

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-40 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Base Neutrals (cont)				
anthracene	< 300.	mg/kg	300.	065900000N
di-n-butyl phthalate	< 300.	mg/kg	300.	068200000N
fluoranthene	< 300.	mg/kg	300.	068700000N
pyrene	< 300.	mg/kg	300.	070100000N
benzidine	< 600.	mg/kg	600.	066000000N
butyl benzyl phthalate	< 300.	mg/kg	300.	067100000N
benzo (a) anthracene	< 300.	mg/kg	300.	066100000N
chrysene	< 300.	mg/kg	300.	067400000N
3,3'-dichlorobenzidine	< 600.	mg/kg	600.	067900000N
bis (2-ethylhexyl) phthalate	< 300.	mg/kg	300.	066900000N
di-n-octyl phthalate	< 300.	mg/kg	300.	068500000N
benzo (b) fluoranthene	< 300.	mg/kg	300.	066300000N
benzo (K) fluoranthene	< 300.	mg/kg	300.	066500000N
benzo (a) pyrene	< 300.	mg/kg	300.	066200000
indeno (1,2,3-cd) pyrene	< 300.	mg/kg	300.	069300000
dibenzo (a,h) anthracene	< 300.	mg/kg	300.	067500000N
benzo (ghi) perylene	< 300.	mg/kg	300.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100485

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

[illegible] PA 17604 [illegible] 656-2301

F02123 D 1 44

LL Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	33.9	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	1.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	6.	mg/kg	5.	015101300
Copper	6.	mg/kg	2.	015301300
Lead	< 5.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	5.	mg/kg	4.	016101300
Selenium	< 2.	mg/kg	2.	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	8.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.4	mg/kg	0.4	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	0.9	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

The reporting limit for selenium was increased due to interference from the sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100486

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Medical, Biological & Environmental Testing

146 02913 110.00 150000

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

Lancaster, Pennsylvania 17604 (717) 656-2301

L.L. Sample No. SV 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Antimony	< 8.0	mg/kg	8.	014402500
Arsenic	< 2.0	mg/kg	2.	014503300
Beryllium	< 0.80	mg/kg	0.8	014703300
Cadmium	< 0.80	mg/kg	0.8	014901300
Chromium	9.1	mg/kg	8.	015101300
Copper	9.1	mg/kg	3.	015301300
Lead	< 8.0	mg/kg	8.	015501300
Mercury	< 0.20	mg/kg	0.2	015901300
Nickel	7.6	mg/kg	6.	016101300
Selenium	< 3.0	mg/kg	3.	016403300
Silver	< 2.0	mg/kg	2.	016601300
Zinc	12.1	mg/kg	3.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.080	mg/kg	0.08	023701300
Dioxin Screen	< 0.60	mg/kg	0.6	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	1.36	mg/kg	0.2	043416000
Purgables Method # 624		attached		052016000
Thallium	< 30.	mg/kg	30.	052516000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

The reporting limit for selenium was increased due to interference from the sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100487

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

Lancaster, Pennsylvania 17604 (717) 656-2301

02123 D 1 44

LL Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 1.	mg/kg	1.	060900000N
Beta BHC	< 1.	mg/kg	1.	061000000N
Gamma BHC - Lindane	< 1.	mg/kg	1.	045300000N
Delta BHC	< 1.	mg/kg	1.	061200000N
Heptachlor	< 1.	mg/kg	1.	045400000N
Aldrin	< 1.	mg/kg	1.	045500000N
Heptachlor Epoxide	< 1.	mg/kg	1.	061500000N
DDE	< 1.	mg/kg	1.	061600000N
DDD	< 1.	mg/kg	1.	061700000N
DDT	< 1.	mg/kg	1.	047800000N
Dieldrin	< 0.5	mg/kg	0.5	046900000N
Endrin	< 0.5	mg/kg	0.5	047700000N
Chlordane	< 5.	mg/kg	5.	062500000N
Toxaphene	< 10.	mg/kg	10.	062600000N
Endosulfan I	< 0.5	mg/kg	0.5	062700000N
Endosulfan II	< 0.5	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 1.	mg/kg	1.	062900000N
Endrin Aldehyde	< 5.	mg/kg	5.	063800000N
PCB-1016	< 20.	mg/kg	20.	063900000N
PCB-1221	< 20.	mg/kg	20.	064000000N
PCB-1232	< 20.	mg/kg	20.	064100000N
PCB-1242	< 20.	mg/kg	20.	064200000N
PCB-1248	< 20.	mg/kg	20.	064300000N
PCB-1254	< 20.	mg/kg	20.	064400000N
PCB-1260	< 20.	mg/kg	20.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

AR100428

American Association for Laboratory Accreditation Toxicological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 2.0	mg/kg	2.	060900000N
Beta BHC	< 2.0	mg/kg	2.	061000000N
Gamma BHC - Lindane	< 2.0	mg/kg	2.	045300000N
Delta BHC	< 2.0	mg/kg	2.	061200000N
Heptachlor	< 2.0	mg/kg	2.	045400000N
Aldrin	< 2.0	mg/kg	2.	045500000N
Heptachlor Epoxide	< 2.0	mg/kg	2.	061500000N
DDE	< 2.0	mg/kg	2.	061600000N
DDD	< 2.0	mg/kg	2.	061700000N
DDT	< 2.0	mg/kg	2.	047800000N
Dieldrin	< 0.80	mg/kg	0.8	046900000N
Endrin	< 0.80	mg/kg	0.8	047700000N
Chlordane	< 8.0	mg/kg	8.	062500000N
Toxaphene	< 20.	mg/kg	20.	062600000N
Endosulfan I	< 0.80	mg/kg	0.8	062700000N
Endosulfan II	< 0.80	mg/kg	0.8	062800000N
Endosulfan Sulfate	< 2.0	mg/kg	2.	062900000N
Endrin Aldehyde	< 8.0	mg/kg	8.	063800000N
PCB-1016	< 30.	mg/kg	30.	063900000N
PCB-1221	< 30.	mg/kg	30.	064000000N
PCB-1232	< 30.	mg/kg	30.	064100000N
PCB-1242	< 30.	mg/kg	30.	064200000N
PCB-1248	< 30.	mg/kg	30.	064300000N
PCB-1254	< 30.	mg/kg	30.	064400000N
PCB-1260	< 30.	mg/kg	30.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

AR100489

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories, Inc

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

F02123 D 1 44

L.L. Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 500,000.	ug/kg	500000.	082700000N
Bromomethane	< 500,000.	ug/kg	500000.	082800000N
Vinyl Chloride	< 500,000.	ug/kg	500000.	082900000N
Chloroethane	< 500,000.	ug/kg	500000.	083000000N
Acrolein	< 5,000,000.	ug/kg	5000000.	082400000N
Acrylonitrile	< 5,000,000.	ug/kg	5000000.	082500000N
Methylene Chloride	< 200,000.	ug/kg	200000.	083100000N
Trichlorofluoromethane	< 200,000.	ug/kg	200000.	079000000N
1,1-Dichloroethene	< 200,000.	ug/kg	200000.	083200000N
1,1-Dichloroethane	< 200,000.	ug/kg	200000.	083300000N
trans-1,2-Dichloroethene	< 200,000.	ug/kg	200000.	083400000N
Chloroform	< 200,000.	ug/kg	200000.	083500000N
1,2-Dichloroethane	< 200,000.	ug/kg	200000.	083600000N
1,1,1-Trichloroethane	< 200,000.	ug/kg	200000.	083700000N
Carbon Tetrachloride	< 200,000.	ug/kg	200000.	083800000N
Bromodichloromethane	< 200,000.	ug/kg	200000.	083900000N
1,1,2,2-Tetrachloroethane	< 200,000.	ug/kg	200000.	084900000N
1,2-Dichloropropane	< 200,000.	ug/kg	200000.	084000000N
trans-1,3-Dichloropropene	< 200,000.	ug/kg	200000.	084100000N
Trichloroethene	< 200,000.	ug/kg	200000.	084200000N
Dibromochloromethane	< 200,000.	ug/kg	200000.	084600000N
1,1,2-Trichloroethane	< 200,000.	ug/kg	200000.	084500000N
Benzene	< 200,000.	ug/kg	200000.	084300000N
cis-1,3-Dichloropropene	< 200,000.	ug/kg	200000.	084400000N
2-Chloroethylvinyl ether	< 500,000.	ug/kg	500000.	082600000N
Bromoform	< 200,000.	ug/kg	200000.	084700000N
Tetrachloroethene	< 200,000.	ug/kg	200000.	084800000N
Toluene	< 200,000.	ug/kg	200000.	085000000N
Chlorobenzene	< 200,000.	ug/kg	200000.	085100000N
Ethylbenzene	< 200,000.	ug/kg	200000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AR 00490

American Association for Accreditation of Analytical & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc.

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SV 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 800,000.	ug/kg	800000.	082700000N
Bromomethane	< 800,000.	ug/kg	800000.	082800000N
Vinyl Chloride	< 800,000.	ug/kg	800000.	082900000N
Chloroethane	< 800,000.	ug/kg	800000.	083000000N
Acrolein	< 7,564,296.	ug/kg	7564296.	082400000N
Acrylonitrile	< 7,564,296.	ug/kg	7564296.	082500000N
Methylene Chloride	< 300,000.	ug/kg	300000.	083100000N
Trichlorofluoromethane	< 300,000.	ug/kg	300000.	079000000N
1,1-Dichloroethene	< 300,000.	ug/kg	300000.	083200000N
1,1-Dichloroethane	< 300,000.	ug/kg	300000.	083300000N
trans-1,2-Dichloroethene	< 300,000.	ug/kg	300000.	083400000N
Chloroform	< 300,000.	ug/kg	300000.	083500000N
1,2-Dichloroethane	< 300,000.	ug/kg	300000.	083600000
1,1,1-Trichloroethane	< 300,000.	ug/kg	300000.	083700000N
Carbon Tetrachloride	< 300,000.	ug/kg	300000.	083800000N
Bromodichloromethane	< 300,000.	ug/kg	300000.	083900000N
1,1,2,2-Tetrachloroethane	< 300,000.	ug/kg	300000.	084900000N
1,2-Dichloropropane	< 300,000.	ug/kg	300000.	084000000N
trans-1,3-Dichloropropene	< 300,000.	ug/kg	300000.	084100000N
Trichloroethene	< 300,000.	ug/kg	300000.	084200000N
Dibromochloromethane	< 300,000.	ug/kg	300000.	084600000N
1,1,2-Trichloroethane	< 300,000.	ug/kg	300000.	084500000N
Benzene	< 300,000.	ug/kg	300000.	084300000N
cis-1,3-Dichloropropene	< 300,000.	ug/kg	300000.	084400000N
2-Chloroethylvinyl ether	< 800,000.	ug/kg	800000.	082600000N
Bromoform	< 300,000.	ug/kg	300000.	084700000N
Tetrachloroethene	< 300,000.	ug/kg	300000.	084800000N
Toluene	< 300,000.	ug/kg	300000.	085000000N
Chlorobenzene	< 300,000.	ug/kg	300000.	085100000N
Ethylbenzene	< 300,000.	ug/kg	300000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100491

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation Chemical Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories, Inc

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Holland Pike, Lancaster, PA 17601 [illegible]

LLI Sample No. SW 1260354

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 83.	mg/kg	83.	064600000N
phenol	< 83.	mg/kg	83.	065500000N
2-nitrophenol	< 83.	mg/kg	83.	065100000N
2,4-dimethylphenol	< 83.	mg/kg	83.	064800000N
2,4-dichlorophenol	< 83.	mg/kg	83.	064700000N
4-chloro-3-methylphenol	< 83.	mg/kg	83.	065300000N
2,4,6-trichlorophenol	< 83.	mg/kg	83.	065600000N
2,4-dinitrophenol	< 208.	mg/kg	208.	065000000N
4-nitrophenol	< 208.	mg/kg	208.	065200000N
2-methyl-4,6-dinitrophenol	< 208.	mg/kg	208.	064900000N
pentachlorophenol	< 208.	mg/kg	208.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100492

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Chemical & Environmental Testing

American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDH

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 100.	mg/kg	100.	064600000N
phenol	< 100.	mg/kg	100.	065500000N
2-nitrophenol	< 100.	mg/kg	100.	065100000N
2,4-dimethylphenol	< 100.	mg/kg	100.	064800000N
2,4-dichlorophenol	< 100.	mg/kg	100.	064700000N
4-chloro-3-methylphenol	< 100.	mg/kg	100.	065300000N
2,4,6-trichlorophenol	< 100.	mg/kg	100.	065600000N
2,4-dinitrophenol	< 300.	mg/kg	300.	065000000N
4-nitrophenol	< 300.	mg/kg	300.	065200000N
2-methyl-4,6-dinitrophenol	< 300.	mg/kg	300.	064900000N
pentachlorophenol	< 300.	mg/kg	300.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100493

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation Chemical & Environmental Field Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 1310719 182845 REP [illegible] 002123 [illegible]

LLI Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 83.	mg/kg	83.	069700000N
bis (2-chloroethyl) ether	< 83.	mg/kg	83.	066700000N
1,3-dichlorobenzene	< 83.	mg/kg	83.	067700000N
1,4-dichlorobenzene	< 83.	mg/kg	83.	067800000N
1,2-dichlorobenzene	< 83.	mg/kg	83.	067600000N
bis (2-chloroisopropyl) ether	< 83.	mg/kg	83.	066800000N
hexachloroethane	< 83.	mg/kg	83.	069200000N
N-nitrosodi-n-propylamine	< 83.	mg/kg	83.	069800000N
nitrobenzene	< 83.	mg/kg	83.	069600000N
isophorone	< 83.	mg/kg	83.	069400000N
bis (2-chloroethoxy) methane	< 83.	mg/kg	83.	066600000N
1,2,4-trichlorobenzene	< 83.	mg/kg	83.	070200000N
naphthalene	< 83.	mg/kg	83.	069500000N
hexachlorobutadiene	< 83.	mg/kg	83.	069000000N
hexachlorocyclopentadiene	< 83.	mg/kg	83.	069100000N
2-chloronaphthalene	< 83.	mg/kg	83.	067200000N
acenaphthylene	< 83.	mg/kg	83.	065800000N
dimethyl phthalate	< 83.	mg/kg	83.	068100000N
2,6-dinitrotoluene	< 83.	mg/kg	83.	068400000N
acenaphthene	< 83.	mg/kg	83.	065700000N
2,4-dinitrotoluene	< 83.	mg/kg	83.	068300000N
fluorene	< 83.	mg/kg	83.	068800000N
4-chlorophenyl phenyl ether	< 83.	mg/kg	83.	067300000N
diethyl phthalate	< 83.	mg/kg	83.	068000000N
1,2-diphenylhydrazine	< 83.	mg/kg	83.	068600000N
N-nitrosodiphenylamine	358.	mg/kg	83.	069900000N
4-bromophenyl phenyl ether	< 83.	mg/kg	83.	067000000N
hexachlorobenzene	< 83.	mg/kg	83.	068900000N
phenanthrene	< 83.	mg/kg	83.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

ican Association for
y Accreditation
Biological & Environmental
ring.

Member American Council of
Independent Laboratories Inc

See Reverse Side For Explanation
Of Symbols And Abbreviations And
Our Standard Terms And Conditions

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

1310716 182845 REP
P02123 D 1 44

LLI Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 100.	mg/kg	100.	069700000N
bis (2-chloroethyl) ether	< 100.	mg/kg	100.	066700000N
1,3-dichlorobenzene	< 100.	mg/kg	100.	067700000N
1,4-dichlorobenzene	< 100.	mg/kg	100.	067800000N
1,2-dichlorobenzene	< 100.	mg/kg	100.	067600000N
bis (2-chloroisopropyl) ether	< 100.	mg/kg	100.	066800000N
hexachloroethane	< 100.	mg/kg	100.	069200000N
N-nitrosodi-n-propylamine	< 100.	mg/kg	100.	069800000N
nitrobenzene	< 100.	mg/kg	100.	069600000N
isophorone	< 100.	mg/kg	100.	069400000N
bis (2-chloroethoxy) methane	< 100.	mg/kg	100.	066600000N
1,2,4-trichlorobenzene	< 100.	mg/kg	100.	070200000N
naphthalene	< 100.	mg/kg	100.	069500000
hexachlorobutadiene	< 100.	mg/kg	100.	069000000
hexachlorocyclopentadiene	< 100.	mg/kg	100.	069100000N
2-chloronaphthalene	< 100.	mg/kg	100.	067200000N
acenaphthylene	< 100.	mg/kg	100.	065800000N
dimethyl phthalate	< 100.	mg/kg	100.	068100000N
2,6-dinitrotoluene	< 100.	mg/kg	100.	068400000N
acenaphthene	< 100.	mg/kg	100.	065700000N
2,4-dinitrotoluene	< 100.	mg/kg	100.	068300000N
fluorene	< 100.	mg/kg	100.	068800000N
4-chlorophenyl phenyl ether	< 100.	mg/kg	100.	067300000N
diethyl phthalate	< 100.	mg/kg	100.	068000000N
1,2-diphenylhydrazine	< 100.	mg/kg	100.	068600000N
N-nitrosodiphenylamine	540.	mg/kg	100.	069900000N
4-bromophenyl phenyl ether	< 100.	mg/kg	100.	067000000N
hexachlorobenzene	< 100.	mg/kg	100.	068900000N
phenanthrene	< 100.	mg/kg	100.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100495

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

13:07:46 182845 REP
F02123 D 1 44

LLI Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 83.	mg/kg	83.	065900000N
di-n-butyl phthalate	< 83.	mg/kg	83.	068200000N
fluoranthene	< 83.	mg/kg	83.	068700000N
pyrene	< 83.	mg/kg	83.	070100000N
benzidine	< 208.	mg/kg	208.	066000000N
butyl benzyl phthalate	< 83.	mg/kg	83.	067100000N
benzo (a) anthracene	< 83.	mg/kg	83.	066100000N
chrysene	< 83.	mg/kg	83.	067400000N
3,3'-dichlorobenzidine	< 208.	mg/kg	208.	067900000N
bis (2-ethylhexyl) phthalate	< 83.	mg/kg	83.	066900000N
di-n-octyl phthalate	< 83.	mg/kg	83.	068500000N
benzo (b) fluoranthene	< 83.	mg/kg	83.	066300000N
benzo (K) fluoranthene	< 83.	mg/kg	83.	066500000N
benzo (a) pyrene	< 83.	mg/kg	83.	066200000N
indeno (1,2,3-cd) pyrene	< 83.	mg/kg	83.	069300000N
dibenzo (a,h) anthracene	< 83.	mg/kg	83.	067500000N
benzo (ghi) perylene	< 83.	mg/kg	83.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100496

American Association for Laboratory Accreditation Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, P.O. Box 12425, Lancaster, PA 17605 (717) 656-2301

13:07:50 182845 REP
F02123 D 1 44

LLI Sample No. SW 1260354

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

D-60 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 100.	mg/kg	100.	065900000N
di-n-butyl phthalate	< 100.	mg/kg	100.	068200000N
fluoranthene	< 100.	mg/kg	100.	068700000N
pyrene	< 100.	mg/kg	100.	070100000N
benzidine	< 300.	mg/kg	300.	066000000N
butyl benzyl phthalate	< 100.	mg/kg	100.	067100000N
benzo (a) anthracene	< 100.	mg/kg	100.	066100000N
chrysene	< 100.	mg/kg	100.	067400000N
3,3'-dichlorobenzidine	< 300.	mg/kg	300.	067900000N
bis (2-ethylhexyl) phthalate	< 100.	mg/kg	100.	066900000N
di-n-octyl phthalate	< 100.	mg/kg	100.	068500000N
benzo (b) fluoranthene	< 100.	mg/kg	100.	066300000
benzo (K) fluoranthene	< 100.	mg/kg	100.	066500000
benzo (a) pyrene	< 100.	mg/kg	100.	066200000N
indeno (1,2,3-cd) pyrene	< 100.	mg/kg	100.	069300000N
dibenzo (a,h) anthracene	< 100.	mg/kg	100.	067500000N
benzo (ghi) perylene	< 100.	mg/kg	100.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

AR100497

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

07144147 182845
F02123 D 1 44

LLI Sample No. SW 1260374

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

M-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	6.1	% by wt.	0.1	011101100
Dioxin Screen	< 1.6	mg/kg	1.6	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100498

American Association for Laboratory Accreditation Biological & Environmental Testing

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/HS

American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA 17601 [illegible] 07144150 182845
F02123 D 1 44

LLI Sample No. SW 1260374

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

M-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 2.0	mg/kg	2.	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation
Chemical Biological & Environmental Testing

American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100499

ANALYSIS REPORT

Lancaster Laboratories

[illegible] PA 17601 [illegible] (717) 656-2301 [illegible] F02123 D 1 44

LLI Sample No. SW 1260385

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

H-2 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	26.9	% by wt.	0.1	011101100
Dioxin Screen	< 0.4	mg/kg	0.4	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100500

American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LLI Sample No. SW 1260363

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2-B2 Chemical Waste Pit Row 2 B-2 Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.2	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation
Biological & Environmental Testing

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR10050

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260363

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2-B2 Chemical Waste Pit Row 2 B-2 Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	<0.020 mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260364

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

CH Chemical Waste Pit Center Hole Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	28.7	% by wt.	0.1	011101100
Dioxin Screen	< 0.03	mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100503

The American Association for Laboratory Accreditation
CP Biological & Environmental
for Testing

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

LLI Sample No. SW 1260364

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

CH Chemical Waste Pit Center Hole Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.040 mg/kg	0.04	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Member American Council of Independent Laboratories, Inc.
See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA 17601-5994 (717) 656-2301 [illegible] 02123 D 1 44

LLI Sample No. SW 1260370

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2 B5 Chemical Waste Pit Row 2 B-5 22-26" Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	29.9	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100505

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 102843
F02123 D 1 44

LLI Sample No. SW 1260370

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

R2 B5 Chemical Waste Pit Row 2 B-5 22-26" Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR400506

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260362

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 6/88
Date Submitted 5/ 5/88
Discard Date 7/ 7/88
Collected by CBR
P.O. CW127-05
Rel.

R3-B3 Chemical Waste Pit Row 3 16"-20" Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	26.7	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

112 02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260362

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 6/88
Date Submitted 5/ 5/88
Discard Date 7/ 7/88
Collected by CBR
P.O. CW127-05
Rel.

R3-B3 Chemical Waste Pit Row 3 16"-20" Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260373

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

MRA-1 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1335 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	19.8	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation Chemical, Biological & Environmental Fields

American Council of Independent Laboratories Inc

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And *Our Standard Terms And Conditions*

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100509

ANALYSIS REPORT

Lancaster Laboratories

F02123 D 1 44

LLI Sample No. SW 1260373

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

MRA-1 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1335 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.020 mg/kg	0.02	03B216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100510

American Association for Laboratory Accreditation Biological & Environmental Testing

American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

LLI Sample No. SW 1260372

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

MRA-2 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1345 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.5	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100511

The American Association for Laboratory Accreditation Biological & Environmental Testing

American Council of Independent Laboratories, Inc.

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 02123 D 1 44

LLI Sample No. SW 1260372

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

MRA-2 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1345 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.020 mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100512

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

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ANALYSIS REPORT

Lancaster Laboratories

07/13/11 182843
F02123 D 1 44

LLI Sample No. SW 1260383

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

S-1 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	21.6	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100513

The American Association for Laboratory Accreditation (A.A. Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

07145112 182845
F02123 D 1 44

LLI Sample No. SW 1260383

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

S-1 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDH

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100514

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

07:45:20 182845
F02123 D 1 44

LLI Sample No. SW 1260387

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

S-2 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	27.9	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

National American Council of Independent Laboratories

02913 60.00 023100
See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

AR100515

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

ILL Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 2,000.	ug/kg	2000.	082700000N
Bromomethane	< 2,000.	ug/kg	2000.	082800000N
Vinyl Chloride	< 2,000.	ug/kg	2000.	082900000N
Chloroethane	< 2,000.	ug/kg	2000.	083000000N
Acrolein	< 20,000.	ug/kg	20000.	082400000N
Acrylonitrile	< 20,000.	ug/kg	20000.	082500000N
Methylene Chloride	< 1,000.	ug/kg	1000.	083100000N
Trichlorofluoromethane	< 1,000.	ug/kg	1000.	079000000N
1,1-Dichloroethene	< 1,000.	ug/kg	1000.	083200000N
1,1-Dichloroethane	< 1,000.	ug/kg	1000.	083300000N
trans-1,2-Dichloroethene	< 1,000.	ug/kg	1000.	083400000N
Chloroform	< 1,000.	ug/kg	1000.	083500000N
1,2-Dichloroethane	< 1,000.	ug/kg	1000.	083600000N
1,1,1-Trichloroethane	< 1,000.	ug/kg	1000.	083700000N
Carbon Tetrachloride	< 1,000.	ug/kg	1000.	083800000N
Bromodichloromethane	< 1,000.	ug/kg	1000.	083900000N
1,1,2,2-Tetrachloroethane	< 1,000.	ug/kg	1000.	084900000N
1,2-Dichloropropane	< 1,000.	ug/kg	1000.	084000000N
trans-1,3-Dichloropropene	< 1,000.	ug/kg	1000.	084100000N
Trichloroethene	< 1,000.	ug/kg	1000.	084200000N
Dibromochloromethane	< 1,000.	ug/kg	1000.	084600000N
1,1,2-Trichloroethane	< 1,000.	ug/kg	1000.	084500000N
Benzene	< 1,000.	ug/kg	1000.	084300000N
cis-1,3-Dichloropropene	< 1,000.	ug/kg	1000.	084400000N
2-Chloroethylvinyl ether	< 2,000.	ug/kg	2000.	082600000N
Bromoform	< 1,000.	ug/kg	1000.	084700000N
Tetrachloroethene	< 1,000.	ug/kg	1000.	084800000N
Toluene	20,000.	ug/kg	1000.	085000000N
Chlorobenzene	< 1,000.	ug/kg	1000.	085100000N
Ethylbenzene	< 1,000.	ug/kg	1000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100516

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 2,000.	ug/kg	2000.	082700000N
Bromomethane	< 2,000.	ug/kg	2000.	082800000N
Vinyl Chloride	< 2,000.	ug/kg	2000.	082900000N
Chloroethane	< 2,000.	ug/kg	2000.	083000000N
Acrolein	< 20,000.	ug/kg	20000.	082400000N
Acrylonitrile	< 20,000.	ug/kg	20000.	082500000N
Methylene Chloride	< 1,000.	ug/kg	1000.	083100000N
Trichlorofluoromethane	< 1,000.	ug/kg	1000.	079000000N
1,1-Dichloroethene	< 1,000.	ug/kg	1000.	083200000N
1,1-Dichloroethane	< 1,000.	ug/kg	1000.	083300000N
trans-1,2-Dichloroethene	< 1,000.	ug/kg	1000.	083400000N
Chloroform	< 1,000.	ug/kg	1000.	083500000N
1,2-Dichloroethane	< 1,000.	ug/kg	1000.	08360000
1,1,1-Trichloroethane	< 1,000.	ug/kg	1000.	08370000
Carbon Tetrachloride	< 1,000.	ug/kg	1000.	083800000N
Bromodichloromethane	< 1,000.	ug/kg	1000.	083900000N
1,1,2,2-Tetrachloroethane	< 1,000.	ug/kg	1000.	084900000N
1,2-Dichloropropane	< 1,000.	ug/kg	1000.	084000000N
trans-1,3-Dichloropropene	< 1,000.	ug/kg	1000.	084100000N
Trichloroethene	< 1,000.	ug/kg	1000.	084200000N
Dibromochloromethane	< 1,000.	ug/kg	1000.	084600000N
1,1,2-Trichloroethane	< 1,000.	ug/kg	1000.	084500000N
Benzene	< 1,000.	ug/kg	1000.	084300000N
cis-1,3-Dichloropropene	< 1,000.	ug/kg	1000.	084400000N
2-Chloroethylvinyl ether	< 2,000.	ug/kg	2000.	082600000N
Bromoform	< 1,000.	ug/kg	1000.	084700000N
Tetrachloroethene	< 1,000.	ug/kg	1000.	084800000N
Toluene	24,000.	ug/kg	1000.	085000000N
Chlorobenzene	< 1,000.	ug/kg	1000.	085100000N
Ethylbenzene	< 1,000.	ug/kg	1000.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100517

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation
Biological & Environmental Fields of Testing

Member American Council of

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ANALYSIS REPORT

Lancaster Laboratories

Lab Sample No. SV J260355

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 33.	mg/kg	33.	064600000N
phenol	399.	mg/kg	33.	065500000N
2-nitrophenol	< 33.	mg/kg	33.	065100000N
2,4-dimethylphenol	499.	mg/kg	33.	064800000N
2,4-dichlorophenol	< 33.	mg/kg	33.	064700000N
4-chloro-3-methylphenol	< 33.	mg/kg	33.	065300000N
2,4,6-trichlorophenol	117.	mg/kg	33.	065600000N
2,4-dinitrophenol	< 83.2	mg/kg	83.2	065000000N
4-nitrophenol	< 83.2	mg/kg	83.2	065200000N
2-methyl-4,6-dinitrophenol	< 83.2	mg/kg	83.2	064900000N
pentachlorophenol	< 83.2	mg/kg	83.2	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR109518

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1307, 2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

Lab Sample No. SV1260355

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 40.	mg/kg	40.	064600000N
phenol	482.	mg/kg	40.	065500000N
2-nitrophenol	< 40.	mg/kg	40.	065100000N
2,4-dimethylphenol	603.	mg/kg	40.	064800000N
2,4-dichlorophenol	< 40.	mg/kg	40.	064700000N
4-chloro-3-methylphenol	< 40.	mg/kg	40.	065300000N
2,4,6-trichlorophenol	141.	mg/kg	40.	065600000N
2,4-dinitrophenol	< 100.	mg/kg	100.	065000000N
4-nitrophenol	< 100.	mg/kg	100.	065200000N
2-methyl-4,6-dinitrophenol	< 100.	mg/kg	100.	064900000N
pentachlorophenol	< 100.	mg/kg	100.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100519

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Medical, Biological & Environmental Fields of Testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

ERM Midwest, Inc. [illegible] (717) 656-2301

Charleston, W. VA 25313-1577

Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CC
N-nitrosodimethylamine	(33.	mg/kg	33.	0697000
bis (2-chloroethyl) ether	(33.	mg/kg	33.	0667000
1,3-dichlorobenzene	(33.	mg/kg	33.	0677000
1,4-dichlorobenzene	(33.	mg/kg	33.	0678000
1,2-dichlorobenzene	(33.	mg/kg	33.	0676000
bis (2-chloroisopropyl) ether	(33.	mg/kg	33.	0668000
hexachloroethane	(33.	mg/kg	33.	0692000
N-nitrosodi-n-propylamine	(33.	mg/kg	33.	0698000
nitrobenzene	(33.	mg/kg	33.	0696000
isophorone	(33.	mg/kg	33.	0694000
bis (2-chloroethoxy) methane	(33.	mg/kg	33.	0666000
1,2,4-trichlorobenzene	(33.	mg/kg	33.	0702000
naphthalene	(33.	mg/kg	33.	0695000
hexachlorobutadiene	(33.	mg/kg	33.	0690000
hexachlorocyclopentadiene	(33.	mg/kg	33.	0691000
2-chloronaphthalene	(33.	mg/kg	33.	0672000
acenaphthylene	(33.	mg/kg	33.	0658000
dimethyl phthalate	(33.	mg/kg	33.	0681000
2,6-dinitrotoluene	(33.	mg/kg	33.	0684000
acenaphthene	(33.	mg/kg	33.	0657000
2,4-dinitrotoluene	(33.	mg/kg	33.	0683000
fluorene	(33.	mg/kg	33.	0688000
4-chlorophenyl phenyl ether	(33.	mg/kg	33.	0673000
diethyl phthalate	(33.	mg/kg	33.	0680000
1,2-diphenylhydrazine	(33.	mg/kg	33.	0686000
N-nitrosodiphenylamine	57.	mg/kg	33.	0699000
4-bromophenyl phenyl ether	(33.	mg/kg	33.	0670000
hexachlorobenzene	(33.	mg/kg	33.	0689000
phenanthrene	(33.	mg/kg	33.	0700000

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100520

Respectfully Submitted
Lanc Inc.
Reviewed and Approved by:
Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical & Biological fields of testing

Member American Council of Independent Laboratories

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ANALYSIS REPORT

Lancaster Laboratories

[illegible] 13109112 182845 REP
[illegible] F02123 . D . 1 . 44

LLI Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 40.	mg/kg	40.	069700000N
bis (2-chloroethyl) ether	< 40.	mg/kg	40.	066700000N
1,3-dichlorobenzene	< 40.	mg/kg	40.	067700000N
1,4-dichlorobenzene	< 40.	mg/kg	40.	067800000N
1,2-dichlorobenzene	< 40.	mg/kg	40.	067600000N
bis (2-chloroisopropyl) ether	< 40.	mg/kg	40.	066800000N
hexachloroethane	< 40.	mg/kg	40.	069200000N
N-nitrosodi-n-propylamine	< 40.	mg/kg	40.	069800000N
nitrobenzene	< 40.	mg/kg	40.	069600000N
isophorone	< 40.	mg/kg	40.	069400000N
bis (2-chloroethoxy) methane	< 40.	mg/kg	40.	066600000N
1,2,4-trichlorobenzene	< 40.	mg/kg	40.	070200000N
naphthalene	< 40.	mg/kg	40.	069500000
hexachlorobutadiene	< 40.	mg/kg	40.	069000000
hexachlorocyclopentadiene	< 40.	mg/kg	40.	069100000N
2-chloronaphthalene	< 40.	mg/kg	40.	067200000N
acenaphthylene	< 40.	mg/kg	40.	065800000N
dimethyl phthalate	< 40.	mg/kg	40.	068100000N
2,6-dinitrotoluene	< 40.	mg/kg	40.	068400000N
acenaphthene	< 40.	mg/kg	40.	065700000N
2,4-dinitrotoluene	< 40.	mg/kg	40.	068300000N
fluorene	< 40.	mg/kg	40.	068800000N
4-chlorophenyl phenyl ether	< 40.	mg/kg	40.	067300000N
diethyl phthalate	< 40.	mg/kg	40.	068000000N
1,2-diphenylhydrazine	< 40.	mg/kg	40.	068600000N
N-nitrosodiphenylamine	69.	mg/kg	40.	069900000N
4-bromophenyl phenyl ether	< 40.	mg/kg	40.	067000000N
hexachlorobenzene	< 40.	mg/kg	40.	068900000N
phenanthrene	< 40.	mg/kg	40.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100521

The American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

P02123 0 1 44

LLI Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 33.	mg/kg	33.	065900000N
di-n-butyl phthalate	< 33.	mg/kg	33.	068200000N
fluoranthene	< 33.	mg/kg	33.	068700000N
pyrene	< 33.	mg/kg	33.	070100000N
benzidine	< 83.2	mg/kg	83.2	066000000N
butyl benzyl phthalate	< 33.	mg/kg	33.	067100000N
benzo (a) anthracene	< 33.	mg/kg	33.	066100000N
chrysene	< 33.	mg/kg	33.	067400000N
3,3'-dichlorobenzidine	< 83.2	mg/kg	83.2	067900000N
bis (2-ethylhexyl) phthalate	< 33.	mg/kg	33.	066900000N
di-n-octyl phthalate	< 33.	mg/kg	33.	068500000N
benzo (b) fluoranthene	< 33.	mg/kg	33.	066300000N
benzo (K) fluoranthene	< 33.	mg/kg	33.	066500000N
benzo (a) pyrene	< 33.	mg/kg	33.	066200000N
indeno (1,2,3-cd) pyrene	< 33.	mg/kg	33.	069300000N
dibenzo (a,h) anthracene	< 33.	mg/kg	33.	067500000N
benzo (ghi) perylene	< 33.	mg/kg	33.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100522

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation of Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA [illegible] (717) 656-2301 [illegible] F02123 D 1 44

LLI Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 40.	mg/kg	40.	065900000N
di-n-butyl phthalate	< 40.	mg/kg	40.	068200000N
fluoranthene	< 40.	mg/kg	40.	068700000N
pyrene	< 40.	mg/kg	40.	070100000N
benzidine	< 100.	mg/kg	100.	066000000N
butyl benzyl phthalate	< 40.	mg/kg	40.	067100000N
benzo (a) anthracene	< 40.	mg/kg	40.	066100000N
chrysene	< 40.	mg/kg	40.	067400000N
3,3'-dichlorobenzidine	< 100.	mg/kg	100.	067900000N
bis (2-ethylhexyl) phthalate	< 40.	mg/kg	40.	066900000N
di-n-octyl phthalate	< 40.	mg/kg	40.	068500000N
benzo (b) fluoranthene	< 40.	mg/kg	40.	066300000N
benzo (K) fluoranthene	< 40.	mg/kg	40.	066500000N
benzo (a) pyrene	< 40.	mg/kg	40.	066200000N
indeno (1,2,3-cd) pyrene	< 40.	mg/kg	40.	069300000N
dibenzo (a,h) anthracene	< 40.	mg/kg	40.	067500000N
benzo (ghi) perylene	< 40.	mg/kg	40.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100523

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

07:44:28 182843
F02123 D 1 44

LLI Sample No. SW 1260371

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2 B3 Chemical Waste Pit Row 2 B-3 Grab Soil Samp
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	25.5	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100524

American Association for Laboratory Accreditation Hygienic & Environmental Testing

American Council of Independent Laboratories Inc

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 04/29 182845
P02123 D 1 44

LLI Sample No. SW 1260371

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2 B3 Chemical Waste Pit Row 2 B-3 Grab Soil Samp
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100525

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

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Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260363

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2-B2 Chemical Waste Pit Row 2 B-2 Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.2	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100526

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260363

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2-B2 Chemical Waste Pit Row 2 B-2 Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	<0.020 mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100527

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260364

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

CH Chemical Waste Pit Center Hole Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	28.7	% by wt.	0.1	011101100
Dioxin Screen	< 0.03	mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100528

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Biological & Environmental Testing

02913 60.00 023100

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

LLI Sample No. SW 1260364

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

CH Chemical Waste Pit Center Hole Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.040 mg/kg	0.04	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100529

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

02123 D 1 44

LLI Sample No. SW 1260370

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2 B5 Chemical Waste Pit Row 2 B-5 22-26" Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	29.9	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100530

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

LLI Sample No. SW 1260370

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

R2 B5 Chemical Waste Pit Row 2 B-5 22-26" Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation Program for Biological & Environmental Testing

American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100531

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260362

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 6/88
Date Submitted 5/ 5/88
Discard Date 7/ 7/88
Collected by CBR
P.O. CW127-05
Rel.

R3-B3 Chemical Waste Pit Row 3 16"-20" Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	26.7	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc.

112 02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No: SW 1260362

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 6/88
Date Submitted 5/ 5/88
Discard Date 7/ 7/88
Collected by CBR
P.O. CW127-05
Rel.

R3-B3 Chemical Waste Pit Row 3 16"-20" Grab Soil
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100533

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Clinical, Biological & Environmental Fields of Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260373

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

MRA-1 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1335 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	19.8	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100534

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

02913 60.00 023100

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ANALYSIS REPORT

Lancaster Laboratories

F02123 D I 44

LLI Sample No. SW T260373

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127·05
Rel.

ORIGINAL (Red)

MRA·1 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1335 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.020 mg/kg	0.02	038216000

This is a semi·quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100535

AR100853

The American Association for Laboratory Accreditation
Biological & Environmental Testing

American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

LLI Sample No. SW 1260372

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

MRA-2 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1345 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.5	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100536

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

F02123 D 1 44

LLI Sample No. SW 1260372

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

MRA-2 Municipal Refuse Area Grab Soil Sample
Collected on 04/26/88 at 1345 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.020 mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100537

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

LLI Sample No. SW 1260383

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

S-1 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	21.6	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation (A.L.A.) Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

02913 60.00 023100

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100538

ANALYSIS REPORT

Lancaster Laboratories

0/145112 182845
F02123 D 1 44

LLI Sample No. SW 1260383

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

S-1 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation
Biological & Environmental of Nations

Member American Council of Independent Laboratories Inc

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by

AM 00539

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 717/656-2301

07:45:20 182845
P02123 D 1 44

LLI Sample No. SW 1260387

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

S-2 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	27.9	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation General Biological & Environmental Testing

Mutual American Council of Independent Laboratories Inc

02913 60.00 023100
See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100540

ANALYSIS REPORT

Lancaster Laboratories

07:45:21 182845
F02123 D 1 44

LLI Sample No. SW 1260387

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

S-2 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

The American Association for Laboratory Accreditation (Analytical, Toxicological & Environmental Fields of Testing)

Member: American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

AR100541

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

07:45:32 182845
F02123 D 1 44

LLI Sample No. SW 1260392

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

S-3 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	69.7	% by wt.	0.1	011101100
Dioxin Screen	< 0.1	mg/kg	0.1	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100542

American Association for Laboratory Accreditation Forensic, Biological & Environmental Testing

United American Clinical Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

07:45:34 182845
F02123 D 1 44

LLI Sample No. SW 1260392

ERM Midvest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127·05
Rel.

S·3 Grab Sediment Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.30 mg/kg	0.3	03B216000

This is a semi·quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midvest, Inc. ATTN: Dayton Carpenter

AR100543

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental fields of testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	15.9	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	18.	mg/kg	1.	014503300
Beryllium	< 0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	12.	mg/kg	5.	015101300
Copper	10.	mg/kg	2.	015301300
Lead	15.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	< 4.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	14.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.02	mg/kg	0.02	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.1	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094402500

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100544

Respectfully Submitted,
Lancaster Laboratories,
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

146 02913 110.00 150000

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Member American Council of Independent Laboratories Inc.

ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1101, Lancaster, PA 17603 (717) 656-2301

LLT Sample No. SW 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Antimony	< 6.0	mg/kg	6.	014402500
Arsenic	21.4	mg/kg	1.	014503300
Beryllium	< 0.60	mg/kg	0.6	014703300
Cadmium	< 0.60	mg/kg	0.6	014901300
Chromium	14.3	mg/kg	6.	015101300
Copper	11.9	mg/kg	2.	015301300
Lead	17.8	mg/kg	6.	015501300
Mercury	< 0.10	mg/kg	0.1	015901300
Nickel	< 5.0	mg/kg	5.	016101300
Selenium	< 0.60	mg/kg	0.6	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	16.6	mg/kg	2.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.060	mg/kg	0.06	023701300
Dioxin Screen	< 0.020	mg/kg	0.02	038201300
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.10	mg/kg	0.1	043401300
Purgables Method # 624		attached		052001300
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100545

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

L.L. Sample No. SV 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA. 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 0.2	mg/kg	0.2	060900000N
Beta BHC	< 0.2	mg/kg	0.2	061000000N
Gamma BHC - Lindane	< 0.2	mg/kg	0.2	045300000N
Delta BHC	< 0.2	mg/kg	0.2	061200000N
Heptachlor	< 0.2	mg/kg	0.2	045400000N
Aldrin	< 0.2	mg/kg	0.2	045500000N
Heptachlor Epoxide	< 0.2	mg/kg	0.2	061500000N
DDE	< 0.2	mg/kg	0.2	061600000N
DDD	< 0.2	mg/kg	0.2	061700000N
DDT	< 0.2	mg/kg	0.2	047800000N
Dieldrin	< 0.05	mg/kg	0.05	046900000N
Endrin	< 0.05	mg/kg	0.05	047700000N
Chlordane	< 1.	mg/kg	1.	062500000N
Toxaphene	< 2.	mg/kg	2.	062600000N
Endosulfan I	< 0.05	mg/kg	0.05	062700000N
Endosulfan II	< 0.2	mg/kg	0.2	062800000N
Endosulfan Sulfate	< 0.2	mg/kg	0.2	062900000N
Endrin Aldehyde	< 0.5	mg/kg	0.5	063800000N
PCB-1016	< 5.	mg/kg	5.	063900000N
PCB-1221	< 5.	mg/kg	5.	064000000N
PCB-1232	< 5.	mg/kg	5.	064100000N
PCB-1242	< 5.	mg/kg	5.	064200000N
PCB-1248	< 5.	mg/kg	5.	064300000N
PCB-1254	< 5.	mg/kg	5.	064400000N
PCB-1260	< 5.	mg/kg	5.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100546

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 126036

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 0.20	mg/kg	0.2	060900000N
Beta BHC	< 0.20	mg/kg	0.2	061000000N
Gamma BHC - Lindane	< 0.20	mg/kg	0.2	045300000N
Delta BHC	< 0.20	mg/kg	0.2	061200000N
Heptachlor	< 0.20	mg/kg	0.2	045400000N
Aldrin	< 0.20	mg/kg	0.2	045500000N
Heptachlor Epoxide	< 0.20	mg/kg	0.2	061500000N
DDE	< 0.20	mg/kg	0.2	061600000N
DDD	< 0.20	mg/kg	0.2	061700000N
DDT	< 0.20	mg/kg	0.2	047800000N
Dieldrin	< 0.060	mg/kg	0.06	046900000N
Endrin	< 0.060	mg/kg	0.06	047700000N
Chlordane	< 1.0	mg/kg	1.	062500000N
Toxaphene	< 2.0	mg/kg	2.	06260000[illegible]
Endosulfan I	< 0.060	mg/kg	0.06	06270000[illegible]
Endosulfan II	< 0.20	mg/kg	0.2	062800000N
Endosulfan Sulfate	< 0.20	mg/kg	0.2	062900000N
Endrin Aldehyde	< 0.60	mg/kg	0.6	063800000N
PCB-1016	< 6.0	mg/kg	6.	063900000N
PCB-1221	< 6.0	mg/kg	6.	064000000N
PCB-1232	< 6.0	mg/kg	6.	064100000N
PCB-1242	< 6.0	mg/kg	6.	064200000N
PCB-1248	< 6.0	mg/kg	6.	064300000N
PCB-1254	< 6.0	mg/kg	6.	064400000N
PCB-1260	< 6.0	mg/kg	6.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100547

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

The American Association for Laboratory Accreditation
Medical, Biological & Environmental Testing

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW-1260361

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	< 500.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	083700000N
Carbon Tetrachloride	< 500.	ug/kg	500.	083800000N
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	< 500.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR000548

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

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Member American Council of Independent Laboratories, Inc.

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260361

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313·1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127·05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 600.	ug/kg	600.	083100000N
Trichlorofluoromethane	< 600.	ug/kg	600.	079000000N
1,1·Dichloroethene	< 600.	ug/kg	600.	083200000N
1,1·Dichloroethane	< 600.	ug/kg	600.	083300000N
trans·1,2·Dichloroethene	< 600.	ug/kg	600.	083400000N
Chloroform	< 600.	ug/kg	600.	083500000N
1,2·Dichloroethane	< 600.	ug/kg	600.	083600000N
1,1,1·Trichloroethane	< 600.	ug/kg	600.	083700000N
Carbon Tetrachloride	< 600.	ug/kg	600.	08380000[illegible]
Bromodichloromethane	< 600.	ug/kg	600.	08390000[illegible]
1,1,2,2·Tetrachloroethane	< 600.	ug/kg	600.	084900000N
1,2·Dichloropropane	< 600.	ug/kg	600.	084000000N
trans·1,3·Dichloropropene	< 600.	ug/kg	600.	084100000N
Trichloroethene	< 600.	ug/kg	600.	084200000N
Dibromochloromethane	< 600.	ug/kg	600.	084600000N
1,1,2·Trichloroethane	< 600.	ug/kg	600.	084500000N
Benzene	< 600.	ug/kg	600.	084300000N
cis·1,3·Dichloropropene	< 600.	ug/kg	600.	084400000N
2·Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 600.	ug/kg	600.	084700000N
Tetrachloroethene	< 600.	ug/kg	600.	084800000N
Toluene	< 600.	ug/kg	600.	085000000N
Chlorobenzene	< 600.	ug/kg	600.	085100000N
Ethylbenzene	< 600.	ug/kg	600.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Sample No. SW 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 0.33	mg/kg	0.33	064600000N
phenol	< 0.33	mg/kg	0.33	065500000N
2-nitrophenol	< 0.33	mg/kg	0.33	065100000N
2,4-dimethylphenol	< 0.33	mg/kg	0.33	064800000N
2,4-dichlorophenol	< 0.33	mg/kg	0.33	064700000N
4-chloro-3-methylphenol	< 0.33	mg/kg	0.33	065300000N
2,4,6-trichlorophenol	< 0.33	mg/kg	0.33	065600000N
2,4-dinitrophenol	< 0.833	mg/kg	0.833	065000000N
4-nitrophenol	< 0.833	mg/kg	0.833	065200000N
2-methyl-4,6-dinitrophenol	< 0.833	mg/kg	0.833	064900000N
pentachlorophenol	< 0.833	mg/kg	0.833	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR 0550

American Association for Laboratory Accreditation Water, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA 17601-5994 (717) 656-2301

LL Sample No. SW 1269361

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Acid Extractables				
2-chlorophenol	< 0.40	mg/kg	0.4	064600000N
phenol	< 0.40	mg/kg	0.4	065500000N
2-nitrophenol	< 0.40	mg/kg	0.4	065100000N
2,4-dimethylphenol	< 0.40	mg/kg	0.4	064800000N
2,4-dichlorophenol	< 0.40	mg/kg	0.4	064700000N
4-chloro-3-methylphenol	< 0.40	mg/kg	0.4	065300000N
2,4,6-trichlorophenol	< 0.40	mg/kg	0.4	065600000N
2,4-dinitrophenol	< 1.0	mg/kg	1.	065000000N
4-nitrophenol	< 1.0	mg/kg	1.	065200000N
2-methyl-4,6-dinitrophenol	< 1.0	mg/kg	1.	064900000N
pentachlorophenol	< 1.0	mg/kg	1.	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

A2100531

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Acl. Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

Lab Sample No. SW-126036

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 0.33	mg/kg	0.33	069700000N
bis (2-chloroethyl) ether	< 0.33	mg/kg	0.33	066700000N
1,3-dichlorobenzene	< 0.33	mg/kg	0.33	067700000N
1,4-dichlorobenzene	< 0.33	mg/kg	0.33	067800000N
1,2-dichlorobenzene	< 0.33	mg/kg	0.33	067600000N
bis (2-chloroisopropyl) ether	< 0.33	mg/kg	0.33	066800000N
hexachloroethane	< 0.33	mg/kg	0.33	069200000N
N-nitrosodi-n-propylamine	< 0.33	mg/kg	0.33	069800000N
nitrobenzene	< 0.33	mg/kg	0.33	069600000N
isophorone	< 0.33	mg/kg	0.33	069400000N
bis (2-chloroethoxy) methane	< 0.33	mg/kg	0.33	066600000N
1,2,4-trichlorobenzene	< 0.33	mg/kg	0.33	070200000N
naphthalene	< 0.33	mg/kg	0.33	069500000N
hexachlorobutadiene	< 0.33	mg/kg	0.33	069000000N
hexachlorocyclopentadiene	< 0.33	mg/kg	0.33	069100000N
2-chloronaphthalene	< 0.33	mg/kg	0.33	067200000N
acenaphthylene	< 0.33	mg/kg	0.33	065800000N
dimethyl phthalate	< 0.33	mg/kg	0.33	068100000N
2,6-dinitrotoluene	< 0.33	mg/kg	0.33	068400000N
acenaphthene	< 0.33	mg/kg	0.33	065700000N
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	068300000N
fluorene	< 0.33	mg/kg	0.33	068800000N
4-chlorophenyl phenyl ether	< 0.33	mg/kg	0.33	067300000N
diethyl phthalate	< 0.33	mg/kg	0.33	068000000N
1,2-diphenylhydrazine	< 0.33	mg/kg	0.33	068600000N
N-nitrosodiphenylamine	< 0.33	mg/kg	0.33	069900000N
4-bromophenyl phenyl ether	< 0.33	mg/kg	0.33	067000000N
hexachlorobenzene	< 0.33	mg/kg	0.33	068900000N
phenanthrene	< 0.33	mg/kg	0.33	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100552

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Water, Wastewater & Environmental Testing

American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories INCORPORATED

LLI Sample No. SW 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 0.40	mg/kg	0.4	069700000N
bis (2-chloroethyl) ether	< 0.40	mg/kg	0.4	066700000N
1,3-dichlorobenzene	< 0.40	mg/kg	0.4	067700000N
1,4-dichlorobenzene	< 0.40	mg/kg	0.4	067800000N
1,2-dichlorobenzene	< 0.40	mg/kg	0.4	067600000N
bis (2-chloroisopropyl) ether	< 0.40	mg/kg	0.4	066800000N
hexachloroethane	< 0.40	mg/kg	0.4	069200000N
N-nitrosodi-n-propylamine	< 0.40	mg/kg	0.4	069800000N
nitrobenzene	< 0.40	mg/kg	0.4	069600000N
isophorone	< 0.40	mg/kg	0.4	069400000N
bis (2-chloroethoxy) methane	< 0.40	mg/kg	0.4	066600000N
1,2,4-trichlorobenzene	< 0.40	mg/kg	0.4	070200000N
naphthalene	< 0.40	mg/kg	0.4	069500000N
hexachlorobutadiene	< 0.40	mg/kg	0.4	0690000[illegible]
hexachlorocyclopentadiene	< 0.40	mg/kg	0.4	0691000[illegible]
2-chloronaphthalene	< 0.40	mg/kg	0.4	067200000N
acenaphthylene	< 0.40	mg/kg	0.4	065800000N
dimethyl phthalate	< 0.40	mg/kg	0.4	068100000N
2,6-dinitrotoluene	< 0.40	mg/kg	0.4	068400000N
acenaphthene	< 0.40	mg/kg	0.4	065700000N
2,4-dinitrotoluene	< 0.40	mg/kg	0.4	068300000N
fluorene	< 0.40	mg/kg	0.4	068800000N
4-chlorophenyl phenyl ether	< 0.40	mg/kg	0.4	067300000N
diethyl phthalate	< 0.40	mg/kg	0.4	068000000N
1,2-diphenylhydrazine	< 0.40	mg/kg	0.4	068600000N
N-nitrosodiphenylamine	< 0.40	mg/kg	0.4	069900000N
4-bromophenyl phenyl ether	< 0.40	mg/kg	0.4	067000000N
hexachlorobenzene	< 0.40	mg/kg	0.4	068900000N
phenanthrene	< 0.40	mg/kg	0.4	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100653

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No: SW 1260361

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDH

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 0.33	mg/kg	0.33	065900000N
di-n-butyl phthalate	< 0.33	mg/kg	0.33	068200000N
fluoranthene	< 0.33	mg/kg	0.33	068700000N
pyrene	< 0.33	mg/kg	0.33	070100000N
benzidine	< 0.833	mg/kg	0.833	066000000N
butyl benzyl phthalate	< 0.33	mg/kg	0.33	067100000N
benzo (a) anthracene	< 0.33	mg/kg	0.33	066100000N
chrysene	< 0.33	mg/kg	0.33	067400000N
3,3'-dichlorobenzidine	< 0.833	mg/kg	0.833	067900000N
bis (2-ethylhexyl) phthalate	< 0.33	mg/kg	0.33	066900000N
di-n-octyl phthalate	< 0.33	mg/kg	0.33	068500000N
benzo (b) fluoranthene	< 0.33	mg/kg	0.33	066300000N
benzo (K) fluoranthene	< 0.33	mg/kg	0.33	066500000N
benzo (a) pyrene	< 0.33	mg/kg	0.33	066200000N
indeno (1,2,3-cd) pyrene	< 0.33	mg/kg	0.33	069300000N
dibenzo (a,h) anthracene	< 0.33	mg/kg	0.33	067500000N
benzo (ghi) perylene	< 0.33	mg/kg	0.33	066400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260361

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Background 1 Grab Soil Sample
Collected on 04/26/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 0.40	mg/kg	0.4	065900000N
di-n-butyl phthalate	< 0.40	mg/kg	0.4	068200000N
fluoranthene	< 0.40	mg/kg	0.4	068700000N
pyrene	< 0.40	mg/kg	0.4	070100000N
benzidine	< 1.0	mg/kg	1.	066000000N
butyl benzyl phthalate	< 0.40	mg/kg	0.4	067100000N
benzo (a) anthracene	< 0.40	mg/kg	0.4	066100000N
chrysene	< 0.40	mg/kg	0.4	067400000N
3,3'-dichlorobenzidine	< 1.0	mg/kg	1.	067900000N
bis (2-ethylhexyl) phthalate	< 0.40	mg/kg	0.4	066900000N
di-n-octyl phthalate	< 0.40	mg/kg	0.4	068500000N
benzo (b) fluoranthene	< 0.40	mg/kg	0.4	066300000N
benzo (K) fluoranthene	< 0.40	mg/kg	0.4	066500000N
benzo (a) pyrene	< 0.40	mg/kg	0.4	06620000[illegible]
indeno (1,2,3-cd) pyrene	< 0.40	mg/kg	0.4	06930000[illegible]
dibenzo (a,h) anthracene	< 0.40	mg/kg	0.4	067500000N
benzo (ghi) perylene	< 0.40	mg/kg	0.4	066400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

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Member, American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

07:44:22 182843
P02123 D I 44

LLI Sample No. SW 1260369

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL
(Red)

Drum Storage Area Background 0-18" Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	26.3	% by wt.	0.1	011101100
Dioxin Screen	< 0.02	mg/kg	0.02	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation Biological & Environmental Testing

American Council of Independent Laboratories Inc.

02913 60.00 023100

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100556

ANALYSIS REPORT

Lancaster Laboratories

FO2123 D 1 44

LLI Sample No. SW 1260369

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Background 0-18" Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.030 mg/kg	0.03	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100557

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation Biological & Environmental Testing

American Council of Independent Laboratories, Inc.

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ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1260, Lancaster, PA 17604 (717) 656-2301

P02123 D 1 44

LLI Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.8	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	23.	mg/kg	1.	014503300
Beryllium	0.9	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	14.	mg/kg	5.	015101300
Copper	20.	mg/kg	2.	015301300
Lead	12.	mg/kg	5.	015501300
Mercury	0.1	mg/kg	0.1	015903300
Nickel	17.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	124.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.4	mg/kg	0.4	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	3.3	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage Complete			0.	094402500

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100558

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

146 02913 110.00 150000

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 • (717) 656-2301 • Telex 902123 • D 1 44

LLI Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT.	BASIS	LIMIT OF DETECTION	LAB CODE
Antimony	< 6.0	mg/kg	6.	014402500
Arsenic	28.0	mg/kg	1.	014503300
Beryllium	1.09	mg/kg	0.6	014703300
Cadmium	< 0.60	mg/kg	0.6	014901300
Chromium	17.0	mg/kg	6.	015101300
Copper	24.3	mg/kg	2.	015301300
Lead	14.6	mg/kg	6.	015501300
Mercury	0.12	mg/kg	0.1	015901300
Nickel	20.7	mg/kg	5.	016101300
Selenium	< 0.60	mg/kg	0.6	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	151.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.060	mg/kg	0.06	02370130[illegible]
Dioxin Screen	< 0.50	mg/kg	0.5	03821600[illegible]
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	4.01	mg/kg	0.1	043404000
Purgables Method # 624		attached		052004000
Thallium	< 20.	mg/kg	20.	052504000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR000559

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing.

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ANALYSIS REPORT

Lancaster Laboratories

P02123 D 1 44

I.L.L. Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 5.	mg/kg	5.	060900000N
Beta BHC	< 5.	mg/kg	5.	061000000N
Gamma BHC - Lindane	< 5.	mg/kg	5.	045300000N
Delta BHC	< 5.	mg/kg	5.	061200000N
Heptachlor	< 5.	mg/kg	5.	045400000N
Aldrin	< 5.	mg/kg	5.	045500000N
Heptachlor Epoxide	< 5.	mg/kg	5.	061500000N
DDE	< 5.	mg/kg	5.	061600000N
DDD	< 5.	mg/kg	5.	061700000N
DDT	< 5.	mg/kg	5.	047800000N
Dieldrin	< 0.5	mg/kg	0.5	046900000N
Endrin	< 0.5	mg/kg	0.5	047700000N
Chlordane	< 20.	mg/kg	20.	062500000N
Toxaphene	< 50.	mg/kg	50.	062600000N
Endosulfan I	< 0.5	mg/kg	0.5	062700000N
Endosulfan II	< 0.5	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 2.	mg/kg	2.	062900000N
Endrin Aldehyde	< 5.	mg/kg	5.	063800000N
PCB-1016	< 50.	mg/kg	50.	063900000N
PCB-1221	< 50.	mg/kg	50.	064000000N
PCB-1232	< 50.	mg/kg	50.	064100000N
PCB-1242	< 50.	mg/kg	50.	064200000N
PCB-1248	< 50.	mg/kg	50.	064300000N
PCB-1254	< 50.	mg/kg	50.	064400000N
PCB-1260	< 50.	mg/kg	50.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

ARI 00560

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

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ORIGINAL
(Red)

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL
(Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Pesticides/PCB's				
Alpha BHC	< 6.0	mg/kg	6.	060900000N
Beta BHC	< 6.0	mg/kg	6.	061000000N
Gamma BHC - Lindane	< 6.0	mg/kg	6.	045300000N
Delta BHC	< 6.0	mg/kg	6.	061200000N
Heptachlor	< 6.0	mg/kg	6.	045400000N
Aldrin	< 6.0	mg/kg	6.	045500000N
Heptachlor Epoxide	< 6.0	mg/kg	6.	061500000N
DDE	< 6.0	mg/kg	6.	061600000N
DDD	< 6.0	mg/kg	6.	061700000N
DDT	< 6.0	mg/kg	6.	047800000N
Dieldrin	< 0.60	mg/kg	0.6	046900000N
Endrin	< 0.60	mg/kg	0.6	047700000N
Chlordane	< 20.	mg/kg	20.	062500000N
Toxaphene	< 60.	mg/kg	60.	062600000N
Endosulfan I	< 0.60	mg/kg	0.6	062700000N
Endosulfan II	< 0.60	mg/kg	0.6	062800000N
Endosulfan Sulfate	< 2.0	mg/kg	2.	062900000N
Endrin Aldehyde	< 6.0	mg/kg	6.	063800000N
PCB-1016	< 60.	mg/kg	60.	063900000N
PCB-1221	< 60.	mg/kg	60.	064000000N
PCB-1232	< 60.	mg/kg	60.	064100000N
PCB-1242	< 60.	mg/kg	60.	064200000N
PCB-1248	< 60.	mg/kg	60.	064300000N
PCB-1254	< 60.	mg/kg	60.	064400000N
PCB-1260	< 60.	mg/kg	60.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

AR100562

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	3,700.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	0837000[illegible]
Carbon Tetrachloride	< 500.	ug/kg	500.	0838000[illegible]
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	1,000.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

ARID0563

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 600.	ug/kg	600.	083100000N
Trichlorofluoromethane	< 600.	ug/kg	600.	079000000N
1,1-Dichloroethene	< 600.	ug/kg	600.	083200000N
1,1-Dichloroethane	< 600.	ug/kg	600.	083300000N
trans-1,2-Dichloroethene	< 600.	ug/kg	600.	083400000N
Chloroform	4,500.	ug/kg	600.	083500000N
1,2-Dichloroethane	< 600.	ug/kg	600.	083600000N
1,1,1-Trichloroethane	< 600.	ug/kg	600.	083700000N
Carbon Tetrachloride	< 600.	ug/kg	600.	083800000N
Bromodichloromethane	< 600.	ug/kg	600.	083900000N
1,1,2,2-Tetrachloroethane	< 600.	ug/kg	600.	084900000N
1,2-Dichloropropane	< 600.	ug/kg	600.	084000000N
trans-1,3-Dichloropropene	< 600.	ug/kg	600.	084100000N
Trichloroethene	< 600.	ug/kg	600.	084200000N
Dibromochloromethane	< 600.	ug/kg	600.	084600000N
1,1,2-Trichloroethane	< 600.	ug/kg	600.	084500000N
Benzene	< 600.	ug/kg	600.	084300000N
cis-1,3-Dichloropropene	< 600.	ug/kg	600.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 600.	ug/kg	600.	084700000N
Tetrachloroethene	< 600.	ug/kg	600.	084800000N
Toluene	1,200.	ug/kg	600.	085000000N
Chlorobenzene	< 600.	ug/kg	600.	085100000N
Ethylbenzene	< 600.	ug/kg	600.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100564

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LLI Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 17.	mg/kg	17.	064600000N
phenol	< 17.	mg/kg	17.	065500000N
2-nitrophenol	< 17.	mg/kg	17.	065100000N
2,4-dimethylphenol	< 17.	mg/kg	17.	064800000N
2,4-dichlorophenol	< 17.	mg/kg	17.	064700000N
4-chloro-3-methylphenol	< 17.	mg/kg	17.	065300000N
2,4,6-trichlorophenol	< 17.	mg/kg	17.	065600000N
2,4-dinitrophenol	< 41.6	mg/kg	41.6	065000000N
4-nitrophenol	< 41.6	mg/kg	41.6	065200000N
2-methyl-4,6-dinitrophenol	< 41.6	mg/kg	41.6	064900000N
pentachlorophenol	< 41.6	mg/kg	41.6	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved

AR100565

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Medical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

[illegible] Lancaster, PA 17601 (717) 656-2301

Lab Sample No. SW-1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ORIGINAL (Red)

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 20.	mg/kg	20.	064600000N
phenol	< 20.	mg/kg	20.	065500000N
2-nitrophenol	< 20.	mg/kg	20.	065100000N
2,4-dimethylphenol	< 20.	mg/kg	20.	064800000N
2,4-dichlorophenol	< 20.	mg/kg	20.	064700000N
4-chloro-3-methylphenol	< 20.	mg/kg	20.	065300000N
2,4,6-trichlorophenol	< 20.	mg/kg	20.	065600000N
2,4-dinitrophenol	< 50.	mg/kg	50.	065000000N
4-nitrophenol	< 50.	mg/kg	50.	065200000N
2-methyl-4,6-dinitrophenol	< 50.	mg/kg	50.	064900000N
pentachlorophenol	< 50.	mg/kg	50.	065400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100566

Respectfully Submitted, L.L.C.
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Fields of Testing)

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2301

LLI Sample No. SW 1260356

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CV127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 17.	mg/kg	17.	069700000N
bis (2-chloroethyl) ether	< 17.	mg/kg	17.	066700000N
1,3-dichlorobenzene	< 17.	mg/kg	17.	067700000N
1,4-dichlorobenzene	< 17.	mg/kg	17.	067800000N
1,2-dichlorobenzene	< 17.	mg/kg	17.	067600000N
bis (2-chloroisopropyl) ether	< 17.	mg/kg	17.	066800000N
hexachloroethane	< 17.	mg/kg	17.	069200000N
N-nitrosodi-n-propylamine	< 17.	mg/kg	17.	069800000N
nitrobenzene	< 17.	mg/kg	17.	069600000N
isophorone	< 17.	mg/kg	17.	069400000N
bis (2-chloroethoxy) methane	< 17.	mg/kg	17.	066600000N
1,2,4-trichlorobenzene	< 17.	mg/kg	17.	070200000N
naphthalene	< 17.	mg/kg	17.	069500000N
hexachlorobutadiene	< 17.	mg/kg	17.	0690000[illegible]
hexachlorocyclopentadiene	< 17.	mg/kg	17.	0691000[illegible]
2-chloronaphthalene	< 17.	mg/kg	17.	067200000N
acenaphthylene	< 17.	mg/kg	17.	065800000N
dimethyl phthalate	< 17.	mg/kg	17.	068100000N
2,6-dinitrotoluene	< 17.	mg/kg	17.	068400000N
acenaphthene	< 17.	mg/kg	17.	065700000N
2,4-dinitrotoluene	< 17.	mg/kg	17.	068300000N
fluorene	< 17.	mg/kg	17.	068800000N
4-chlorophenyl phenyl ether	< 17.	mg/kg	17.	067300000N
diethyl phthalate	< 17.	mg/kg	17.	068000000N
1,2-diphenylhydrazine	< 17.	mg/kg	17.	068600000N
N-nitrosodiphenylamine	200.	mg/kg	17.	069900000N
4-bromophenyl phenyl ether	< 17.	mg/kg	17.	067000000N
hexachlorobenzene	< 17.	mg/kg	17.	068900000N
phenanthrene	< 17.	mg/kg	17.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100567

Respectfully Submitted,
Lancaster Labo[illegible]
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 20.	mg/kg	20.	069700000N
bis (2-chloroethyl) ether	< 20.	mg/kg	20.	066700000N
1,3-dichlorobenzene	< 20.	mg/kg	20.	067700000N
1,4-dichlorobenzene	< 20.	mg/kg	20.	067800000N
1,2-dichlorobenzene	< 20.	mg/kg	20.	067600000N
bis (2-chloroisopropyl) ether	< 20.	mg/kg	20.	066800000N
hexachloroethane	< 20.	mg/kg	20.	069200000N
N-nitrosodi-n-propylamine	< 20.	mg/kg	20.	069800000N
nitrobenzene	< 20.	mg/kg	20.	069600000N
isophorone	< 20.	mg/kg	20.	069400000N
bis (2-chloroethoxy) methane	< 20.	mg/kg	20.	066600000N
1,2,4-trichlorobenzene	< 20.	mg/kg	20.	070200000N
naphthalene	< 20.	mg/kg	20.	069500000N
hexachlorobutadiene	< 20.	mg/kg	20.	069000000N
hexachlorocyclopentadiene	< 20.	mg/kg	20.	069100000N
2-chloronaphthalene	< 20.	mg/kg	20.	067200000N
acenaphthylene	< 20.	mg/kg	20.	065800000N
dimethyl phthalate	< 20.	mg/kg	20.	068100000N
2,6-dinitrotoluene	< 20.	mg/kg	20.	068400000N
acenaphthene	< 20.	mg/kg	20.	065700000N
2,4-dinitrotoluene	< 20.	mg/kg	20.	068300000N
fluorene	< 20.	mg/kg	20.	068800000N
4-chlorophenyl phenyl ether	< 20.	mg/kg	20.	067300000N
diethyl phthalate	< 20.	mg/kg	20.	068000000N
1,2-diphenylhydrazine	< 20.	mg/kg	20.	068600000N
N-nitrosodiphenylamine	243.	mg/kg	20.	069900000N
4-bromophenyl phenyl ether	< 20.	mg/kg	20.	067000000N
hexachlorobenzene	< 20.	mg/kg	20.	068900000N
phenanthrene	< 20.	mg/kg	20.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR100568

American Association for Laboratory Accreditation Accredited Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260356

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 20.	mg/kg	20.	065900000N
di-n-butyl phthalate	< 20.	mg/kg	20.	068200000N
fluoranthene	< 20.	mg/kg	20.	068700000N
pyrene	< 20.	mg/kg	20.	070100000N
benzidine	< 50.	mg/kg	50.	066000000N
butyl benzyl phthalate	< 20.	mg/kg	20.	067100000N
benzo (a) anthracene	< 20.	mg/kg	20.	066100000N
chrysene	< 20.	mg/kg	20.	067400000N
3,3'-dichlorobenzidine	< 50.	mg/kg	50.	067900000N
bis (2-ethylhexyl) phthalate	< 20.	mg/kg	20.	066900000N
di-n-octyl phthalate	< 20.	mg/kg	20.	068500000N
benzo (b) fluoranthene	< 20.	mg/kg	20.	066300000N
benzo (K) fluoranthene	< 20.	mg/kg	20.	066500000N
benzo (a) pyrene	< 20.	mg/kg	20.	0662000[illegible]
indeno (1,2,3-cd) pyrene	< 20.	mg/kg	20.	0693000[illegible]
dibenzo (a,h) anthracene	< 20.	mg/kg	20.	06750000[illegible]
benzo (ghi) perylene	< 20.	mg/kg	20.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100569

Respectfully Submitted,
Lancaster Labor[illegible]
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
[illegible] Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

ILT Sample No. SW 1260356

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior Composite Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 17.	mg/kg	17.	065900000N
di-n-butyl phthalate	< 17.	mg/kg	17.	068200000N
fluoranthene	< 17.	mg/kg	17.	068700000N
pyrene	< 17.	mg/kg	17.	070100000N
benzidine	< 41.6	mg/kg	41.6	066000000N
butyl benzyl phthalate	< 17.	mg/kg	17.	067100000N
benzo (a) anthracene	< 17.	mg/kg	17.	066100000N
chrysene	< 17.	mg/kg	17.	067400000N
3,3'-dichlorobenzidine	< 41.6	mg/kg	41.6	067900000N
bis (2-ethylhexyl) phthalate	< 17.	mg/kg	17.	066900000N
di-n-octyl phthalate	< 17.	mg/kg	17.	068500000N
benzo (b) fluoranthene	< 17.	mg/kg	17.	066300000N
benzo (K) fluoranthene	< 17.	mg/kg	17.	066500000N
benzo (a) pyrene	< 17.	mg/kg	17.	066200000N
indeno (1,2,3-cd) pyrene	< 17.	mg/kg	17.	069300000N
dibenzo (a,h) anthracene	< 17.	mg/kg	17.	067500000N
benzo (ghi) perylene	< 17.	mg/kg	17.	066400000N

The usual reporting limits could not be attained due to the matrix of the sample or interferences observed in the GC/MS analysis.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR400570

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	26.2	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	17.	mg/kg	1.	014503300
Beryllium	0.5	mg/kg	0.5	014701300
Cadmium	< 0.5	mg/kg	0.5	014901300
Chromium	13.	mg/kg	5.	015101300
Copper	25.	mg/kg	2.	015301300
Lead	15.	mg/kg	5.	015501300
Mercury	< 0.1	mg/kg	0.1	015903300
Nickel	12.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	29.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	0.07	mg/kg	0.05	023704000
Dioxin Screen	< 0.02	mg/kg	0.02	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.1	mg/kg	0.1	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100571

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation of Analytical, Biological & Environmental Laboratories

146 02913 110.00 147500

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Antimony	< 7.0	mg/kg	7.	014401000
Arsenic	23.0	mg/kg	1.	014503300
Beryllium	< 0.70	mg/kg	0.7	014703300
Cadmium	< 0.70	mg/kg	0.7	014901300
Chromium	17.6	mg/kg	7.	015101300
Copper	33.9	mg/kg	3.	015301300
Lead	20.3	mg/kg	7.	015501300
Mercury	< 0.10	mg/kg	0.1	015901300
Nickel	16.3	mg/kg	5.	016101300
Selenium	< 0.70	mg/kg	0.7	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	39.3	mg/kg	3.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	0.095	mg/kg	0.07	023701300
Dioxin Screen	< 0.030	mg/kg	0.03	038216000
This is a semi-quantitative screen. Results are reported as less than the lovest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	< 0.10	mg/kg	0.1	043416000
Purgables Method # 624		attached		052016000
Thallium	< 30.	mg/kg	30.	052516000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000

Zinc was detected in the blank for this sample at a concentration of 3 mg/kg. The result shown for this element has not been blank subtracted.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100572

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SV 1260365

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 0.5	mg/kg	0.5	060900000N
Beta BHC	< 0.5	mg/kg	0.5	061000000N
Gamma BHC - Lindane	< 0.5	mg/kg	0.5	045300000N
Delta BHC	< 0.5	mg/kg	0.5	061200000N
Heptachlor	< 0.5	mg/kg	0.5	045400000N
Aldrin	< 0.5	mg/kg	0.5	045500000N
Heptachlor Epoxide	< 0.5	mg/kg	0.5	061500000N
DDE	< 0.5	mg/kg	0.5	061600000N
DDD	< 0.5	mg/kg	0.5	061700000N
DDT	< 0.5	mg/kg	0.5	047800000N
Dieldrin	< 0.5	mg/kg	0.5	046900000N
Endrin	< 0.5	mg/kg	0.5	047700000N
Chlordane	< 5.	mg/kg	5.	062500000N
Toxaphene	< 5.	mg/kg	5.	062600000N
Endosulfan I	< 0.5	mg/kg	0.5	062700000N
Endosulfan II	< 0.5	mg/kg	0.5	062800000N
Endosulfan Sulfate	< 2.	mg/kg	2.	062900000N
Endrin Aldehyde	< 5.	mg/kg	5.	063800000N
PCB-1016	< 10.	mg/kg	10.	063900000N
PCB-1221	< 10.	mg/kg	10.	064000000N
PCB-1232	< 10.	mg/kg	10.	064100000N
PCB-1242	< 10.	mg/kg	10.	064200000N
PCB-1248	< 10.	mg/kg	10.	064300000N
PCB-1254	< 10.	mg/kg	10.	064400000N
PCB-1260	< 10.	mg/kg	10.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

The American Association for Laboratory Accreditation Chemical Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No: SV 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 0.70	mg/kg	0.7	060900000N
Beta BHC	< 0.70	mg/kg	0.7	061000000N
Gamma BHC - Lindane	< 0.70	mg/kg	0.7	045300000N
Delta BHC	< 0.70	mg/kg	0.7	061200000N
Heptachlor	< 0.70	mg/kg	0.7	045400000N
Aldrin	< 0.70	mg/kg	0.7	045500000N
Heptachlor Epoxide	< 0.70	mg/kg	0.7	061500000N
DDE	< 0.70	mg/kg	0.7	061600000N
DDD	< 0.70	mg/kg	0.7	061700000N
DDT	< 0.70	mg/kg	0.7	047800000N
Dieldrin	< 0.70	mg/kg	0.7	046900000N
Endrin	< 0.70	mg/kg	0.7	047700000N
Chlordane	< 7.0	mg/kg	7.	062500000N
Toxaphene	< 7.0	mg/kg	7.	062600000N
Endosulfan I	< 0.70	mg/kg	0.7	062700000N
Endosulfan II	< 0.70	mg/kg	0.7	062800000N
Endosulfan Sulfate	< 3.0	mg/kg	3.	062900000N
Endrin Aldehyde	< 7.0	mg/kg	7.	063800000N
PCB-1016	< 10.	mg/kg	10.	063900000N
PCB-1221	< 10.	mg/kg	10.	064000000N
PCB-1232	< 10.	mg/kg	10.	064100000N
PCB-1242	< 10.	mg/kg	10.	064200000N
PCB-1248	< 10.	mg/kg	10.	064300000N
PCB-1254	< 10.	mg/kg	10.	064400000N
PCB-1260	< 10.	mg/kg	10.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation in Industrial & Environmental Testing

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

AR100574

ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Rev)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 500.	ug/kg	500.	083100000N
Trichlorofluoromethane	< 500.	ug/kg	500.	079000000N
1,1-Dichloroethene	< 500.	ug/kg	500.	083200000N
1,1-Dichloroethane	< 500.	ug/kg	500.	083300000N
trans-1,2-Dichloroethene	< 500.	ug/kg	500.	083400000N
Chloroform	< 500.	ug/kg	500.	083500000N
1,2-Dichloroethane	< 500.	ug/kg	500.	083600000N
1,1,1-Trichloroethane	< 500.	ug/kg	500.	083700000N
Carbon Tetrachloride	< 500.	ug/kg	500.	083800000N
Bromodichloromethane	< 500.	ug/kg	500.	083900000N
1,1,2,2-Tetrachloroethane	< 500.	ug/kg	500.	084900000N
1,2-Dichloropropane	< 500.	ug/kg	500.	084000000N
trans-1,3-Dichloropropene	< 500.	ug/kg	500.	084100000N
Trichloroethene	< 500.	ug/kg	500.	084200000N
Dibromochloromethane	< 500.	ug/kg	500.	084600000N
1,1,2-Trichloroethane	< 500.	ug/kg	500.	084500000N
Benzene	< 500.	ug/kg	500.	084300000N
cis-1,3-Dichloropropene	< 500.	ug/kg	500.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 500.	ug/kg	500.	084700000N
Tetrachloroethene	< 500.	ug/kg	500.	084800000N
Toluene	< 500.	ug/kg	500.	085000000N
Chlorobenzene	< 500.	ug/kg	500.	085100000N
Ethylbenzene	< 500.	ug/kg	500.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted,
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AR 00575

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Fields of Testing

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Member American Council of Independent Laboratories Inc

ANALYSIS REPORT

Lancaster Laboratories

502123 D 1 44

L.L. Sample No. SW 1260365

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Purgables Method # 624				
Chloromethane	< 1,000.	ug/kg	1000.	082700000N
Bromomethane	< 1,000.	ug/kg	1000.	082800000N
Vinyl Chloride	< 1,000.	ug/kg	1000.	082900000N
Chloroethane	< 1,000.	ug/kg	1000.	083000000N
Acrolein	< 10,000.	ug/kg	10000.	082400000N
Acrylonitrile	< 10,000.	ug/kg	10000.	082500000N
Methylene Chloride	< 700.	ug/kg	700.	083100000N
Trichlorofluoromethane	< 700.	ug/kg	700.	079000000N
1,1-Dichloroethene	< 700.	ug/kg	700.	083200000N
1,1-Dichloroethane	< 700.	ug/kg	700.	083300000N
trans-1,2-Dichloroethene	< 700.	ug/kg	700.	083400000N
Chloroform	< 700.	ug/kg	700.	083500000N
1,2-Dichloroethane	< 700.	ug/kg	700.	083600000N
1,1,1-Trichloroethane	< 700.	ug/kg	700.	083700000N
Carbon Tetrachloride	< 700.	ug/kg	700.	083800000N
Bromodichloromethane	< 700.	ug/kg	700.	083900000N
1,1,2,2-Tetrachloroethane	< 700.	ug/kg	700.	084900000N
1,2-Dichloropropane	< 700.	ug/kg	700.	084000000N
trans-1,3-Dichloropropene	< 700.	ug/kg	700.	084100000N
Trichloroethene	< 700.	ug/kg	700.	084200000N
Dibromochloromethane	< 700.	ug/kg	700.	084600000N
1,1,2-Trichloroethane	< 700.	ug/kg	700.	084500000N
Benzene	< 700.	ug/kg	700.	084300000N
cis-1,3-Dichloropropene	< 700.	ug/kg	700.	084400000N
2-Chloroethylvinyl ether	< 1,000.	ug/kg	1000.	082600000N
Bromoform	< 700.	ug/kg	700.	084700000N
Tetrachloroethene	< 700.	ug/kg	700.	084800000N
Toluene	< 700.	ug/kg	700.	085000000N
Chlorobenzene	< 700.	ug/kg	700.	085100000N
Ethylbenzene	< 700.	ug/kg	700.	085200000N

Sample dilution necessary because of foaming. Antifoam could not be used because of sample matrix.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

American Association for Laboratory Accreditation · Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

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88100676

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260365

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDH

	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Acid Extractables				
2-chlorophenol	< 0.33	mg/kg	0.33	064600000N
phenol	< 0.33	mg/kg	0.33	065500000N
2-nitrophenol	< 0.33	mg/kg	0.33	065100000N
2,4-dimethylphenol	< 0.33	mg/kg	0.33	064800000N
2,4-dichlorophenol	< 0.33	mg/kg	0.33	064700000N
4-chloro-3-methylphenol	< 0.33	mg/kg	0.33	065300000N
2,4,6-trichlorophenol	< 0.33	mg/kg	0.33	065600000N
2,4-dinitrophenol	< 0.833	mg/kg	0.833	065000000N
4-nitrophenol	< 0.833	mg/kg	0.833	065200000N
2-methyl-4,6-dinitrophenol	< 0.833	mg/kg	0.833	064900000N
pentachlorophenol	< 0.833	mg/kg	0.833	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100577

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Fields of Testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260365

ERM Midwest, Inc. · WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Acid Extractables	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 0.40	mg/kg	0.4	064600000N
phenol	< 0.40	mg/kg	0.4	065500000N
2-nitrophenol	< 0.40	mg/kg	0.4	065100000N
2,4-dimethylphenol	< 0.40	mg/kg	0.4	064800000N
2,4-dichlorophenol	< 0.40	mg/kg	0.4	064700000N
4-chloro-3-methylphenol	< 0.40	mg/kg	0.4	065300000N
2,4,6-trichlorophenol	< 0.40	mg/kg	0.4	065600000N
2,4-dinitrophenol	< 1.0	mg/kg	1.	065000000N
4-nitrophenol	< 1.0	mg/kg	1.	065200000N
2-methyl-4,6-dinitrophenol	< 1.0	mg/kg	1.	064900000N
pentachlorophenol	< 1.0	mg/kg	1.	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

AR100578

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

F02123 D.T. 44

LLL Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 0.33	mg/kg	0.33	069700000N
bis (2-chloroethyl) ether	< 0.33	mg/kg	0.33	066700000N
1,3-dichlorobenzene	< 0.33	mg/kg	0.33	067700000N
1,4-dichlorobenzene	< 0.33	mg/kg	0.33	067800000N
1,2-dichlorobenzene	< 0.33	mg/kg	0.33	067600000N
bis (2-chloroisopropyl) ether	< 0.33	mg/kg	0.33	066800000N
hexachloroethane	< 0.33	mg/kg	0.33	069200000N
N-nitrosodi-n-propylamine	< 0.33	mg/kg	0.33	069800000N
nitrobenzene	< 0.33	mg/kg	0.33	069600000N
isophorone	< 0.33	mg/kg	0.33	069400000N
bis (2-chloroethoxy) methane	< 0.33	mg/kg	0.33	066600000N
1,2,4-trichlorobenzene	< 0.33	mg/kg	0.33	070200000N
naphthalene	0.53	mg/kg	0.33	069500000N
hexachlorobutadiene	< 0.33	mg/kg	0.33	069000000N
hexachlorocyclopentadiene	< 0.33	mg/kg	0.33	069100000N
2-chloronaphthalene	< 0.33	mg/kg	0.33	067200000N
acenaphthylene	< 0.33	mg/kg	0.33	065800000N
dimethyl phthalate	< 0.33	mg/kg	0.33	068100000N
2,6-dinitrotoluene	< 0.33	mg/kg	0.33	068400000N
acenaphthene	< 0.33	mg/kg	0.33	065700000N
2,4-dinitrotoluene	< 0.33	mg/kg	0.33	068300000N
fluorene	< 0.33	mg/kg	0.33	068800000N
4-chlorophenyl phenyl ether	< 0.33	mg/kg	0.33	067300000N
diethyl phthalate	< 0.33	mg/kg	0.33	068000000N
1,2-diphenylhydrazine	< 0.33	mg/kg	0.33	068600000N
N-nitrosodiphenylamine	< 0.33	mg/kg	0.33	069900000N
4-bromophenyl phenyl ether	< 0.33	mg/kg	0.33	067000000N
hexachlorobenzene	< 0.33	mg/kg	0.33	068900000N
phenanthrene	0.73	mg/kg	0.33	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

American Association for Laboratory Accreditation Analytical & Environmental Testing

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Member American Council of Independent Laboratories Inc

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

AB100579

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

LLI Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 0.40	mg/kg	0.4	069700000N
bis (2-chloroethyl) ether	< 0.40	mg/kg	0.4	066700000N
1,3-dichlorobenzene	< 0.40	mg/kg	0.4	067700000N
1,4-dichlorobenzene	< 0.40	mg/kg	0.4	067800000N
1,2-dichlorobenzene	< 0.40	mg/kg	0.4	067600000N
bis (2-chloroisopropyl) ether	< 0.40	mg/kg	0.4	066800000N
hexachloroethane	< 0.40	mg/kg	0.4	069200000N
N-nitrosodi-n-propylamine	< 0.40	mg/kg	0.4	069800000N
nitrobenzene	< 0.40	mg/kg	0.4	069600000N
isophorone	< 0.40	mg/kg	0.4	069400000N
bis (2-chloroethoxy) methane	< 0.40	mg/kg	0.4	066600000N
1,2,4-trichlorobenzene	< 0.40	mg/kg	0.4	070200000N
naphthalene	0.72	mg/kg	0.4	069500000
hexachlorobutadiene	< 0.40	mg/kg	0.4	069000000
hexachlorocyclopentadiene	< 0.40	mg/kg	0.4	069100000N
2-chloronaphthalene	< 0.40	mg/kg	0.4	067200000N
acenaphthylene	< 0.40	mg/kg	0.4	065800000N
dimethyl phthalate	< 0.40	mg/kg	0.4	068100000N
2,6-dinitrotoluene	< 0.40	mg/kg	0.4	068400000N
acenaphthene	< 0.40	mg/kg	0.4	065700000N
2,4-dinitrotoluene	< 0.40	mg/kg	0.4	068300000N
fluorene	< 0.40	mg/kg	0.4	068800000N
4-chlorophenyl phenyl ether	< 0.40	mg/kg	0.4	067300000N
diethyl phthalate	< 0.40	mg/kg	0.4	068000000N
1,2-diphenylhydrazine	< 0.40	mg/kg	0.4	068600000N
N-nitrosodiphenylamine	< 0.40	mg/kg	0.4	069900000N
4-bromophenyl phenyl ether	< 0.40	mg/kg	0.4	067000000N
hexachlorobenzene	< 0.40	mg/kg	0.4	068900000N
phenanthrene	0.99	mg/kg	0.4	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

80

AR 1005

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories, Inc.

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

[illegible] 131191 37 182845 REP
[illegible] F02123 D 1 44

LLI Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDH

	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Base Neutrals (cont)				
anthracene	< 0.33	mg/kg	0.33	065900000N
di-n-butyl phthalate	< 0.33	mg/kg	0.33	068200000N
fluoranthene	< 0.33	mg/kg	0.33	068700000N
pyrene	< 0.33	mg/kg	0.33	070100000N
benzidine	< 0.833	mg/kg	0.833	066000000N
butyl benzyl phthalate	< 0.33	mg/kg	0.33	067100000N
benzo (a) anthracene	< 0.33	mg/kg	0.33	066100000N
chrysene	< 0.33	mg/kg	0.33	067400000N
3,3'-dichlorobenzidine	< 0.833	mg/kg	0.833	067900000N
bis (2-ethylhexyl) phthalate	< 0.33	mg/kg	0.33	066900000N
di-n-octyl phthalate	< 0.33	mg/kg	0.33	068500000N
benzo (b) fluoranthene	< 0.33	mg/kg	0.33	066300000N
benzo (K) fluoranthene	< 0.33	mg/kg	0.33	066500000N
benzo (a) pyrene	< 0.33	mg/kg	0.33	066200000N
indeno (1,2,3-cd) pyrene	< 0.33	mg/kg	0.33	069300000N
dibenzo (a,h) anthracene	< 0.33	mg/kg	0.33	067500000N
benzo (ghi) perylene	< 0.33	mg/kg	0.33	066400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

[illegible] 13:19:44 182845 REP
[illegible] P02123 D 1 44

LLI Sample No. SW 1260365

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

Chemical Waste Pit Composite Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Base Neutrals (cont)	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
anthracene	< 0.40	mg/kg	0.4	065900000N
di-n-butyl phthalate	< 0.40	mg/kg	0.4	068200000N
fluoranthene	< 0.40	mg/kg	0.4	068700000N
pyrene	< 0.40	mg/kg	0.4	070100000N
benzidine	< 1.0	mg/kg	1.	066000000N
butyl benzyl phthalate	< 0.40	mg/kg	0.4	067100000N
benzo (a) anthracene	< 0.40	mg/kg	0.4	066100000N
chrysene	< 0.40	mg/kg	0.4	067400000N
3,3'-dichlorobenzidine	< 1.0	mg/kg	1.	067900000N
bis (2-ethylhexyl) phthalate	< 0.40	mg/kg	0.4	066900000N
di-n-octyl phthalate	< 0.40	mg/kg	0.4	068500000N
benzo (b) fluoranthene	< 0.40	mg/kg	0.4	066300000N
benzo (K) fluoranthene	< 0.40	mg/kg	0.4	066500000N
benzo (a) pyrene	< 0.40	mg/kg	0.4	066200000
indeno (1,2,3-cd) pyrene	< 0.40	mg/kg	0.4	069300000N
dibenzo (a,h) anthracene	< 0.40	mg/kg	0.4	067500000N
benzo (ghi) perylene	< 0.40	mg/kg	0.4	066400000N

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100582

The American Association for Laboratory Accreditation Chemical, Biological & Environmental Testing

Certified American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

09:05:28 193735
WK1174—D—1—2

LLI Sample No. WW 1298613

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL (Red)

DS-1 Grab Water Sample
Collected on 08/19/88 at 1630 by RRO

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Antimony	< 0.05	mg/l	0.05	024401300
Arsenic	< 0.01	mg/l	0.01	024502500
Beryllium	< 0.005	mg/l	0.005	024701300
Cadmium	< 0.005	mg/l	0.005	024901300
Chromium	< 0.05	mg/l	0.05	025101300
Copper	< 0.02	mg/l	0.02	025301300
Lead	< 0.05	mg/l	0.05	025501300
Mercury	< 0.0005	mg/l	0.0005	025902500
Nickel	< 0.04	mg/l	0.04	026101300
Selenium	< 0.005	mg/l	0.005	026402500
Silver	< 0.01	mg/l	0.01	026601300
Zinc	0.06	mg/l	0.02	027201300
Thallium	< 0.1	mg/l	0.1	042201300
Purgables Method # 624		attached		052023000
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

AR 100583

02913 10.00 090500

American Association for Laboratory Accreditation: Medical, Biological & Environmental Testing.

Member American Council of Independent Laboratories, Inc.

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

LLI Sample No. WW 1298613

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL (Red)

DS-1 Grab Water Sample
Collected on 08/19/88 at 1630 by RRO

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 10.	ug/l	10.	082700000N
Bromomethane	< 10.	ug/l	10.	082800000N
Vinyl Chloride	< 10.	ug/l	10.	082900000N
Chloroethane	< 10.	ug/l	10.	083000000N
Acrolein	< 100.	ug/l	100.	082400000N
Acrylonitrile	< 100.	ug/l	100.	082500000N
Methylene Chloride	< 5.	ug/l	5.	083100000N
Trichlorofluoromethane	< 5.	ug/l	5.	079000000N
1,1-Dichloroethene	< 5.	ug/l	5.	083200000N
1,1-Dichloroethane	< 5.	ug/l	5.	083300000N
trans-1,2-Dichloroethene	< 5.	ug/l	5.	083400000N
Chloroform	< 5.	ug/l	5.	083500000N
1,2-Dichloroethane	< 5.	ug/l	5.	083600000N
1,1,1-Trichloroethane	< 5.	ug/l	5.	083700000N
Carbon Tetrachloride	< 5.	ug/l	5.	08380000[illegible]
Bromodichloromethane	< 5.	ug/l	5.	0839000[illegible]
1,1,2,2-Tetrachloroethane	< 5.	ug/l	5.	084900000N
1,2-Dichloropropane	< 5.	ug/l	5.	084000000N
trans-1,3-Dichloropropene	< 5.	ug/l	5.	084100000N
Trichloroethene	< 5.	ug/l	5.	084200000N
Dibromochloromethane	< 5.	ug/l	5.	084600000N
1,1,2-Trichloroethane	< 5.	ug/l	5.	084500000N
Benzene	< 5.	ug/l	5.	084300000N
cis-1,3-Dichloropropene	< 5.	ug/l	5.	084400000N
2-Chloroethylvinyl ether	< 10.	ug/l	10.	082600000N
Bromoform	< 5.	ug/l	5.	084700000N
Tetrachloroethene	< 5.	ug/l	5.	084800000N
Toluene	< 5.	ug/l	5.	085000000N
Chlorobenzene	< 5.	ug/l	5.	085100000N
Ethylbenzene	< 5.	ug/l	5.	085200000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

The American Association for Laboratory Accreditation
Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

09:05:42 193735

LLI Sample No. WW 1298613

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

DS-1 Grab Water Sample
Collected on 08/19/88 at 1630 by RRO

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 10.	ug/l	10.	064600000N
phenol	< 10.	ug/l	10.	065500000N
2-nitrophenol	< 10.	ug/l	10.	065100000N
2,4-dimethylphenol	< 10.	ug/l	10.	064800000N
2,4-dichlorophenol	< 10.	ug/l	10.	064700000N
4-chloro-3-methylphenol	< 10.	ug/l	10.	065300000N
2,4,6-trichlorophenol	< 10.	ug/l	10.	065600000N
2,4-dinitrophenol	< 25.	ug/l	25.	065000000N
4-nitrophenol	< 25.	ug/l	25.	065200000N
2-methyl-4,6-dinitrophenol	< 25.	ug/l	25.	064900000N
pentachlorophenol	< 25.	ug/l	25.	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved By:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

09:05:45 193735
WK1174 D-1-2

LLI Sample No. WW 1298613

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL FILE

DS-1 Grab Water Sample
Collected on 08/19/88 at 1630 by RRO

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 10.	ug/l	10.	069700000N
bis (2-chloroethyl) ether	< 10.	ug/l	10.	066700000N
1,3-dichlorobenzene	< 10.	ug/l	10.	067700000N
1,4-dichlorobenzene	< 10.	ug/l	10.	067800000N
1,2-dichlorobenzene	< 10.	ug/l	10.	067600000N
bis (2-chloroisopropyl) ether	< 10.	ug/l	10.	066800000N
hexachloroethane	< 10.	ug/l	10.	069200000N
N-nitrosodi-n-propylamine	< 10.	ug/l	10.	069800000N
nitrobenzene	< 10.	ug/l	10.	069600000N
isophorone	< 10.	ug/l	10.	069400000N
bis (2-chloroethoxy) methane	< 10.	ug/l	10.	066600000N
1,2,4-trichlorobenzene	< 10.	ug/l	10.	070200000N
naphthalene	< 10.	ug/l	10.	069500000N
hexachlorobutadiene	< 10.	ug/l	10.	069000000N
hexachlorocyclopentadiene	< 10.	ug/l	10.	06910000[illegible]
2-chloronaphthalene	< 10.	ug/l	10.	06720000[illegible]
acenaphthylene	< 10.	ug/l	10.	065800000N
dimethyl phthalate	< 10.	ug/l	10.	068100000N
2,6-dinitrotoluene	< 10.	ug/l	10.	068400000N
acenaphthene	< 10.	ug/l	10.	065700000N
2,4-dinitrotoluene	< 10.	ug/l	10.	068300000N
fluorene	< 10.	ug/l	10.	068800000N
4-chlorophenyl phenyl ether	< 10.	ug/l	10.	067300000N
diethyl phthalate	< 10.	ug/l	10.	068000000N
1,2-diphenylhydrazine	< 10.	ug/l	10.	068600000N
N-nitrosodiphenylamine	< 10.	ug/l	10.	069900000N
4-bromophenyl phenyl ether	< 10.	ug/l	10.	067000000N
hexachlorobenzene	< 10.	ug/l	10.	068900000N
phenanthrene	< 10.	ug/l	10.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved

AR100386

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Medical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

09:05:51 193735

LLI Sample No. WW 1298613

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

DS-1 Grab Water Sample
Collected on 08/19/88 at 1630 by RRO

Base Neutrals (cont)	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
anthracene	< 10.	ug/l	10.	065900000N
di-n-butyl phthalate	< 10.	ug/l	10.	068200000N
fluoranthene	< 10.	ug/l	10.	068700000N
pyrene	< 10.	ug/l	10.	070100000N
benzidine	< 25.	ug/l	25.	066000000N
butyl benzyl phthalate	< 10.	ug/l	10.	067100000N
benzo (a) anthracene	< 10.	ug/l	10.	066100000N
chrysene	< 10.	ug/l	10.	067400000N
3,3'-dichlorobenzidine	< 25.	ug/l	25.	067900000N
bis (2-ethylhexyl) phthalate	< 10.	ug/l	10.	066900000N
di-n-octyl phthalate	< 10.	ug/l	10.	068500000N
benzo (b) fluoranthene	< 10.	ug/l	10.	066300000N
benzo (K) fluoranthene	< 10.	ug/l	10.	066500000N
benzo (a) pyrene	< 10.	ug/l	10.	066200000N
indeno (1,2,3-cd) pyrene	< 10.	ug/l	10.	069300000N
dibenzo (a,h) anthracene	< 10.	ug/l	10.	067500000N
benzo (ghi) perylene	< 10.	ug/l	10.	066400000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental fields of testing)

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

09:05:05 193735
WK1174 D 1 2

LLI Sample No. WW 1298612

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

GS-1 Grab Water Sample
Collected on 08/19/88 at 1535 by RRO

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Antimony	< 0.05	mg/l	0.05	024401300
Arsenic	0.02	mg/l	0.01	024502500
Beryllium	< 0.005	mg/l	0.005	024701300
Cadmium	< 0.005	mg/l	0.005	024901300
Chromium	< 0.05	mg/l	0.05	025101300
Copper	< 0.02	mg/l	0.02	025301300
Lead	< 0.05	mg/l	0.05	025501300
Mercury	< 0.0005	mg/l	0.0005	025902500
Nickel	< 0.04	mg/l	0.04	026101300
Selenium	< 0.005	mg/l	0.005	026402500
Silver	< 0.01	mg/l	0.01	026601300
Zinc	0.04	mg/l	0.02	027201300
Thallium	< 0.1	mg/l	0.1	042201300
Purgables Method # 624		attached		05202300
Acid Extractables		attached		05521700
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:
AR100588
Richard S. Rodgers, B.S.
Group Leader, GC/MS

02913 10.00 090500

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Testing)

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

09:05:11 193735

LLI Sample No. WW 1298612

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL
(Red)

GS-1 Grab Water Sample
Collected on 08/19/88 at 1535 by RRO

Purgables Method # 624	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Chloromethane	< 10.	ug/l	10.	082700000N
Bromomethane	< 10.	ug/l	10.	082800000N
Vinyl Chloride	< 10.	ug/l	10.	082900000N
Chloroethane	< 10.	ug/l	10.	083000000N
Acrolein	< 100.	ug/l	100.	082400000N
Acrylonitrile	< 100.	ug/l	100.	082500000N
Methylene Chloride	70.	ug/l	5.	083100000N
Trichlorofluoromethane	< 5.	ug/l	5.	079000000N
1,1-Dichloroethene	< 5.	ug/l	5.	083200000N
1,1-Dichloroethane	< 5.	ug/l	5.	083300000N
trans-1,2-Dichloroethene	< 5.	ug/l	5.	083400000N
Chloroform	< 5.	ug/l	5.	083500000N
1,2-Dichloroethane	< 5.	ug/l	5.	083600000N
1,1,1-Trichloroethane	< 5.	ug/l	5.	083700000N
Carbon Tetrachloride	< 5.	ug/l	5.	083800000N
Bromodichloromethane	< 5.	ug/l	5.	083900000N
1,1,2,2-Tetrachloroethane	< 5.	ug/l	5.	084900000N
1,2-Dichloropropane	< 5.	ug/l	5.	084000000N
trans-1,3-Dichloropropene	< 5.	ug/l	5.	084100000N
Trichloroethene	< 5.	ug/l	5.	084200000N
Dibromochloromethane	< 5.	ug/l	5.	084600000N
1,1,2-Trichloroethane	< 5.	ug/l	5.	084500000N
Benzene	< 5.	ug/l	5.	084300000N
cis-1,3-Dichloropropene	< 5.	ug/l	5.	084400000N
2-Chloroethylvinyl ether	< 10.	ug/l	10.	082600000N
Bromoform	< 5.	ug/l	5.	084700000N
Tetrachloroethene	< 5.	ug/l	5.	084800000N
Toluene	< 5.	ug/l	5.	085000000N
Chlorobenzene	< 5.	ug/l	5.	085100000N
Ethylbenzene	< 5.	ug/l	5.	085200000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Nelson H. Risser B.A.
Manager, GC/MS

AA 00589

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

Member American Council of Independent Laboratories Inc

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ANALYSIS REPORT

Lancaster Laboratories

09:05:16 193735

LLI Sample No. WW 1298612

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL (Red)

GS-1 Grab Water Sample
Collected on 08/19/88 at 1535 by RRO

Acid Extractables	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
2-chlorophenol	< 10.	ug/l	10.	064600000N
phenol	< 10.	ug/l	10.	065500000N
2-nitrophenol	< 10.	ug/l	10.	065100000N
2,4-dimethylphenol	< 10.	ug/l	10.	064800000N
2,4-dichlorophenol	< 10.	ug/l	10.	064700000N
4-chloro-3-methylphenol	< 10.	ug/l	10.	065300000N
2,4,6-trichlorophenol	< 10.	ug/l	10.	065600000N
2,4-dinitrophenol	< 25.	ug/l	25.	065000000N
4-nitrophenol	< 25.	ug/l	25.	065200000N
2-methyl-4,6-dinitrophenol	< 25.	ug/l	25.	064900000N
pentachlorophenol	< 25.	ug/l	25.	065400000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

AR100590

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard [illegible], B.S.
Group Leader, GC/MS

The American Association for Laboratory Accreditation
Chemical, Biological & Environmental fields of testing

Member American Council of Independent Laboratories, Inc

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ANALYSIS REPORT

Lancaster Laboratories

09:05:18.193735

LLI Sample No. WW 1298612

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL (Red)

GS-1 Grab Water Sample
Collected on 08/19/88 at 1535 by RRO

Base Neutrals	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
N-nitrosodimethylamine	< 10.	ug/l	10.	069700000N
bis (2-chloroethyl) ether	< 10.	ug/l	10.	066700000N
1,3-dichlorobenzene	< 10.	ug/l	10.	067700000N
1,4-dichlorobenzene	< 10.	ug/l	10.	067800000N
1,2-dichlorobenzene	< 10.	ug/l	10.	067600000N
bis (2-chloroisopropyl) ether	< 10.	ug/l	10.	066800000N
hexachloroethane	< 10.	ug/l	10.	069200000N
N-nitrosodi-n-propylamine	< 10.	ug/l	10.	069800000N
nitrobenzene	< 10.	ug/l	10.	069600000N
isophorone	< 10.	ug/l	10.	069400000N
bis (2-chloroethoxy) methane	< 10.	ug/l	10.	066600000N
1,2,4-trichlorobenzene	< 10.	ug/l	10.	070200000N
naphthalene	< 10.	ug/l	10.	069500000N
hexachlorobutadiene	< 10.	ug/l	10.	069000000N
hexachlorocyclopentadiene	< 10.	ug/l	10.	069100000N
2-chloronaphthalene	< 10.	ug/l	10.	067200000N
acenaphthylene	< 10.	ug/l	10.	065800000N
dimethyl phthalate	< 10.	ug/l	10.	068100000N
2,6-dinitrotoluene	< 10.	ug/l	10.	068400000N
acenaphthene	< 10.	ug/l	10.	065700000N
2,4-dinitrotoluene	< 10.	ug/l	10.	068300000N
fluorene	< 10.	ug/l	10.	068800000N
4-chlorophenyl phenyl ether	< 10.	ug/l	10.	067300000N
diethyl phthalate	< 10.	ug/l	10.	068000000N
1,2-diphenylhydrazine	< 10.	ug/l	10.	068600000N
N-nitrosodiphenylamine	< 10.	ug/l	10.	069900000N
4-bromophenyl phenyl ether	< 10.	ug/l	10.	067000000N
hexachlorobenzene	< 10.	ug/l	10.	068900000N
phenanthrene	< 10.	ug/l	10.	070000000N

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

AR100591

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. [illegible]
Group Leader, GC/MS

The American Association for Laboratory Accreditation (Chemical, Biological & Environmental Tests of Testing)

Member American Council of Independent Laboratories, Inc

See Reverse Side For Explanation Of Symbols And Abbreviations And Our Standard Terms And Conditions

Lancaster Laboratories

09:05:25 193735
WK1174 D 1 2

LL1 Sample No. WW 1298612

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 9/ 8/88
Date Submitted 8/20/88
Discard Date 9/16/88
Collected by C
P.O. 127-05
Rel.

ORIGINAL
(Red)

GS-1 Grab Water Sample
Collected on 08/19/88 at 1535 by RRO

	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Base Neutrals (cont)				
anthracene	< 10.	ug/l	10.	065900000N
di-n-butyl phthalate	< 10.	ug/l	10.	068200000N
fluoranthene	< 10.	ug/l	10.	068700000N
pyrene	< 10.	ug/l	10.	070100000N
benzidine	< 25.	ug/l	25.	066000000N
butyl benzyl phthalate	< 10.	ug/l	10.	067100000N
benzo (a) anthracene	< 10.	ug/l	10.	066100000N
chrysene	< 10.	ug/l	10.	067400000N
3,3'-dichlorobenzidine	< 25.	ug/l	25.	067900000N
bis (2-ethylhexyl) phthalate	< 10.	ug/l	10.	066900000N
di-n-octyl phthalate	< 10.	ug/l	10.	068500000N
benzo (b) fluoranthene	< 10.	ug/l	10.	066300000N
benzo (K) fluoranthene	< 10.	ug/l	10.	066500000N
benzo (a) pyrene	< 10.	ug/l	10.	066200000N
indeno (1,2,3-cd) pyrene	< 10.	ug/l	10.	069300000N
dibenzo (a,h) anthracene	< 10.	ug/l	10.	0675000[illegible]
benzo (ghi) perylene	< 10.	ug/l	10.	0664000[illegible]

1 COPY TO ERM Midwest, Inc. ATTN: Bart Roberts

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

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ANALYSIS REPORT

Lancaster Laboratories

ILL Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	17.2	% by wt.	0.1	011101100
Antimony	< 5.	mg/kg	5.	014401300
Arsenic	32.	mg/kg	1.	014503300
Beryllium	0.5	mg/kg	0.5	014701300
Cadmium	0.9	mg/kg	0.5	014901300
Chromium	34.	mg/kg	5.	015101300
Copper	207.	mg/kg	2.	015301300
Lead	117.	mg/kg	5.	015501300
Mercury	0.3	mg/kg	0.1	015903300
Nickel	72.	mg/kg	4.	016101300
Selenium	< 0.5	mg/kg	0.5	016403300
Silver	< 1.	mg/kg	1.	016601300
Zinc	291.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017819500
Cyanide, Total	< 0.05	mg/kg	0.05	023704000
Dioxin Screen	< 0.2	mg/kg	0.2	038216000
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	450.	mg/kg	20.	043404000
Purgables Method # 624		attached		052023000
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage Complete			0.	094402500

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

American Association for Laboratory Accreditation
Chemical, Biological & Environmental Testing

146 02913 110.00 150000

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ANALYSIS REPORT

Lancaster Laboratories

F02123 D 1 44

LLL Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT.	BASIS	LIMIT OF DETECTION	LAB CODE
Antimony	< 6.0	mg/kg	6.	014402500
Arsenic	38.6	mg/kg	1.	014503300
Beryllium	0.60	mg/kg	0.6	014703300
Cadmium	1.09	mg/kg	0.6	014901300
Chromium	41.1	mg/kg	6.	015101300
Copper	250.	mg/kg	2.	015301300
Lead	141.	mg/kg	6.	015501300
Mercury	0.36	mg/kg	0.1	015901300
Nickel	87.0	mg/kg	5.	016101300
Selenium	< 0.60	mg/kg	0.6	016401300
Silver	< 1.0	mg/kg	1.	016601300
Zinc	351.	mg/kg	2.	017201300
Pesticides/PCB's		attached		017801300
Cyanide, Total	< 0.060	mg/kg	0.06	023701300
Dioxin Screen	< 0.20	mg/kg	0.2	038201300
This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.				
Phenols	543.	mg/kg	20.	043401300
Purgables Method # 624		attached		052001300
Thallium	< 20.	mg/kg	20.	052501300
Acid Extractables		attached		055217000
Base Neutrals		attached		055329000
Base Neutrals (cont)		attached		055400000
Forensic storage	Complete		0.	094400000

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

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ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1101, Lancaster, PA 17603 (717) 656-2301

F02123 D 1 44

LLI Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 5.	mg/kg	5.	060900000N
Beta BHC	< 5.	mg/kg	5.	061000000N
Gamma BHC - Lindane	< 5.	mg/kg	5.	045300000N
Delta BHC	< 5.	mg/kg	5.	061200000N
Heptachlor	< 5.	mg/kg	5.	045400000N
Aldrin	< 5.	mg/kg	5.	045500000N
Heptachlor Epoxide	< 5.	mg/kg	5.	061500000N
DDE	< 5.	mg/kg	5.	061600000N
DDD	< 5.	mg/kg	5.	061700000N
DDT	< 5.	mg/kg	5.	047800000N
Dieldrin	< 2.	mg/kg	2.	046900000N
Endrin	< 2.	mg/kg	2.	047700000N
Chlordane	< 50.	mg/kg	50.	062500000N
Toxaphene	< 50.	mg/kg	50.	062600000N
Endosulfan I	< 2.	mg/kg	2.	062700000N
Endosulfan II	< 2.	mg/kg	2.	062800000N
Endosulfan Sulfate	< 5.	mg/kg	5.	062900000N
Endrin Aldehyde	< 20.	mg/kg	20.	063800000N
PCB-1016	< 100.	mg/kg	100.	063900000N
PCB-1221	< 100.	mg/kg	100.	064000000N
PCB-1232	< 100.	mg/kg	100.	064100000N
PCB-1242	< 100.	mg/kg	100.	064200000N
PCB-1248	< 100.	mg/kg	100.	064300000N
PCB-1254	< 100.	mg/kg	100.	064400000N
PCB-1260	< 100.	mg/kg	100.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

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Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

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ANALYSIS REPORT

Lancaster Laboratories

LLT Sample No. SW 1260355

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 8/88
Date Submitted 5/ 5/88
Discard Date 7/ 9/88
Collected by CBR
P.O. CW127-05
Rel.

IDA-1 Solid From Drum Grab Soil Sample
Collected on 04/27/88 by CBR/KKP/JDM

Pesticides/PCB's	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Alpha BHC	< 6.0	mg/kg	6.	060900000N
Beta BHC	< 6.0	mg/kg	6.	061000000N
Gamma BHC - Lindane	< 6.0	mg/kg	6.	045300000N
Delta BHC	< 6.0	mg/kg	6.	061200000N
Heptachlor	< 6.0	mg/kg	6.	045400000N
Aldrin	< 6.0	mg/kg	6.	045500000N
Heptachlor Epoxide	< 6.0	mg/kg	6.	061500000N
DDE	< 6.0	mg/kg	6.	061600000N
DDD	< 6.0	mg/kg	6.	061700000N
DDT	< 6.0	mg/kg	6.	047800000N
Dieldrin	< 2.0	mg/kg	2.	046900000N
Endrin	< 2.0	mg/kg	2.	047700000N
Chlordane	< 60.	mg/kg	60.	062500000N
Toxaphene	< 60.	mg/kg	60.	062600000N
Endosulfan I	< 2.0	mg/kg	2.	062700000N
Endosulfan II	< 2.0	mg/kg	2.	062800000N
Endosulfan Sulfate	< 6.0	mg/kg	6.	062900000N
Endrin Aldehyde	< 20.	mg/kg	20.	063800000N
PCB-1016	< 100.	mg/kg	100.	063900000N
PCB-1221	< 100.	mg/kg	100.	064000000N
PCB-1232	< 100.	mg/kg	100.	064100000N
PCB-1242	< 100.	mg/kg	100.	064200000N
PCB-1248	< 100.	mg/kg	100.	064300000N
PCB-1254	< 100.	mg/kg	100.	064400000N
PCB-1260	< 100.	mg/kg	100.	064500000N

Due to interfering peaks on the chromatogram, the values reported represent the lowest detection limits obtainable. Despite numerous clean-up methods we were unable to see our usual detection limits.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

Respectfully Submitted
Lancaster Laboratories
Reviewed and Approved by:

Charles J. Neslund, B.S.
Group Leader, Pesticides/PCB's

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ANALYSIS REPORT

Laboratories

LLI Sample No. SW 1260366

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

idwest, Inc. . WVA
West Washington Street
.eston, W. VA 25313-1577

age Area Interior 2 24-30" Grab Soil
on 04/29/88 by CBR/KKP/JDM

	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
	< 0.030 mg/kg	0.03	038216000

creen
is a semi-quantitative screen. Results are reported as less than
.ovest detectable concentration if no dioxin was detected. A
:ive response is reported as being greater than an estimated amount.

ATTN: Dayton Carpenter

TO ERM Midwest, Inc.

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/HS

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ANALYSIS REPORT

Lancaster Laboratories

P.O. Box 1689, Lancaster, PA 17601-5994 (717) 656-2301

F02123 D 1 44

LLI Sample No. SW 1260367

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior 3 32-40" Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS	LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.10 mg/kg	0.1	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

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Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

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ANALYSIS REPORT

Lancaster Laboratories

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

07/14/89 182845

F02123 D 1 44

LLI Sample No. SW 1260368

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

Drum Storage Area Interior 4 36-41" Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ORIGINAL (Red)

ANALYSIS	RESULT AS RECEIVED		LIMIT OF DETECTION	LAB CODE
Moisture	19.3	% by wt.	0.1	011101100
Dioxin Screen	< 0.4	mg/kg	0.4	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

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02913 60.00 023100

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Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

ANALYSIS REPORT

Lancaster Laboratories

425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

07/14/21 182845
702123 D.1 44

LLI Sample No. SW 1260368

ERM Midwest, Inc. - WVA
5088 West Washington Street
Charleston, W. VA 25313-1577

Date Reported 6/ 3/88
Date Submitted 5/ 5/88
Discard Date 7/ 4/88
Collected by CBR
P.O. CW127-05
Rel.

ORIGINAL (Red)

Drum Storage Area Interior 4 36-41" Grab Soil
Collected on 04/29/88 by CBR/KKP/JDM

ANALYSIS	RESULT DRY WT. BASIS		LIMIT OF DETECTION	LAB CODE
Dioxin Screen	< 0.50	mg/kg	0.5	038216000

This is a semi-quantitative screen. Results are reported as less than the lowest detectable concentration if no dioxin was detected. A positive response is reported as being greater than an estimated amount.

1 COPY TO ERM Midwest, Inc. ATTN: Dayton Carpenter

AR100600

Respectfully Submitted
Lancaster Laboratories, Inc.
Reviewed and Approved by:

Richard S. Rodgers, B.S.
Group Leader, GC/MS

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ORIGINAL
(Red)

TRIANGLE LABORATORIES, INC.
801-10 CAPITOLA DRIVE
RESEARCH TRIANGLE PARK, NC 27713

Phone: (919) 544-5729
Fax: (919) 544-5491

DATE :	* 24 AUGUST 1988
CLIENT ID :	* ERM-MIDWEST, INC.
TLI PROJECT No. :	* 12573

CASE NARRATIVE
70S MODEL 8290E

ANALYSIS OF SAMPLES FOR THE PRESENCE OF

2,3,7,8-TETRACHLORO-p-DIBENZODIOXIN, TOTAL TCDDs

AND

2,3,7,8-TETRACHLORODIBENZOFURAN, TOTAL TCDFs

BY

HIGH-RESOLUTION GAS CHROMATOGRAPHY / HIGH-RESOLUTION MASS SPECTROMETRY

AR100601

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1. Foreword

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1.2 Sample Data Summary Topsheet
1.3 Document Control

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4. High-Resolution Gas Chromatography/ High-Resolution Mass Spectrometry

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5.3 GC Column Performance Check
5.4 Confirmation Analyses

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AR100602

TABLE LEGENDS

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Table 2. Unlabeled Analyte Quantification Relationships

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Table 5. Elemental Compositions and Exact Masses of the Ions Monitored by High-Resolution Mass Spectrometry for TCDDs and TCDFs

Table 6. Internal Standards Quantification Relationships

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Table 8. Gas Chromatographic Conditions

Table 9. Initial and Continuing Calibrations Response Factors Minimum Requirements

Table 10. Ion-Abundance Ratio Acceptable Ranges for TCDDs and TCDFs

AR100603

ORIGINAL (Red)

Section 1

Foreword

1.1 Analytical Methodology

This report was obtained by using an analytical methodology described in this Case Narrative. Three types of labeled standards are currently employed in the procedure. Two labeled TCDD/TCDF congeners are used as internal standards, one other labeled TCDD congener are used as a surrogate standards, and one additional labeled TCDD congener is used as a recovery standard.

1.2 Sample Data Summary Topsheet

In addition, the format used to report the data was revised so that one page is used to report the results. On the Sample Data Summary Topsheet, the concentrations of the 2,3,7,8-substituted TCDD/TCDF congeners are displayed first followed by the total TCDDs and TCDFs. In the lower part of the summary sheet are reported the QA/QC results.

1.3 Document Control

The Document Control package contains all laboratory records received or generated during the sample handling by Triangle Laboratories. For further clarification of the Case Narrative and Document Control, please refer to the User Manual. This manual will only be issued once unless further revisions in the protocol are made, in which case a new User Manual will be issued.

4

AR100604

Section 2

Sample Handling

2.1 Sample Delivery and Storage

Six soil samples were received in good condition July 25, 1988 and stored in a refrigerator at 4°C. An internal chain-of-custody form was prepared while recording the sample IDs inside the "Sample Receiving Log Book" (a copy of which is provided in the Document Control section). In addition to the customer sample ID, Triangle Laboratories assigns an internal sample ID obtained by using the "Sample Receiving Log Book" serial number, the page where the samples are recorded and the page entry number (e.g., 7-139-1 = Log Book No 7, Log Book Page 139 and first entry on that page). Upon reception of the samples, a Triangle Laboratory Project Number is issued, which is used for tracking the batch of samples and for invoicing purposes.

2.2 Sample Preparation

2.2.1 Sample Fortification

All the samples (including the quality control and method blank samples) were, before the extraction, fortified with 1 ppb of the tetrachlorinated internal dibenzodioxin and dibenzofuran standards. This was accomplished by using the sample fortification solution described in Table 1. (The quantification relationships of the labeled internal standards are summarized in Table 2.). Following the extraction and before the fractionation, 1 ppb of the surrogate standard are added to the sample extract.

Note that for water samples (if applicable), the sample fortification solution is dissolved in acetone before spiking the samples. Efforts are made to allow the spiked standard compounds to equilibrate with the indigeneous analytes.

2.2.2 Sample Extraction/Fractionation

The samples were prepared by using methods inspired from the RCRA Method 8280 or 8290 analytical protocols. The solid samples are extracted by using toluene in a Soxhlet extractor for 16 hours and the aqueous samples are first filtered (0.45 um glass-fiber filter) and the filtrate is extracted with methylene chloride in a separatory funnel. The filter is Soxhlet extracted as described above; the Soxhlet extract is then combined with the methylene chloride extract.

AR100605

The sample extracts are then washed with concentrated sulfuric acid followed by sodium hydroxide. The concentrated residue is then placed on top of an alumina column and eluted as described

in the analytical protocol. Sample M-3 was further extracted in hexane and was subjected to a three-column chromatographic cleanup (acid-base impregnated silica gel, alumina, and carbon columns). The carbon column used in the final cleanup step was prepared by mixing Celite 545 and AX-21 carbon.

2.3 Quality Assurance/Quality Control Samples

A laboratory method blank -- identified as the TLI Blank -- is prepared along with the batch of samples. One such sample per 10 field samples (or less) of a given matrix is prepared.

AR100606

Section 3

Sample Data Package

3.1 Sample Data Summary Topsheet

On the enclosed Sample Data Summary Topsheets, the concentrations of the analytes are given in parts per billion (ppb). The definitions of the headers are given below.

"RT" is the gas chromatographic retention time in minutes and seconds,

"number" is the number of GC peaks identified as TCDD/TCDF isomers in the totals reported for the homologous series,

"ratio" is the integrated ion-abundance ratio as shown in Table 9,

"DL" is the detection limit for samples presenting an analyte response that is less than 2.5 times the background level,

"EMPC", representing the estimated maximum possible concentration, is reported for GC/MS signals eluting within the TCDD/TCDF retention time windows established with the daily GC performance analysis, and which are characterized by a signal-to-noise ratio in excess of 2.5:1 but do not meet all of the qualitative identification criteria listed in Section 6 of this Case Narrative. The "EMPC" is calculated by using the same expression used for reporting the identified analyte concentrations. The "DL" and "EMPC" are both reported in the same units described above.

"Flags" are used to warn the Data User of specific peculiarities associated with the reults of a particular sample. For reporting results, the following specific qualifiers are used:

S *This qualifier indicates that the response of a specific TCDD/TCDF isomer has exceeded the normal dynamic range of the mass spectrometer detection system. The corresponding signal is saturated and the reported analyte concentration is a "minimum estimate" regardless of whether or not the ion-abundance ratio or the retention time criteria are met. When the S qualifier is associated with the reporting of "totals", its use is to warn the data user of the existence of one (not necessarily from a specific isomer) or more saturated signals for a given class of compounds.*

I *This flag identifies a labeled compound (e.g., internal standard) for which the ion-abundance ratio or retention time criteria were not met due to the possible presence of coeluting interferences. The concentration of unlabeled*

AR100607

analytes (computed relatively to the labeled standard in question) may be underestimated while the percent recoveries of the flagged labeled standard may be higher than reality.

Note that this qualifier may also be used if several unexpected signals are found to elute in the vicinity of the labeled standards even though the former's identification criteria are met.

Q *A "Q" qualifier is used to warn the data user of the existence of a "quantitative interference" as defined in Section IV of Triangle Laboratories User Manual. The reported concentrations and percent recoveries may be questionable.*

N *Carbon-labeled internal standard characterized by a signal-to-noise ratio of less than 10:1 will be flagged by using the qualifier "N". This qualifier will be used for samples that underwent an authorized re-extraction and analysis as a result of poor recoveries and for which a matrix effect was found to be responsible for the poor recoveries.*

B *This flag is used when the analyte is found in the associated laboratory method blank sample as well as in the field sample. The flag is to warn the Data User of the possible/probable blank contamination.*

L *This flag identifies detected analytes for which the reported concentrations are below the working calibration curve of the GC/MS system.*

E *This data qualifier is used to warn the data user of the presence of signals in the hexachlorinated diphenylether channels that may interfere with the determination of tetrachlorinated dibenzofurans.*

RO *When the ion-abundance ratio for carbon-labeled standards is outside the acceptable range, an "RO" flag will be used to indicate the presence of potential interference(s).*

X *Other specific flags and footnotes may be required to properly define the results. If used, they will be fully described in the Case Narrative. If more than one is necessary, a different letter (e.g., Y, Z..) will be used.*

3.2 Analyte Quantification

For quantifications, the sum of the peak areas for the [illegible] monitored (Table 5) is used. When no peak is detected, an area of 10 counts for each ion (total 20 counts) is used to calculate

ORIGINAL (Red)

the detection limit. Tables 2, 6 and 7 summarize the quantification relationships for the unlabeled analytes, internal and surrogate standards, respectively.

For example, the percent recoveries of the carbon-labeled tetrachlorinated dibenzodioxin internal standard were calculated by using $^{13}C_{12}$-1,2,3,4-TCDD as the recovery standard.

Similarly, the concentration of the surrogate compound $^{37}Cl_4$-2,3,7,8-TCDD (m/z 328) in the final extract is calculated relative to $^{13}C_{12}$-2,3,7,8-TCDD (m/z 332).

The concentration of a given analyte is calculated from:

$$C(a_i) = \frac{A_{ai} * Q_{aj}}{A_{aj} * RFF(a_i) * W}$$

where $C(a_i)$ is the concentration of a given analyte (e.g., a = TCDD; i = 2,3,7,8 isomer),

A_{ai} is the integrated current for the two ions characteristic of the analyte,

A_{aj} is the integrated current of the two ions characteristic of the corresponding internal standard,

Q_{aj} represents the amount of internal standard added to the sample before the sample extraction,

$RRF(a_i)$ is the analyte relative response factor as determined from the continuing calibration, and

W is the sample weight. (The results of the solid samples are given on a wet weight basis.)

The "total" concentrations given for each class of compounds (dioxin, furan) represent the summation of the concentrations for all the GC/MS signals that meet the retention time and ion-abundance ratio criteria discussed in Section 6.

CAUTION

The analyte concentrations reported on the Sample Data Summary Top Sheet and provided with each sample data pack are "RECOVERY CORRECTED". This is a direct consequence of using isotope-dilution mass spectrometry. Thus, there is no need for adjusting the reported analyte concentrations.

AR100609

ORIGINAL (Red)

3.3 QA/QC Remarks

When applicable, deviations from acceptable QA/QC requirements are identified in this paragraph. Comments on the effect of these deviations upon the validity and reliability of the results are offered herein.

Specific QA/QC Problems Associated with this Particular Project:

For the detection limit calculations, an area of 50 counts/channel was used (100 counts in both channels). Also, there were low (out of QC limit) recoveries of both internal standrads in the TLI Blank.

AR100610

ORIGINAL (Red)

Section 4

High-Resolution Gas Chromatography / High-Resolution Mass Spectrometry

4.1 Gas Chromatography

For GC/MS analysis, the final residue was dissolved in 20 uL of a toluene solution containing the recovery standards shown in Table 1. An HP-5890 GC , equipped with a fused-silica capillary column, was employed. One uL of the 20-uL final sample volume was analyzed by using the GC conditions summarized in Table 8.

4.2 Mass Spectrometry

The samples were analyzed by using a VG 70S mass spectrometer operated in the selected ion recording mode (SIR), at a resolving power of 10,000. Electron ionization and an ion-chamber temperature of 250°C were used. Perfluorokerosene (PFK) was used to calibrate the SIR mass range. Moreover, one PFK ion per mass descriptor was used as a lock-mass ion to correct mass drifts occuring during the analysis. A list of the various ions monitored is shown in Table 5. In addition to the TCDD/TCDF ions, an ion characteristics of hexachlorinated diphenylethers (HxCDPEs) is monitored simultaneously with TCDFs.

A VG 11/250 data system was used to acquire the data. A "Mass Spectrometer Run Sheet", summarizing the chronological order of the GC/MS analyses, is provided in the Document Control section.

AR100611

ORIGINAL (Red)

Section 5

System Performance and Calibration Checks

5.1 Initial Calibration

The mass spectrometer response was calibrated by using the set of four initial calibration solutions shown in Table 4.

An acceptable calibration must meet the following criteria:

1) The percent relative standard deviations for the mean response factors from each of the unlabeled analytes (Table 4) and of the internal and surrogate standards (Table 4) must be less than 25 or 30 percent depending on the analyte (Table 9).

2) The signal-to-noise ratio (S/N) for the GC signals present in every selected ion current profile must be $\geq$ 2.5.

3) The ion abundance ratios must be within the specified control limits (see Table 10).

The mean relative response factors are obtained by using the following expression:

$$\overline{RRF}(a_i) = \frac{1}{n} \sum_{i}^{n} \frac{A_a * Q_s}{Q_a * A_s}$$

where $\overline{RRF}(a_i)$ represents the mean relative response factor of a particular PCDD/PCDF congener (e.g., a = TCDD; i = 2,3,7,8 isomer),

A_a (or A_s) is the integrated ion current of the two ions characteristic of the homologuous series,

$Q(a)$ (or Q_s) is the amount of analyte injected onto the GC column, and

n is the total number of data points derived from the initial calibration.

5.2 Continuing Calibration

A continuing calibration is demonstrated every 12 hours by injecting one uL of solution number 4 from Table 3 or solution number 3 from Table 4. The RRFs are calculated and compared to the mean RRFs obtained during the initial calibration procedure.

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ORIGINAL (Red)

The continuing calibration delta RRF (on the data sheets) corresponds to the relative percent difference between the daily RRF and the initial calibration RRF.

An acceptable continuing calibration run must meet the following criteria:

1) The measured RRFs (for the unlabeled as well as labeled compounds) obtained during the continuing calibration run must be within 25 or 30 percent depending on the analyte (Table 9) of the mean values established during the initial calibration.

2) The ion-abundance ratios must be within the allowed control limits listed in Table 10.

5.3 Gas Chromatographic Column Performance Check

At the beginning of every 12-hour shift during which samples are analyzed for tetra- through octachlorinated dibenzodioxins and dibenzofurans, the 60-m DB-5 fused-silica capillary GC column performance is verified by injecting a solution composed of a mixture of selected TCDD/TCDF congeners that (1) allow documentation of the chromatographic resolution between 2,3,7,8-TCDD and other close-eluting TCDD isomers (≤25% valley) and, (2) permit the mass spectrometer operator to identify the various retention time windows for each class of homologuous compounds.

5.4 Confirmation Analyses

For samples found to contain, by using the 60-m DB-5 column, 2,3,7,8-TCDD or 2,3,7,8-TCDF, the associated sample extracts are analyzed on a second high-resolution GC column (SP-2331/DB-17 or DB-225) also under high-resolution mass spectrometric conditions. The results of the second column analysis are forthcoming. A GC column performance run preceeds the analysis of the extracts so that the 2,3,7,8-TCDD and 2,3,7,8-TCDF isomeric specificities can be documented (see User Manual for details). The results from such "confirmation" analyses should be used in the final report.

AR100613

Section 6

Identification Criteria

The positive identification criteria used for the characterization of tetrachlorinated dibenzodioxins and dibenzofurans are as follows:

1) The integrated ion-abundance ratio (M+/M+2) must be within 15 percent of the theoretical value. The acceptable ion-abundance ratio ranges for the identification of chlorine-containing compounds are given in Table 10.

2) The retention time for the analytes must be within 3 s of the corresponding ^{13}C-labeled internal standard.

3) The monitored ions shown in Table 10 for an analyte must maximize within 2 s of each other.

4) The (S/N) for all monitored ions must be greater than 2.5.

5) The confirmation of 2,3,7,8-TCDD and 2,3,7,8-TCDF must satisfy all of the above identification criteria.

6) For the identification of TCDFs, no signal should be found in the corresponding HxCDPE channel.

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AR1006

For Triangle Laboratories,

Analyst	QA Project Officer	Program Manager
Michael D. Chu, LRSC	Hani S. Karam, Ph.D.	for Yves Tondeur, Ph.D.

AR100615

TABLE 1: COMPOSITION OF THE SAMPLE FORTIFICATION AND RECOVERY STANDARDS SOLUTIONS
(concentrations in pg/uL)

Analyte	Sample Fortification Solution	Recovery Standards Solution
$^{13}C_{12}$-2,3,7,8-TCDD (IS)	100	-
$^{13}C_{12}$-1,2,3,4-TCDD (RS)	-	500
$^{37}Cl_4$-2,3,7,8-TCDD (SS)	100	-
$^{13}C_{12}$-2,3,7,8-TCDF (IS)	100	-

IS = Internal Standard; SS = Surrogate Standard; RS = Recovery Standard;

Note: The volume of the recovery standards solution added to the final extract before GC/MS analysis is 20 uL.

ORIGINAL (Red)

AR100616

ORIGINAL (Red)

TABLE 2. UNLABELED ANALYTES QUANTIFICATION RELATIONSHIPS

Analyte	Internal Standard Used During Quantification
2,3,7,8-TCDD	$^{13}C_{12}$-2,3,7,8-TCDD
Other TCDDs	$^{13}C_{12}$-2,3,7,8-TCDD
2,3,7,8-TCDF	$^{13}C_{12}$-2,3,7,8-TCDF
Other TCDFs	$^{13}C_{12}$-2,3,7,8-TCDF

AR100617

TABLE 3: COMPOSITION OF THE INITIAL CALIBRATION SOLUTIONS (HIGH)

Compound	Sol. Number	Concentrations (pg/uL) 1	2	3	4	5
Unlabeled Analytes						
2,3,7,8-TCDD		5	50	100	500	800
2,3,7,8-TCDF		5	50	100	500	800
Internal Standards						
$^{13}C_{12}$-2,3,7,8-TCDD		100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF		100	100	100	100	100
Surrogate Standard						
$^{37}Cl_4$-2,3,7,8-TCDD		5	50	100	500	800
Recovery Standard						
$^{13}C_{12}$-1,2,3,4-TCDD		100	100	100	100	100

AR100618

ORIGINAL (Red)

TABLE 4. COMPOSITION OF THE INITIAL CALIBRATION SOLUTIONS (LOW)

Compound	Concentrations (pg/uL)				
Sol. Number	1	2	3	4	5
Unlabeled Analytes					
2,3,7,8-TCDD	0.5	1	5	50	100
2,3,7,8-TCDF	0.5	1	5	50	100
Internal Standards					
$^{13}C_{12}$-2,3,7,8-TCDD	100	100	100	100	100
$^{13}C_{12}$-2,3,7,8-TCDF	100	100	100	100	100
Surrogate Standard					
$^{37}Cl_4$-2,3,7,8-TCDD	0.5	1	5	50	100
Recovery Standard					
$^{13}C_{12}$-1,2,3,4-TCDD	100	100	100	100	100

TABLE 5. ELEMENTAL COMPOSITIONS AND EXACT MASSES OF THE IONS MONITORED BY HIGH-RESOLUTION MASS SPECTROMETRY FOR TCDDs AND TCDFs

Descriptor Number	Accurate Mass[a]	Ion Type	Elemental Composition	Analyte
1	292.9825	LOCK	C_7F_{11}	PFK
	303.9016	M	$C_{12}H_4{}^{35}Cl_4O$	TCDF
	305.8987	M+2	$C_{12}H_4{}^{35}Cl_3{}^{37}ClO$	TCDF
	315.9419	M	$^{13}C_{12}H_4{}^{35}Cl_4O$	TCDF (S)
	317.9389	M+2	$^{13}C_{12}H_4{}^{35}Cl_3{}^{37}ClO$	TCDF (S)
	319.8965	M	$C_{12}H_4{}^{35}Cl_4O_2$	TCDD
	321.8936	M+2	$C_{12}H_4{}^{35}Cl_3{}^{37}ClO_2$	TCDD
	327.8847	M	$C_{12}H_4{}^{37}Cl_4O_2$	TCDD (S)
	330.9792	QC	C_7F_{13}	PFK
	331.9368	M	$^{13}C_{12}H_4{}^{35}Cl_4O_2$	TCDD (S)
	333.9339	M+2	$^{13}C_{12}H_4{}^{35}Cl_3{}^{37}ClO_2$	TCDD (S)
	375.8364	M+2	$C_{12}H_4{}^{35}Cl_5{}^{37}ClO$	HxCDPE

a) The following nuclidic masses were used:

H	= 1.007825	O	= 15.994915
C	= 12.000000	^{35}Cl	= 34.968853
^{13}C	= 13.003355	^{37}Cl	= 36.965903
F	= 18.9984		

AR100619

S = Labeled Standard

TABLE 6. INTERNAL STANDARDS QUANTIFICATION RELATIONSHIPS

Internal Standard	Standard Used During Percent Recovery Determination
$^{13}C_{12}$-2,3,7,8-TCDD	$^{13}C_{12}$-1,2,3,4-TCDD
$^{13}C_{12}$-2,3,7,8-TCDF	$^{13}C_{12}$-1,2,3,4-TCDD

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ORIGINAL (Red)

TABLE 7. SURROGATE STANDARDS QUANTIFICATION RELATIONSHIPS

Surrogate Standard	Standard Used During Percent Recovery Determination
$^{37}Cl_4$-2,3,7,8-TCDD	$^{13}C_{12}$-2,3,7,8-TCDD

AR100621

ORIGINAL (Red)

TABLE 8: GAS CHROMATOGRAPHY CONDITIONS

Column type	DB-5
Length (m)	60
i.d. (mm)	0.25
Film Thickness (um)	0.25
Carrier Gas	Helium
Carrier Gas Flow (mL/min)	1-2
Injection Mode	splitless
Valve Time (s)	30
Initial Temperature (° C)	150
Program Temperature	150° C to 190° C ballistically then 3° C/min up to 300° C.

ARI00622

ORIGINAL (Red)

TABLE 9. INITIAL AND CONTINUING CALIBRATIONS RESPONSE FACTORS MINIMUM REQUIREMENTS

Compound	Relative Response Factors I-Cal %RSD	Con-Cal %Delta
Unlabeled Analytes		
2,3,7,8-TCDD	25	25
2,3,7,8-TCDF	25	25
Internal Standards		
$^{13}C_{12}$-2,3,7,8-TCDD	25	25
$^{13}C_{12}$-2,3,7,8-TCDF	30	30
Surrogate Standard		
$^{37}Cl_4$-2,3,7,8-TCDD	25	25

AR100623

ORIGINAL (Red)

TABLE 10. ION-ABUNDANCE RATIO ACCEPTABLE RANGES FOR TCDDs AND TCDFs

Number of Chlorine Atoms	Ion Type	Theoretical Ratio	Control Limits Lower	Control Limits Upper
4	M/M+2	0.77	0.65	0.89

AR100624

TRIANGLE LABORATORIES, INC

ORIGINAL (Red)

SAMPLE DATA

AR100625

ORIGINAL (Red)

TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ANALYST: DH
DATE: 08/15/88
SAMPLEWT: 10.15

FILE NAME: M882609
SAMPLE ID: S-1
CASE NO: ERM
PROJ NO: 12573

CONCAL: M882603

NAME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
2378-TCDD	ND	0.005					
2378-TCDF	ND	0.005					
TOTAL TCDD	ND	0.005					
TOTAL TCDF	ND	0.005					

SURROGATE STD. RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
37CL-TCDD	0.97	98.45		28.29	

INTERNAL STANDARDS RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
13C12-TCDF	0.55	55.83	0.78	27.42	
2378-13C12-TCDD	0.62	62.93	0.79	28.28	

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08/21/88

ORIGINAL (Red)

M8826098
MATCHED GC PEAKS /RATIO/ RET TIME

M/Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT
304	2.39	28.49	130.21	.F.	.F.	1.040
304	1.00	29.23	85.35	.F.	.F.	1.061
304	0.74	29.39	54.42	.T.	.F.	1.070
304	0.36	30.53	91.96	.F.	.F.	1.115
316	0.77	27.16	805.62	.T.	.F.	0.984
316	0.78	27.42	61988.61	.T.	.T.	1.000
320	0.50	29.11	66.37	.F.	.F.	1.025
320	1.35	30.30	113.35	.F.	.F.	1.071
320	0.54	32.24	186.72	.F.	.F.	1.138
328	0.00	28.29	44491.96	.T.	.T.	1.001
328	0.00	28.52	190.92	.T.	.F.	1.014
328	0.00	29.20	164.62	.T.	.F.	1.030
328	0.00	29.46	56.11	.T.	.F.	1.046
328	0.00	30.07	98.36	.T.	.F.	1.058
332	0.75	28.15	76194.34	.T.	.T.	0.992
332	0.79	28.28	46108.83	.T.	.T.	1.000
*** Total ***						
***	0.97	465.84	230817.75			16.645

AR100627

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M882609I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	57.65	24.21
304	20.57	24.51
304	78.02	25.14
304	39.99	25.32
304	20.82	25.42
304	27.28	25.51
304	72.35	26.01
304	34.36	26.16
304	103.28	26.57
304	111.92	27.17
304	88.29	27.39
304	40.05	27.46
304	50.89	28.23
304	49.22	28.37
304	91.79	28.49
304	94.12	28.57
304	32.16	29.09
304	41.82	29.14
304	42.72	29.23
304	23.20	29.39
304	53.72	29.49
304	75.47	30.00
304	75.19	30.15
304	25.69	30.26
304	61.12	30.32
304	24.20	30.53
304	78.27	31.19
304	39.14	31.34
306	60.65	24.30
306	28.89	24.38
306	129.57	24.56
306	75.27	25.20
306	25.00	25.39
306	28.53	25.54
306	35.22	27.28
306	89.80	27.43
306	65.52	27.51
306	33.05	28.02
306	38.42	28.47
306	42.63	29.22
306	31.22	29.37
306	45.78	30.39
306	67.76	30.54
306	32.62	31.15
306	25.89	32.04
306	40.20	32.14
306	48.17	32.24
306	24.37	32.33
306	23.58	32.44
306	28.87	32.50

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M882609I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	144.38	33.47
306	98.12	34.08
306	42.25	34.25
306	40.44	34.51
306	33.59	35.13
316	54.13	26.54
316	351.64	27.16
316	27193.67	27.42
316	248.02	28.07
316	87.14	28.36
318	81.85	24.16
318	453.98	27.14
318	34794.94	27.42
318	299.14	28.12
318	307.36	29.38
318	196.73	32.21
318	50.33	33.11
318	259.11	33.19
318	56.29	33.53
318	62.59	34.05
318	46.34	34.25
320	32.59	24.33
320	20.85	24.40
320	35.81	24.51
320	94.92	25.09
320	67.62	25.24
320	37.59	25.41
320	40.57	26.02
320	49.08	26.30
320	111.45	26.44
320	47.64	27.08
320	79.49	27.40
320	25.50	28.25
320	57.89	28.34
320	32.68	28.58
320	22.08	29.11
320	34.49	29.45
320	66.86	29.53
320	51.80	30.15
320	65.09	30.30
320	120.14	30.44
320	51.86	30.58
320	78.91	31.35
320	33.84	31.48
320	32.46	32.16
320	65.73	32.24
322	39.28	24.11
322	59.59	24.29
322	27.30	24.55
322	70.56	25.14

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M8S2609I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
322	33.43	25.36
322	23.54	25.45
322	35.31	25.53
322	27.29	25.59
322	46.68	26.12
322	57.41	26.41
322	52.23	27.14
322	32.21	27.28
322	53.93	27.46
322	35.45	28.01
322	46.87	28.12
322	76.35	28.20
322	75.51	28.31
322	20.69	28.41
322	21.59	28.46
322	88.28	29.01
322	44.29	29.10
322	26.10	29.17
322	20.84	29.26
322	89.90	30.02
322	127.93	30.21
322	48.26	30.32
322	31.95	30.52
322	106.73	31.19
322	27.35	31.41
322	46.79	32.13
322	120.99	32.22
322	159.71	32.39
322	108.35	32.49
322	46.04	33.09
322	154.96	33.18
322	39.73	33.42
322	25.15	33.53
322	38.95	34.12
322	64.74	34.25
322	78.83	34.51
328	44491.96	28.29
328	190.92	28.52
328	164.62	29.20
328	56.11	29.46
328	82.36	30.07
332	107.52	27.54
332	32594.64	28.15
332	20387.95	28.28
332	216.46	28.51
334	43599.70	28.15
334	25720.88	28.28
334	66.20	32.38
334	110.04	33.00
334	91.48	33.46

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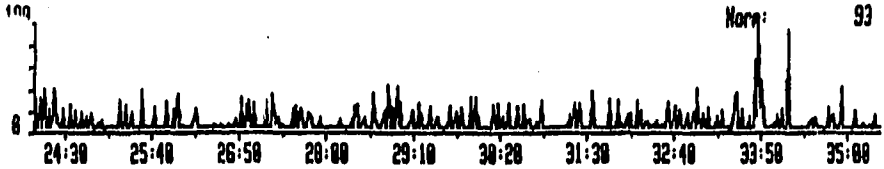
M882609I
RAW MASS AND AREA DATA

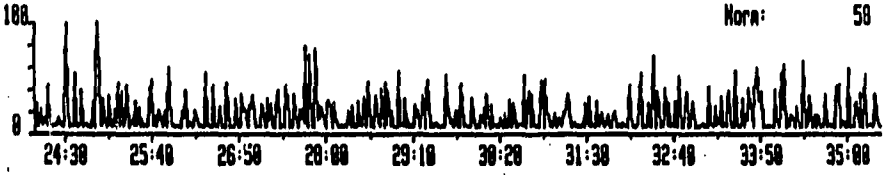
MASS	AREA	RET.TIME
334	82.52	34.58
*** Total ***		
****	239132.74	4384.18

ORIGINAL (Red)

M082689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 303.9816
Text:S-1 TLI012573



M082689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 305.8987
Text:S-1 TLI012573



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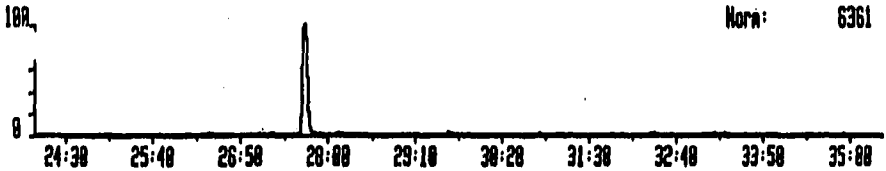
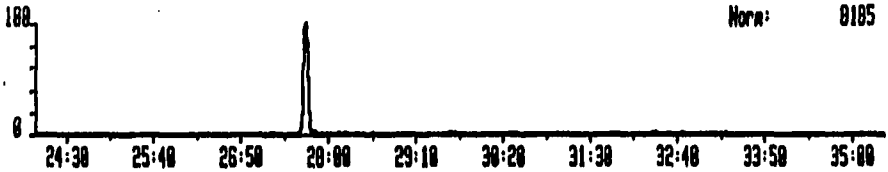
Sample 1 Injection 1 Group 2 Mass 315.9419
Text:S-1 TLI012573

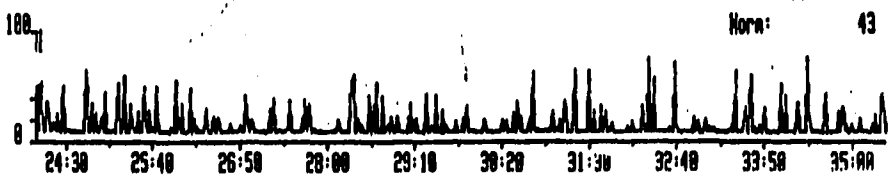


M082689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 317.9389
Text:S-1 TLI012573



M082689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 375.8364
Text:S-1 TLI012573

ARI00632



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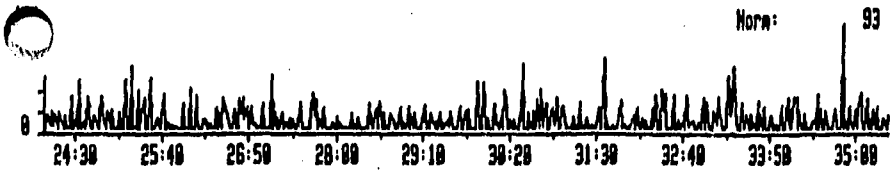
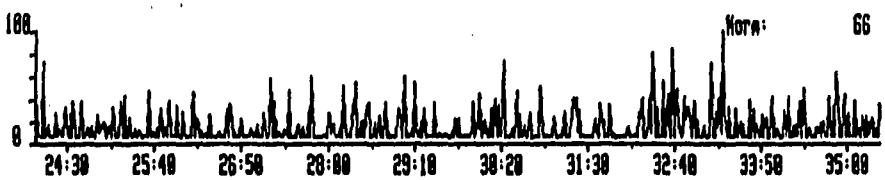
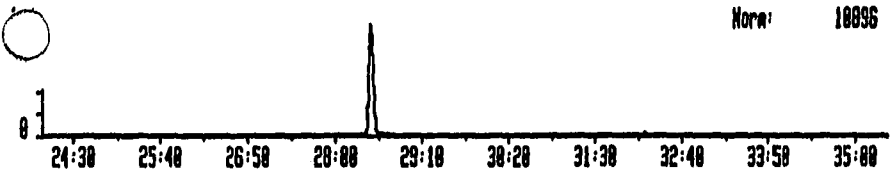
M002689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 319.8965
Text:S-1 TLI012573



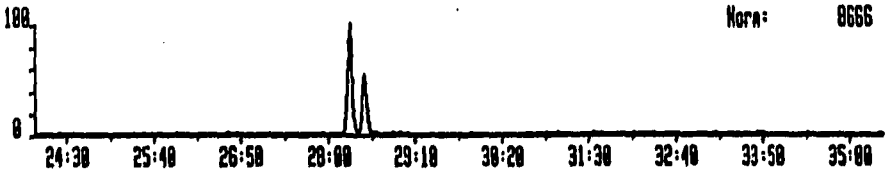
M002689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 321.8936
Text:S-1 TLI012573



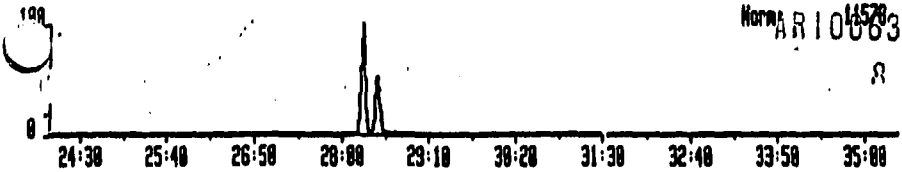
M002689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 327.8847
Text:S-1 TLI012573



M002689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 331.9368
Text:S-1 TLI012573



M002689 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 333.9338
Text:S-1 TLI012573



ORIGINAL (Red)

TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ANALYST: DH
DA': 08/15/88
SA. .LEWT: 10.07

FILE NAME: M882611
SAMPLE ID: M-10
CASE NO: ERM
PROJ NO: 12573

CONCAL: M882603

NAME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
2378-TCDD	ND			0.006			
2378-TCDF	0.006				0.76	27.48	
TOTAL TCDD	ND			0.006			
TOTAL TCDF	0.006	1			0.76		

SURROGATE STD. RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
37CL-TCDD	0.98	98.69		28.31	

INTERNAL STANDARDS RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
13C12-TCDF	0.88	88.62	0.78	27.44	
2378-13C12-TCDD	0.97	97.68	0.82	28.30	

M882611B
MATCHED GC PEAKS /RATIO/ RET TIME

M_Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT
304	0.81	25.13	79.38	.T.	.F.	0.909
304	1.02	25.25	74.79	.F.	.F.	0.916
304	0.69	26.02	140.98	.T.	.F.	0.939
304	1.17	27.20	281.41	.F.	.F.	0.986
304	0.76	27.48	418.13	.T.	.T.	1.002
304	1.45	28.06	116.94	.F.	.F.	1.013
304	2.33	28.24	90.75	.F.	.F.	1.024
304	3.64	28.37	163.05	.F.	.F.	1.032
304	4.66	29.23	119.52	.F.	.F.	1.059
304	2.97	30.49	133.16	.F.	.F.	1.111
316	5.17	27.19	503.83	.F.	.F.	0.985
316	0.78	27.44	73990.12	.T.	.T.	1.000
320	2.95	24.56	93.32	.F.	.F.	0.875
320	0.60	25.26	67.87	.F.	.F.	0.892
320	0.44	27.51	194.69	.F.	.F.	0.977
320	0.43	27.59	92.90	.F.	.F.	0.982
320	2.82	28.11	238.51	.F.	.F.	0.989
320	0.90	28.32	355.77	.F.	.T.	1.001
320	1.00	29.23	70.02	.F.	.F.	1.031
320	1.30	30.35	55.58	.F.	.F.	1.073
320	2.73	32.24	255.63	.F.	.F.	1.137
328	0.00	28.31	53490.86	.T.	.T.	1.001
328	0.00	29.26	253.55	.T.	.F.	1.033
328	0.00	29.41	109.51	.T.	.F.	1.042
328	0.00	30.08	105.40	.T.	.F.	1.057
332	1.16	27.44	104.43	.F.	.F.	0.973
332	0.83	28.18	57658.48	.T.	.T.	0.993
332	0.82	28.30	53835.97	.T.	.T.	1.000
332	0.25	29.20	251.58	.F.	.F.	1.029
*** Total ***						
***	41.68	813.45	243346.13			29.061

AR100635

M882611I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	39.14	24.28
304	35.49	25.13
304	37.79	25.25
304	48.91	25.41
304	57.76	26.02
304	40.01	26.08
304	56.72	26.21
304	315.39	26.42
304	68.71	26.54
304	93.62	27.09
304	151.60	27.20
304	73.99	27.33
304	181.00	27.48
304	69.21	28.06
304	63.48	28.24
304	127.88	28.37
304	90.40	29.23
304	232.22	30.07
304	68.88	30.16
304	99.65	30.49
304	33.35	31.07
306	33.01	24.41
306	46.39	24.59
306	43.89	25.13
306	37.00	25.26
306	26.43	25.33
306	63.63	25.45
306	63.50	25.51
306	83.22	26.04
306	118.54	26.39
306	123.24	26.59
306	108.14	27.06
306	129.81	27.20
306	237.13	27.46
306	47.73	28.05
306	66.21	28.14
306	27.27	28.22
306	35.17	28.35
306	20.02	28.51
306	26.15	29.04
306	21.12	29.24
306	46.43	30.03
306	28.52	30.21
306	136.38	30.32
306	46.49	30.44
306	33.51	30.50
306	25.77	31.15
306	35.93	31.27
306	45.70	31.34
306	63.02	32.10

ORIGINAL (Red)

MS82611I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	40.78	32.25
306	34.00	32.37
306	52.65	33.05
306	57.02	33.26
306	189.63	33.51
306	103.05	34.03
306	75.87	34.20
306	46.89	34.45
306	34.12	34.58
316	52.77	26.45
316	86.72	26.56
316	422.17	27.19
316	32452.76	27.44
316	440.14	28.18
316	275.06	28.37
318	49.57	24.28
318	55.58	24.50
318	60.14	26.41
318	266.47	26.59
318	81.66	27.19
318	41537.36	27.44
318	153.25	28.08
318	259.88	28.25
318	102.71	28.46
318	74.19	29.03
318	258.67	29.39
318	72.55	30.43
318	282.80	31.18
318	82.68	31.36
318	127.27	32.05
318	396.10	32.25
318	132.41	32.45
318	99.59	33.22
318	75.17	34.09
318	156.19	34.49
318	63.69	35.13
320	20.32	24.29
320	30.29	24.46
320	69.72	24.56
320	25.43	25.26
320	49.98	25.44
320	45.44	25.56
320	87.87	26.25
320	70.06	27.11
320	72.56	27.42
320	59.95	27.51
320	27.91	27.59
320	176.01	28.11
320	168.59	28.32
320	67.93	28.55

AR100637

M832611I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
320	35.08	29.23
320	100.92	29.29
320	46.23	29.41
320	89.17	30.12
320	125.81	30.25
320	31.46	30.35
320	38.41	31.02
320	41.75	31.13
320	23.91	31.34
320	90.61	31.51
320	43.35	32.10
320	187.09	32.24
322	143.47	24.18
322	71.36	24.40
322	37.85	24.51
322	23.60	24.57
322	44.06	25.13
322	42.44	25.25
322	43.88	25.41
322	46.73	25.51
322	73.68	26.22
322	56.94	26.46
322	55.91	26.53
322	73.46	27.04
322	82.81	27.17
322	30.04	27.28
322	134.74	27.49
322	64.99	28.01
322	62.50	28.13
322	165.87	28.24
322	187.09	28.31
322	32.34	28.49
322	34.94	29.21
322	57.43	29.38
322	37.86	30.07
322	96.97	30.21
322	43.59	30.31
322	24.12	30.37
322	58.91	30.50
322	22.22	30.59
322	48.99	31.16
322	40.77	31.28
322	22.45	31.45
322	22.89	32.13
322	68.54	32.25
322	38.03	32.34
322	170.01	33.20
322	103.12	33.31
322	48.38	33.42
322	129.85	33.58

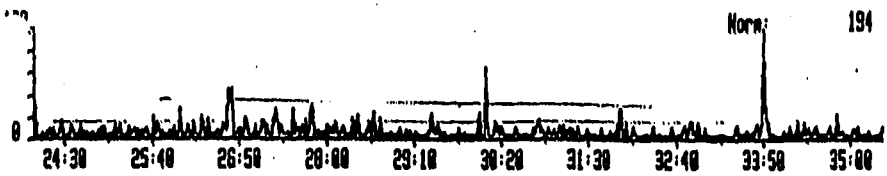
ORIGINAL (Red)

M882611I
RAW MASS AND AREA DATA

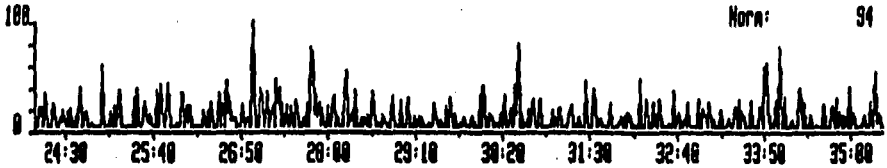
MASS	AREA	RET.TIME
322	55.46	34.17
322	22.71	34.26
322	95.87	34.33
322	46.30	34.58
328	53490.86	28.31
328	253.55	29.26
328	109.51	29.41
328	105.40	30.08
332	114.62	26.35
332	87.20	27.16
332	271.35	27.27
332	55.98	27.44
332	46.20	28.01
332	26096.65	28.18
332	24278.68	28.30
332	178.02	29.07
332	49.82	29.20
332	88.45	29.40
334	42.89	24.23
334	55.20	26.11
334	94.73	26.58
334	48.45	27.45
334	31561.83	28.18
334	29557.29	28.30
334	201.76	29.21
334	108.24	29.35
334	143.51	29.51
334	156.33	31.13
334	145.94	31.45
334	121.27	32.15
334	133.41	32.26
334	40.10	32.54
334	184.63	33.25
334	139.85	33.48
334	101.33	34.02
334	62.80	34.18
334	58.20	35.09
*** Total ***		
****	255338.77	5426.38

AR100639

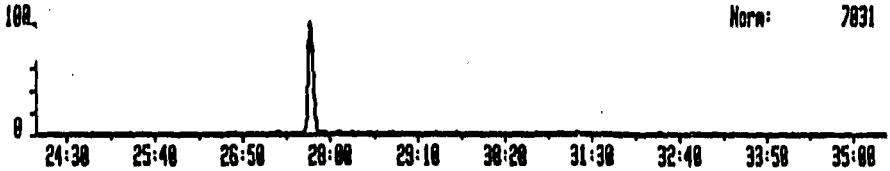
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 303.9816
Text:M-10 TLI012573



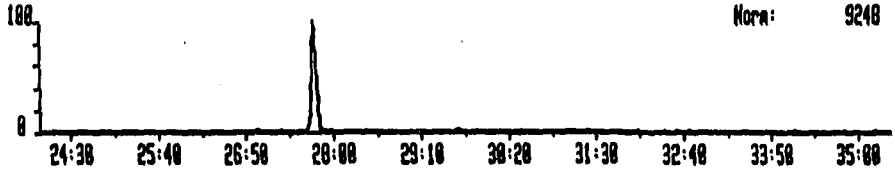
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 305.8987
Text:M-10 TLI012573



M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 315.9419
Text:M-10 TLI012573

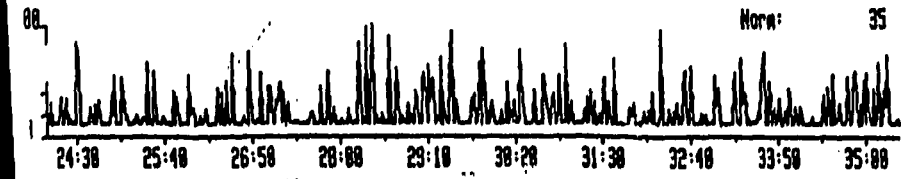


M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 317.9389
Text:M-10 TLI012573



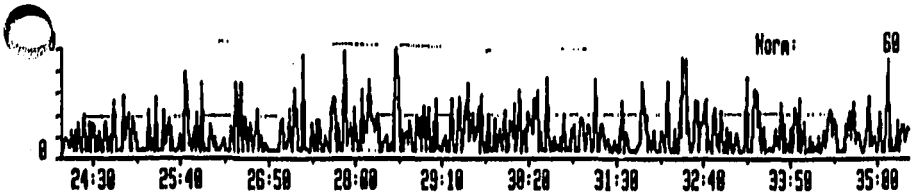
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 375.8364
Text:M-10 TLI012573

AR100640

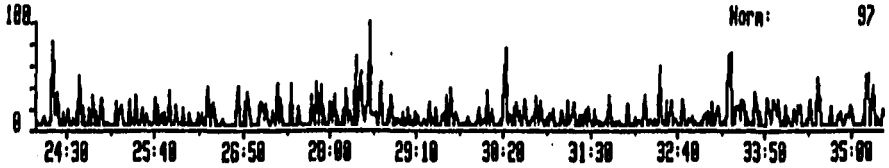


7

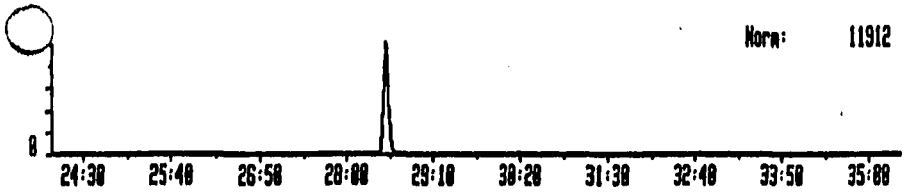
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 319.8965
Text:M-10 TLI012573



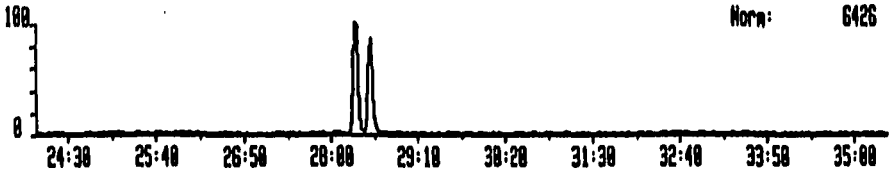
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 321.8936
Text:M-10 TLI012573



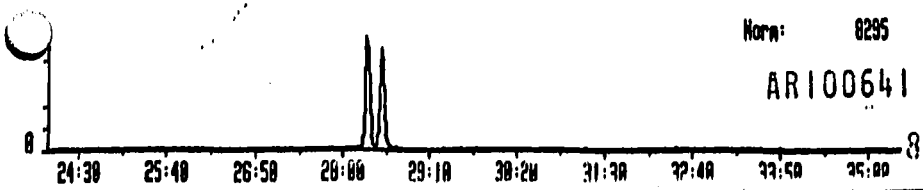
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 327.8847
Text:M-10 TLI012573



M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 331.9368
Text:M-10 TLI012573



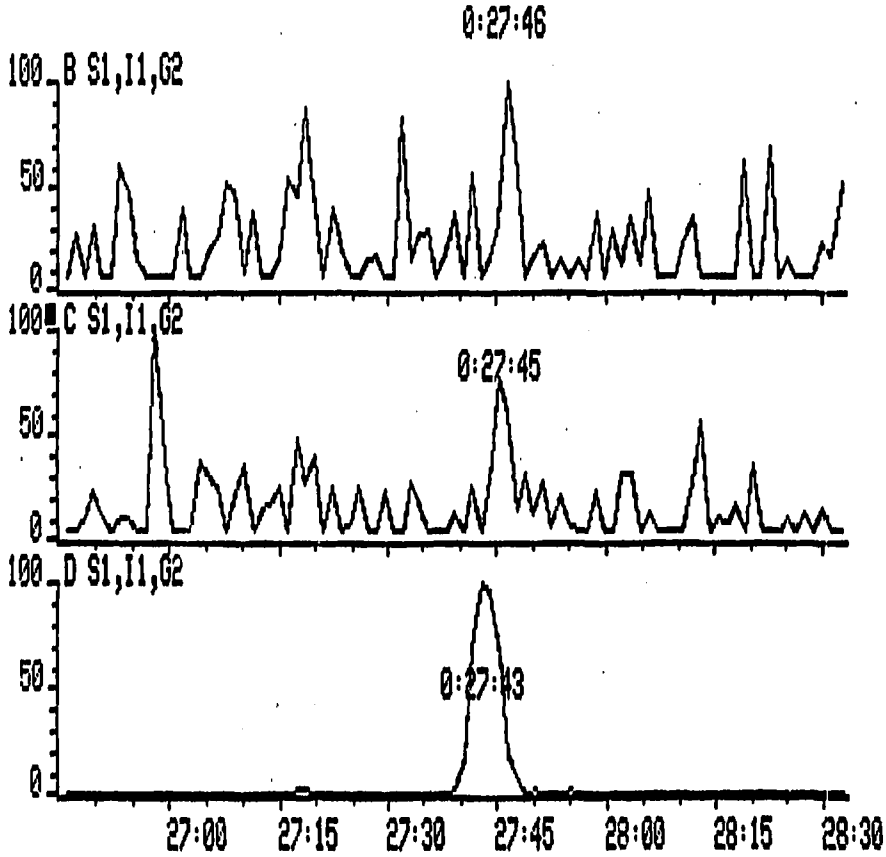
M882611 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 333.9330
Text:M-10 TLI012573



AR100641

8

M882611 15-AUG-88 18:38 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:M-10 TLI#12573



1.
59.532

1.
93.516

703

AR100642

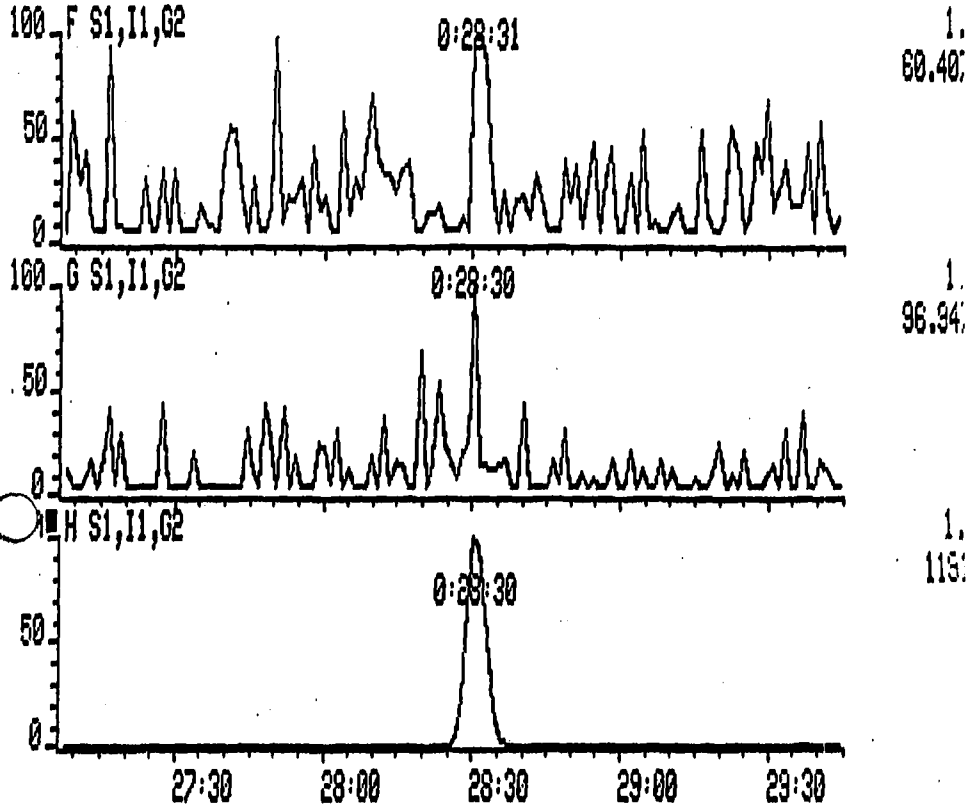
9

M882611 15-AUG-88 18:38 70-H (EI+) Sys:US

GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389

t:M-10 TLI#12573

ORIGINAL (Red)



AR100643

10

ORIGINAL

TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ANALYST: DH
TE: 08/15/88
AMPLEWT: 0.79

FILE NAME: M882608
SAMPLE ID: M-3
CASE NO: ERM
PROJ NO: 12573

CONCAL:

NAME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
2378-TCDD	ND		0.070				
2378-TCDF	1.925				0.73	27.45	
TOTAL TCDD	ND		0.070				
TOTAL TCDF	4.968	7		5.215	0.70		

SURROGATE STD. RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
37CL-TCDD	12.24	96.70		28.29	

INTERNAL STANDARDS RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
13C12-TCDF	5.97	47.16	0.77	27.43	
2378-13C12-TCDD	6.90	54.51	0.80	28.28	

ORIGINAL (Red)

M8826038
MATCHED GC PEAKS /RATIO/ RET TIME

M_Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT	
304	0.27	25.12	121.44	.F.	.F.	0.909	
304	1.61	26.01	523.37	.F.	.F.	0.939	
304	1.32	26.21	417.25	.F.	.F.	0.951	
304	0.65	26.39	1034.84	.T.	.F.	0.962	
304	0.67	26.53	2665.34	.T.	.F.	0.970	
304	0.67	27.17	1436.57	.T.	.F.	0.984	
304	~~0.69~~ 0.70	27.32	~~1622.25~~	.F. 1496.27	.F.	0.993	
304	0.73	27.45	7319.86	.T.	.T.	1.001	
304	0.72	28.12	2502.55	.T.	.F.	1.017	
304	0.77	28.25	2445.18	.T.	.F.	1.025	
316	2.01	26.57	202.82	.F.	.F.	0.972	
316	1.82	27.15	580.25	.F.	.F.	0.983	
316	0.77	27.43	52847.73	.T.	.T.	1.000	
316	1.04	28.15	318.94	.F.	.F.	1.019	
320	1.52	25.22	169.98	.F.	.F.	0.891	
320	0.88	27.59	77.78	.T.	.F.	0.983	
320	1.66	28.22	72.35	.F.	.F.	0.996	
320	0.22	29.04	211.78	.F.	.F.	1.021	
320	0.41	29.46	197.88	.F.	.F.	1.046	
328	0.00	27.26	111.13	.T.	.F.	0.964	
328	0.00	28.29	38321.42	.T.	.T.	1.001	
328	0.00	28.57	494.72	.T.	.F.	1.017	
328	0.00	29.12	94.11	.T.	.F.	1.026	
328	0.00	29.29	205.80	.T.	.F.	1.036	
328	0.00	29.51	102.12	.T.	.F.	1.049	
328	0.00	30.19	137.58	.T.	.F.	1.065	
332	0.81	28.17	77113.76	.T.	.T.	0.994	
332	0.80	28.28	40222.82	.T.	.T.	1.000	
*** Total ***							
***	19.98	776.08	231571.62			27.814	

AR100645

M8826083I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	63.68	24.12
304	35.35	24.46
304	26.19	25.12
304	121.04	25.38
304	323.07	26.01
304	237.32	26.21
304	409.33	26.39
304	1070.97	26.53
304	577.49	27.17
304	629.63	27.32
304	3093.88	27.45
304	1051.46	28.12
304	1061.56	28.25
304	21.53	28.42
304	20.01	28.49
304	32.15	29.28
304	104.61	29.40
304	31.23	30.56
304	24.18	31.04
306	116.11	24.32
306	95.25	25.14
306	152.09	25.22
306	228.38	25.42
306	200.30	26.02
306	50.13	26.10
306	179.93	26.23
306	625.51	26.40
306	1594.37	26.54
306	560.94	27.05
306	859.08	27.17
306	992.62	27.32
306	4225.98	27.45
306	1451.09	28.12
306	1383.62	28.25
306	55.72	28.37
306	35.01	28.54
306	55.08	29.07
306	50.14	29.37
306	31.99	29.53
306	107.29	30.07
306	50.54	30.25
306	64.38	30.32
306	27.69	30.42
306	20.76	31.01
306	47.29	31.17
306	31.99	31.29
306	24.20	31.41
306	61.58	32.01
306	71.60	32.08
306	150.47	32.16

AR100646

M8826081
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	244.19	32.47
306	46.01	32.57
306	311.35	33.20
306	201.11	33.32
306	95.35	33.47
306	131.93	34.15
306	26.83	34.40
306	52.01	35.02
316	135.33	26.57
316	374.67	27.15
316	22979.12	27.43
316	162.48	28.15
316	133.45	28.36
318	50.09	24.30
318	48.64	26.10
318	51.33	26.25
318	67.49	26.56
318	205.58	27.16
318	29868.61	27.43
318	156.46	28.14
318	214.31	28.40
318	54.67	29.21
318	128.26	29.37
318	51.37	30.56
318	466.24	32.24
318	319.96	33.20
318	241.95	33.55
318	52.56	34.38
318	88.15	35.01
320	29.08	24.45
320	30.36	24.55
320	102.50	25.22
320	41.51	25.32
320	129.26	25.48
320	44.57	26.00
320	80.18	26.08
320	162.48	26.23
320	57.70	26.40
320	33.51	27.09
320	64.53	27.23
320	45.13	27.42
320	28.46	27.51
320	36.39	27.59
320	45.20	28.22
320	37.71	29.04
320	29.03	29.27
320	57.16	29.46
320	51.02	30.01
320	39.14	30.27
320	42.00	30.36

M8826D8I
RAW MASS AND AREA DATA

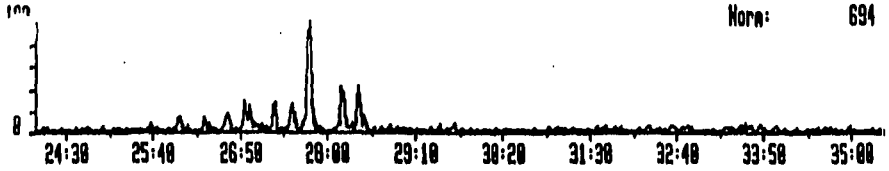
MASS	AREA	RET.TIME
320	48.36	30.56
320	133.90	31.15
320	45.65	31.24
320	31.19	31.40
320	36.27	31.53
320	59.09	32.08
320	103.68	32.21
322	54.61	24.15
322	148.44	24.51
322	68.52	25.08
322	67.48	25.20
322	36.72	25.41
322	140.98	26.14
322	95.91	26.58
322	93.43	27.13
322	78.71	27.36
322	41.39	28.01
322	27.15	28.22
322	27.09	28.29
322	91.44	28.41
322	110.66	28.53
322	174.07	29.06
322	45.94	29.15
322	52.76	29.35
322	140.72	29.47
322	27.99	30.24
322	102.12	30.32
322	82.93	30.47
322	42.02	31.10
322	100.55	31.44
322	126.15	32.04
322	73.07	32.24
322	117.60	32.45
322	65.62	32.51
322	28.72	32.59
322	387.57	33.19
322	34.23	33.32
322	20.69	33.51
322	42.98	33.57
322	29.07	34.15
322	81.66	34.25
322	42.48	34.45
322	35.58	35.04
322	22.75	35.14
328	111.13	27.26
328	38321.42	28.29
328	494.72	28.57
328	54.11	29.12
328	205.80	29.29
328	102.12	29.51

AR100648

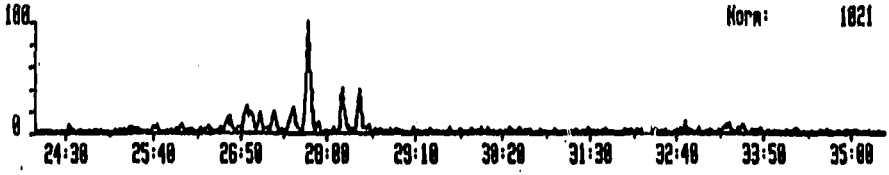
M8826081
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
328	137.58	30.19
332	133.25	26.38
332	151.77	26.44
332	60.63	27.06
332	34398.79	28.17
332	17838.43	28.28
332	51.27	29.03
332	97.73	29.57
334	72.41	25.21
334	44.90	25.53
334	47.78	26.54
334	109.11	27.14
334	58.84	27.46
334	42714.97	28.17
334	22384.39	28.28
334	100.77	29.00
334	113.08	30.23
334	121.08	30.58
334	63.39	31.18
334	69.87	32.03
334	242.23	33.20
334	139.12	33.46
334	49.03	33.57
334	51.39	34.17
334	75.18	34.26
*** Total ***		
****	242798.65	5094.17

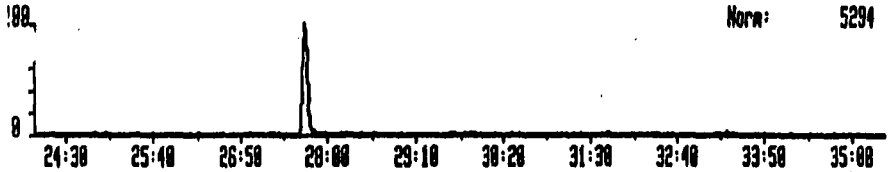
M002600 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 303.9816
Text:M-3 TLI012573



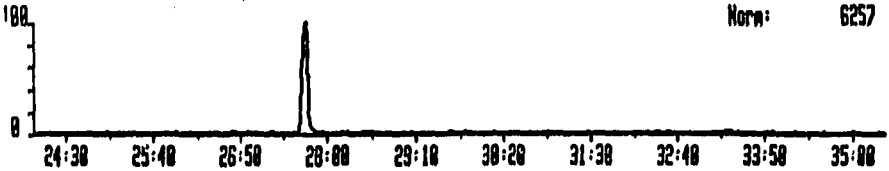
M002600 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 305.0987
Text:M-3 TLI012573



M002600 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 315.9419
Text:M-3 TLI012573

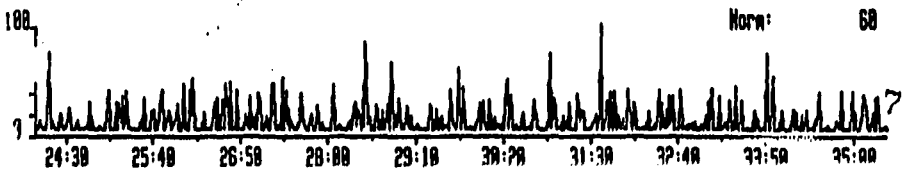


M002600 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 317.9389
Text:M-3 TLI012573



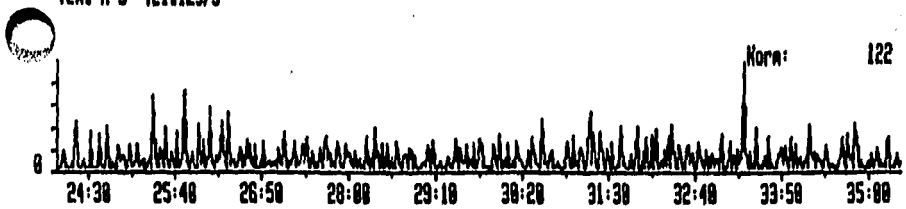
M002600 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 375.0364
Text:M-3 TLI012573

AR100650

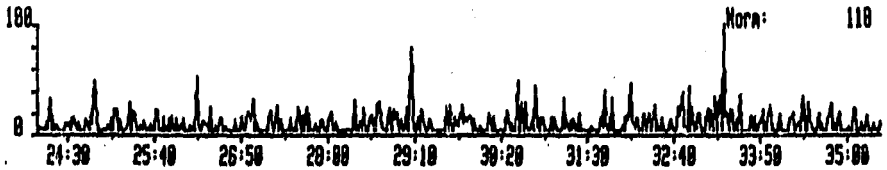


ORIGINAL (Red)

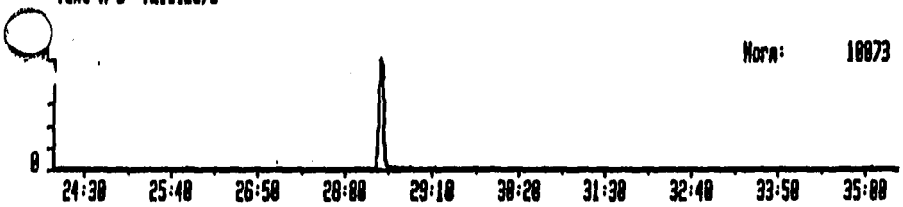
M002600 15-AUG-00 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 319.0965
Text:M-3 TL1012573



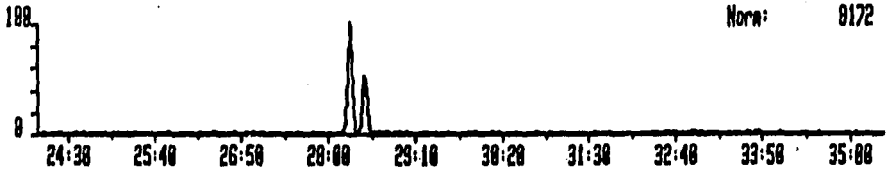
M002600 15-AUG-00 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 321.0936
Text:M-3 TL1012573



M002600 15-AUG-00 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 327.0847
Text:M-3 TL1012573

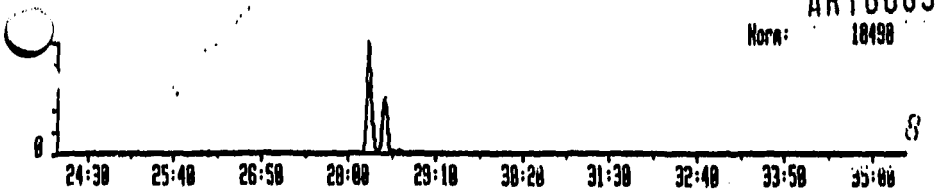


M002600 15-AUG-00 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 331.9360
Text:M-3 TL1012573



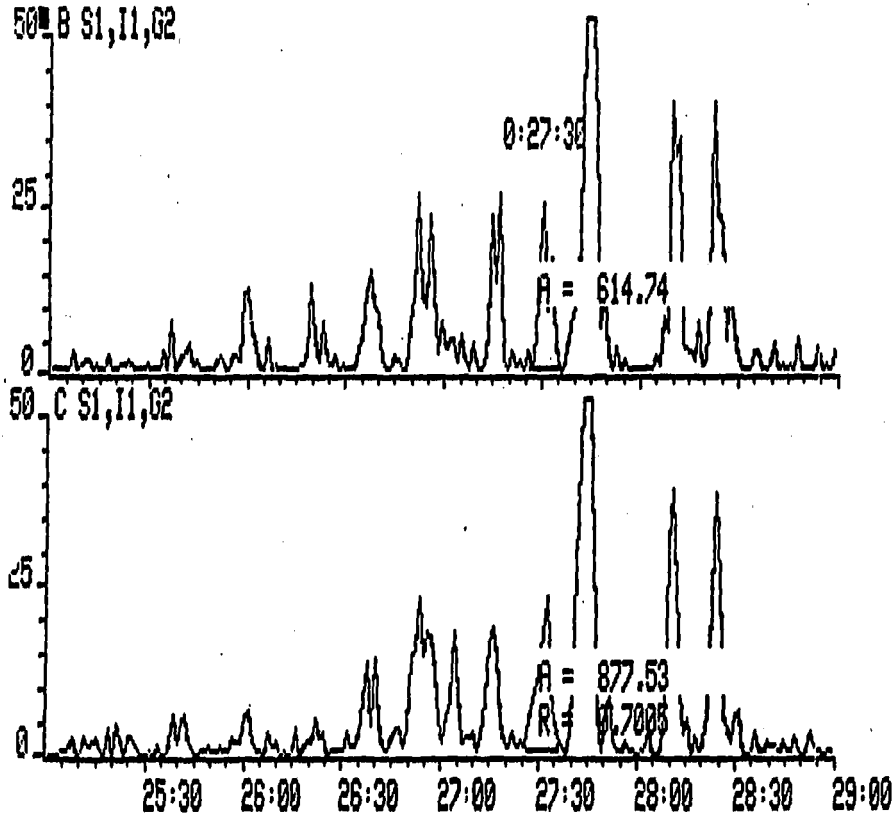
M002600 15-AUG-00 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 333.9330
Text:M-3 TL1012573

AR100651



8

M882608 15-AUG-88 15:54 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:M-3 TLI#12573



AR100652

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TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ORIGINAL

ANALYST: DH FILE NAME: M882607 CONCAL: M882603
DATE: 08/15/88 SAMPLE ID: D-60
SAMPLE WT: 10.17 CASE NO: ERM
PROJ NO: 12573

NAME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
2378-TCDD	ND			0.010			
2378-TCDF	ND		0.003				
TOTAL TCDD	0.057	5		0.121	0.75		
TOTAL TCDF	ND			0.005			

SURROGATE STD. RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
37CL-TCDD	0.91	92.55		28.30	

INTERNAL STANDARDS RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
13C12-TCDF	0.75	76.27	0.79	27.43	
2378-13C12-TCDD	0.83	84.41	0.79	28.29	

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08/21/88

M882607B
MATCHED GC PEAKS /RATIO/ RET TIME

	M_Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT	
Dbl	304	1.09	24.34	70.36	.F.	.F.	0.886	
	304	0.53	25.16	109.73	.F.	.F.	0.912	
Prot	304	0.58	25.42	256.61	.F.	.F.	0.927	
Dbl	304	3.78	27.52	581.06	.F.	.F.	1.005	
	304	2.14	28.18	270.34	.F.	.F.	1.021	
Dbl	304	1.81	28.30	105.95	.F.	.F.	1.028	
	304	1.50	29.46	124.71	.F.	.F.	1.074	
	316	0.58	27.17	1244.55	.F.	.F.	0.984	
	316	0.79	27.43	176172.88	.T.	.T.	1.000	
Dbl	320	0.38	25.29	87.08	.F.	.F.	0.894	
	320	1.07	25.35	42.01	.F.	.F.	0.898	
	320	1.68	26.17	311.15	.F.	.F.	0.923	
	320	1.34	26.34	684.35	.F.	.F.	0.933	
	320	1.06	27.15	4683.39	.F.	.F.	0.957	
	320	0.75	27.57	587.06	.T.	.F.	0.981	
90 Ch	320	1.00	28.15	1886.40	.F.	.F.	0.992	
	320	0.77	28.23	1739.31	.T.	.F.	0.996	
90 Ch	320	1.19	28.30	1403.56	.F.	.T.	1.001	
	320	0.84	28.41	1035.83	.T.	.F.	1.007	
	320	0.59	28.52	1346.13	.T.	.F.	1.013	
	320	0.45	29.07	275.49	.F.	.F.	1.022	
Dbl	320	1.56	29.26	90.33	.F.	.F.	1.033	
Dbl	320	0.23	29.38	870.13	.F.	.F.	1.040	
Dbl	320	2.00	29.49	64.38	.F.	.F.	1.047	Dbl off
	320	0.71	32.24	520.02	.T.	.F.	1.138	
RT	320	1.21	32.45	130.13	.F.	.F.	1.150	
	328	0.00	28.30	116801.74	.T.	.T.	1.001	
	328	0.00	28.57	523.87	.T.	.F.	1.016	
	332	0.82	28.17	159505.51	.T.	.T.	0.993	
	332	0.79	28.29	128809.72	.T.	.T.	1.000	
*** Total ***								
***		31.49	837.67	600333.78			29.872	
Ch 320		0.71	27.30	3527.51	T	F	0.965	

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AR100

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M8826071
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	36.67	24.34
304	60.76	24.53
304	42.03	25.05
304	40.23	25.16
304	94.27	25.42
304	239.23	26.05
304	67.88	26.13
304	27.08	26.31
304	72.34	26.39
304	117.27	27.00
304	39.03	27.20
304	459.48	27.52
304	184.25	28.18
304	68.24	28.30
304	47.59	28.58
304	43.18	29.09
304	35.84	29.29
304	74.87	29.46
304	76.51	30.12
304	45.80	30.42
304	67.97	30.58
304	34.84	31.06
304	29.97	31.15
304	44.98	31.30
306	20.25	24.28
306	33.69	24.35
306	91.24	24.46
306	69.50	25.15
306	79.10	25.27
306	162.34	25.44
306	40.75	26.02
306	69.38	26.17
306	159.36	26.46
306	41.00	26.56
306	117.34	27.05
306	128.25	27.17
306	78.44	27.32
306	120.53	27.46
306	121.53	27.54
306	71.28	28.01
306	56.09	28.19
306	37.71	28.29
306	50.10	29.03
306	85.72	29.14
306	35.00	29.24
306	68.44	29.32
306	50.19	29.40
306	49.84	29.47
306	33.44	30.08
306	57.23	30.18

AR100655
3

M8826071
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	64.31	30.26
306	48.65	30.38
306	42.70	30.46
306	51.31	31.02
306	26.43	31.45
306	24.66	32.03
306	60.43	32.11
306	35.06	32.20
306	49.80	32.37
306	77.08	32.53
306	50.84	33.11
306	60.89	33.19
306	77.97	33.26
306	33.44	33.40
306	360.78	33.49
306	30.87	34.31
306	22.45	34.41
306	43.29	35.06
306	97.78	35.17
316	458.20	27.17
316	77833.42	27.43
316	645.30	28.12
316	503.85	28.30
318	123.51	26.56
318	786.35	27.17
318	98339.46	27.43
318	137.43	28.36
318	525.30	29.39
318	506.90	32.24
318	602.29	33.22
318	356.23	33.32
320	85.23	24.52
320	89.77	25.03
320	59.76	25.19
320	24.03	25.28
320	21.76	25.35
320	46.04	25.41
320	25.54	25.50
320	194.88	26.17
320	392.29	26.34
320	2408.58	27.15
320	1709.85	27.26
320	252.48	27.57
320	942.38	28.15
320	756.33	28.23
320	762.93	28.30
320	474.28	28.41
320	550.93	28.52
320	85.72	29.07
320	37.97	29.20

AR100656

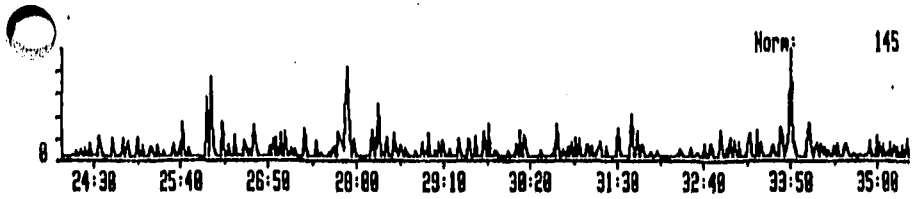
M882607I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
320	55.11	29.26
320	217.83	29.38
320	42.92	29.49
320	64.77	30.13
320	33.05	31.13
320	53.91	31.24
320	41.01	31.31
320	147.25	32.16
320	216.34	32.24
320	71.33	32.45
320	117.70	32.55
322	26.51	24.18
322	26.22	24.59
322	63.05	25.30
322	20.25	25.37
322	108.47	25.55
322	116.27	26.17
322	292.06	26.34
322	2274.81	27.14
322	2205.54	27.29
322	334.58	27.56
322	944.02	28.14
322	982.98	28.24
322	640.63	28.30
322	561.55	28.41
322	795.20	28.52
322	189.77	29.07
322	35.22	29.28
322	652.30	29.38
322	21.46	29.50
322	26.50	30.03
322	53.49	30.32
322	28.89	30.44
322	28.82	30.54
322	29.30	31.40
322	26.34	32.08
322	303.68	32.22
322	26.40	32.37
322	58.80	32.45
322	101.29	33.02
322	53.62	33.12
322	350.57	33.20
322	21.21	33.49
322	106.14	34.00
322	207.00	34.28
322	23.59	34.41
322	86.30	34.50
322	57.14	35.01
328	116801.74	28.30
328	523.87	28.57

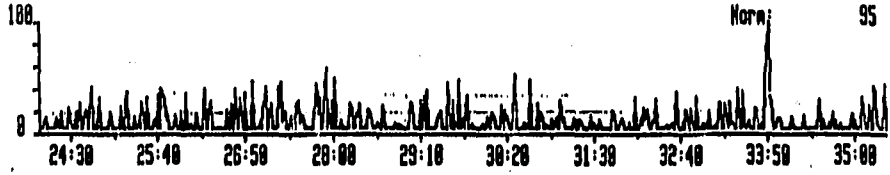
M882607I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
332	71770.45	28.17
332	57016.22	28.29
334	91.47	26.28
334	87735.06	28.17
334	71793.50	28.29
334	152.46	30.26
334	225.53	33.48
*** Total ***		
****	614055.32	4565.61

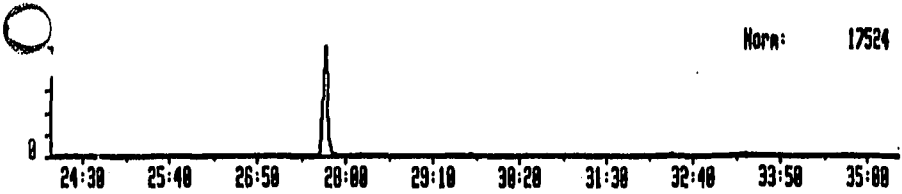
M082687 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 303.9016
Text:D-68 TLI#12573



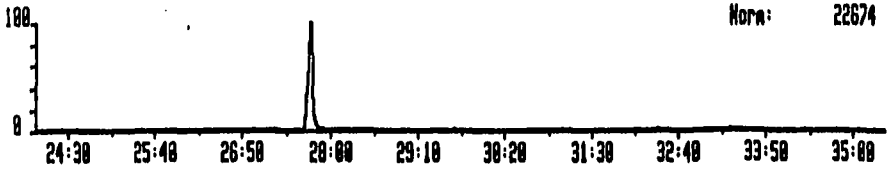
M082687 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 305.0987
Text:D-68 TLI#12573



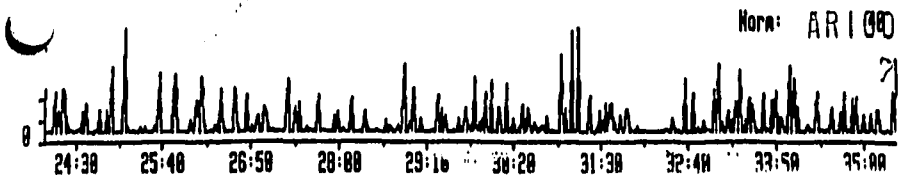
M082687 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 315.9419
Text:D-68 TLI#12573



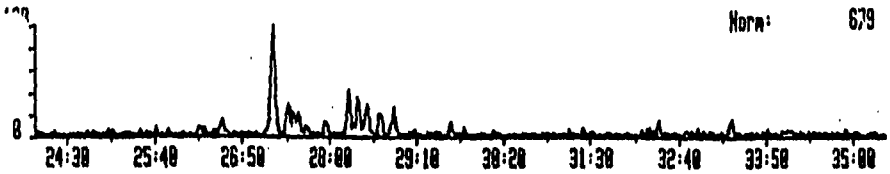
M082687 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 317.9389
Text:D-68 TLI#12573



M082687 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 375.8364
Text:D-68 TLI#12573

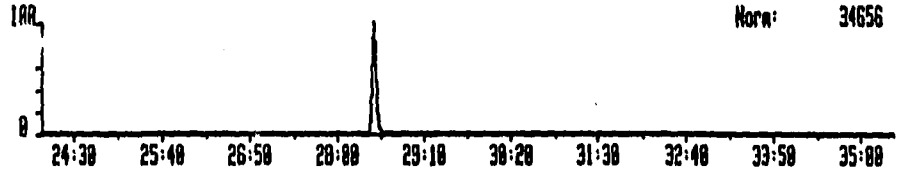


M082607 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 319.0965
Text:D-60 TLI012573

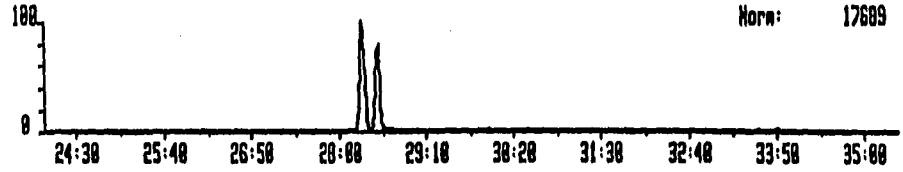


M082607 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 321.0936
Text:D-60 TLI012573

M082607 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 327.0847
Text:D-60 TLI012573

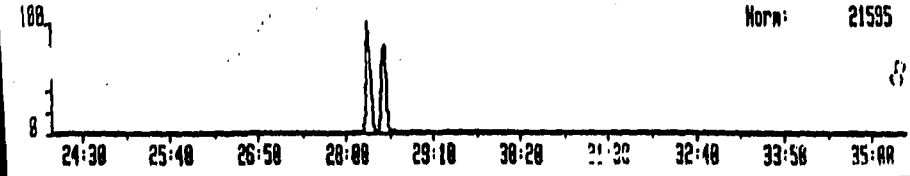


M082607 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 331.9368
Text:D-60 TLI012573



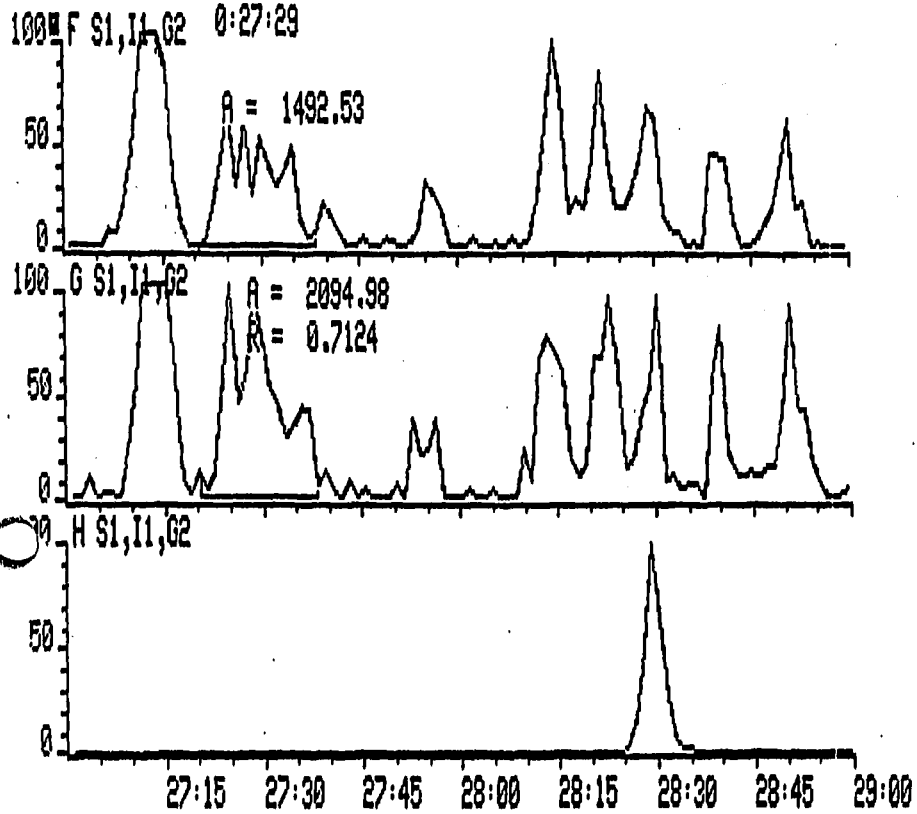
M082607 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 333.9330
Text:D-60 TLI012573

AR100660



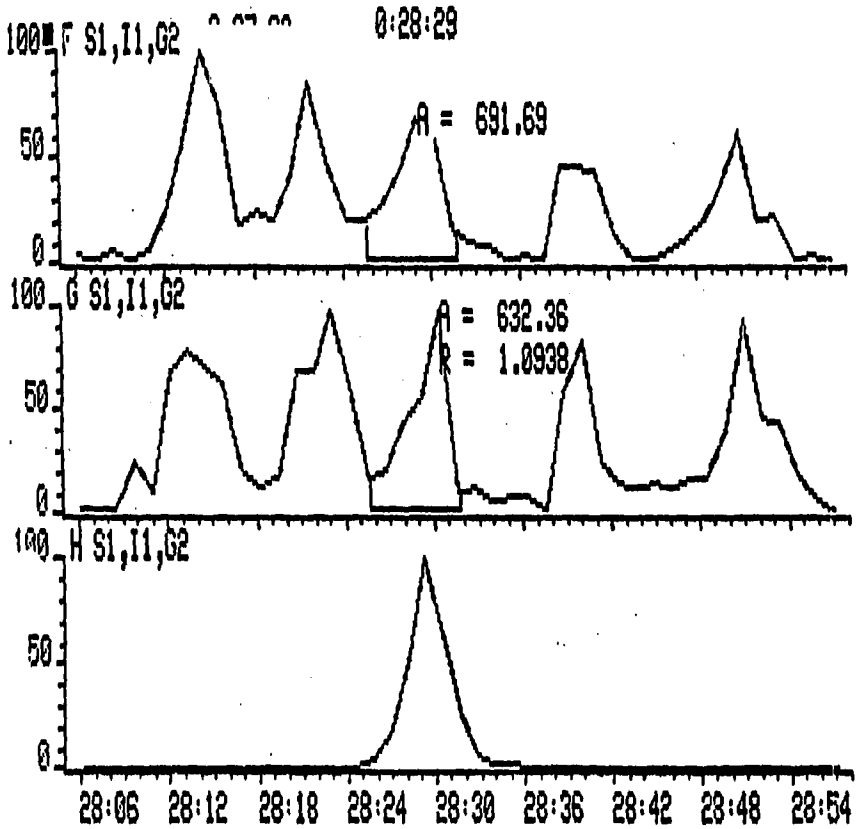
8

M882607 15-AUG-88 14:59 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:D-60 TLI#12573



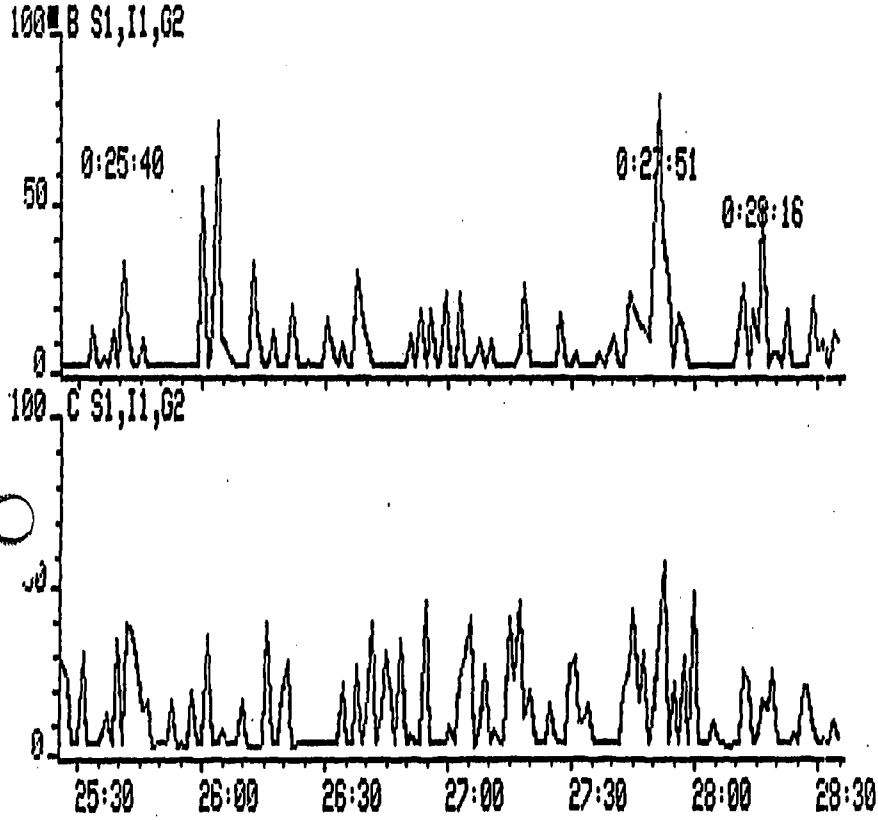
AR100661

M882607 15-AUG-88 14:59 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:D-60 TLI#12573



AR100662

M882607 15-AUG-88 14:59 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
t:D-60 TLI#12573



AR100663

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TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ANALYST: DH
DATE: 08/15/88
SAMPLEWT: 10.26

FILE NAME: M882606
SAMPLE ID: D-1
CASE NO: ERM
PROJ NO: 12573

CONCAL: M882603

NAME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
2378-TCDD	ND			0.012			
2378-TCDF	ND		0.003				
TOTAL TCDD	ND			0.012			
TOTAL TCDF	0.004	1		0.011	0.82		

SURROGATE STD. RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
37CL-TCDD	1.03	105.68		28.31	

INTERNAL STANDARDS RECOVERY SUMMARY

NAME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
13C12-TCDF	0.67	68.74	0.76	27.44	
2378-13C12-TCDD	0.77	79.00	0.77	28.30	

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M882606B
MATCHED GC PEAKS /RATIO/ RET TIME

M_Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT
304	0.28	24.38	133.24	.F.	.F.	0.888
304	1.77	26.00	139.72	.F.	.F.	0.937
304	0.66	26.41	377.82	.T.	.F.	0.962
304	0.55	26.59	149.05	.F.	.F.	0.973
304	1.03	27.08	200.94	.F.	.F.	0.978
304	0.82	27.19	614.95	.T.	.F.	0.985
304	~~0.97~~	27.44	~~1033.78~~	.F. 584.86	.T.	1.000
304	2.37	29.18	171.37	.F.	.F.	1.056
304	0.39	30.21	119.92	.F.	.F.	1.094
316	0.91	26.58	555.83	.F.	.F.	0.972
316	0.55	27.17	1378.05	.F.	.F.	0.984
316	0.76	27.44	158272.71	.T.	.T.	1.000
316	0.63	28.13	1533.89	.F.	.F.	1.017
316	0.34	28.29	678.98	.F.	.F.	1.027
320	0.72	24.46	107.74	.T.	.F.	0.869
320	1.74	25.25	75.15	.F.	.F.	0.892
320	0.53	25.33	116.69	.F.	.F.	0.896
320	0.20	27.15	440.96	.F.	.F.	0.956
320	0.48	27.31	158.34	.F.	.F.	0.965
320	2.53	27.44	287.77	.F.	.F.	0.973
320	0.63	27.56	115.51	.F.	.F.	0.980
320	0.51	28.31	1688.23	.F.	.T.	1.001
320	0.59	28.53	257.20	.F.	.F.	1.013
320	0.91	29.49	46.15	.F.	.F.	1.046
320	1.43	30.16	206.12	.F.	.F.	1.062
320	2.71	30.43	158.83	.F.	.F.	1.078
320	1.19	32.38	645.59	.F.	.F.	1.145
320	0.67	32.51	456.64	.T.	.F.	1.153
328	0.00	28.31	122810.83	.T.	.T.	1.001
332	0.78	28.18	158834.98	.T.	.T.	0.993
332	0.77	28.30	119570.22	.T.	.T.	1.000
332	0.82	28.54	593.81	.T.	.F.	1.014
*** Total ***						
***	20.24	891.73	571091.01			31.910
304	0.95	27.46	499.87	F	F	1.002

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M882606I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	31.47	24.18
304	29.00	24.38
304	86.08	24.56
304	47.25	25.12
304	144.22	25.20
304	41.38	25.53
304	89.20	26.00
304	83.97	26.16
304	150.90	26.41
304	52.70	26.59
304	102.00	27.08
304	277.19	27.19
304	539.56	27.44
304	37.83	27.57
304	196.41	28.14
304	96.46	28.31
304	31.74	28.52
304	30.20	29.10
304	120.50	29.18
304	69.19	29.32
304	99.58	29.40
304	24.08	30.00
304	33.67	30.21
304	73.81	30.29
304	135.74	30.44
304	52.32	30.52
304	48.00	31.07
304	87.07	31.24
306	104.24	24.26
306	29.93	24.50
306	25.29	24.59
306	98.59	25.15
306	67.90	25.27
306	58.71	25.42
306	50.52	26.02
306	43.81	26.12
306	64.97	26.23
306	226.92	26.40
306	96.35	27.00
306	98.94	27.08
306	327.76	27.20
306	133.75	27.38
306	554.22	27.46
306	44.86	28.03
306	125.78	28.34
306	60.18	29.05
306	50.87	29.16
306	69.53	29.22
306	91.05	29.52
306	32.38	30.12

M8826061
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	86.25	30.23
306	29.54	30.48
306	44.04	31.10
306	36.96	31.41
306	27.08	32.03
306	46.10	32.09
306	69.23	32.26
306	24.89	32.44
306	68.36	32.51
306	45.40	33.26
306	83.79	33.42
306	245.24	33.52
306	64.38	34.02
306	24.56	34.17
306	30.07	34.44
306	26.69	34.58
306	83.99	35.09
316	264.76	26.58
316	491.52	27.17
316	68416.88	27.44
316	590.61	28.13
316	173.24	28.29
316	274.88	28.38
318	81.58	24.23
318	188.92	24.46
318	291.07	26.59
318	886.53	27.19
318	89855.83	27.44
318	943.28	28.12
318	505.74	28.30
318	847.28	29.39
318	316.06	32.26
318	548.67	33.24
318	143.58	33.53
320	45.00	24.46
320	68.17	24.51
320	47.71	25.25
320	40.33	25.33
320	21.16	25.47
320	81.64	26.17
320	59.33	26.47
320	33.31	27.03
320	74.80	27.15
320	51.62	27.31
320	120.30	27.38
320	206.32	27.44
320	44.69	27.56
320	20.52	28.06
320	60.09	28.15
320	566.89	28.31

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M8826061
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
320	95.78	28.53
320	41.57	29.35
320	22.01	29.49
320	121.26	30.16
320	142.53	30.30
320	116.03	30.43
320	26.91	31.12
320	48.27	31.30
320	269.18	32.25
320	350.32	32.38
320	183.19	32.51
322	44.14	24.28
322	46.91	24.39
322	62.74	24.45
322	27.44	25.25
322	76.36	25.35
322	50.32	25.44
322	109.02	25.54
322	142.03	26.14
322	31.65	26.22
322	366.16	27.14
322	106.72	27.32
322	81.45	27.43
322	70.82	27.56
322	55.23	28.19
322	1121.34	28.31
322	97.12	28.41
322	161.42	28.53
322	140.97	29.05
322	56.63	29.15
322	24.14	29.47
322	25.81	29.58
322	81.20	30.10
322	84.86	30.18
322	57.41	30.25
322	42.80	30.42
322	38.74	31.34
322	268.92	32.28
322	294.77	32.37
322	273.45	32.51
322	439.14	33.05
322	587.51	33.20
322	33.61	33.45
322	105.19	33.52
322	114.63	34.08
322	66.57	34.16
322	1057.33	34.31
322	30.71	34.41
322	806.89	34.56
322	45.92	35.13

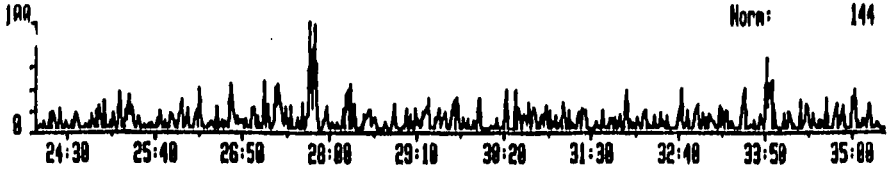
AR100668

MS82606I
RAW MASS AND AREA DATA

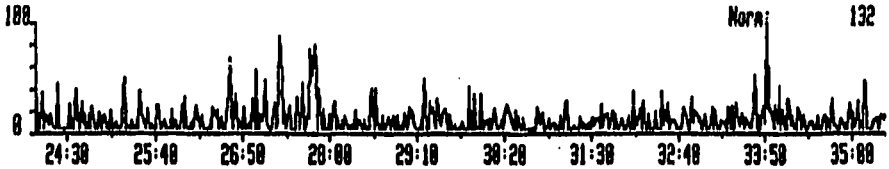
MASS	AREA	RET.TIME
328	122810.83	28.31
332	216.43	26.41
332	134.21	27.26
332	143.49	27.39
332	69598.37	28.18
332	52160.82	28.30
332	891.22	28.43
332	268.39	28.54
332	142.97	29.18
334	166.51	25.30
334	100.44	25.58
334	144.40	26.59
334	89236.61	28.18
334	67409.40	28.30
334	325.42	28.53
334	154.77	32.30
334	168.30	33.51
334	111.29	34.20
334	139.59	34.35
*** Total ***		
****	585747.64	4879.85

AR100669

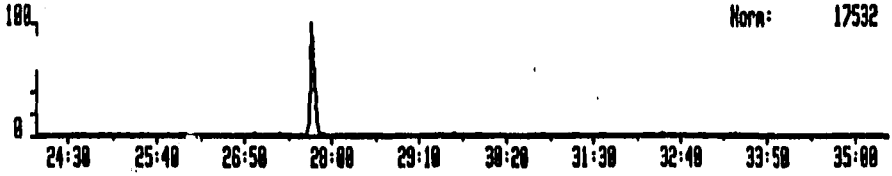
M082606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 303.9816
Text:D-1 TLI012573



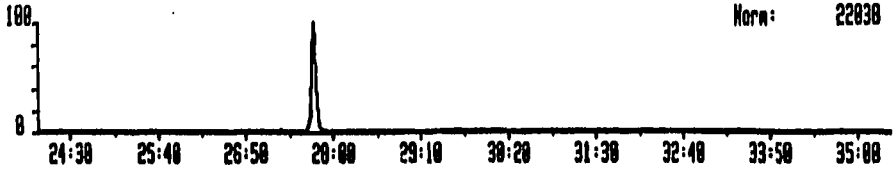
M082606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 305.8987
Text:D-1 TLI012573



M082606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 315.9419
Text:D-1 TLI012573

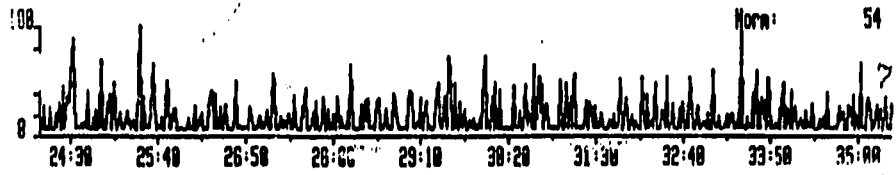


M082606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 317.9389
Text:D-1 TLI012573

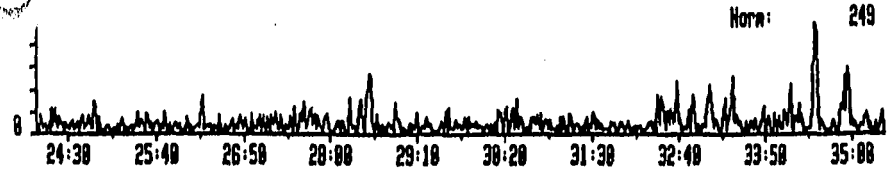


M082606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 375.8364
Text:D-1 TLI012573

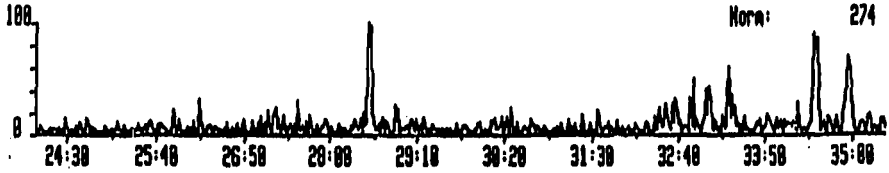
AR100670



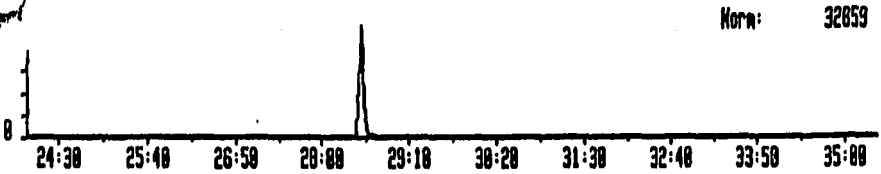
M002606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 319.8965
Text:D-1 TLI012573



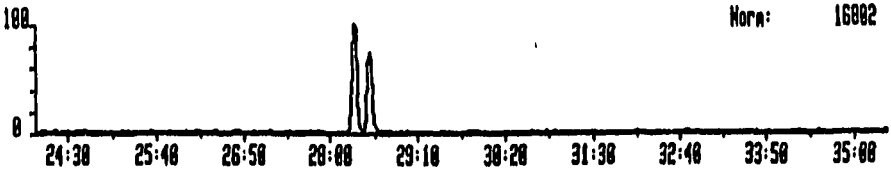
M002606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 321.8936
Text:D-1 TLI012573



M002606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 327.8847
Text:D-1 TLI012573



M002606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 331.9368
Text:D-1 TLI012573



M002606 15-AUG-88 Sir:Voltage 70-H Sys: US
Sample 1 Injection 1 Group 2 Mass 333.9338
Text:D-1 TLI012573

AR100671

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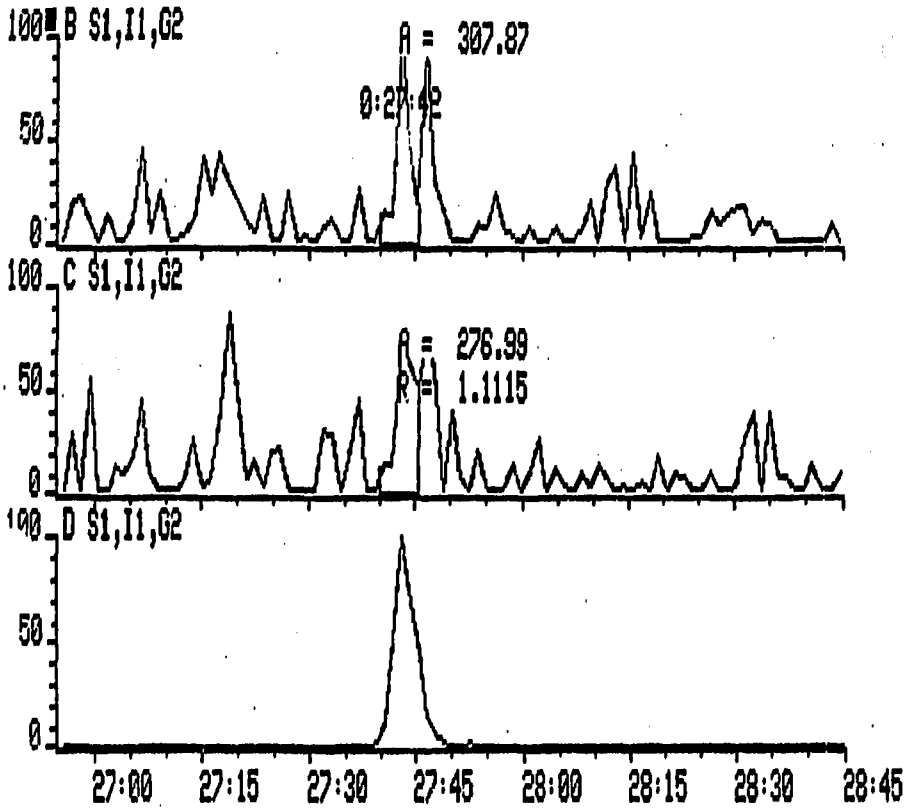
M882606 15-AUG-88 14:01 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:D-1 TLI#12573



ORIGINAL (Red)

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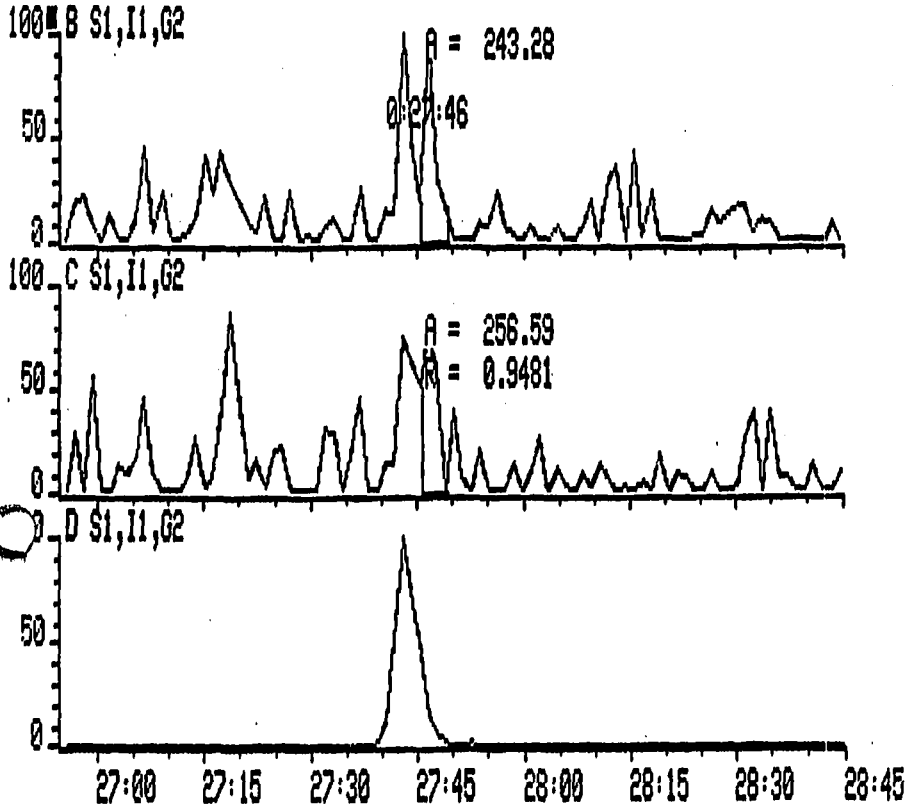
AR100672

M882606 15-AUG-88 14:01 70-H (EI+) Sys:US
GR 2 A: 292.9825 B: 303.9016 C: 305.8987 D: 315.9419 E: 317.9389
Text:D-1 TLI#12573



AR100673

ORIGINAL (Red)

TRIANGLE LABORATORIES, INC.
CONFIRMATION ANALYSIS

ANALYST: DH FILE NAME: M882605 CONCAL: M882603
'A 08/15/88 SAMPLE ID: BACKGROND #1
AMPLEWT: 10.41 CASE NO: ERM
PROJ NO: 12573

AME	CONC(ppb)	NUMBER	DL	EMPC	RATIO	RT	FLAGS
378-TCDD	ND			0.009			
378-TCDF	ND		0.003				
OTAL TCDD	ND			0.009			
OTAL TCDF	ND		0.003				

URROGATE STD. RECOVERY SUMMARY

AME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
7CL-TCDD	0.89	92.65		28.30	

NTERNAL STANDARDS RECOVERY SUMMARY

AME	CONC (ppb)	% REC.	RATIO	RT	FLAGS
3C12-TCDF	0.77	80.16	0.77	27.43	
378-13C12-TCDD	0.79	82.24	0.85	28.29	

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ORIGINAL

M882605B
MATCHED GC PEAKS /RATIO/ RET TIME

	M_Z	RATIO	RT.	AREA	MATCH_RAT	MATCH_RT	REL_RT
	304	0.94	24.36	41.49	.F.	.F.	0.888
	304	2.56	26.41	75.53	.F.	.F.	0.963
	304	0.99	27.33	167.75	.F.	.F.	0.994
Double	304	0.34	27.43	346.23	.F.	.T.	1.000
> w	304	1.22	28.08	90.81	.F.	.F.	1.015
	304	1.30	28.17	103.70	.F.	.F.	1.020
	304	1.70	28.29	107.79	.F.	.F.	1.028
	304	0.22	29.20	142.56	.F.	.F.	1.058
	304	1.57	31.33	89.37	.F.	.F.	1.138
	316	0.82	27.16	856.37	.T.	.F.	0.984
	316	0.77	27.43	78232.50	.T.	.T.	1.000
	316	0.76	28.13	446.50	.T.	.F.	1.018
	316	0.40	28.28	258.90	.F.	.F.	1.027
Double	320	0.67	27.14	62.74	.T.	.F.	0.956
	320	0.39	28.30	575.94	.F.	.T.	1.001
	320	1.02	28.51	104.89	.F.	.F.	1.013
Double	320	0.48	31.05	154.91	.F.	.F.	1.091
	320	1.00	32.21	471.41	.F.	.F.	1.136
	328	0.00	28.09	78.75	.T.	.F.	0.988
	328	0.00	28.30	50691.30	.T.	.T.	1.001
	328	0.00	29.18	375.83	.T.	.F.	1.029
	332	0.79	28.17	67643.40	.T.	.T.	0.993
	332	0.85	28.29	53440.34	.T.	.T.	1.000
*** Total ***							
***		18.85	650.84	254559.01			23.341

AR100675
2

MS82605I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
304	50.72	24.17
304	90.25	24.30
304	20.15	24.36
304	62.74	25.04
304	25.57	25.32
304	68.16	25.50
304	78.93	26.11
304	75.70	26.23
304	54.33	26.41
304	31.83	27.19
304	83.28	27.33
304	88.60	27.43
304	47.57	27.54
304	49.86	28.08
304	58.65	28.17
304	67.92	28.29
304	167.45	29.01
304	25.62	29.20
304	66.20	29.28
304	47.51	29.35
304	89.02	30.07
304	23.05	30.15
304	45.57	30.25
304	42.92	30.47
304	63.92	31.05
304	25.61	31.24
304	54.53	31.33
306	50.73	24.26
306	21.34	24.36
306	103.98	24.45
306	103.54	25.27
306	119.50	25.45
306	94.07	26.18
306	54.19	26.33
306	21.20	26.42
306	55.35	27.00
306	110.18	27.13
306	119.83	27.22
306	84.47	27.32
306	257.63	27.44
306	40.95	28.07
306	45.05	28.18
306	39.87	28.28
306	46.78	28.42
306	24.15	28.48
306	74.82	29.04
306	116.94	29.22
306	34.42	29.38
306	27.46	29.45
306	32.17	29.52

M882605I
RAW MASS AND AREA DATA

MASS	AREA	RET.TIME
306	20.91	30.10
306	40.32	30.36
306	37.06	30.44
306	55.79	30.52
306	121.06	31.00
306	28.21	31.17
306	34.84	31.31
306	52.46	31.53
306	119.27	32.13
306	45.63	32.37
306	22.80	32.48
306	65.50	33.03
306	111.75	33.23
306	48.92	33.35
306	256.21	33.48
306	41.40	34.03
306	45.99	34.14
306	22.82	34.26
306	33.71	35.07
316	386.09	27.16
316	34071.32	27.43
316	451.36	27.59
316	193.25	28.13
316	81.66	28.28
318	133.93	25.35
318	470.28	27.17
318	42.72	27.31
318	44161.18	27.43
318	250.25	28.14
318	177.24	28.26
318	327.53	29.39
318	109.90	31.36
318	369.37	32.24
318	131.68	32.40
318	366.17	33.22
320	197.14	24.38
320	62.61	24.56
320	45.54	25.19
320	72.21	26.12
320	22.23	26.35
320	77.63	26.51
320	80.34	26.57
320	25.24	27.14
320	55.63	27.32
320	94.60	27.44
320	92.84	27.59
320	160.62	28.30
320	53.03	28.51
320	113.88	29.12
320	80.77	29.23

AR100677