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Environmental Affairs

TO Distribution DATE January 9, 1990
FROM S. L. White *SW* SUBJECT OHC/VCM/Dioxin

Attached is the Lake Charles information regarding the OHC/VCM/Dioxin R. J. Samelson requested in his memo dated January 4, 1990.

bb

Attachments

Distribution

G. Wimer
D. Magill
R. J. Samelson

*Op. Units
Lake Charles
VCM
Dioxin Issue*

SL 105543

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

copy

Date: March 29, 1989

To: Mr. Jim Busnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA01092

Sample location: PPG

PPG Sample No. Outfall 201

Collected by: JIM RUSNAK

Collection date: 03/07/89 Time: COMP

Laboratory submittal date: 03/13/89 Time: 14:00

Received by: RLH

Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/15/89

Date finished: 03/15/89

Time started: 4:00

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/16/89

Date finished: 03/16/89

Time started: 7:31

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/15/89

Date finished: 03/15/89

Time started: 3:03

Analyst: RLH

Mr. Jim Rusnak
Page: 2 *AA01092*
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/14/89
Time started: 4:24

Date finished: 03/14/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/15/89
Time started: 1:21

Date finished: 03/15/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
1,3-Dichlorobenzene	Trace	.05
1,4-Dichlorobenzene	.08	.05
1,2-Dichlorobenzene	.05	.05
Hexachloroethane	.27	.05
1,2,4-Trichlorobenzene	.21	.05
Hexachlorobutadiene	4.10	.05
Hexachlorocyclopentadiene	Not Det	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	3.50	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	240.	5
1,2-Dichloroethane	30.	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 AA01092
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
Bromodichloromethane	7.	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	6.	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	Trace	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration µg/L	Component MDL µg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	40.	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
Page: 4 AA01092
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration µg/L	Component MDL µg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration µg/L	Component MDL µg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 AA01092
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
M thoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

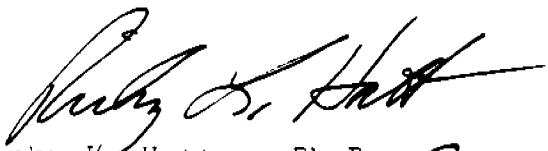
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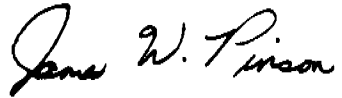
Semi-Vol sample is 24 hr composite.

VOA samples (2 ea) at 6:15, 12:50, 13:30, 3:10.

1 voa (0:10) sample rec. broken.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105548

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01110

Sample location: PPG PPG Sample No. Outfall 201

Collected by: J RUSNAK Collection date: 03/09/89 Time: comp

Laboratory submittal date: 03/15/89 Time: 18:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 13:38

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/20/89

Date finished: 03/20/89

Time started: 6:28

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 11:46

Analyst: RLH

SL 105549

Mr. Jim Rusnak
Page: 2 AA01110
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/17/89
Time started: 9:43

Date finished: 03/17/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/20/89
Time started: 19:37

Date finished: 03/20/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration μg/L	Component MDL μg/L
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.19	.05
1,2,4-Trichlorobenzene	Trace	.05
Hexachlorobutadiene	1.70	.05
Hexachlorocyclopentadiene	.10	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.83	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	160.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
 Page: 3 AAO 1110
 March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
Bromodichloromethane	6.	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Not Det	5
Tetrachloroethene	Not Det	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration µg/L	Component MDL µg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	47.	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

SL 105552

Mr. Jim Rusnak
Page: 4 AA01110
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration μg/L	Component MDL μg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Ph nanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	10
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	80

Data for PESTICIDES AND PCBs

Component Name	Concentration μg/L	Component MDL μg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 AA01110
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

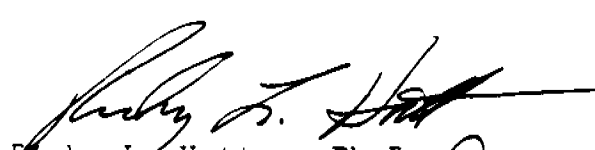
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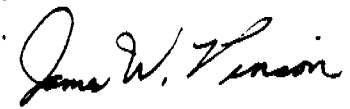
Extractables is 24hr composite.

VOAs (2ea) at 7:55, 12:36, 18:27, 0:20.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105554

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01123

Sample location: PPG PPG Sample No. Outfall 201

Collected by: J RUSNAK Collection date: 03/13/89 Time: comp

Laboratory submittal date: 03/17/89 Time: 16:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 17:53

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 22:11

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 17:07

Analyst: RLH

SL 105555

Mr. Jim Rusnak
Page: 2 AAD/123
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/21/89
Time started: 15:01

Date finished: 03/21/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/24/89
Time started: 04:29

Date finished: 03/24/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration μg/L	Component MDL μg/L
1,3-Dichlorobenzene	Trace	.05
1,4-Dichlorobenzene	.15	.05
1,2-Dichlorobenzene	.09	.05
Hexachloroethane	.35	.05
1,2,4-Trichlorobenzene	.46	.05
Hexachlorobutadiene	8.60	.05
Hexachlorocyclopentadiene	Trace	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	4.80	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	93.	5
1,2-Dichloroethane	7.	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
 Page: 3 AAO1123
 March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration mg/L	Component MDL mg/L
Bromodichloromethane		5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	Trace	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	Trace	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration mg/L	Component MDL mg/L
Ph nol	50.	10
bis(2-Chloroethyl) Ether	43.	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Trace	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
Page: 4 AA01123
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Trace	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Trace	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Trace	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

SL 105558

Mr. Jim Rusnak
Page: 5 **AA0123**
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

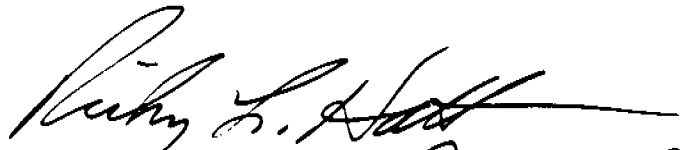
Component Name	Concentration μg/L	Component MDL μg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

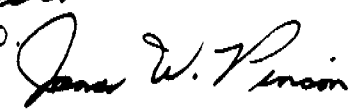
Comments:

Semi-vol sample is 24hr composite.
VOAs (2ea) at 0:15, 7:00, 12:40, 13:30.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01153

Sample location: PPG PPG Sample Outfall 201

Collected by: J RUSNAK Collection date: 03/16/89 Time: comp

Laboratory submittal date: 03/21/89 Time: 16:40

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/24/89

Date finished: 03/24/89

Time started: 10:31

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/22/89

Date finished: 03/22/89

Time started: 21:14

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 1:15

Analyst: RLH

SL 105560

Mr. Jim Rusnak
Page: 2 *AA01153*
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/22/89
Time started: 19:38

Date finished: 03/22/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/24/89
Time started: 05:35

Date finished: 03/24/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
1,3-Dichlorobenzene	.09	.05
1,4-Dichlorobenzene	.37	.05
1,2-Dichlorobenzene	.19	.05
Hexachloroethane	.52	.05
1,2,4-Trichlorobenzene	.52	.05
Hexachlorobutadiene	8.40	.05
Hexachlorocyclopentadiene	Trace	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	5.60	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Chloromethane	Not Det	10
Bromomethane	Not Det	10
→ Vinyl Chloride	38.	10
Trifluorochloromethane	Not Det	10
Chloroethane	12.	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	17.	5
1,1-Dichloroethane	44.	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	170.	5
1,2-Dichloroethane	540.	5
1,1,1-Trichloroethane	31.	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
 Page: 3 *AA01153*
 March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Bromodichloromethane	6.	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	40.	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	Trace	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	310.	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Trace	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Phenol	80.	10
bis(2-Chloroethyl) Ether	67.	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Trace	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
Page: 4 AA01153
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration µg/L	Component MDL µg/L
✓Dimethyl Phthalate	Not Det	10
✓Acenaphthalene	Not Det	10
✓Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
✓4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
✓4-Chlorophenyl-phenylether	Not Det	10
✓Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
✓4-Bromophenyl-phenylether	Not Det	10
✓Hexachlorobenzene	Trace	10
✓Pentachlorophenol	Trace	50
✓Phenanthrene	Not Det	10
✓Anthracene	Not Det	10
✓Di-n-Butylphthalate	Not Det	10
✓Fluoranthene	Not Det	10
✓Pyrene	Not Det	10
✓Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
✓Benzo(a)anthracene	Not Det	10
✓bis(2-Ethylhexyl) Phthalate	Not Det	10
✓Chrysene	Not Det	10
✓Di-n-octyl Phthalate	Not Det	10
✓Benzo(b)fluoranthene	Not Det	10
✓Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
✓Indeno(1,2,3-c,d)pyrene	Not Det	10
✓Dibenzo(a,h)anthracene	Not Det	10
✓Benzo(g,h,i)perylene	Not Det	10
✓Benzidine	Not Det	80

Data for PESTICIDES AND PCBs

Component Name	Concentration µg/L	Component MDL µg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 *AAO 1154*
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

Comments:

Semi-vol sample is 24hr composite.
VOAs (2 ea) at 6:26, 14:00, 18:33, 0:24.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105564

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

copy

To: PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602
ATTN: Mr. Jim Rusnak

The following analytical results have been obtained for the indicated sample which was submitted to this laboratory:

Sample I.D. AA01090

Sample location: PPG Outfall 001/Mobil #2 Bridge

Collected by: J RUSNAK Collection date: 03/07/89 Time: comp

Laboratory submittal date: 03/11/89 Time: 10:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/13/89

Time started: 17:24

Date finished: 03/13/89

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/16/89

Time started: 6:25

Date finished: 03/16/89

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/13/89

Time started: 16:27

Date finished: 03/13/89

Analyst: RLH

SL 105565

PPG Industries
Page: 2 *AA01090*
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/11/89
Time started: 22:58

Date finished: 03/11/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/12/89
Time started: 11:33

Date finished: 03/12/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration ug/L	Component MDL ug/L
-1,3-Dichlorobenzene	.09	.05
1,4-Dichlorobenzene	.21	.05
-1,2-Dichlorobenzene	.12	.05
-Hexachloroethane	1.00	.05
1,2,4-Trichlorobenzene	.63	.05
-Hexachlorobutadiene	5.40	.05
-Hexachlorocyclopentadiene	Not Det	.05
-2-Chloronaphthalene	Not Det	.05
-Hexachlorobenzene	-.57	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration ug/L	Component MDL ug/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	29.	5
1,2-Dichloroethane	6.	5
1,1,1-Trichloroethane	Trace	5
Carbon Tetrachloride	Not Det	5

FPG Industries
 Page: 3 AA01090
 March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration μg/L	Component MDL μg/L
Bromodichloromethane	Trace	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	6.	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	10.	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	11.	5
1,1,2,2-Tetrachloroethane	20.	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration μg/L	Component MDL μg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Trace	10
2-Chlorophenol	Not Det	10
-1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
-Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
-Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
-Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
-2-Chloronaphthalene	Not Det	10

FPG Industries
Page: 4 AA01090
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration mg/L	Component MDL mg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
-Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration mg/L	Component MDL mg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

PPG Industries
Page: 5 AA01090
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

Component Name	Concentration mg/L	Component MDL mg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
M thoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

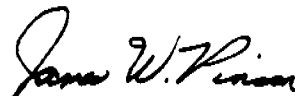
Comments:

24hr. composite. VOA grab times: 6:55, 12:25, 18:20, 0:25.
1 of each VOA vials and both of 0:25 vials broken.
Reference Lab Report No. R489.

If there are any questions regarding this data, please call.



Ricky L. Hatton, Ph.D.
Vice President



Reviewed By: James W. Pinson, Ph.D.
President

SL 105569

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602
ATTN: Mr. Jim Rusnak

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01091

Sample location: PPG Outfall 001/Mobil #2 Bridge

Collected by: J RUSNAK Collection date: 03/09/89 Time: comp

Laboratory submittal date: 03/11/89 Time: 10:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/13/89

Date finished: 03/13/89

Time started: 18:30

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/16/89

Date finished: 03/16/89

Time started: 6:59

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/13/89

Date finished: 03/13/89

Time started: 17:33

Analyst: RLH

SL 105570

PPG Industries
Page: 2 AA01091
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/12/89
Time started: 0:15

Date finished: 03/12/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/12/89
Time started: 12:07

Date finished: 03/12/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
-1,3-Dichlorobenzene	.08	.05
-1,4-Dichlorobenzene	.23	.05
-1,2-Dichlorobenzene	.13	.05
-Hexachloroethane	1.50	.05
1,2,4-Trichlorobenzene	.71	.05
Hexachlorobutadiene	5.20	.05
-Hexachlorocyclopentadiene	Not Det	.05
-2-Chloronaphthalene	Not Det	.05
-Hexachlorobenzene	.34	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Ethyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	18.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

SL 105571

PPG Industries
Page: 3 *AA01091*
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Bromodichloromethane	Trace	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Trace	5
Dibromochloromethane	9.	5
1,1,2-Trichloroethane	Trace	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	29.	5
Tetrachloroethene	7.	5
1,1,2,2-Tetrachloroethane	8.	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Trace	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

SL 105572

PFG Industries
Page: 4 AA01091
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration µg/L	Component MDL µg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Ph nanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration µg/L	Component MDL µg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

FPG Industries
Page: 5 AA01091
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

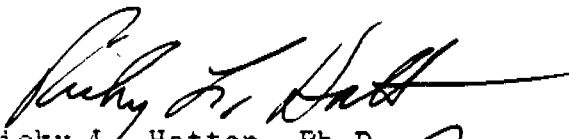
Component Name	Concentration µg/L	Component MDL µg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
M thoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

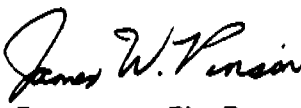
Comments:

24 hr composite. VOA grabs at: 8:25, 13:00, 13:46, 0:10.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105574

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01117

Sample location: PPG PPG Sample No. Outfall 001

Collected by: J RUSNAK Collection date: 03/14/89 Time: comp

Laboratory submittal date: 03/16/89 Time: 10:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 13:04

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 5:10

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 21:05

Analyst: RLH

SL 105575

Mr. Jim Rusnak
Page: 2 AA0017
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/17/89
Time started: 10:31

Date finished: 03/17/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/20/89
Time started: 20:12

Date finished: 03/20/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration µg/L	Component MDL µg/L
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.38	.05
1,2,4-Trichlorobenzene	.30	.05
Hexachlorobutadiene	1.40	.05
Hexachlorocyclopentadiene	Not Det	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.21	.05

Data for Base/Neutral Acid Extractables

Component Name	Concentration µg/L	Component MDL µg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Trace	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10

Mr. Jim Rusnak
Page: 3 AAD1117
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration ✓ µg/L	Component MDL µg/L
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobnezene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Ac naphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Trace	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	14.	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	80

Mr. Jim Rusnak
Page: 4 AA01117
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	8.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Trace	5
Carbon Tetrachloride	Not Det	5
Bromodichloromethane	Trace	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	3.	5
Tetrachloroethene	5.	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for PESTICIDES AND PCBs

Component Name	Concentration μg/L	Component MDL μg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1

SL 105578

Mr. Jim Rusnak
Page: 5 AA01117
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

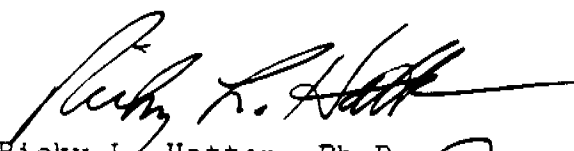
Component Name	Concentration µg/L	Component MDL µg/L
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

Comments:

Extractables sample is 24hr composite.
VOAs (2 ea) at 6:50, 12:20, 13:25, 0:10.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105579

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01140

Sample location: PPG PPG Sample No. Outfall 001

Collected by: J RUSNAK Collection date: 03/16/89 Time: comp

Laboratory submittal date: 03/18/89 Time: 11:00

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 12:34

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 22:43

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 8:26

Analyst: RLH

SL 105580

Mr. Jim Rusnak
Page: 2 AA01140
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/21/89
Time started: 16:00

Date finished: 03/21/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/24/89
Time started: 03:05

Date finished: 03/24/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration μg/L	Component MDL μg/L
1,3-Dichlorobenzene	Trace	.05
1,4-Dichlorobenzene	.12	.05
1,2-Dichlorobenzene	.06	.05
H xachloroethane	.40	.05
1,2,4-Trichlorobenzene	.32	.05
-Hexachlorobutadiene	1.82	.05
-H xachlorocyclopentadiene	Not Det	.05
-2-Chloronaphthalene	Not Det	.05
H xachlorobenzene	.74	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
M thylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	8.	5
1,2-Dichloroethane	7.	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 *AA01140*
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration <i>µg/l</i>	Component MDL <i>µg/l</i>
Bromodichloromethane	Trace	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Trace	5
Dibromochloromethane	6.	5
1,1,2-Trichloroethane	Trace	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	11.	5
Tetrachloroethene	Not Det	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration <i>µg/l</i>	Component MDL <i>µg/l</i>
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Trace	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Trace	10
1,4-Dichlorobenzene	Trace	10
1,2-Dichlorobenzene	Trace	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Trace	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
 Page: 4 *AA01140*
 March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Not Det	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Not Det	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
→ bis(2-Ethylhexyl) Phthalate	41.	10
→ Chrysene	Not Det	10
→ Di-n-octyl Phthalate	20.	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 *AA01140*
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

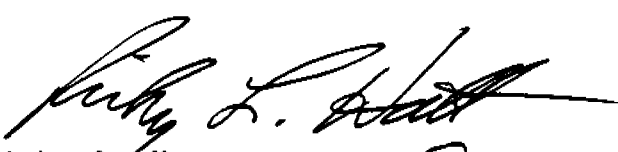
Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

Comments:

Semi-Vol sample is 24hr composite.
VOAs (2 es) at 6:15, 13:50, 18:17, 0:10.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105584

copy

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01093

Sample location: PPG PPG Sample No. Outfall 101

Collected by: JIM RUSNAK Collection date: 03/07/89 Time: COMP

Laboratory submittal date: 03/13/89 Time: 14:00

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/15/89

Date finished: 03/15/89

Time started: 2:53

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/20/89

Date finished: 03/20/89

Time started: 13:06

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/15/89

Date finished: 03/15/89

Time started: 1:57

Analyst: RLH

SL 105585

Mr. Jim Rusnak
Page: 2 *AA01093*
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/14/89
Time started: 5:16

Date finished: 03/14/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 $\mu\text{g/L}$
Date started: 03/15/89
Time started: 2:15

Date finished: 03/15/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration $\mu\text{g/L}$	Component MDL $\mu\text{g/L}$
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.19	.05
1,2,4-Trichlorobenzene	Not Det	.05
Hexachlorobutadiene	.25	.05
Hexachlorocyclopentadiene	.22	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.18	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration $\mu\text{g/L}$	Component MDL $\mu\text{g/L}$
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	86.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	24.	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 AA01093
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
Bromodichloromethane	Not Det	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Trace	5
Dibromochloromethane	Not Det	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Not Det	5
Tetrachloroethene	Not Det	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration µg/L	Component MDL µg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Not Det	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
Page: 4 AA01093
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration μg/L	Component MDL μg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Trace	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Trace	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration μg/L	Component MDL μg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

SL 105588

Mr. Jim Rusnak
Page: 5 *AA61093*
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

Component Name	Concentration <i>µg/l</i>	Component MDL <i>µg/l</i>
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

Comments:

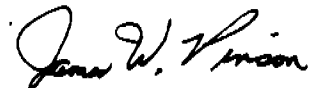
Semi-Vol sample is 24 hr composite.

VOA sample (2 ea) taken at 8:10, 12:40, 18:25, 00:15.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice-President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105589

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01109

Sample location: PPG PPG Sample No. Outfall 101

Collected by: J RUSNAK Collection date: 03/09/89 Time: comp

Laboratory submittal date: 03/15/89 Time: 13:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 11:36

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 19:59

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 10:39

Analyst: RLH

SL 105590

Mr. Jim Rusnak
Page: 2 AA01109
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/17/89
Time started: 8:22

Date finished: 03/17/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/20/89
Time started: 18:48

Date finished: 03/20/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.26	.05
1,2,4-Trichlorobenzene	Not Det	.05
Hexachlorobutadiene	.16	.05
Hexachlorocyclopentadiene	.15	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.12	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration <i>ug/L</i>	Component MDL <i>ug/L</i>
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	38.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Trace	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 AA01109
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration µg/L	Component MDL µg/L
Bromodichloromethane	Not Det	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Trace	5
Dibromochloromethane	Trace	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	5.	5
Tetrachloroethene	Not Det	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xyl ne, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration µg/L	Component MDL µg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Not Det	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobnezene	Not Det	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Not Det	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
 Page: 4 AA01109
 March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration μg/L	Component MDL μg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Trace	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Trace	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not L	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Not Det	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Not Det	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration μg/L	Component MDL μg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 AA01109
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

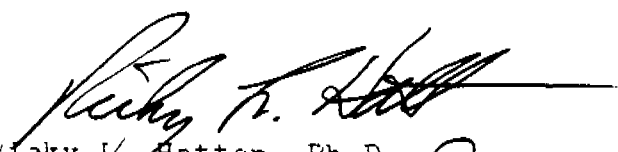
Component Name	Concentration µg/L	Component MDL µg/L
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

Comments:

Extractables sample is 24hr composite.
VOAs (2ea) at 7:55, 12:52, 13:24, 0:25.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105594

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01122

Sample location: PPG PPG Sample No. Outfall 101

Collected by: J RUSNAK Collection date: 03/13/89 Time: comp

Laboratory submittal date: 03/17/89 Time: 16:30

Received by: RLH Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 13:21

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/18/89

Date finished: 03/18/89

Time started: 21:38

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 9:21

Analyst: RLH

SL 105595

Mr. Jim Rusnak
Page: 2 AA01122
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/21/89
Time started: 13:57

Date finished: 03/21/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/24/89
Time started: 03:47

Date finished: 03/24/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration μg/L	Component MDL μg/L
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.17	.05
1,2,4-Trichlorobenzene	Not Det	.05
Hexachlorobutadiene	.19	.05
Hexachlorocyclopentadiene	Trace	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.23	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	12.	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	34.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 AAO 1122
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration μg/L	Component MDL μg/L
Bromodichloromethane	Not Det	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Not Det	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	Trace	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration μg/L	Component MDL μg/L
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Not Det	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
 Page: 4 *AA01122*
 March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Trace	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	Trace	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	Trace	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	Trace	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 *AA01122*
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

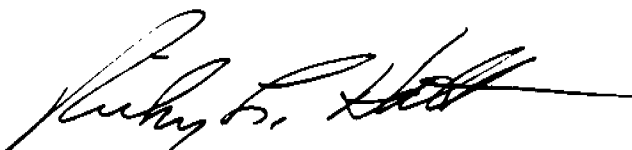
Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
Heptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

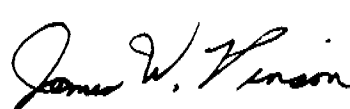
Comments:

Semivol sample is 24hr composite.
VOAs (2ea) at 0:30, 7:10, 12:36, 18:33.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105599

From: American Laboratories and
Research Services, Inc.
P.O. Box 15609
Hattiesburg, MS 39402-5609
601-264-9320

Date: March 29, 1989

To: Mr. Jim Rusnak
PPG Industries
Chemicals Division
P.O. Box 1000
Lake Charles, LA 70602

The following analytical results have been obtained for the
indicated sample which was submitted to this laboratory:

Sample I.D. AA01152

Sample location: PPG

PPG Sample Outfall 101

Collected by: J RUSNAK

Collection date: 03/16/89 Time: comp

Laboratory submittal date: 03/21/89 Time: 16:40

Received by: RLH

Validated by: RLH

Parameter: Chlorinated Hydrocarbons

Method reference: EPA 612

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 21:59

Analyst: RLH

Parameter: VOLATILE ORGANIC ANALYSIS

Method reference: EPA 624

Result: see appended report

Date started: 03/22/89

Date finished: 03/22/89

Time started: 20:42

Analyst: RLH

Parameter: Base/Neutral Acid Extractables

Method reference: EPA 625

Result: see appended report

Date started: 03/23/89

Date finished: 03/23/89

Time started: 21:12

Analyst: RLH

SL 105600

Mr. Jim Rusnak
Page: 2 AA61152
March 29, 1989

Parameter: PESTICIDES AND PCBs
Method reference: EPA 625
Result: see appended report
Date started: 03/22/89
Time started: 18:42

Date finished: 03/22/89
Analyst: RLH

Parameter: Dioxin Screen - TCDD, total
Method reference: EPA 625
Result: less than .01 ug/L
Date started: 03/24/89
Time started: 05:11

Date finished: 03/24/89
Analyst: RLH

Data for Chlorinated Hydrocarbons

Component Name	Concentration μg/L	Component MDL μg/L
1,3-Dichlorobenzene	Not Det	.05
1,4-Dichlorobenzene	Not Det	.05
1,2-Dichlorobenzene	Not Det	.05
Hexachloroethane	.30	.05
1,2,4-Trichlorobenzene	Not Det	.05
Hexachlorobutadiene	.33	.05
Hexachlorocyclopentadiene	.25	.05
2-Chloronaphthalene	Not Det	.05
Hexachlorobenzene	.93	.05

Data for VOLATILE ORGANIC ANALYSIS

Component Name	Concentration μg/L	Component MDL μg/L
Chloromethane	Not Det	10
Bromomethane	Not Det	10
Vinyl Chloride	Not Det	10
Trifluorochloromethane	Not Det	10
Chloroethane	Not Det	10
Methylene Chloride	Not Det	5
1,1-Dichloroethene	Not Det	5
1,1-Dichloroethane	Not Det	5
trans-1,2-Dichloroethene	Not Det	5
Chloroform	110.	5
1,2-Dichloroethane	Not Det	5
1,1,1-Trichloroethane	Not Det	5
Carbon Tetrachloride	Not Det	5

Mr. Jim Rusnak
Page: 3 *AA61152*
March 29, 1989

Data for VOLATILE ORGANIC ANALYSIS

(continued)

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Bromodichloromethane	Trace	5
1,2-Dichloropropane	Not Det	5
trans-1,3-Dichloropropene	Not Det	5
Trichloroethene	Not Det	5
Dibromochloromethane	Not Det	5
1,1,2-Trichloroethane	Not Det	5
Benzene	Not Det	5
cis-1,3-Dichloropropene	Not Det	5
2-Chloroethylvinylether	Not Det	10
Bromoform	Trace	5
Tetrachloroethene	Not Det	5
1,1,2,2-Tetrachloroethane	Not Det	5
Toluene	Not Det	5
Chlorobenzene	Not Det	5
Ethylbenzene	Not Det	5
Xylene, total	Not Det	5

Data for Base/Neutral Acid Extractables

Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
Phenol	Not Det	10
bis(2-Chloroethyl) Ether	Not Det	10
2-Chlorophenol	Not Det	10
1,3-Dichlorobenzene	Not Det	10
1,4-Dichlorobenzene	Not Det	10
1,2-Dichlorobenzene	Not Det	10
bis(2-Chloroisopropyl) Ether	Not Det	10
N-Nitroso-di-n-propylamine	Not Det	10
Hexachloroethane	Trace	10
Nitrobenzene	Not Det	10
Isophorone	Not Det	10
2-Nitrophenol	Not Det	10
2,4-Dimethylphenol	Not Det	10
bis(2-Chloroethoxy) Methane	Not Det	10
2,4-Dichlorophenol	Not Det	10
1,2,4-Trichlorobenzene	Not Det	10
Naphthalene	Not Det	10
Hexachlorobutadiene	Trace	10
4-Chloro-3-methylphenol	Not Det	10
Hexachlorocyclopentadiene	Trace	10
2,4,6-Trichlorophenol	Not Det	10
2-Chloronaphthalene	Not Det	10

Mr. Jim Rusnak
Page: 4 AA01152
March 29, 1989

Data for Base/Neutral Acid Extractables (continued)

Component Name	Concentration μg/L	Component MDL μg/L
Dimethyl Phthalate	Not Det	10
Acenaphthalene	Not Det	10
Acenaphthene	Not Det	10
2,4-Dinitrophenol	Not Det	50
4-Nitrophenol	Not Det	50
2,4-Dinitrotoluene	Not Det	10
2,6-Dinitrotoluene	Not Det	10
Diethylphthalate	Not Det	10
4-Chlorophenyl-phenylether	Trace	10
Fluorene	Not Det	10
4,6-Dinitro-2-methylphenol	Not Det	50
N-Nitrosodiphenylamine	Not Det	10
4-Bromophenyl-phenylether	12.	10
Hexachlorobenzene	Trace	10
Pentachlorophenol	Not Det	50
Phenanthrene	Not Det	10
Anthracene	Not Det	10
Di-n-Butylphthalate	Not Det	10
Fluoranthene	Not Det	10
Pyrene	Not Det	10
Butylbenzylphthalate	Not Det	10
3,3'-Dichlorobenzidine	Not Det	20
Benzo(a)anthracene	Not Det	10
bis(2-Ethylhexyl) Phthalate	12.	10
Chrysene	Not Det	10
Di-n-octyl Phthalate	18.	10
Benzo(b)fluoranthene	Not Det	10
Benzo(k)fluoranthene	Not Det	10
Benzo(a)pyrene	Not Det	10
Indeno(1,2,3-c,d)pyrene	Not Det	10
Dibenzo(a,h)anthracene	Not Det	10
Benzo(g,h,i)perylene	Not Det	10
Benzidine	Not Det	30

Data for PESTICIDES AND PCBs

Component Name	Concentration μg/L	Component MDL μg/L
Aldrin	Not Det	.05
alpha-BHC	Not Det	.05
beta-BHC	Not Det	.05
delta-BHC	Not Det	.05
gamma-BHC	Not Det	.05

Mr. Jim Rusnak
Page: 5 *AA01152*
March 29, 1989

Data for PESTICIDES AND PCBs

(continued)

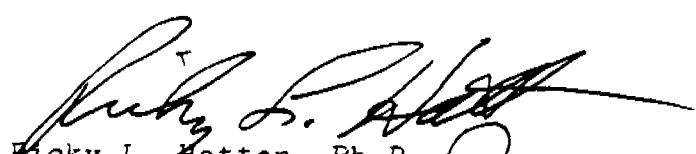
Component Name	Concentration <i>µg/L</i>	Component MDL <i>µg/L</i>
4,4'-DDT	Not Det	.1
4,4'-DDE	Not Det	.1
4,4'-DDD	Not Det	.1
Dieldrin	Not Det	.1
Endosulfan I	Not Det	.05
Endosulfan II	Not Det	.1
Endosulfan Sulfate	Not Det	.1
Endrin	Not Det	.1
Heptachlor	Not Det	.05
H ptachlor Epoxide	Not Det	.05
Aroclor-1016	Not Det	.5
Aroclor-1221	Not Det	.5
Aroclor-1232	Not Det	.5
Aroclor-1242	Not Det	.5
Aroclor-1248	Not Det	.5
Aroclor-1254	Not Det	1
Aroclor-1260	Not Det	1
Toxaphene	Not Det	1
alpha-Chlordane	Not Det	.5
gamma-Chlordane	Not Det	.5
Endrin Ketone	Not Det	.1
Methoxychlor	Not Det	.5
Endrin Aldehyde	Not Det	.1

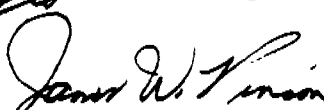
Comments:

Semi-vol is 24hr composite.
VOAs (2 ea) at 6:30, 14:05, 18:28, 0:19.

Reference Lab Report No. R489.

If there are any questions regarding this data, please call.


Ricky L. Hatton, Ph.D.
Vice President


Reviewed By: James W. Pinson, Ph.D.
President

SL 105604