NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc
Dayton Division
3601 South Dixie Drive
Dayton, OH 45439
Tel (513) 294-6856
Fax (513) 294-7816

Formerly Howard Laboratories, Inc

ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21023

PAGE 5

Sample Description: 3-6-90-03 Drum by Hole

Date Taken: 03-06-90

Date Received: 03-06-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	<10.	ug/L
Benzene	<5.	ug/L
Bromodichloromethane	<5.	ug/L
Bromoform	<5.	ug/L
Bromomethane	<5.	ug/L
2-Butanone	<10.	ug/L
Carbon disulfide	<5.	ug/L
Carbon tetrachloride	<5.	ug/L
Chlorobenzene	<5.	ug/L
Chloroethane	277.	ug/L
Chloroform	<5.	ug/L
Chloromethane	<5.	ug/L
2-Chloroethyl vinyl ether	<300	ug/L
Dibromochloromethane	<5.	ug/L
1,1-Dichloroethane	<5.	ug/L
1,2-Dichloroethane	<5.	ug/L
1,1-Dichloroethene	<5.	ug/L
1,2-Dichloroethene(Total)	106.	ug/L
1,2-Dichloropropane	<5.	ug/L
cis-1,3-Dichloropropene	<5.	ug/L
trans-1,3-Dichloropropene	<5.	ug/L
Ethyl benzene	<5.	ug/L
2-Hexanone	<10.	ug/L
Methylene chloride	<5.	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<5.	ug/L
1,1,2,2-Tetrachloroethane	<5.	ug/L
Tetrachloroethene	6.1	ug/L
Toluene	<5.	ug/L
1,1,1-Trichloroethane	5.3	ug/L
1,1,2-Trichloroethane	<5.	ug/L
Trichloroethene	<5.	ug/L
Vinyl acetate	<5.	ug/L

John Andreicio

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ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21023

PAGE 6

Sample Description: 3-6-90-03 Drum by Hole

Date Taken: 03-06-90

Date Received: 03-06-90

Vinyl chloride	<5.	ug/L
Xylenes, Total	<5.	ug/L

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ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21024

Sample Description: Blanks

Date Taken: 03-06-90

Date Received: 03-06-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	<2.	ug/L
Benzene	<1.	ug/L
Bromodichloromethane	<1.	ug/L
Bromoform	<1.	ug/L
Bromomethane	<1.	ug/L
2-Butanone	<2.	ug/L
Carbon disulfide	<1.	ug/L
Carbon tetrachloride	<1.	ug/L
Chlorobenzene	<1.	ug/L
Chloroethane	<1.	ug/L
Chloroform	<1.	ug/L
Chloromethane	<1.	ug/L
2-Chloroethyl vinyl ether	<60.	ug/L
Dibromochloromethane	<1.	ug/L
1,1-Dichloroethane	<1.	ug/L
1,2-Dichloroethane	<1.	ug/L
1,1-Dichloroethene	<1.	ug/L
1,2-Dichloroethene(Total)	<1.	ug/L
1,2-Dichloropropane	<1.	ug/L
cis-1,3-Dichloropropene	<1.	ug/L
trans-1,3-Dichloropropene	<1.	ug/L
Ethyl benzene	<1.	ug/L
2-Hexanone	<2.	ug/L
Methylene chloride	<1.	ug/L
4-Methyl-2-pentanone	<1.	ug/L
Styrene	<1.	ug/L
1,1,2,2-Tetrachloroethane	<1.	ug/L
Tetrachloroethene	<1.	ug/L
Toluene	<1.	ug/L
1,1,1-Trichloroethane	<1.	ug/L
1,1,2-Trichloroethane	<1.	ug/L
Trichloroethene	<1.	ug/L
Vinyl acetate	<1.	ug/L

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Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21024

PAGE 8

Sample Description: Blanks

Date Taken: 03-06-90

Date Received: 03-06-90

Vinyl chloride	<1.	ug/L
Xylenes, Total	<1.	ug/L

John Andrejcio

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ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21021

PAGE 1

Sample Description: 3-6-90-01 Boiler House Well

Date Taken: 03-06-90

Date Received: 03-06-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	<10.	ug/L
Benzene	<5.	ug/L
Bromodichloromethane	<5.	ug/L
Bromoform	<5.	ug/L
Bromomethane	<5.	ug/L
2-Butanone	<10.	ug/L
Carbon disulfide	<5.	ug/L
Carbon tetrachloride	<5.	ug/L
Chlorobenzene	<5.	ug/L
Chloroethane	<5.	ug/L
Chloroform	<5.	ug/L
Chloromethane	<5.	ug/L
2-Chloroethyl vinyl ether	<300.	ug/L
Dibromochloromethane	<5.	ug/L
1,1-Dichloroethane	23.2	ug/L
1,2-Dichloroethane	<5.	ug/L
1,1-Dichloroethene	219.	ug/L
1,2-Dichloroethene(Total)	115.3	ug/L
1,2-Dichloropropane	<5.	ug/L
cis-1,3-Dichloropropene	<5.	ug/L
trans-1,3-Dichloropropene	<5.	ug/L
Ethyl benzene	<5.	ug/L
2-Hexanone	<10.	ug/L
Methylene chloride	<5.	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<5.	ug/L
1,1,2,2-Tetrachloroethane	<5.	ug/L
Tetrachloroethene	405.	ug/L
Toluene	<5.	ug/L
1,1,1-Trichloroethane	633.	ug/L
1,1,2-Trichloroethane	<5.	ug/L
Trichloroethene	452.	ug/L
Vinyl acetate	<5.	ug/L

John Andrejcio

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ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-02-90

Sample No.: 21021

PAGE 2

Sample Description: 3-6-90-01 Boiler House Well

Date Taken: 03-06-90

Date Received: 03-06-90

Vinyl chloride	28.8	ug/L
Xylenes, Total	<5.	ug/L

John Andrejcio

ACUSTAR - DAYTON PLANT

Telecopier Cover Sheet

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Telephone Number: 841-6711

Total Pages Including Cover: 6

From: DOUG ORF

Telephone Number: 848-2467

Notes/Comments: ANALYTICAL RESULTS FROM BOILER HOUSE WELL AND POST HOLE IN BLDG. 40-B TWO WEEKS AFTER OPERATING BOILER HOUSE WELL AND AFTER DAILY DRAINING OF HOLE

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Doug
Lab results
3-9-90

ANALYTICAL REPORT

MAR 0 9 199

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19162

PAGE 1

POST HOLE BLDG. 40-B

Sample Description: 2-20-90-01 Hole by Stairway

Date Taken: 02-20-90

Date Received: 02-20-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	2290.	ug/L
Benzene	<2.5	ug/L
Bromodichloromethane	<2.5	ug/L
Bromoform	<2.5	ug/L
Bromomethane	<2.5	ug/L
2-Butanone	540.	ug/L
Carbon disulfide	<2.5	ug/L
Carbon tetrachloride	<2.5	ug/L
Chlorobenzene	<2.5	ug/L
Chloroethane	238.	ug/L
Chloroform	<2.5	ug/L
Chloromethane	<2.5	ug/L
2-Chloroethyl vinyl ether	<150.	ug/L
Dibromochloromethane	<2.5	ug/L
1,1-Dichloroethane	144.	ug/L
1,2-Dichloroethane	15.3	ug/L
1,1-Dichloroethene	5.	ug/L
1,2-Dichloroethene(Total)	191.	ug/L
1,2-Dichloropropane	<2.5	ug/L
cis-1,3-Dichloropropene	<2.5	ug/L
trans-1,3-Dichloropropene	<2.5	ug/L
Ethyl benzene	8.3	ug/L
2-Hexanone	108.	ug/L
Methylene chloride	<2.5	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<2.5	ug/L
1,1,2,2-Tetrachloroethane	<2.5	ug/L
Tetrachloroethene	7.2	ug/L
Toluene	4.9	ug/L
1,1,1-Trichloroethane	29.	ug/L
1,1,2-Trichloroethane	<2.5	ug/L
Trichloroethene	23.	ug/L
Vinyl acetate	<5.	ug/L

John Andrejcio
Project Manager

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19162

POST HOLE BLDG. 40-B

Sample Description: 2-20-90-01 Hole by Stairway

Date Taken: 02-20-90

Date Received: 02-20-90

Vinyl chloride	<2.5	ug/L
Xylenes, Total	57.8	ug/L

John Andrejcio

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ADDITIONAL VOLATILE COMPOUNDS DETECTED THAT ARE NOT LISTED AS PRIORITY POLLUTANTS

Sample 19162 POST HOLE BLDG. 40-B

Additional Mixed Aromatics	718.	ug/L
2-Propanol	52.	ug/L
1,1,2-Trichloro-1,2,2-Trifluoro-Ethane	117.	ug/L
1,4-Dioxane	368.	ug/L

John Andrejcio
Project Manager

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Lab results
3-9-90

ANALYTICAL REPORT

MAR 0 9 199

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19162

PAGE 1

Sample Description: 2-20-90-01 Hole by Stairway

Date Taken: 02-20-90

Date Received: 02-20-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	2290.	ug/L
Benzene	<2.5	ug/L
Bromodichloromethane	<2.5	ug/L
Bromoform	<2.5	ug/L
Bromomethane	<2.5	ug/L
2-Butanone	540.	ug/L
Carbon disulfide	<2.5	ug/L
Carbon tetrachloride	<2.5	ug/L
Chlorobenzene	<2.5	ug/L
Chloroethane	238.	ug/L
Chloroform	<2.5	ug/L
Chloromethane	<2.5	ug/L
2-Chloroethyl vinyl ether	<150.	ug/L
Dibromochloromethane	<2.5	ug/L
1,1-Dichloroethane	144.	ug/L
1,2-Dichloroethane	15.3	ug/L
1,1-Dichloroethene	5.	ug/L
1,2-Dichloroethene(Total)	191.	ug/L
1,2-Dichloropropane	<2.5	ug/L
cis-1,3-Dichloropropene	<2.5	ug/L
trans-1,3-Dichloropropene	<2.5	ug/L
Ethyl benzene	8.3	ug/L
2-Hexanone	108.	ug/L
Methylene chloride	<2.5	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<2.5	ug/L
1,1,2,2-Tetrachloroethane	<2.5	ug/L
Tetrachloroethene	7.2	ug/L
Toluene	4.9	ug/L
1,1,1-Trichloroethane	29.	ug/L
1,1,2-Trichloroethane	<2.5	ug/L
Trichloroethene	23.	ug/L
Vinyl acetate	<5.	ug/L

John Andrejcio

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19162

Sample Description: 2-20-90-01 Hole by Stairway

Date Taken: 02-20-90

Date Received: 02-20-90

Vinyl chloride	<2.5	ug/L
Xylenes, Total	57.8	ug/L

John Andrejcio

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ADDITIONAL VOLATILE COMPOUNDS DETECTED THAT ARE NOT LISTED AS PRIORITY POLLUTANTS

Sample 19162

Additional Mixed Aromatics	718.	ug/L
2-Propanol	52.	ug/L
1,1,2-Trichloro-1,2,2-Trifluoro-Ethane	117.	ug/L
1,4-Dioxane	368.	ug/L

John Andrejcio
Project Manager

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19163

BOILER HOUSE WELL

Sample Description: 02-20-90-02 Boiler Well

Date Taken: 02-20-90

Date Received: 02-20-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	13.4	ug/L
Benzene	<2.5	ug/L
Bromodichloromethane	<2.5	ug/L
Bromoform	3.5	ug/L
Bromomethane	<2.5	ug/L
2-Butanone	<5.	ug/L
Carbon disulfide	<2.5	ug/L
Carbon tetrachloride	<2.5	ug/L
Chlorobenzene	<2.5	ug/L
Chloroethane	<2.5	ug/L
Chloroform	5.	ug/L
Chloromethane	<2.5	ug/L
2-Chloroethyl vinyl ether	<150.	ug/L
Dibromochloromethane	5.6	ug/L
1,1-Dichloroethane	7.3	ug/L
1,2-Dichloroethane	<2.5	ug/L
1,1-Dichloroethene	21.1	ug/L
1,2-Dichloroethene(Total)	54.	ug/L
1,2-Dichloropropane	<2.5	ug/L
cis-1,3-Dichloropropene	<2.5	ug/L
trans-1,3-Dichloropropene	<2.5	ug/L
Ethyl benzene	<2.5	ug/L
2-Hexanone	<5.	ug/L
Methylene chloride	<2.5	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<2.5	ug/L
1,1,2,2-Tetrachloroethane	<2.5	ug/L
Tetrachloroethene	<2.5	ug/L
Toluene	<2.5	ug/L
1,1,1-Trichloroethane	85.	ug/L
1,1,2-Trichloroethane	<2.5	ug/L
Trichloroethene	71.	ug/L
Vinyl acetate	<5.	ug/L

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19163

PAGE 4

BOILER HOUSE WELL

Sample Description: 02-20-90-02 Boiler Well

Date Taken: 02-20-90

Date Received: 02-20-90

Vinyl chloride	<2.5	ug/L
Xylenes, Total	<2.5	ug/L

John Andreicio
Project Manager

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19163

Sample Description: 02-20-90-02 Boiler Well

Date Taken: 02-20-90

Date Received: 02-20-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	13.4	ug/L
Benzene	<2.5	ug/L
Bromodichloromethane	<2.5	ug/L
Bromoform	3.5	ug/L
Bromomethane	<2.5	ug/L
2-Butanone	<5.	ug/L
Carbon disulfide	<2.5	ug/L
Carbon tetrachloride	<2.5	ug/L
Chlorobenzene	<2.5	ug/L
Chloroethane	<2.5	ug/L
Chloroform	5.	ug/L
Chloromethane	<2.5	ug/L
2-Chloroethyl vinyl ether	<150.	ug/L
Dibromochloromethane	5.6	ug/L
1,1-Dichloroethane	7.3	ug/L
1,2-Dichloroethane	<2.5	ug/L
1,1-Dichloroethene	21.1	ug/L
1,2-Dichloroethene(Total)	54.	ug/L
1,2-Dichloropropane	<2.5	ug/L
cis-1,3-Dichloropropene	<2.5	ug/L
trans-1,3-Dichloropropene	<2.5	ug/L
Ethyl benzene	<2.5	ug/L
2-Hexanone	<5.	ug/L
Methylene chloride	<2.5	ug/L
4-Methyl-2-pentanone	<5.	ug/L
Styrene	<2.5	ug/L
1,1,2,2-Tetrachloroethane	<2.5	ug/L
Tetrachloroethene	<2.5	ug/L
Toluene	<2.5	ug/L
1,1,1-Trichloroethane	85.	ug/L
1,1,2-Trichloroethane	<2.5	ug/L
Trichloroethene	71.	ug/L
Vinyl acetate	<5.	ug/L

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CHRYSLER CORPORATION
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Dayton OH 45404

Sample No.: 19163

PAGE 4

Sample Description: 02-20-90-02 Boiler Well

Date Taken: 02-20-90

Date Received: 02-20-90

Vinyl chloride	<2.5	ug/L
Xylenes, Total	<2.5	ug/L

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19164

Sample Description: Blanks

Date Taken:

Date Received: 02-20-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	<1.	ug/L
Benzene	<0.5	ug/L
Bromodichloromethane	<0.5	ug/L
Bromoform	<0.5	ug/L
Bromomethane	<0.5	ug/L
2-Butanone	<1.	ug/L
Carbon disulfide	<0.5	ug/L
Carbon tetrachloride	<0.5	ug/L
Chlorobenzene	<0.5	ug/L
Chloroethane	<0.5	ug/L
Chloroform	<0.5	ug/L
Chloromethane	<0.5	ug/L
2-Chloroethyl vinyl ether	<30.	ug/L
Dibromochloromethane	<0.5	ug/L
1,1-Dichloroethane	<0.5	ug/L
1,2-Dichloroethane	<0.5	ug/L
1,1-Dichloroethene	<0.5	ug/L
1,2-Dichloroethene(Total)	<0.5	ug/L
1,2-Dichloropropane	<0.5	ug/L
cis-1,3-Dichloropropene	<0.5	ug/L
trans-1,3-Dichloropropene	<0.5	ug/L
Ethyl benzene	<0.5	ug/L
2-Hexanone	<1.	ug/L
Methylene chloride	<0.5	ug/L
4-Methyl-2-pentanone	<1.	ug/L
Styrene	<0.5	ug/L
1,1,2,2-Tetrachloroethane	<0.5	ug/L
Tetrachloroethene	<0.5	ug/L
Toluene	<0.5	ug/L
1,1,1-Trichloroethane	<0.5	ug/L
1,1,2-Trichloroethane	<0.5	ug/L
Trichloroethene	<0.5	ug/L
Vinyl acetate	<1.	ug/L

John Andreicio

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ANALYTICAL REPORT

03-08-90

CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

Sample No.: 19164

PAGE 6

Sample Description: Blanks

Date Taken:

Date Received: 02-20-90

Vinyl chloride	<0.5	ug/L
Xylenes, Total	<0.5	ug/L

John Andrejcio

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ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-09-90

Sample No.: 18560

PAGE 1

Sample Description: Boiler House Well

Date Taken: 02-13-90 1130

Date Received: 02-13-90

VOLATILE COMPOUNDS

METHOD 8240

Acetone	<20.	ug/L
Benzene	<10.	ug/L
Bromodichloromethane	<10.	ug/L
Bromoform	<10.	ug/L
Bromomethane	<10.	ug/L
2-Butanone	<20.	ug/L
Carbon disulfide	<10.	ug/L
Carbon tetrachloride	<10.	ug/L
Chlorobenzene	<10.	ug/L
Chloroethane	<10.	ug/L
Chloroform	<10.	ug/L
Chloromethane	<10.	ug/L
2-Chloroethyl vinyl ether	<600.	ug/L
Dibromochloromethane	<10.	ug/L
1,1-Dichloroethane	29.	ug/L
1,2-Dichloroethane	<10.	ug/L
1,1-Dichloroethene	178.	ug/L
1,2-Dichloroethene(Total)	170.	ug/L
1,2-Dichloropropane	<10.	ug/L
cis-1,3-Dichloropropene	<10.	ug/L
trans-1,3-Dichloropropene	<10.	ug/L
Ethyl benzene	<10.	ug/L
2-Hexanone	<20.	ug/L
Methylene chloride	<10.	ug/L
4-Methyl-2-pentanone	<10.	ug/L
Styrene	<10.	ug/L
1,1,2,2-Tetrachloroethane	<10.	ug/L
Tetrachloroethene	451.	ug/L
Toluene	<10.	ug/L
1,1,1-Trichloroethane	785.	ug/L
1,1,2-Trichloroethane	<10.	ug/L
Trichloroethene	606.	ug/L
Vinyl acetate	<10.	ug/L

John Andreicio

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc
Dayton Division
3601 South Dixie Drive
Dayton, OH 45439
Tel (513) 294-6856
Fax (513) 294-7816

Formerly Howard Laboratories, Inc

ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-09-90

Sample No.: 18560

PAGE 2

Sample Description: Boiler House Well

Date Taken: 02-13-90 1130

Date Received: 02-13-90

Vinyl chloride	14.	ug/L
Xylenes, Total	<10.	ug/L

John Andrejcin

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NET Midwest, Inc
Dayton Division
3601 South Dixie Drive
Dayton, OH 45439
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Fax (513) 294-7816

Formerly Howard Laboratories, Inc

ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-09-90

Sample No.: 18561

PAGE 3

Sample Description: Blanks

Date Taken: NA

Date Received: 02-13-90

VOLATILE COMPOUNDS

METHOD 8240

TOX-HALOGENATED VOLATILES

Acetone	<2.	ug/L
Benzene	<1.	ug/L
Bromodichloromethane	<1.	ug/L
Bromoform	<1.	ug/L
Bromomethane	<1.	ug/L
2-Butanone	<2.	ug/L
Carbon disulfide	<1.	ug/L
Carbon tetrachloride	<1.	ug/L
Chlorobenzene	<1.	ug/L
Chloroethane	<1.	ug/L
Chloroform	<1.	ug/L
Chloromethane	<1.	ug/L
2-Chloroethyl vinyl ether	<60	ug/L
Dibromochloromethane	<1.	ug/L
1,1-Dichloroethane	<1.	ug/L
1,2-Dichloroethane	<1.	ug/L
1,1-Dichloroethene	<1.	ug/L
1,2-Dichloroethene(Total)	<1.	ug/L
1,2-Dichloropropane	<1.	ug/L
cis-1,3-Dichloropropene	<1.	ug/L
trans-1,3-Dichloropropene	<1.	ug/L
Ethyl benzene	<1.	ug/L
2-Hexanone	<2.	ug/L
Methylene chloride	<1.	ug/L
4-Methyl-2-pentanone	<1.	ug/L
Styrene	<1.	ug/L
1,1,2,2-Tetrachloroethane	<1.	ug/L
Tetrachloroethene	<1.	ug/L
Toluene	<1.	ug/L
1,1,1-Trichloroethane	<1.	ug/L
1,1,2-Trichloroethane	<1.	ug/L

John Andrejcio

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Formerly Howard Laboratories, Inc

ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

04-09-90

Sample No.: 18561

PAGE 4

Sample Description: Blanks

Date Taken: NA

Date Received: 02-13-90

Trichloroethene	<1.	ug/L
Vinyl acetate	<1.	ug/L
Vinyl chloride	<1.	ug/L
Xylenes, Total	<1.	ug/L

John Andrejcio

NET NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc
Dayton Division
3601 South Dixie Drive
Dayton, OH 45439
Tel (513) 294-6856
Fax (513) 294-7816

Formerly Howard Laboratories Inc

ANALYTICAL REPORT

ig Orf
:YSLER CORPORATION
:0 Webster Street
ton OH 45404

07-23-90

Sample No.: 39228

PAGE 1

ple Description: Boiler House Well

e Taken: 07-03-90 1445

Date Received: 07-03-90

VOLATILE COMPOUNDS

8240-AQUEOUS

:	<10.	ug/L
.	5.	ug/L
chloromethane	<5.	ug/L
rm	<5.	ug/L
thane	<5.	ug/L
one	<10.	ug/L
disulfide	<5.	ug/L
tetrachloride	<5.	ug/L
enzene	<5.	ug/L
thane	<5.	ug/L
orm	<5.	ug/L
ethane	<5.	ug/L
ethyl vinyl ether	<300.	ug/L
chloromethane	<5.	ug/L
loroethane	<5.	ug/L
loroethane	69.	ug/L
loroethene	27.	ug/L
loroethene(Total)	72.	ug/L
loropropane	<5.	ug/L
Dichloropropene	<5.	ug/L
3-Dichloropropene	<5.	ug/L
nzene	<5.	ug/L
ne	<10.	ug/L
e chloride	<5.	ug/L
-2-pentanone	<10.	ug/L
	<5.	ug/L
etrachloroethane	<5.	ug/L
roethene	569.	ug/L
	9.	ug/L
chloroethane	719.	ug/L
chloroethane	<5.	ug/L
ethene	413.	ug/L
tate	<10.	ug/L

John Andrejcio
Project M

ACUSTAR - DAYTON PLANT

Telecopier Cover Sheet

Date: 1/5/90

1/8/90 Talked to Lou Blair - need a game plan. Does not want to bore test holes

To: DON REMBOSKI

Telefax Number: 822-7928

Telephone Number: 876-5455

Total Pages Including Cover: 8

1-5-90 Don Remboski says we have to let them come in + retest. Cathy Fox requested that we let them come in to retest their results showed detectable levels for VOCs

Ron Rich [illegible] DAYTON WATER [illegible] Neal Bagley will get involved

From: DOUG CRF

Telephone Number: 848-2467

Notes/Comments: Analytical Results from (2) wells for Boiler Feed Water. These were split samples from Ohio EPA inspection. What are the standards? Please review and contact me. Ohio EPA has not contacted us with their results, yet.

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc
Dayton Division
3601 South Dixie Drive
Dayton, OH 45439
Tel (513) 294-6856
Fax (513) 294-7816

Formerly Howard Laboratories, Inc

ANALYTICAL REPORT

Doug Orf
CHRYSLER CORPORATION
1600 Webster Street
Dayton OH 45404

12-27-89

PAGE 1

DATE RECEIVED: 11-28-89

SAMPLE NO.	SAMPLE DESCRIPTION	DATE TAKEN	
7051	Well #3 - Bldg 50	11-27-89	1007

Alkalinity, Total (CaC03)	221	mg/L
Chloride	74	mg/L
COD	<10	mg/L
Conductivity	801	umhos/cm
Nitrogen, Nitrate+Nitrite	<0.02	mg/L
pH	7.65	S.U.
Phosphorus, Total	0.04	mg/L
Solids, Suspended	2	mg/L
Sulfate	71	mg/L
Mercury	<0.0002	mg/L
Arsenic	0.008	mg/L
Barium	0.271	mg/L
Cadmium	<0.001	mg/L
Chromium, Total	<0.005	mg/L
Lead	0.019	mg/L
Selenium	0.007	mg/L
Silver	<0.001	mg/L

John Andrejcio
Project Manager

EPA Region 5 Records Ctr
350008

Inter Company Correspondence

To–Name & Department		Telephone	Date / CIMS Number
Doug Orf	Environmental Coordinator	822-6047	December 7, 1992 / 478-05-00

From–Name & Department		CIMS Number
Curt Chapman (CRC)	Energy & Environmental Affairs	416-15-14

Subject: **Preconstruction Issues at the Dayton Thermal Facility**

Per our conversation of 12/1/92 I have assembled the following list of environmental considerations to aid you in the preparation of the construction specs for your upcoming construction projects:

- Contractors/subcontractors should be made aware of the potential for contact with hazardous materials and potentially impacted soils;
- Contractors/subcontractors involved in the cleaning process should prepare a formal task-specific Health and Safety Plan which will be submitted to Chrysler for final review and approval (Industrial Hygiene should be able to provide assistance with this).
- Contractor/subcontractor employees who have potential to come into contact with hazardous materials/soils or groundwater should have 40 hour HAZWOPER training and be current with all requirements of 29 CFR 1910.120;
- All rinsate should be considered hazardous until characterized (Debbie Rowe at TL 876-2123 can provide input on this point);
- Precautions should be taken by the contractor to prevent rinsate from entering the onsite storm/sanitary sewer system and/or seams in the floor;
- Contractor must handle, transport and dispose of hazardous/nonhazardous materials in accordance with all applicable local, state and federal regulations;
- Contractor should provide analytical documentation certifying that materials utilized for backfilling sumps and flumes are free of VOC's, PNAs and PCBs;
- Soil excavated in connection with the A-bar furnaces in the southeast corner of Bldg 40 should be submitted for waste characterization and if impacted by man-made contaminants then should be disposed of appropriately; if not iimpacted then this soil can be utilized as backfill the above closures.

I hope this will be of help to you. Should you have any further questions please don't hesitate to contact me.

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 1

To Doug Orf	From Curt Chapman
Co Dayton Thermal	Co Chrysler
Dept	Phone # 822 6047
Fax # 848 2915	Fax #

ACUSTAR

Inter Company Correspondence

		Telephone	Date	
		841-6711	December 7, 1992	
To- Name & Department				CIMS Number
M. W. Grice	General Counsel's Office		HP	416-19-02
W. C. Achinger	Energy & Environmental Affairs		HP	416-15-14
From Name & Department				CIMS Number
L. L. Blair LLB	Manager Environmental Planning	Acustar-Troy		404-02-01

Subject **Dayton Thermal Products Environmental Update**

As you requested, the following is an environmental update for the plant

In 1990, the new Building 59 was constructed. Its foot print was within the demolished Maxwell Complex, a group of old manufacturing buildings dating back to the 1920s. In order to achieve the specified floor strength, about 21,000 cubic yards (CY) of clay-containing soil was removed. Environmental concerns dictated the soil be segregated into three separate piles. Later, a fourth and smaller pile (about 1,800 CY) was generated from soil excavated for the new parking lot.

The first three piles were vapor extracted due to the known presence of VOCs and tested The results indicated all three piles were below EPA VOC action levels and two piles were declared "clean" but the third was stained and had TPH levels >100 ppm

Acustar decided to keep the excavated soil on-site and remediate, as required In November, 1992, Clean Tech of Newark, Delaware visited the site. The purpose was to collect and test soil samples for TPH and VOC, and to perform a biotreatability study on the two piles, in question, to determine their suitability for bioremediation.

A report on the study was just completed. A copy was sent to Curtis Chapman (E&EA). This feasibility study shows (1) TPH levels in the two piles in question are >100 ppm and must be remediated and (2) with the addition of proper nutrients, the two piles can be bioremediated.

Future plans call for combining the two TPH-containing piles for bioremediation. The other two clean piles will be placed in berms or used on-site, as required.

After the planned bioremediation is underway, plans will be initiated for a site-wide hydrogeological study because previous studies have indicated the widespread subsurface presence of regulated substances. Both the above efforts are covered under a recently approved Blue Letter.

I will keep you informed of progress at the plant.

cc: K. J. Fouts
M. Teodosic
W. F. Smith
L. W. Williams

Soil Piles

#1) Vapor Extraction

"Clean Pile" - Clean

~ 5000 yd^3

#2) Vapor Extraction

"Voc Pile - Clean

4000 yds^3

Max 6

3) Vapor Extraction

"TPH Pile" - To Be Remed

12,000 yds^3

#4) To Be Remed

Excav. under degreaser / sump / sewers until ND for VOC's

* Contacted OH EPA prior to construction to get approval of work plan based upon corr action plan - Feb 1991

No Air Permit needed from Air

Inter Company Correspondence

		Telephone	Date
		822-6047	May 6, 1993
To--Name & Department			CIMS Number
Doug Orf	Environmental Coordinator		478-05-00
From--Name & Department			CIMS Number
Curt Chapman	Energy & Environmental Affairs		416-15-14

Subject **Review of the Project Manual for Phase I Construction, Dayton Thermal**

I have reviewed the above document and find that it adequately covers the list of environmental considerations outlined in my December 7, 1992 memo.

Outline for Burlington Soil Pile Summary

[illegible] BACKGROUND

Demolition of antiquated [illegible] space for construction [illegible]

Full-time environmental [illegible] retained [illegible] construction activities and address [illegible] issues [illegible]

[illegible] in new [illegible]

[illegible] with [illegible]

[illegible]

[illegible] all [illegible]

[illegible]

[illegible]

[illegible] rate etc

[illegible] for VOC and TPH.

[illegible] TPH [illegible] still contains [illegible] TPH [illegible] the latter will require further remediation.

[illegible] Basis for [illegible] level.

[illegible] associated with [illegible]

[illegible] will require evaluation [illegible] VOC

PRECONSTRUCTION ISSUES AT DAYTON THERMAL FACILITY

Construction Projects

1) Cleaning and closure of the 1,1,1-TCE degreaser system located in northeast corner of Building 40-A.

2) Cleaning and closure of the coolant flumes/sumps and areas around cutting and grinding machinery, aquaeous washers and Loctite coating machines situated in Building 40.

3) Cleaning and closure of areas around and the coolant flumes/sumps associated with skyve fin presses located in the south protion of Building 40-B.

4) Excavation of approximately 3.5 feet of soil and installation of an A-Bar furnace in the southeast corner of Building 40.

- Based upon an extensive soil gas survey analyzing both groundwater and soil samples (167 soil and 28 groundwater samples) performed under the slab of and around Buildings 40A and 40B, there appears to be impact to both soil and groundwater.

  Soil gas and water samples were screened for and found elevated levels of the following chlorinated solvents; 1,1-DCE, cis/trans-1,2-DCE, 1,1,1-TCA, TCE and Perchloroethylene. Headspace soil and water concentrations ranged from nondetect to as high as 258 ppm (1,1-DCE).

  Groundwater samples were also collected during the soil gas survey and submitted for analytical testing. Results of the analytical testing of the groundwater indicated levels of chlorinated solvents ranging from nondetect to 2.5 ppm (1,1-DCA).

- Sampling of soils was performed prior to the construction of Building 59 in 1991 which was constructed on the site of the former Maxwell building constructed in 1907. Results of the analytical testing of composited soil samples indicated elevated levels of TPH, TCE, tetrachloroethene, 1,1,1-TCE, 1,1-DCE and total 1,2-DCE. Levels ranged from nondetect to a high of 5.3 ppm (1,1,1-TCE).

- Due to data provided by the above soil gas and soil sampling investigation it is not necessary to perform further sampling, especially where no excavation of soils will be taking place (i.e., sites of the flume/sump cleaning).

  What I have discussed with Doug Orf and will submit to him in a memo would be the following guidelines for the preparation of his construction specs: 1) Contractors should be made aware of the potential for contact with hazardous materials

and soil 2) Contractors involved in the cleaning process should produce a formal task-specific Health and Safety plan to submitted to Chrysler for review and approval prior to commencement of the project; this and other industrial hygiene issues should be discussed by D. Orf and Chrysler's IH group 3) Contractors' employees involved onsite with the project should have 40 hour HAZWOPER training and be current with all requirements of 29CFR 1910.120; 4) All rinsate should be considered hazardous until characterized (D. Rowe will provide input on this point); 5) Precautions should be taken by the contractor to prevent rinsate from entering the onsite storm/sanitary sewer system; 6) Contractor must handle, transport and dispose of hazardous/nonhazardous materials in accordance with all applicable local, state and federal regulations; 7) Contractor should provide analytical documentation certifying that materials utilized for backfilling sumps and flumes are free of VOC's; 8) Soil excavated in connection with the A-bar furnaces in the southeast corner of Bldg 40 should be submitted for waste characterization and if impacted by man-made contaminants then should be disposed of appropriately; if not iimpacted then this soil can be utilized as backfill the above closures.

ACUSTAR

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		841-6711	December 7, 1992	
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M W. Grice	General Counsel's Office		HP	416-19-02
W. C. Achinger	Energy & Environmental Affairs		HP	416-15-14
From -Name & Department				CIMS Number
L. L. Blair LLB	Manager Environmental Planning	Acustar-Troy		404-02-01

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I will keep you informed of progress at the plant.

cc: K. J. Fouts
M. Teodosic
W. F. Smith
L. W. Williams

LEGGETTE, BRASHEARS & GRAHAM, INC.
Northpark Corporate Center
1210 West County Road E
Suite 700
St. Paul, MN 55112
651-490-1405
651-490-1006 (FAX)

LETTER OF TRANSMITTAL

DATE	17-May-00	JOB NO	3CHRY4 DAYTON
ATTENTION	Mr Kirk Johnson		
RE	Dayton Thermal Products		
	SVE Well Installation Bid Package		
	Dayton, Ohio		

TO Environmental Drilling and Contracting, Inc
4692 136th Avenue
Holland, Michigan 49424
(616) 738-9300

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ Bid Package

COPIES	DATE	NO	DESCRIPTION
1			"Request For Bid For Drilling Services For Installation of SVE Wells at Dayton
			Thermal Products"
1			Base Bid Form for Onsite SVE Well Installation
1			Alternate Bid Form for Onsite SVE Well Installation
1 each		1 thru 8	Figures
1			Draft Contract for SVE and Monitor Well Installation

THESE ARE TRANSMITTED as checked below

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☐ For your use ☐ Approved as noted ☐ Resubmit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE June 1, 2000 ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Enclosed for your review is a request for bid for drilling services at the Dayton Thermal Products Plant in Dayton, Ohio I look forward to seeing you at the mandatory pre-bid meeting on Wednesday, May 24, 2000 at 9 00 a m Eastern Daylight Savings Time

COPY TO R Armbruster, DCC
G Stanczuk, DCC

SIGNED Kenneth D. Vogel

Kenneth D Vogel, PG, CHMM
Senior Associate

LEGGETTE, BRASHEARS & GRAHAM, INC.

Northpark Corporate Center
1210 West County Road E
Suite 700
St. Paul, MN 55112
651-490-1405
651-490-1006 (FAX)

LETTER OF TRANSMITTAL

DATE	17-May-00	JOB NO	3CHRY4 DAYTON
ATTENTION	Mr Thomas J Roberts		
RE	Dayton Thermal Products		
	SVE Well Installation Bid Package		
	Dayton, Ohio		

TO Layne-Christensen
W229 N5005 Duplainville Road
Pewaukee, Wisconsin 53072
(800) 407-4449

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items

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G Stanczuk, DCC

SIGNED Kenneth D Vogel

Kenneth D Vogel, PG, CHMM
Senior Associate

LEGGETTE, BRASHEARS & GRAHAM, INC.

Northpark Corporate Center
1210 West County Road E
Suite 700
St. Paul, MN 55112
651-490-1405
651-490-1006 (FAX)

LETTER OF TRANSMITTAL

DATE	17-May-00	JOB NO	3CHRY4 DAYTON
ATTENTION	Mr Chip Fenske		
RE	Dayton Thermal Products		
	SVE Well Installation Bid Package		
	Dayton, Ohio		

TO Alliance Environmental
117 Industry Road
Marietta, Ohio 45750
(800) 996-4949

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COPY TO R Armbruster DCC
G Stanczuk, DCC

SIGNED Kenneth D. Vogel

Kenneth D Vogel, PG, CHMM
Senior Associate

LEGGETTE, BRASHEARS & GRAHAM, INC.

Northpark Corporate Center
1210 West County Road E
Suite 700
St. Paul, MN 55112
651-490-1405
651-490-1006 (FAX)

LETTER OF TRANSMITTAL

DATE	17-May-00	JOB NO	3CHRY4 DAYTON
ATTENTION	Mr Steve Coomer		
RE	Dayton Thermal Products		
	SVE Well Installation Bid Package		
	Dayton, Ohio		

TO Dayton Thermal Products
CIMS 478-05-01
1600 Webster Street
Dayton, Ohio 45404-1205
(937) 224-2952

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items

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G Stanczuk, DCC

SIGNED Kenneth D. Vogel

Kenneth D Vogel, PG, CHMM
Senior Associate

ONYX

FAX TRANSMITTAL

ONYX INDUSTRIAL SERVICES
6151 EXECUTIVE BLVD.
HUBER HEIGHTS, OH 45424

PHONE: 937-237-1097
FAX: 937-237-1850
FAX: 937-237-3669 (ACCOUNTING & SALES)

TO:	Gary Stanczuk & Brit Crider
COMPANY:	Daimler Chrysler
FAX NUMBER:	248-576-7369
DATE:	10/3/01
SUBJECT:	Analytical Results

FROM:	Mike
NUMBER OF PAGES (INCLUDING COVER):	8

MESSAGE:

6151 Executive Blvd., Huber Heights OH 45424 (937) 237-1097 Fax (937) 237-1850 (937) 237-3669 (Accounting)

Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ONYX INDUSTRIAL SERVICES
ATTN: MIKE WEBB
6151 EXECUTIVE BLVD
HUBER HEIGHTS OH 45424

Report Date: 10/02/01

Report Released By:

Ed Lookwood Jr., Pres.

PROJECT: Daimler/Chrysler
SAMPLE ID: Drive #2 (Red material)
SAMPLE TYPE: Solid/Grab
SAMPLER: M. Webb
DATE AND TIME TAKEN: 09/28/01 @ 0900
DATE RECEIVED: 09/28/01

LABORATORY ID: 53483-144

ANALYSIS

TEST	RESULTS	UNITS	ANALYST	DATE	METHOD
Flashpoint	>212	F	AF	09/28/01	1010
pH	6.5	S U.	AF	09/28/01	9045
TCLP Extraction			EL	09/28/01	1311
TCLP Metals					
Arsenic	< 0.020	mg/l	EL	10/02/01	7060
Barium	1.490	mg/l	EL	10/02/01	7080
Cadmium	< 0.020	mg/l	EL	10/01/01	7130
Chromium	< 0.050	mg/l	EL	10/01/01	7190
Lead	0.366	mg/l	EL	10/01/01	7420
Mercury	< 0.020	mg/l	EL	10/01/01	7470
Selenium	< 0.020	mg/l	EL	10/02/01	7740
Silver	0.011	mg/l	EL	10/02/01	7760

1001 East Street ◆ P.O. Box 2728 ◆ Springfield, OH 45501-2728
◆ Tel: (937) 324-8001 ◆ 1-800-308-8001 ◆ Fax: (937) 324-5188 ◆

Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ATTN MIKE WEBB
ONYX INDUSTRIAL SERVICES

SAMPLE ID: Drive #2
LABORATORY ID: 59483-144

ANALYSIS continued:

TEST	UNITS	ANALYST	DATE	METHOD
TCLP Volatiles	mg/l	AS	09/30/01	8260

COMPONENT	CONCENTRATION	DETECTION LIMIT
Benzene	< 0.100	0.100
Carbon Tetrachloride	< 0.100	0.100
Chlorobenzene	< 0.100	0.100
Chloroform	< 0.100	0.100
1,4-Dichlorobenzene	< 0.100	0.100
1,2-Dichloroethane	< 0.100	0.100
1,1-Dichloroethylene	< 0.100	0.100
Methyl ethyl ketone	< 0.500	0.500
Tetrachloroethylene	< 0.100	0.100
Trichloroethylene	< 0.100	0.100
Vinyl chloride	< 0.100	0.100

TCLP Semi-Volatiles	mg/l	AS	09/30/01	8270

COMPONENT	CONCENTRATION	DETECTION LIMIT
2,4-Dinitrotoluene	< 0.100	0.100
Hexachlorobenzene	< 0.100	0.100
Hexachlorobutadien	< 0.100	0.100
Hexachloroethane	< 0.100	0.100
Nitrobenzene	< 0.100	0.100
Pyridine	< 0.100	0.100
2-Methylphenol	< 0.100	0.100
3-Methylphenol	< 0.100	0.100
4-Methylphenol	< 0.100	0.100
Pentachlorophenol	< 0.100	0.100
2,4,5-Trichlorophenol	< 0.100	0.100
2,4,6-Trichlorophenol	< 0.100	0.100

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Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ATTN MIKE WEBB
ONYX INDUSTRIAL SERVICES

SAMPLE ID: Drive #2
LABORATORY ID: 53483-144

ANALYSIS continued:

TEST	RESULT	UNITS	ANALYST	DATE	METHOD
Reactivity					
Cyanide	< 1.0	mg/kg	AF	09/28/01	9010
Sulfide	< 5.0	mg/kg	AF	10/01/01	9030

TCLP Pesticide/Herbicide mg/l AS 09/30/01 8080

COMPONENT	CONCENTRATION	DETECTION LIMIT
Chlordane	< 0.008	0.008
Endrin	< 0.008	0.008
Heptachlor	< 0.008	0.008
Heptachlor Epoxide	< 0.008	0.008
Lindane	< 0.008	0.008
Methoxychlor	< 1.0	1.0
Toxaphene	< 0.050	0.050
2,4-D	< 1.0	1.0
2,4,5-TP (Silvex)	< 0.100	0.100

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Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ONYX INDUSTRIAL SERVICES
ATTN: MIKE WEBB
6151 EXECUTIVE BLVD
HUBER HEIGHTS OH 45424

Report Date: 10/02/01

Report Released By:

Ed Lockwood Jr., Pres.

PROJECT: Daimler/Chrysler
SAMPLE ID: Drive #1 (Green material)
SAMPLE TYPE: Solid/Grab
SAMPLER: M. Webb
DATE AND TIME TAKEN: 09/28/01 @ 0900
DATE RECEIVED: 09/28/01

LABORATORY ID: 53482-144

ANALYSIS

TEST	RESULTS	UNITS	ANALYST	DATE	METHOD
Flashpoint	>212	F	AF	09/28/01	1010
pH	8.3	S.U.	AF	09/28/01	9045
TCLP Extraction			EL	09/28/01	1311
TCLP Metals					
Arsenic	< 0.020	mg/l	EL	10/02/01	7060
Barium	0.771	mg/l	EL	10/02/01	7080
Cadmium	0.432	mg/l	EL	10/01/01	7130
Chromium	< 0.050	mg/l	EL	10/01/01	7190
→ Lead	15.8	mg/l	EL	10/01/01	7420
Mercury	< 0.020	mg/l	EL	10/01/01	7470
Selenium	< 0.020	mg/l	EL	10/02/01	7740
Silver	0.035	mg/l	EL	10/02/01	7760

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Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ATTN MIKE WEBB
ONYX INDUSTRIAL SERVICES

SAMPLE ID: Drive #1
LABORATORY ID: 53482-144

ANALYSIS continued:

TEST	RESULT	UNITS	ANALYST	DATE	METHOD
Reactivity					
Cyanide	< 1.0	mg/kg	AF	09/28/01	9010
Sulfide	< 5.0	mg/kg	AF	10/01/01	9030
TCLP Pesticide/Herbicide		mg/l	AS	09/30/01	8080

COMPONENT	CONCENTRATION	DETECTION LIMIT
Chlordane	< 0.008	0.008
Endrin	< 0.008	0.008
Heptachlor	< 0.008	0.008
Heptachlor Epoxide	< 0.008	0.008
Lindane	< 0.008	0.008
Methoxychlor	< 1.0	1.0
Toxaphene	< 0.050	0.050
2,4-D	< 1.0	1.0
2,4,5-TP (Silvex)	< 0.100	0.100

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Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ATTN MIKE WEBB
ONYX INDUSTRIAL SERVICES

SAMPLE ID: Drive #1
LABORATORY ID: 53482-144

ANALYSIS continued:

TEST	UNITS	ANALYST	DATE	METHOD
TCLP Volatiles	mg/l	AS	09/30/01	8260

COMPONENT	CONCENTRATION	DETECTION LIMIT
Benzene	< 0.100	0.100
Carbon Tetrachloride	< 0.100	0.100
Chlorobenzene	< 0.100	0.100
Chloroform	< 0 100	0.100
1,4-Dichlorobenzene	< 0.100	0.100
1,2-Dichloroethane	< 0.100	0.100
1,1-Dichloroethylene	< 0.100	0.100
Methyl ethyl ketone	< 0.500	0.500
Tetrachloroethylene	< 0.100	0.100
Trichloroethylene	< 0.100	0.100
Vinyl chloride	< 0.100	0.100

TCLP Semi-Volatiles	mg/l	AS	09/30/01	8270

COMPONENT	CONCENTRATION	DETECTION LIMIT
2,4-Dinitrotoluene	< 0.100	0.100
Hexachlorobenzene	< 0.100	0.100
Hexachlorobutadien	< 0.100	0.100
Hexachloroethane	< 0.100	0.100
Nitrobenzene	< 0.100	0.100
Pyridine	< 0.100	0.100
2-Methylphenol	< 0.100	0.100
3-Methylphenol	< 0.100	0.100
4-Methylphenol	< 0.100	0.100
Pentachlorophenol	< 0.100	0.100
2,4,5-Trichlorophenol	< 0.100	0.100
2,4,6-Trichlorophenol	< 0.100	0.100

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Lockwood Laboratories

SEI Springfield Environmental, Inc.

Environmental Services Division

Certificate of Analysis

ONYX INDUSTRIAL SERVICES
ATTN: MIKE WEBB
6151 EXECUTIVE BLVD
HUBER HEIGHTS OH 45424

Report Date: 10/02/01

Report Released By:

Ed Lockwood Jr , Pres.

PROJECT: Daimler/Chrysler
SAMPLE ID: Drive #1
SAMPLE TYPE: Solid/Grab
SAMPLER: M. Webb
DATE AND TIME TAKEN: 09/28/01 @ 0900
DATE RECEIVED: 09/28/01

LABORATORY ID: 53482-144

ANALYSIS

TEST	RESULTS	UNITS	ANALYST	DATE	METHOD
Total Metals					
→ Copper	73459.6	mg/kg	EL	10/01/01	7210
Lead	4737.0	mg/kg	EL	10/01/01	7420
Nickel	514.7	mg/kg	EL	10/01/01	7520
→ Zinc	10451.8	mg/kg	EL	10/01/01	7950

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1600 Webster Street
Dayton Ohio 45401
Fax: 937 224-2915

DaimlerChrysler Corp
Dayton Thermal Product
Component Operations

Fax

To:	GARY STANCZYK	From:	Britton Cridler
Fax:	576-7369	Pages:	Cover + 11
Phone:		Date:	01/08/01
Re:		CC:	

☒ Urgent ☐ For Review ☒ Please Comment ☒ Please Reply ☐ Please Recycl

• Comments:

Question 5 J + Question 6

As you can see the city is requesting a lot of data that they did not require in past years ?

Pursuant to authorization dated or future amendments

to

City of Dayton – Division of Wastewater Treatment
Application for
INDUSTRIAL WASTEWATER DISCHARGE PERMIT *Renewal*

Your facility's **Industrial Wastewater Discharge Permit** expires within 5 years of its issue date This Industrial Wastewater Discharge Permit **Renewal** must be completed and submitted a minimum of 90 days prior to the permit expiration date Please answer completely all questions that are applicable Falsification of information on this form may be grounds for termination of service Please attach additional sheets if necessary to completely answer any section of the application, and note in Section 13 the number of attached pages

Note to signing official *In accordance with Title 40 of the Code of Federal Regulations, Part 403, Section 14, information and data provided in this application which identifies the nature and frequency of discharge shall be available to the Public without restriction Requests for confidential treatment of other information must be asserted at the time of submittal*

The completed and signed Permit Renewal Application should be mailed to the following address

City of Dayton
Division of Wastewater Treatment
Industrial Pretreatment Program
2800 Guthrie Road
Dayton, Ohio 45418

Contact your Industrial Pretreatment Program Coordinator (Lyle Merta, or Sharon Vaughn) at **937-333-1501** if you have questions

---

City of Dayton – Division of Wastewater Treatment
Application for
INDUSTRIAL WASTEWATERDISCHARGE PERMIT *Renewal*

1. GENERAL INFORMATION (Please Type or Print)

Facility Name:			
Facility Address			
Facility Owner:			
Owner's Address.			
Primary Contact:			
Title or Position.			
Phone Number		Fax Number	
e-mail Address			
Mailing Address			
Secondary Contact:			
Phone Number		Fax Number	
e-mail Address			
Mailing Address			
Authorized Representative:			
Title or Position.			
Phone Number:		Fax Number	
e-mail Address			
Mailing Address			

4. WATER USAGE INFORMATION

A. Municipal Water Supply Usage:

Average		gallons per day (gpd),		days per week
Maximum.		gpd		
Period evaluated:	From:		To:	
Is usage seasonal?	☐No ☐Yes	Explain:		
Water meter(s)?	☐No ☐Yes	How many?		
Description, location, what is measured by each meter				

B. Private Well Water Usage:

Average		gallons per day (gpd),		days per week
Maximum:		gpd		
Period evaluated:	From:		To:	
Is usage seasonal?	☐No ☐Yes	Explain		
Water meter(s)?	☐No ☐Yes	How many?		
Description, location, what is measured by each meter				

5 WASTEWATER DISCHARGE INFORMATION

A. General Sanitary Sewer Information:

Number of connections to the City sanitary sewer system _____

First Connection: Is there a designated sampling location on this connection? ☐ Yes ☐ No

Description, size and location of sanitary sewer connection				
Total discharge to sanitary sewer (average)		gpd,		days per week
Total discharge to sanitary sewer (maximum)		gpd		
Period evaluated	From		To:	
Sewer meter(s)?	☐ No ☐ Yes	How many?		
Meter description(s), meter location(s), what flows are measured by each meter				

2. STAFFING/HOURS OF OPERATION

Please complete the following table for your normal work schedules:

Day of the Week	First Shift				Second Shift				Third Shift			
	Start Time	End Time	# People	How Often*	Start Time	End Time	# People	How Often*	Start Time	End Time	# People	How Often*
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												

*How often is the shift worked? A = Always 1 = 1/month, 2 = 2/month 3 = 3/month, O = Occasionally S = Seldom, N = Never

Comments:

3. FACILITY INFORMATION

List applicable Standard Industrial Classification (SIC) code(s)	
Describe principal products or services	
Describe facility operation(s)	
Describe anticipated future industrial expansion	
Describe all facility processes generating wastewater Include sources of wastewater such as air pollution control devices (wet scrubbers), condensers, chillers, boiler blowdown, heating & cooling systems, water treatment devices, softeners, etc Include any processes considered categorical under federal pretreatment regulations, even if the process does not have a wastewater discharge	

5. A. **General Sanitary Sewer Information (continued):**

Second Connection: **Is there a designated sampling location on this connection?** ☐ Yes ☐ No

Description, size and location of sanitary sewer connection:				
Total discharge to sanitary sewer (average):		gpd,		days per week
Total discharge to sanitary sewer (maximum)		gpd		
Period evaluated.	From.		To:	
Sewer meter(s)?	☐ No ☐ Yes	How many?		
Meter description(s), meter location(s), what flows are measured by each meter:				

Third Connection: **Is there a designated sampling location on this connection?** ☐ Yes ☐ No

Description, size and location of sanitary sewer connection:				
Total discharge to sanitary sewer (average)		gpd,		days per week
Total discharge to sanitary sewer (maximum)		gpd		
Period evaluated	From		To	
Sewer meter(s)?	☐ No ☐ Yes	How many?		
Meter description(s), meter location(s), what flows are measured by each meter				

B. **Domestic wastewater discharged to the sanitary sewer?** ☐ NO ☐ YES

Description					
Discharged to which sewer connection?	☐ First	☐ Second	☐ Third		
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?					
When does discharge occur?					
Average flow		gpd,		days per week	☐ Measured ☐ Estimated
Maximum flow		gpd	☐ Measured	☐ Estimated	

C. Process Wastewater Discharged? ☐ NO ☐ YES

if yes, complete a separate block for each categorical (*see 40 CFR 405-471*) or non-categorical process

Process #1 Description:						
Categorical?	☐ No ☐ Yes	Category:				
Discharged to which sewer connection?		☐ First		☐ Second		☐ Third
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

Process #2 Description:						
Categorical?	☐ No ☐ Yes	Category:				
Discharged to which sewer connection?		☐ First		☐ Second		☐ Third
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

Process #3 Description:						
Categorical?	☐ No ☐ Yes	Category				
Discharged to which sewer connection?		☐ First		☐ Second		☐ Third
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

Process #4 Description						
Categorical?	☐ No ☐ Yes	Category				
Discharged to which sewer connection?		☐ First		☐ Second		☐ Third
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

D. Non-Contact Cooling Water Discharged to Sanitary Sewer? ☐ NO ☐ YES

Description						
Discharged to which sewer connection?		☐ First		☐ Second		☐ Third
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

E. Non-Contact Cooling Water Discharged to Storm Sewer? ☐ NO ☐ YES

Description:						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured	☐ Estimated		
Does facility have an NPDES Permit?	☐ NO ☐ YES	Permit Number.				

F. Contact Cooling Water Discharged to the Sanitary Sewer? ☐ NO ☐ YES

Description:						
Discharged to which sewer connection?	☐ First	☐ Second	☐ Third			
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured	☐ Estimated		

G. Boiler Blowdown Discharged to the Sanitary Sewer? ☐ NO ☐ YES

Description						
Discharged to which sewer connection?	☐ First	☐ Second	☐ Third			
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured	☐ Estimated		

H. Deionizer or Water Treatment Backwash:

Discharged to Sanitary Sewer? ☐ NO ☐ YES

Description:						
Discharged to which sewer connection?	☐ First	☐ Second	☐ Third			
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured	☐ Estimated		

I. Stormwater/Surface (Roof, Foundation, Parking Lot):

Run-off Discharged to the Sanitary Sewer? ☐ NO ☐ YES

Description:						
Discharged to which sewer connection?	☐ First	☐ Second	☐ Third			
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
Average flow		gpd,	☐ Measured	☐ Estimated		
Maximum flow		gpd	☐ Measured	☐ Estimated		

J. **Groundwater/Remediation Water Discharged to the Sanitary Sewer?** ☐ NO ☐ YES

Description:						
Discharged to which sewer connection?	☐ First		☐ Second		☐ Third	
Is discharge point ☐ upstream ☐ downstream ☐ separate lateral, from the sample location?						
When does discharge occur?						
Average flow:		gpd,		days per week	☐ Measured	☐ Estimated
Maximum flow		gpd	☐ Measured		☐ Estimated	

6. **PRETREATMENT: Do you have a process to pretreat wastewater?** ☐ NO ☐ YES
(i e pH adjustment metals removal, oils removal, filtration, ion exchange, reverse osmosis)

If "YES" to 6., do you have a Permit to Install from the Ohio EPA? ☐ NO ☐ YES

If "YES" to 6., do you have a Continuous (flow through) process? ☐ NO ☐ YES

Describe the continuous pretreatment process(s), and which wastewaters are treated by it:
Specify days and hours of wastewater discharge from the pretreatment process
Attach a schematic drawing of the continuous pretreatment process.

If "YES" to 6., do you have a Batch Pretreatment process? ☐ NO ☐ YES

Describe the batch pretreatment process, and which wastewaters are treated by it:
Specify days, times, duration, and average volume of wastewater batch pretreatment discharge:
Attach a schematic drawing of the batch pretreatment process.

7. **PRODUCTION DATA (required for facilities with production based limits – see 40 CFR 405-471)**

NOTE: **This section must be completed ONLY for facilities having production-based wastewater discharge limits**, including, but not limited to, those facilities performing metal molding, casting, or forming; and those manufacturing iron, steel, pesticides, organic chemicals, plastics, synthetic fibers, and batteries Copy the following tables as needed, and **complete a separate table for each different categorical process** performed at your facility having production-based limits

#1	Description of process for which production-based limits apply:

For each of the years specified below, provide the daily average weight of product undergoing the above process. Base the daily average on the actual number of days worked in a year. Include all product processed, including product that may have been scrapped or re-processed (if a part was processed twice, it should be counted twice)

YEAR	Weight of Product	Pounds	Kilograms	Measured	Estimated
Four years ago		☐	☐	☐	☐
Three years ago		☐	☐	☐	☐
Two years ago		☐	☐	☐	☐
Last year		☐	☐	☐	☐
This year (projected)		☐	☐	☐	☐
Next year (projected)		☐	☐	☐	☐
In four years (projected)		☐	☐	☐	☐

Explain any significant changes in a the daily averages for any specific year

#2	Description of process for which production-based limits apply:

For each of the years specified below, provide the daily average weight of product undergoing the above process. Base the daily average on the actual number of days worked in a year. Include all product processed, including product that may have been scrapped or re-processed (if a part was processed twice, it should be counted twice).

YEAR	Weight of Product	Pounds	Kilograms	Measured	Estimated
Four years ago		☐	☐	☐	☐
Three years ago		☐	☐	☐	☐
Two years ago		☐	☐	☐	☐
Last year		☐	☐	☐	☐
This year (projected)		☐	☐	☐	☐
Next year (projected)		☐	☐	☐	☐
In four years (projected)		☐	☐	☐	☐

Explain any significant changes in a the daily averages for any specific year

8. **COMPLIANCE MEASURES: What measures do you use in addition to (or instead of) pretreatment to assure that your wastewater discharge complies with applicable limits?**
(i e pollution prevention, countercurrent rinses, evaporation, off-site treatment, zero-discharge, etc)

9. **RADIOACTIVE MATERIALS:**

Does your facility use radioactive materials? ☐ **NO** ☐ **YES** **If "Yes" - describe below:**

10. **WASTE HAULED FOR DISPOSAL**

A. Liquid Wastes

Type of Waste	Hauling Frequency	Annual Volume Hauled

B. Solid Wastes / Sludges

Type of Waste	Hauling Frequency	Annual Volume Hauled

C. Does your facility have a Resource Conservation and Recovery Act (RCRA) ID number?
☐ **NO** ☐ **YES - What is the number?** _____

11. OTHER ENVIRONMENTAL PERMITS

List all other environmental permits that have been issued for this facility:

Type of Permit	Permit Number

12. DOCUMENTS TO BE SUBMITTED:

The following information must be included with this application:

a. Submit **building/plumbing plans** that show

- all equipment and process units that use water and/or produce wastewater
- all plumbing for the facility and related equipment, including water meters, sewer meters, sewer connections, fixtures, pumps, valves, regulating devices, and all drains

b. Submit a **water flow diagram** that shows water and wastewater flow rates into and out of all equipment and process units This diagram should demonstrate a **water balance** whereby all water used and all wastewater discharged is accounted for

c Submit the **flow study** or **flow data** that was used to provide the flow values submitted in this permit

d If you have categorical process wastewater mixed with dilute or non-categorical wastewater prior to the sampling point for your facility, submit information as necessary to complete **Combined Wastestream Formula** calculations to derive adjusted discharge limits at the sample point

13. ATTACHMENTS

Attachments to complete answers to any sections of this renewal application – # of pages _____

Pretreatment Process Schematic attached? ☐ NO ☐ YES

Other (specify)

14. CERTIFICATION

"I certify that all information provided in this document and all attachments are to the best of my knowledge and belief, true, accurate, and complete "

Signature _____ Date _____
(Authorized Representative)

** TOTAL PAGE 12 **

WASTE CHARACTERIZATION REPORT

TO EXPEDITE YOUR WASTE APPROVAL, PLEASE COMPLETE THIS FORM ENTIRELY

Please Choose One EQ Management Facility

☐ Michigan Disposal Waste Treatment Plant (Stabilization and Treatment)	49350 N I-94 Service Drive Phone: 800-592-5489	Belleville, MI 48111 Fax: 800-592-5329	EPA ID # MID 000 724 831
☐ Wayne Disposal, Inc. Site #2 Landfill (Hazardous & Chemical Waste Landfill)	49350 N. I-94 Service Drive Phone: 800-592-5489	Belleville, MI 48111 Fax: 800-592-5329	EPA ID # MID 048 090 633
☐ Michigan Recovery Systems, Inc. (Solvent Recycling, Fuel Blending, WW Treatment)	36345 Van Born Road Phone: 800-521-0998	Romulus, MI 48174 Fax 734-325-9375	EPA ID # MID 060 975 844
☐ EQIS – Transfer & Processing (Drum Transfer/Non-Hazardous Liquid Processing)	1010 Old Rawsonville Road Phone: 734-547-1000	Ypsilanti, MI 48197 Fax 734-480-9195	EPA ID # MIR 000 033 969

Section 1 - Generator & Customer Information

SIC # ____

Generator EPA ID # OHD014703543
Generator Daimler Chrysler
Facility Address 1600 Webster St
City Dayton State OH Zip 45404
County Montgomery
Mailing Address (if different) ____
City ____ State ____ Zip ____
Generator Contact Brett Crider
Title Environmental Coordinator
Phone 937-224-2467 Fax 937-224-2915

EQ Customer No ____
Invoicing Company Onyx Industrial
Address 6151 Executive Blvd
City Dayton State OH Zip 45424
Country US

Invoicing Contact Mike Webb
Phone 937-237-1097 Fax 937-237-3669

Technical Contact ____
Phone ____ Fax ____

Section 2 - Shipping and Packaging Information

2.1) Shipping volume 180 Tons
Shipping frequency ☒ One Time Only ☐ Annual

2.2) DOT shipping name Hazardous Waste Solid, N.O.S., 9, NA3082, III, (D008) (Lead)

Density: ____ lbs/gallon or lbs/cubic yard (or) Specific Gravity ____

2.3) Packaging. (check all that apply)
☐ Bulk Solid (Yd³ < 2000 lbs/yd³)
☒ Bulk Solid (Ton > 2000 lbs/yd³)
☐ Bulk Liquids (Gallons)
Cubic Yard Boxes
☐ Drums
☐ Other (palletized, 5 gal pails, etc.) ____

Quoted bulk disposal charges for solid materials will be billed by the cubic yd. If waste density is less than 2,000 lbs per cubic yd. If waste density is greater than 2,000 lbs per cubic yd. then bulk disposal charges will be billed by the ton regardless of the approved container

Section 3 - Physical Characteristics

WASTE COMMON NAME.

3.1) Color (describe). Dirt
3.2) Odor (describe). None
3.3) Physical state at 70 °F (check all that apply)
☒ Solid ☐ Dust ☐ Liquid ☐ Sludge
3.4) Does this waste contain? (check all that apply)
☐ Free Liquids ☐ Metal fines ☐ Powders ☐ Oily residue
☐ Biodegradable sorbants ☒ NONE
3.5) Does this waste contain? (check all that apply) ☒ NONE
☐ Asbestos - friable ☐ Pyrophoric waste
☐ Asbestos - non-friable ☐ Reactive waste
☐ Dioxins ☐ Shock Sensitive waste
☐ Furans ☐ Radioactive waste
☐ Biohazard ☐ Explosives

3.6) Describe the composition of the waste (i.e. key chemical compounds, soil, water, ppe debris, etc.)

Soil	90 to 99 %
Lead	10 to 1 %
	___ to ___ %
	___ to ___ %
	Total = 100 %

3.7) Does this waste contain > 50% contaminated soil? ☐ Yes ☒ No
3.8) Does this waste contain >50% debris by volume? ☐ Yes ☒ No
(debris is greater than 2.5 inches in size)

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Section 4 - Generating Process and Regulatory Information

4.1) Provide a *detailed* description of the process (es) generating this waste (attach flow diagram if available)

Site Clean Up

Based upon RCRA waste regulations (40 CPR 261) and Michigan Act 451 Rules.

			Waste Code(s)
4.2) Is this an EPA RCRA listed hazardous waste (F, K, P or U)?	☐ Yes	☒ No	
4.3) Is this a MICHIGAN hazardous waste (Other than RCRA)?	☐ Yes	☒ No	
4.4) Is this a MICHIGAN nonhazardous liquid industrial waste?	☐ Yes	☒ No	
4.5) Is this a UNIVERSAL waste?	☐ Yes	☒ No	
4.6) Does this waste exceed LDR treatment standards?	☐ Yes	☒ No	
4.7) Is this an EPA RCRA characteristic hazardous waste (D001-D043)?	☒ Yes	☐ No	D008

4.8) What is the flash point of this waste? ☐ <90°F ☐ 90-140°F ☐ 140-199°F ☒ >200°F

4.9) Is the waste an oxidizer?	☐ Yes	☒ No
4.10) What is the pH of this waste?	☐ <2 ☐ 2-4.9 ☒ 5-10 ☐ 10.1-12.4 ☐ ≥12.5	
4.11) Does this waste contain reactive cyanide ≥ 250 ppm?	☐ Yes	☒ No
4.12) Does this waste contain reactive sulfide ≥ 500 ppm?	☐ Yes	☒ No
4.13) Is the waste surcharge exempt? (attach surcharge form)	☐ Yes	☒ No

Code		Regulatory Level TCLP (mg/L)	Concentration (If above)
D004	Arsenic	5	☐ Below ☐ Above
D005	Barium	100	☐ Below ☐ Above
D006	Cadmium	1	☐ Below ☐ Above
D007	Chromium	5	☐ Below ☐ Above
D008	Lead	5	☐ Below ☒ Above 153 ppm
D009	Mercury	0.2	☐ Below ☐ Above
D010	Selenium	1	☐ Below ☐ Above
D011	Silver	5	☐ Below ☐ Above
D012	Endrin	0.02	☐ Below ☐ Above
D013	Lindane	0.4	☐ Below ☐ Above
D014	Methoxychlor	10	☐ Below ☐ Above
D015	Toxaphene	0.5	☐ Below ☐ Above
D016	2,4-D	10	☐ Below ☐ Above
D017	2,4,5-TP(Silvex)	1	☐ Below ☐ Above
D018	Benzene	0.5	☐ Below ☐ Above
D019	Carbon Tetrachloride	0.5	☐ Below ☐ Above
D020	Chlordane	0.03	☐ Below ☐ Above
D021	Chlorobenzene	100	☐ Below ☐ Above
D022	Chloroform	6.0	☐ Below ☐ Above
D023	o-Cresol	200	☐ Below ☐ Above

Code		Regulatory Level TCLP (mg/L)	Concentration (If above)
D024	m-Cresol	200	☐ Below ☐ Above
D025	p-Cresol	200	☐ Below ☐ Above
D026	Cresols	200	☐ Below ☐ Above
D027	1,4-Dichlorobenzene	7.5	☐ Below ☐ Above
D028	1,2-Dichloroethane	0.5	☐ Below ☐ Above
D029	1,1-Dichloroethylene	0.7	☐ Below ☐ Above
D030	2,4-Dinitrotoluene	0.13	☐ Below ☐ Above
D031	Heptachlor	0.008	☐ Below ☐ Above
D032	Hexachlorobenzene	0.13	☐ Below ☐ Above
D033	Hexachlorobutadiene	0.5	☐ Below ☐ Above
D034	Hexachloroethane	3.0	☐ Below ☐ Above
D035	Methyl Ethy Ketone	200	☐ Below ☐ Above
D036	Nitrobenzene	2	☐ Below ☐ Above
D037	Pentachlorophenol	100	☐ Below ☐ Above
D038	Pyridine	5	☐ Below ☐ Above
D039	Tetrachloroethylene	0.7	☐ Below ☐ Above
D040	Trichloroethylene	0.5	☐ Below ☐ Above
D041	2,4,5-Trichlorophenol	400	☐ Below ☐ Above
D042	2,4,6-Trichlorophenol	2	☐ Below ☐ Above
D043	Vinyl Chloride	0.2	☐ Below ☐ Above

4.14) The hazardous constituent information is based on ☒ Analysis (Please attach for review) ☐ Generator Knowledge ☐ Both

4.15) If this is a characteristic (D-coded) hazardous waste, does it contain underlying hazardous constituents (List in Section5)? ☐ Yes ☒ No ☐ N/A

Section 5 - Constituent Information

Review the following items in the EQ Resource Guide and indicate their concentrations below

1) MVOC (Michigan Volatile Organic Compounds) 2) CCVOC (Subpart CC Volatile Organic Compounds)
3) UHC (Underlying Hazardous Constituents) 4) TRI (Toxic Release Inventory Constituents)

Indicate all constituents in your waste stream, their concentrations, and circle Yes or No for UHC

UHC?		UHC?	
Yes-No		Yes-No	
Yes-No		Yes-No	
Yes-No		Yes-No	

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Section 6 - PCB & TSCA Information

6.1) What is the concentration of PCBs in the waste? ☒ None ☐ 0-5 ppm ☐ 6-49 pp ☐ 50-499 ppm ☐ 500+ppm

6.2) Does the waste contain PCB contamination from a source with a concentration ≥50 ppm? ☐ Yes ☒ No

6.3) Does this waste contain free liquids? (use paint filter test) ☐ Yes ☒ No

6.4) Has this waste been processed into a non-liquid form? ☐ Yes ☒ No

If yes what was the concentration of PCBs prior to processing? ☐ N/A ☐ 0-499 ppm ☐ 500+ ppm

6.5) Is the non-liquid PCB waste in the form of soil, rags, debris, or other contaminated media? ☐ Yes ☒ No

6.6) Are you a PCB capacitor manufacturer or a PCB equipment manufacturer? ☐ Yes ☒ No

6.7) Has the PCB Article (e.g., transformer, hydraulic machine, PCB-contaminated electrical equipment) been drained/flushed of all PCBs and decontaminated in accordance with 40 CFR 761.60(b)? ☐ N/A ☐ Yes ☒ No

Section 7 - Benzene NESHAP Information

NESHAP SIC CODES		
2812	2836	2875
2813	2841	2879
2816	2842	2891
2819	2843	2892
2821	2844	2893
2822	2851	2895
2823	2861	2899
2824	2865	2911
2833	2869	3312
2834	2873	4953
2835	2874	9511

7.1) Does this waste stream contain Benzene? (If "no" to 7.1 please skip to section 8) ☐ Yes ☒ No

7.2) Does the waste stream come from a facility with one of the SIC codes listed under NESHAP? ☐ Yes ☒ No

7.3) Does your company manage wastes from facilities with Total Annual Benzene (TAB) ≥10 Mg/year? ☐ Yes ☒ No

➔ *If you answered "NO" to question 7.2 AND 7.3 please skip to Section 8.*

7.4) Does the waste contain >10 % water? ☐ Yes ☐ No

7.5) What is the TAB quantity for your facility? _____ Mg/Year

7.6) Does the waste contain >1.0 mg/kg total Benzene? ☐ Yes ☐ No

7.7) What is the total Benzene concentration in your waste? _____ percent or _____ ppmw.

(Do not use TCLP analytical results. Acceptable laboratory methods include 8020, 8240, 8260, 602 and 624.)

Section 8 - Waste Constituent Information

➔ COMPLETE FOR MICHIGAN DISPOSAL WASTE TREATMENT PLANT, WAYNE DISPOSAL, AND EQIS T&P

8.1) Does this waste contain any "Potentially Odorous Constituents" as defined in the EQ Resource Guide? ☐ Yes ☒ No

8.2) Does this waste contain any MVOC constituents as defined in the EQ Resource Guide? ☐ Yes ☒ No

8.3) Is this waste subject to Subpart CC regulation (i.e. contain ≥500ppm (VOCs) Volatile Organic Compounds)? ☐ Yes ☒ No

➔ If 8.1, 8.2 or 8.3 is "yes"--please indicate the constituents and their concentrations in the table provided in Section 5

Section 9 - Reclamation/Recycling/Fuel Blending

➔ Complete for Michigan Recovery Systems ONLY

9.1) Heat value (BTU/lb) _____ Chlorine(%) _____ Water (%) _____ Solids (%) _____

9.2) Is this material a recoverable petroleum product? ☐ Yes ☐ No 9.3) Is this material for wastewater treatment? ☐ Yes ☐ No

➔ If 9.1 or 9.2 is "yes" -please attach the Wastewater Addendum Form found in the EQ Resource Guide.

Section 10 - Certification

I certify that all information (including attachments) is complete and factual and is an accurate representation of the known and suspected hazards, pertaining to the waste described herein. I authorize EQ's Resource Team to add supplemental information to the waste approval file, provided I am contacted and give verbal permission. I authorize EQ's Resource Team to obtain a sample from any waste shipment for purposes of verification and confirmation. I agree that, if EQ approves the waste described herein, all such wastes that are transported, delivered, or tendered to EQ by Generator or on Generator's behalf shall be subject to, and Generator shall be bound by, the attached Standard Terms and Conditions.

Generator Signature X _____ Printed Name _____

Company X _____ Title _____ Date _____

The generator's signature must appear on the EQ Waste Characterization Report. If the generator has authorized a third-party to certify this document, a written notice (on generator letterhead) must accompany this submittal.
Although the EQ Resource Team is authorized to make certain modifications to the information provided on this form, the addition or removal of waste codes and waste constituents must be documented by the generator.

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ONYX

FAX TRANSMITTAL

ONYX INDUSTRIAL SERVICES
6151 EXECUTIVE BLVD.
HUBER HEIGHTS, OH 45424

PHONE: 937-237-1097
FAX: 937-237-1850
FAX: 937-237-3669 (ACCOUNTING & SALES)

TO:	Gary Stanczuk & Brit Crider
COMPANY:	Daimler Chrysler
FAX NUMBER:	248-576-7369
DATE:	10/3/01
SUBJECT:	Profile & LDR
FROM:	Mike
NUMBER OF PAGES (INCLUDING COVER):	5

MESSAGE: Please Sign & fax to 937-237-3669

Thanks
Mike

BID RECORD
INTERIOR SVE WELL INSTALLATION
DAYTON THERMAL PRODUCTS PLANT, DAYTON, OH
June 1, 2000

COMPANY NAME	MBE?	PRE-BID ATTENDANCE?	BID RECEIPT DATE	TOTAL BID $	BID AWARD?	CONTACT NAME	ADDRESS	PHONE #	FAX#	EMAIL ADDRESS
Layne Christensen	No					Tom Roberts	W229 N5005 Duplainville Road, Pewaukee, WI 53072	(800) 407-4449	(262) 246-4784	tjroberts@ laynechristensen com
Environmental Drilling and Contracting, Inc (EDAC)	No					Kirk Johnson	4692 136th Avenue, Holland, MI 49424	(616) 738-9300	(616) 738-8135	
Alliance Environmental	No					Chip Fenske	117 Industry Road, Marietta, OH 45750	(800) 996-4949	(740) 373-5003	

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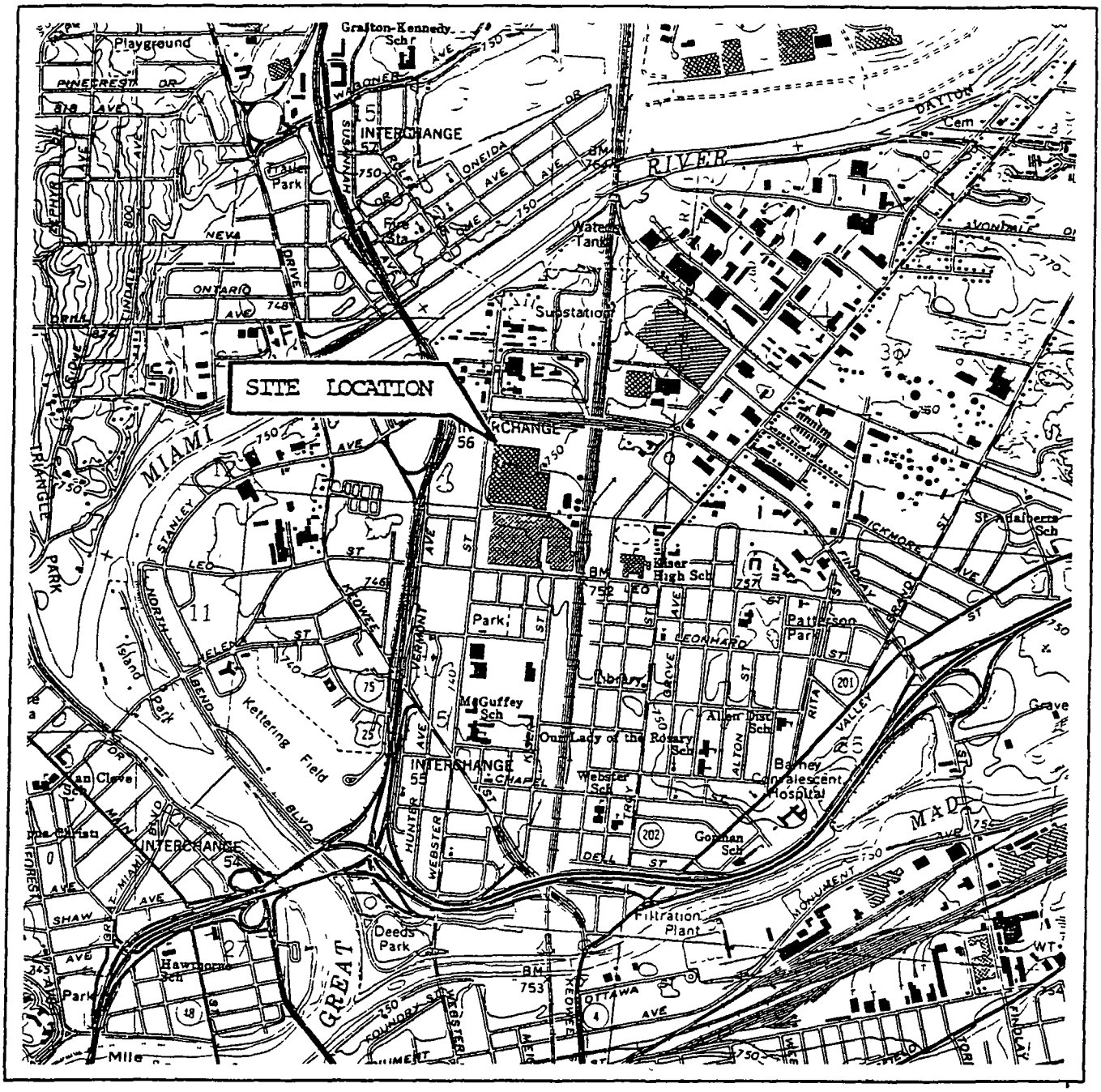

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SCALE IN FEET

QUADRANGLE LOCATION

U S G S TOPOGRAPHIC

DAYTON NORTH, OHIO

7 5 MINUTE QUADRANGLE

DAYTON THERMAL PRODUCTS PLANT

DAYTON, OHIO

AREA LOCATION MAP

DATE	REVISED	PREPARED BY
		LEGGETTE, BRASHEARS & GRAHAM, INC.
		Professional Ground-Water and Environmental Services
		Northpark Corporate Center
		1210 W County Road E, Suite 700
		St Paul, MN 55112
		(612) 490-1405
FILE		DATE MARCH 2000 FIGURE 1

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DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO
CONTRACT FOR SVE AND MONITOR WELL INSTALLATION

AGREEMENT

This Agreement is made this ___th day of June, 2000 by LEGGETTE, BRASHEARS & GRAHAM, INC, 1210 West County Road E, Suite 700, St Paul, Minnesota 55112 (hereinafter referred to as "LBG") and _____ (hereinafter referred to as Contractor) with offices at _____

In reliance on the representations and undertakings herein, LBG engages Contractor as an independent contractor, and not as an employee, partner or joint venturer

DEFINITIONS

The following words, when capitalized, shall have the following meaning

"**Client**" shall mean LBG's Client, i e DaimlerChrysler Corporation (hereinafter called Client or Owner), as identified in Exhibit "A"

"**Deliverables**" shall mean all final reports and designs rendered by LBG and all systems or equipment installed by LBG or under its supervision

"**Insurance**" shall mean the Insurance coverage requirements set forth in Exhibit "C"

"**LBG**" shall mean Leggette, Brashears & Graham, Inc, its principals, officers, directors, employees and any subsidiary or affiliated organization

"**Project**" shall mean the Client project, contract and related documents identified in Exhibits "A", "B" and "C"

"**Contractor's Scope of Services" or "Services**" shall mean those Services to be performed by Contractor under this Agreement, as identified in Exhibit "B", and any modification thereto made under paragraphs 1 2 or 1 3

"**Trade Secret, Proprietary or Privileged Information**" shall mean any information, design, process, procedure, formula, improvement or business information that is commercially valuable to LBG or Client, or that is identified or treated as proprietary, privileged or confidential by LBG or Client, including the terms of this Agreement, except technology developed by and proprietary to Contractor

"**Work Product**" shall mean Deliverables, all scientific and technical data, reports, notes, field data, diagrams, laboratory test results and all other records or materials generated or used in connection with the Services performed under this Agreement, whether generated or provided by LBG, Client or Contractor, except technology developed by and proprietary to Contractor

SERVICES

1.1 Commencement Contractor shall perform Services and will submit progress billing and reports as required Contractor agrees to perform Services in a professional and workmanlike manner under LBG's supervision, commencing as early as June 12, 2000 and proceeding continuously as required by the Project until Services are completed

1 2 LBG Revisions LBG may issue written work order changes which call for services in addition to those contemplated in Exhibit "B", so long as the additional work is the same kind of service described in the Scope of Services Unless otherwise agreed in writing, compensation for such work order changes will be made at the prices and rates set forth in Exhibit "B", and pursuant to the terms of this agreement

1.3 Contractor Revisions If Contractor anticipates that Services cannot be performed in the manner or time frame required by this agreement, Contractor shall immediately inform LBG by written notice and shall submit proposed revisions to the Services that reflect Contractor's best estimates of what can realistically be achieved Contractor will continue to work under the original timetable and milestones until otherwise directed by LBG Contractor shall prepare and submit reports of its performance and its progress as LBG may reasonably request from time to time

1 4 Worker Health and Safety Contractor shall be solely responsible for the health and safety of its employees, agents and subcontractors Contractor shall be responsible for initiating, maintaining and supervising health and safety precautions prepared specifically for the Project, if any, and for complying with Federal, State or local health and safety

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requirements Contractor shall provide any training and equipment required by the foregoing and as may otherwise be necessary to prevent injury to its employees, agents, subcontractors, the general public or others in connection with Contractor's work to be performed hereunder Contractor shall not perform services in the absence of LBG's designated project supervisor without written notice to, and approval from, LBG

COMPENSATION

2 0 General LBG shall pay Contractor the unit rates, fees, and expenses shown in Exhibit "B" for Services performed Unit rates, fees, and expenses not shown in Exhibit "B" will not be paid unless agreed to by LBG in writing before such fees and expenses are incurred

2.1 Statements Contractor shall submit statements for Services performed to LBG monthly or at such other interval as LBG may reasonably require Along with such detailed time and expense logs and such other backup and supporting documentation as LBG may reasonably require LBG shall have 15 days after receiving Contractor's statement to notify Contractor of an exception or question If no such notice is made, the statement will be deemed accepted subject to Client's approval LBG shall bill Client for the Services performed by Contractor in accordance with the requirements of this Project

2 2 Payment LBG shall pay amounts due to Contractor within 30 days after LBG receives payment from Client for the Services performed by Contractor, or within 60 days of the date of LBG's acceptance of Contractor's invoice, whichever occurs first If Client remits payments which, in the aggregate, are less than the full amount due to LBG, each such payment shall be distributed pro rata among LBG, Contractor, and any other contractors whose Services were billed in support of such payment, based upon the amount that each of them is owed as of the date of such payment

TERM

3.0 General This Agreement shall, unless modified in writing signed by the parties or unless terminated as provided herein, continue until the earlier of (1) the satisfactory completion of the Services, or, (2) termination of the agreement between LBG and Client Notwithstanding the foregoing, the provisions of paragraphs 2 0, 2 1, 2 2, 4 0, 4 1, 4 2 and 5 0 shall survive to the extent necessary to carry out their intent

3.1 Termination for Breach In the event of a breach of this Agreement, the non-breaching party may terminate upon 10 days' prior written notice In the event of a cure by the breaching party during that time, the non-breaching party shall not be required to rescind the termination Recision of a termination in any instance shall not constitute a waiver of the right to terminate for any future breach

3.2 Return of Materials Upon termination of this Agreement Contractor shall promptly deliver to LBG all Work Product of whatever nature or kind and all materials incorporating Work Product, Trade Secret, Proprietary or Privileged Information, and all work in progress Contractor may retain one archive copy of such materials for its records

RIGHTS IN DATA AND INFORMATION

4.0 Title Contractor agrees that all Work Product shall remain the property of LBG and Client, and shall be kept separate and identifiable from other data, information, materials and Work Product

4.1 Confidentiality Contractor shall hold confidential all Work Product, Trade Secret, Proprietary and Privileged information Contractor shall make sure its employees, agents and subcontractors at all times observe the terms of this Agreement relative to rights in data and information LBG shall hold confidential all technology developed by and proprietary to Contractor, except as may be required to obtain permits from authorities or as may be required to prepare Deliverables The obligation of confidentiality shall survive termination of this Agreement Contractor's and LBG's obligations not to disclose or use Confidential information shall not apply to information which is

1 Publicly available or becomes publicly available other than through breach of the confidentiality clause,
2 Already known to Contractor or LBG prior to Contractor's or LBG's use or disclosure,
3 Subsequently disclosed to Contractor or LBG by third parties not under obligation to retain the information in confidence, or
4 Contractor or LBG are required to disclose pursuant to law

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4 2 **Records** Contractor shall maintain records of the Services performed, including field logs, time sheets and payroll records, for one year after Contractor's Work on the Project, as described in Exhibit B, is completed Contractor shall make such records available for examination upon LBG's request

INDEMNIFICATION

5.0 **Contractor's Obligation** Contractor shall assume all risk of damage to property or of bodily injury, sickness, or disease of persons (including death resulting at any time therefrom) used or employed on or in connection with the Contractor's work, and of all damage to property or of bodily injury, sickness, or disease of persons (including death resulting at any time therefrom) wherever located, resulting from or arising out of any action, omission or operation under the contract or in connection with the Work Contractor shall protect, defend, hold harmless, and indemnify DaimlerChrysler Corporation and LBG from and against any and all loss, cost, damage, expense, claims, or legal actions, whether groundless or not, arising out of the bodily injury, sickness, or disease (including death resulting at any time therefrom) which may be sustained or claimed by any person or persons, and the damage or destruction of any property, including the loss of use thereof, arising out of or related to the performance of any work in connection with this contract, including any extra work assigned to contractor in connection therewith, based upon any act or omission, negligent or otherwise, of A) Contractor or any of its employees, agents, or servants, B) any subcontractor of Contractor or any employees, agents, or servants of such a subcontractor, and/or C) any other person or persons, including DaimlerChrysler, LBG, or any employees, agents, or servants of DaimlerChrysler and LBG This indemnification shall include, but shall not be limited to, the obligation by contractor to protect, defend, hold harmless, and indemnify DaimlerChrysler and LBG from and against any and all claims for bodily injury, sickness, or disease (including death resulting at any time therefrom) and damage to property, based upon or alleged to have arisen out of (1) the sole active or passive negligence of DaimlerChrysler and/or LBG (except as prohibited by Michigan compiled laws annotated sec 691 991), (2) the joint and/or concurrent active or passive negligence of DaimlerChrysler, LBG, and/or Contractor, (3) the joint and/or concurrent active or passive negligence of DaimlerChrysler, LBG, and/or any subcontractor of Contractor, (4) the joint and/or concurrent active or passive negligence of DaimlerChrysler, LBG and/or any other person or persons, (5) the joint and/or concurrent active or passive negligence of contractor and any other person or persons, (6) the joint and/or concurrent active or passive negligence of any subcontractor of Contractor and any other person or persons, (7) DaimlerChrysler or LBG's failure to provide a safe place to work, and/or (8) DaimlerChrysler or LBG's failure to take proper or reasonable safety precautions or exercise proper control with respect to the conduct of an inherently dangerous activity on or off its premises, and Contractor shall, at its own cost and expense, defend any such claims and any suit, action, or proceeding which may be commenced thereunder, and Contractor shall pay any and all judgments which may be recovered in any such suit, action, or proceeding, and any and all expense, including but not limited to , costs, attorneys' fees and settlement expenses which may be incurred therein Contractor's obligation to defend, indemnify and hold harmless DaimlerChrysler and LBG shall survive termination of this Agreement

INSURANCE

6 0 **Requirement** Contractor will procure and maintain the Insurance as set forth in Exhibit "C" Contractor will not cancel any portion of such Insurance without 30 days prior written notice to LBG

6 1 **Proof** Before beginning any work under this Agreement, Contractor will deliver to LBG proof that Insurance is in force, and will ensure that current proof is on file with LBG until such work is completed Such proof shall be in the form of a "Certificate of Insurance" providing the name and address of the insurance company, the name and address of the broker or agent, the expiration date, an acknowledgment of the required notice to LBG and Client in the event of cancellation, and ***naming both Leggette, Brashears & Graham, Inc. and DaimlerChrysler Corporation as additional insureds.*** On the insurance certificate under the heading "Description of Operations/Locations/ Vehicles/ Special Items", shall read the following

"Re· Work performed at DaimlerChrysler's Dayton Thermal Products Plant. The certificate holder, its affiliated companies and

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DaimlerChrysler are additional insureds under General Liability, Automobile and Pollution Liability. A Waiver of Subrogation applies under General Liability."

6 2 **Subcontractors** Contractor shall require all subcontractors to procure and maintain at least the same Insurance as shown in Exhibit "C" and will provide current certificates that name Contractor, LBG, and Client as additional insureds for the Subcontractor's work

MISCELLANEOUS

7 0 **Project** Contractor represents that it has reviewed and is familiar with the Project and Services, and that Contractor accepts the work schedule and Scope of Services shown in Exhibit "B"

7 1 **Assignment or Subcontract** Contractor shall not assign, transfer, or subcontract its obligations under this Agreement without the prior written consent of LBG, which shall not be unreasonably withheld

7.2 **Employee Compensation** Contractor is solely responsible for compensation of its personnel and subcontractors, maintaining required workers' compensation and employer's liability insurance, and payment of all federal and state income tax withholding, social security taxes, and unemployment insurance applicable to such personnel Contractor shall bear sole responsibility for any health or disability insurance, retirement benefits, or other welfare or pension benefits (if any) to which such personnel may be entitled

7.3 **Governing Law** This Agreement shall be construed in accordance with the laws of the State of Ohio

7.4 **Notices** Unless otherwise provided herein, all notices shall be in writing addressed to the respective parties as shown above, unless another address shall have been previously designated, and shall be delivered to the other party by hand or by U S Mail, postage prepaid

7 5 **Arbitration** All disputes regarding this agreement shall be submitted to binding arbitration pursuant to the rules of the American Arbitration Association, to be held in Minneapolis, Minnesota Final judgment upon the award may be entered in any court of competent jurisdiction

7 6 **Partial Invalidity** If any provision of this agreement is determined to be unenforceable, the remaining provisions shall not be impaired

7.7 **Non-Waiver** Failure to exercise any right hereunder shall not be deemed a waiver of such right The recision of a notice of breach or a notice of termination shall not be deemed a waiver of any right accruing by reason of any future breach of performance

7 8 **Headings** The use of headings in the document is for convenience only Headings shall not be considered as any term of the parties' agreement embodied by this document

7.9 **Merger** This Agreement, including the Exhibits, Schedules and Proposal annexed hereto, is the entire agreement of the parties and supersedes all prior representatives, proposals, discussions, and communications, whether oral or in writing This Agreement may only be modified in writing and signed by all parties

_____

LEGGETTE, BRASHEARS & GRAHAM, INC

By

_____

Its

_____

Date _____, 2000

_____

CONTRACTOR

By

_____

Its

_____

Date _____, 2000

S \TECH\3CHRY\CHACU2\PROJMGMT\CONTRACT\WELINST A WPD

DRAFT

EXHIBIT "A"

DRAFT

EXHIBIT "A"

Project

LBG's Client is DaimlerChrysler Corporation, 800 Chrysler Drive, Auburn Hills, Michigan 48326 The work to be performed under this Agreement is detailed in Exhibit "B"

DRAFT

EXHIBIT "B"

Specifications &
Contractor Bid
Inserted Here

DRAFT

EXHIBIT "C"

EXHIBIT "C" DRAFT

Insurance Requirements

Contractor and all subcontractors shall, during the *continuance* of the work thereunder, including extra work in connection therewith, maintain the following insurance coverages with carrier's rated A- or better by Best's Insurance Rating Services

A **Statutory Worker's Compensation** coverage and a minimum limit of $500,000 00 Employer's Liability coverage for all states identified in the Project, including Long Shoreman's and Harbor Workers Act coverage, if applicable, and any insurance required by NY Employee Benefit Acts or other statutes applicable where the work is to be performed All such insurance shall be in amounts sufficient, in the opinion of LBG and Client, to protect Contractor and subcontractors from any liability for bodily injury, sickness, or disease (including death resulting at any time therefrom) or any of their employees, including any liability or damage which may arise by virtue of any statute or law in force at the time Contractor's Work was performed

B **Commercial General Liability** and property damage insurance of at least $5,000,000 00 combined single limit, bodily injury, and property damage as protection against all risks of damage to or destruction of property or bodily injury, sickness or disease (including death resulting at any time therefrom) of persons, wherever located, resulting from any action, omission, or operation under the contract or in connection with the work, endorsed to show LBG and Client as additional insureds, and including broad form contractual liability coverage, completed operations liability coverage, products liability coverage, coverage for explosion or blasting hazard, coverage for collapse hazard or structural injury, and coverage for underground hazard (deletion of the "X", "C" and "U" exclusions) The policy shall provide for a minimum 30 days notice of cancellation (10 days for non-payment, termination or non-renewal to LBG and Client)

C **Comprehensive Automotive Liability** insurance, including property damage, covering all owned, non-owned or rented equipment used in connection with the work, in the minimum amounts of $1,000,000 per person, $1,000,000 per occurrence for bodily injury (including death resulting at any time therefrom), including no-fault (PIP, BRB) and uninsured motorists coverage and $1,000,000 per occurrence for property damage

D **Contractor's Pollution Liability** coverage of at least $5,000,000 00 per occurrence and $5,000,000 00 aggregate

All insurance policies required hereunder shall be issued by companies authorized to do business under the laws of the state or province in which the work will be performed, such policies (excluding Workers' Compensation and Employer's Liability) shall **name LBG and Client as additional insureds** thereunder and shall contain endorsements stating they are primary and not excess over or contributory with any other valid, applicable, and collectible insurance in force for LBG and Client Such policies shall further contain appropriate endorsements extending the coverage thereunder to include the liability assumed by Contractor under this contract LBG and Client may require Contractor to furnish evidence of the foregoing insurance at LBG's and Client's option, but Contractor's failure to comply with said insurance requirements shall not relieve Contractor of its liabilities and obligations under this clause and LBG and Client action or inaction shall not act as a waiver of any of LBG and Client's rights as described in this clause

BID FORM FOR ONSITE SVE WELL INSTALLATION

TO Mr Kenneth D Vogel
Leggette, Brashears & Graham, Inc
1210 West County Road E, Ste 700
St Paul, Minnesota 55112

FOR Drilling and SVE
Well Installation Services
DaimlerChrysler Corporation
Dayton Thermal Products
Dayton, Ohio

The undersigned has carefully examined the Request for Bid for Drilling Services and other conditions relative to the work, and has made all evaluations and investigations necessary to gain a full understanding of pertinent site conditions and all regulatory, material, equipment, and labor requirements necessary to successfully and safely complete the work, as well as any reasonable difficulties which may be encountered in performing the work

BID SCHEDULE

The undersigned hereby proposes and agrees to furnish all labor, materials, equipment, tools, taxes, services and all other items necessary or appropriate for the proper and complete execution of the work for the following estimated amount

Base Bid Estimate
All work _____ Dollars ($_____)

The undersigned agrees, if this proposal is accepted, to enter into an agreement with Leggette, Brashears & Graham, Inc , per the Terms and Conditions of LBG's Standard Form Contract, for the above unit price-based, estimated Contract Sum

Unit Prices
This bid estimate is based upon, and all work shall be performed in accordance with, the Unit Prices listed below Should additions or subtractions to the scope of work be required, adjustment will be made to the Contract Sum at the following Unit Prices, which shall include all associated expenses, including taxes, overhead and profit

UNIT PRICE TABLE

I D	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
A	Mobilize and demobilize 1 drilling rig, equipment and work crew to/from Dayton, Ohio	L S	1		
B	Drill 39 boreholes, 6-inch O D to 25 feet	L F	975		
C	Drill 3 boreholes, 6-inch O D to 35 feet	L F	105		
D	Soil Sample, 2-inch diameter sampling device at 5-foot intervals	Each	216		
E	SVE well nest installation/construction	Each	39		
F	SVE/Monitor well nest installation/construction	Each	3		
G	Flush-grade SVE/Monitor well finishing	Each	42		
H	2-inch, flip top, vented, compression well caps	Each	84		

I D	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
I	Containerization of drill cuttings	L S	1		
J	Decontamination equipment and supplies	L S	1		
K	Decontamination	Per Hour			
L	Standby, non-equipment failure	Per Hour	0		
M	Per Diem, entire crew	Per Day			
N	Level C Personal Protection	Per Man	0		
	TOTAL ESTIMATED BID	--------	------	--------	

L S = Lump Sum L F = Linear Foot

NOTE: Bidder shall provide estimated quantities for all equipment/materials/services on Unit Price Table for which no estimated quantities are indicated

Contractor proposes to use _____ (number) drilling rig(s)
Contractor estimates _____days to complete this work

PROJECT INITIATION

If awarded this contract, the undersigned proposes and agrees to start work as early as _____, 2000

ADDENDA RECEIVED (IF REQUIRED)

The undersigned hereby acknowledges receipt of the following Addenda which shall become part of the Contract Documents

Addendum Number 1 Dated_____ Addendum Number 2 Dated_____

Any Bid Addenda received during the bid process should be acknowledged by the Contractor by transferring the date of the Addenda to the appropriate line above

BID ACCEPTANCE

In submitting this proposal, it is understood that Leggette, Brashears & Graham, Inc and DaimlerChrysler Corporation reserve the right to reject any or all bids, waive any formalities or technicalities in any bid and to make an award in the best interest of Leggette, Brashears & Graham, Inc and DaimlerChrysler Corporation It is further understood and agreed that this proposal may not be withdrawn for a period of sixty (60) calender days after the date set for bid receipt

Our company **IS**_____, **IS NOT**_____ a Certified Minority Business Enterprise (MBE) firm If so, please attach certification documentation

Respectfully Submitted

_____
Contractor

_____
Signature

_____
Name and Title

_____
Date

(_____)_____
Telephone Number

(_____)_____
Fax Number

S \TECH\3CHRY\DAYTON\PROJMGMT\BIDS\ONSITE FRM

REQUEST FOR BID FOR DRILLING SERVICES FOR INSTALLATION OF SVE WELLS AT THE DAYTON THERMAL PRODUCTS

PART 1 GENERAL

INVITATION TO BID

Your firm is hereby requested to submit a proposal for performing the complete work as described in the Contract Documents consisting of these specifications, the bid form, and included drawings and sketches

Information regarding existing conditions at the job site are believed to be reasonably correct, but LBG cannot guarantee its completeness or accuracy The Contractor will be held to have examined the Contract Documents, the premises and the job site and to have satisfied himself as to the scope of work and field conditions before the delivery of his proposal

1.0) Bids and Prices

Contractor's base bid must be in accordance with the Specifications Contractor may, at its option, offer alternate bids in addition to the base bid Each alternate bid must be clearly identified as an alternate and must identify all exceptions taken to the Specifications, listing each item separately and the reason for the exception Contractor must submit to LBG any alternate price, unit price and separate price that LBG may require All prices quoted will be firm and with no provision for escalation, unless otherwise specified in writing when the Contract is awarded Prices must include all applicable taxes

When the Specifications provide for a specific item or its equal, Contractor must calculate the price of the make or type specified If Contractor prefers to use a substitute material or method that Contractor believes to be of equal or greater value than the specified item, Contractor must state in its bid proposal the price difference to be added to or deducted from the bid price if the specified item were replaced by the substitute If substitute materials include regulated substances, Contractor must submit a completed "Supplier Regulated Substances Certification Report" to DaimlerChrysler

If a choice of more than one make or type of article or material is specified and Contractor requires an adjustment in the bid price because of the alternatives specified, Contractor must state in its bid proposal the make or type upon which the bid proposal is based and the amount to be added to or deducted from the bid price if other makes or types named in the Specifications are selected If that type of statement is not in Contractor's proposal, LBG may select any specified make or type without incurring a change in the price In any event, whenever LBG has a choice of alternate materials, the final selection is LBG's

1 1 SCOPE OF WORK

A Leggette, Brashears & Graham, Inc (LBG), is soliciting cost proposals for drilling, soil sampling, well installation, and well development at DaimlerChrysler Corporation's Dayton Thermal Products in Dayton, Ohio (figure 1) **Thirty-nine (39) borings with two (2) nested SVE wells per boring, and three (3) borings with a SVE well and monitor well per boring will be installed in the interior of an active manufacturing facility (figure 2). All drilling activities shall be completed using a skid rig or other equipment of similar dimensions capable of completing the work.**

B All boring locations must be inspected by the Contractor to verify that the skid rig will clear any access limitations Once the locations have been cleared, a concrete corer must be used to bore through approximately 1-foot of concrete flooring prior to setting up the skid rig

C Thirty-nine of the borings shall be drilled to approximately 25 feet and 3 of the borings shall be installed to approximately 35 feet below-grade level (bgl) using the hollow-stem auger drilling method or other suitable method The boreholes shall have a minimum 6-inch diameter Soils shall be sampled with a 2-inch device appropriate for the drilling method used, at 5-foot depth intervals, or as directed by the on-site LBG representative Contractor shall containerize all drill cuttings All wells shall meet the specifications recorded in this Request for Bid, and be in accordance with the Ohio EPA guidance document titled "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring"

D The Contractor shall provide a portable steam cleaner or pressure washer and other necessary equipment and supplies necessary to decontaminate all drill augers All decontamination fluids shall be containerized

E **Contractor shall provide trade-specific union labor, signatory to the terms of the National Maintenance Agreement, the local collective bargaining agreement, and/or as required by the Owner.** There is no specific bid item number provided for this provision Include costs associated with this provision in the bid items given

F The Contractor shall provide all services, equipment, material, labor, tools, taxes and any other resources, in good working order, required for the completion of the Work specified in this Request for Bid

1.2 DEFINED TERMS

A Certain terms used in this Request for Bid have the meanings indicated below, which are applicable to both the singular and plural thereof

1 Owner - DaimlerChrysler Corporation

2 Bidder - one who submits a Bid directly to LBG as distinct from a sub-bidder, who submits a bid to a Bidder Bidder is synonymous with Contractor

3 Successful Bidder - the Bidder to whom LBG and Owner make an award

4 LBG - Leggette, Brashears & Graham, Inc, synonymous with Owner's Representative and Consultant

1.3 INSTRUCTIONS TO BIDDERS

A The Contractor shall itemize costs and completely fill out the attached Bid Form, providing unit costs for all activities and materials, as the scope of work for this job is flexible The Contractor shall be compensated on a unit

cost basis for the actual quantities of Work/materials utilized The cost proposal shall include any project management costs required to perform the Work as well as the cost per hour for down time that is not caused by drilling problems

B Bidders that would like to be considered for the Work outlined in this Request of Bid, should fax completed Bid Forms to Kenneth D Vogel no later than **noon Central Daylight Savings Time, _____, 2000.** Bids received after this time may not be accepted Bids will be opened privately

C The proposed rig type and rig dimensions along with an estimate of the time required to complete the Work outlined in this Request for Bid should be submitted with the completed Bid Form

D LBG reserves the right to be sole judge of all bids and can reject any and all bids for any reason If you have any questions or comments in regard to the proposed work, Please contact Kenneth D Vogel at Leggette, Brashears & Graham, Inc , 1210 West County Road E, Suite 700, St Paul, MN 55112, Phone (651) 490-1405, ext 202 Fax (651) 490-1006, Email kvogel@lbgmn com

E The selected Contractor shall contract directly with LBG, per the Terms and Conditions of LBG's Standard Form Contract (example attached)

F All Bids should include a schedule and a discussion of the Contractor's availability and ability to meet the time deadline set forth in the Scheduling section of this Request for Bid for initiation of Work

G The quantities provided on the Bid Form are estimates based upon available site data Actual payment will be based on Work completed

H Bidders are encouraged to include Minority Business Enterprise (MBE) firms for subcontracted services and/or supplies, when possible Such MBE firms must be certified by an Owner-approved state or national MBE certification entity Bidder shall identify any such proposed MBE sub-contractors in their bid.

1.4 SITE LOCATION AND CONDITIONS

A Dayton Thermal Products is located at 1600 Webster Street, Dayton, Montgomery County, Ohio

B The drilling locations include forty-two (42) locations within the plant (figure 2, and plates 1 and 2) All locations will be in high traffic areas The Contractor shall provide adequate safety cones, barriers, signs, and/or equipment for drilling in traffic areas of the plant

C Coring through concrete surfaces will be required

D The soil at the drilling locations is expected to consist of glacial outwash deposits consisting of sand, gravel, and cobbles with minor quantities of clay Previous drilling at the site with hollow stem augers has encountered occasional advancement difficulties due to cobbles and/or other subsurface factors The depth to ground water is expected to be approximately 27 feet bgl

1.5 CONTRACTOR USE OF SITE AND PREMISES

A Stage equipment and materials in location(s) designated by the Owner's Representative in order to minimize interference with Owner's operations

B Time restrictions for conducting work general work hours are limited to 6 30 a m to 6 30 p m daily Other plant restrictions may also apply Evening and weekend access may be permitted

C Every precaution shall be taken to minimize disruption to current plant operations Fugitive dust, noise and/or vapor emissions shall be minimized and contained within the work area

D The Contractor shall confine their equipment, storage of materials, and the operations of their workmen to limits indicated by law, ordinances, permits and directions of the Owner The Contractor shall enforce the Owner's instructions regarding signs, advertisements, fires and smoking Smoking on the premises will be permitted only in areas where the Owner's regulations do not forbid the same

The Contractor and all Sub-Contractors and their employees shall be subject to and at all times conform to the Owner's rules and requirements for the protection of the plant, materials, equipment and Owner's employees

E Contractor will not unreasonably encumber the job site with materials or equipment and will confine its equipment, materials storage and the operation of its workmen within such areas as DaimlerChrysler may indicate from time to time Contractor will, at no cost to DaimlerChrysler, move, as directed by DaimlerChrysler, material or equipment temporarily placed on the job site when necessary for performance for the Project

F Contractor must not load or permit any part of a structure to be loaded with a weight that will endanger its safety Contractor will keep the job site and surrounding areas free from accumulation of waste materials or rubbish caused by operations under the Contract Contractor will upon completion of the Project leave all buildings broom clean and remove from and around the job site waste materials, rubbish, tools, construction equipment, machinery and surplus materials If Contractor fails to clean up, DaimlerChrysler may do so at Contractor's expense

G Contractor will afford DaimlerChrysler and DaimlerChrysler's other contractors, if any, reasonable opportunity for introducing and storing their materials and equipment and for performing their activities on the job site Contractor will carry on its work so as not to unduly hinder, delay or interfere with their progress Contractor will perform any cutting and altering of, and fitting to, its work to make possible other work, including that of trades not covered by the Contract, as indicated on the Drawings even though not specifically stated in the Contract Documents

H Contractor and its subcontractors will not disconnect, remove, connect, change or otherwise alter in any way any pipelines, sewers, conduits, cables or other utilities located on DaimlerChrysler's premises without the specific, prior written approval of DaimlerChrysler

I Contractor will not store or use dynamite or other explosives on DaimlerChrysler's property without the express prior written approval by DaimlerChrysler

J If required by DaimlerChrysler, Contractor will furnish its employees and those of its subcontractors with a badge or a card, acceptable to DaimlerChrysler, which will identify them as employees of Contractor or its subcontractors, respectively, and admit them to the job site

1.6 OWNER OCCUPANCY

A The Owner will occupy the premises during the contract period

B Contractor shall cooperate with Owner to minimize

conflict and to facilitate Owner's operations

C Contractor shall schedule the Work to accommodate this requirement

1.7 WORK SEQUENCE

A Conduct Work to accommodate Owner's occupancy requirement during the Work Coordinate schedule with Owner's Representative Conduct Work so inspections and testing can be conducted at a time acceptable to and in the presence of the Owner's Representative

1.8 REFERENCES

A Ohio EPA guidance document "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring" and other relevant regulatory guidance

1.9 PROJECT RECORD DOCUMENTS

A Submit, to Owner's Representative, signed copies of well records or other documents required by state, local or federal agencies

B ***Submit, to Owner's Representative, prior to initiating work, Certificates of Insurance documenting required insurance coverages and naming Leggette, Brashears & Graham, Inc. and DaimlerChrysler Corporation as additional insureds.***

C Submit, to Owner's representative, prior to initiating work, a site-specific Health and Safety plan for the work

1.10 REGULATORY REQUIREMENTS

A Contractor shall conform to applicable code of state and local regulatory authorities

B Contractor shall have all state, local or federal licenses necessary to legally conduct the Work described in this Request for Bid

C The Contractor shall obtain any and all permits required for the installation of the borings and wells

D Conduct Work in accordance with OSHA regulations, State of Ohio, and Owner health and safety protocols applicable to the Work

1 11 UTILITIES

A Owner will verify utility clearance for drilling locations on the plant facility

1 12 HEALTH AND SAFETY

A *The project involves soil boring and well installation activities associated with the investigation of soil and ground water impacted by chlorinated and petroleum hydrocarbons All or some of the Work may involve potential or actual exposure to chlorinated and petroleum hydrocarbon vapors, liquids, and/or impacted materials*

B Contractor shall have a health and safety plan in place prior to initiation of Work Level D protection is anticipated for this Work

C All site workers shall provide documentation to the on-site drilling supervisor that the field personnel have been trained in the proper use of protective clothing and equipment in accordance with 29 CFR Part 1910

D The presence of LBG and/or Owner on the site does not relieve the Contractor's responsibility for complying with all federal, state and local health and safety guidelines

1.13 SCHEDULING

A The anticipated start date for the Work outlined in this specification Section is the week of _____, 2000

B The Contractor shall notify LBG of any anticipated schedule conflicts or delays a minimum of 5 working days in advance

C Once Work is initiated, Work shall be conducted on consecutive working days until the scope is completed

1.14 LBG RESPONSIBILITIES

A LBG will obtain permission from Owner to gain access to the site LBG will provide a full-time drilling supervisor to identify drilling locations and observe and log soil samples

B The presence of LBG on the site does not relieve the Contractor's responsibility for proper workmanship and well construction/installation as required by state codes

C LBG will coordinate disposal of soil cuttings

PART 2 PRODUCTS

2.1 WELL PRODUCTS

All materials shall be new product

A Well Casing
  1 2-inch diameter Schedule-40 PVC pipe with flush joint thread and Buna O-rings for each connection

B Bentonite Chips/Pellets/Grout
  1 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

C Bentonite and/or Cement Seal
  1 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

D Filter Pack Sand
  1 Red Flint No 30 sand or equivalent sand that is compatible with 10-slot screen
  2 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

E SVE Well Nest Screen
  1 2-inch diameter, Schedule 40 PVC screen, 10-slot (0 010 inch) openings, and flush joint thread with Buna O-Rings for each connection
  2 Screens length shall be ten (10) feet
  3 Screen shall be fitted with a bottom plug
  4 Screens will be set from 3 to 13 and 15 to 25 feet bgl

F SVE/Monitor Well Nest Screen
  1 2-inch diameter, Schedule 40 PVC screen, 10-slot (0 010 inch) openings, and flush joint thread with Buna O-Rings for each connection
  2 Screens length shall be ten (10) and twenty (20) feet
  3 Screen shall be fitted with a bottom plug
  4 Screens will be set from 3 to 13 and 15 to 35 feet bgl

G Flush-Mounted Well Installation
  1 All borings shall be constructed as flush-grade wells
  2 The wells will be protected in a watertight vault installed in a concrete pad with minimum 28-day compressive strength of 4,000 psi and a unit weight between 140 and 150 lb/ft^3
  3 The indoor wells will be completed flat with the floor elevation and the watertight vaults will cemented in place

4 The watertight vaults shall be Morrison Fig 9" 418XAW, New Welded Manhole, available from Morrison Brothers Company, P O Box 238, Dubuque, IA 52001, (800) 553-4840, FAX (319) 583-5028 The covers shall be clearly marked with the standard monitoring well warning symbol and labeled "Monitoring Well "

5 Flush-mount wells shall be fitted with watertight, flip-top, compression type, locking well caps provided by the Contractor

6 Contractor shall provide necessary materials to insure proper curing of concrete by providing protection against inclement and/or freezing weather conditions Should concrete pad(s) crack, split, or otherwise be insufficient, Contractor shall immediately replace the concrete pad at Contractor's sole expense

2.2 SAMPLING METHODS AND MATERIALS

A 2-inch diameter split-spoon sampler, or other appropriate device for drilling method used

B Decontamination equipment and materials

2.3 PRODUCTS FURNISHED BY OWNER

A Key-alike locks for SVE/Monitor wells

B LBG will help Contractor secure source of power and water from the site

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A Contractor shall verify that site conditions are safe and suitable for all personnel and equipment for conducting the Work

B Contractor shall protect structures near the wells from damage

3.2 LOCATING AND PROTECTING EXISTING UTILITIES

A Owner will verify utility clearance for drilling locations located on the plant facility

3 3 DRILLING

A Drill borehole to diameters and depths specified in this Request for Bid

B Hollow-stem auger method or other suitable method of drilling shall be utilized

3.4 SOIL BORING SPECIFICATIONS

A The soil borings shall be drilled and sampled in accordance with ASTM D 1586, "Penetration Test and the Split-Barrel Sampling of Soils "

B Borings shall be advanced as minimum 6-inch diameter boreholes

C Exhaust fumes must be routed to outside of the facility or equipment must be fitted with scrubbers The runs may be up to 150 to 200 feet in length

3.5 SOIL SAMPLING

A Soil samples shall be collected starting from just below the concrete flooring and at 5-foot intervals thereafter, to boring termination (25-feet bgl), and/or as directed by the on-site LBG representative

3.6 DECONTAMINATION

A Split spoons shall be decontaminated onsite

B Contractor shall construct a temporary decontamination pad in a location approved by Owner

3.7 SVE WELL NEST CONSTRUCTION

A The SVE wells shall have the following characteristics and be constructed per figure 3

1 Bore Hole shall be minimum 6-inch diameter, to depths of approximately 25 feet bgl Actual depths will be determined on the basis of field conditions and findings

2 SVE Well Casings 2-inch diameter, Schedule 40, PVC, from flush with existing grade to approximately 3 and 15 feet bgl

3 SVE Well Screen The on-site LBG representative will determine screen setting depths but are anticipated to be set from 3 to 13 and 15 to 25 feet bgl

3.8 SVE WELL NEST INSTALLATION

A Prior to use, the casings and couplings shall be inspected for cuts, deformations, gouges, deep scratches, damaged ends, and other imperfections Any casing or coupling having such a defect(s) may not be used Trim and smooth ends and remove burrs from well casings Remove any debris or dirt, on inside and outside of casings, before assembly

B The well casing and screen assembly shall be constructed during the drilling of the borehole Place well casing(s) and screen assembly(s) immediately after drilling Set firmly in place Allow inspection of casing(s) prior to placement of bentonite Place sand pack(s) and bentonite seal(s) in accordance with this Request for Bid

C Filter pack sand shall be emplaced so as to extend from the bottom of the well to 0 5 foot above the top of the well screen Contractor shall ensure that the filter pack is installed evenly surrounding the well screen and casing over the proper interval by using a tape measure, measuring rod or similar device The filter pack sand shall not be allowed to bridge If bridging occurs, the filter pack sand shall be tamped into place to surround the well screen and/or casing

D All wells shall be constructed with an annular space seal designed to achieve a permeability of 1 X 10 -7 centimeters per second or less The annular space seal for the deep well of the nest shall extend from the filter pack to 0 5 foot below the shallow well bottom plug The annular seal for the shallow well of the nest shall extend from the filter pack to 2-feet bg Sealant materials may not contain additives Bentonite pellets, bentonite chips or bentonite granules may be used to seal the annular space when there is no standing water in the well above the filter pack and the total well depth is less than 25 feet

E Maintain well opening(s) and casing(s) free of contaminated materials Do not permit cuttings to enter casing(s) when the top is being cut to final elevation

3.9 SVE/MONITOR WELL NEST CONSTRUCTION

A The SVE/Monitor wells shall have the following characteristics and be constructed per figure 4

1 Bore Hole shall be minimum 6-inch diameter, to depths of approximately 35 feet bgl Actual depths will be determined on the basis of field conditions and findings

2 SVE Well Casings 2-inch diameter, Schedule 40,

PVC, from flush with existing grade to approximately 3 and 15 feet bgl

3 SVE Well Screen The on-site LBG representative will determine screen setting depths but are anticipated to be set from 3 to 13 and 15 to 35 feet bgl

3.10 SVE/MONITOR WELL NEST INSTALLATION

A Prior to use, the casings and couplings shall be inspected for cuts, deformations, gouges, deep scratches, damaged ends, and other imperfections Any casing or coupling having such a defect(s) may not be used Trim and smooth ends and remove burrs from well casings Remove any debris or dirt, on inside and outside of casings, before assembly

B The well casing and screen assembly shall be constructed during the drilling of the borehole Place well casing(s) and screen assembly(s) immediately after drilling Set firmly in place Allow inspection of casing(s) prior to placement of bentonite Place sand pack(s) and bentonite seal(s) in accordance with this Request for Bid

C Filter pack sand shall be emplaced so as to extend from the bottom of the well to 0 5 foot above the top of the well screen Contractor shall ensure that the filter pack is installed evenly surrounding the well screen and casing over the proper interval by using a tape measure, measuring rod or similar device The filter pack sand shall not be allowed to bridge If bridging occurs, the filter pack sand shall be tamped into place to surround the well screen and/or casing

D All wells shall be constructed with an annular space seal designed to achieve a permeability of 1 X 10 -7 centimeters per second or less The annular space seal for the deep well of the nest shall extend from the filter pack to 0 5 foot below the shallow well bottom plug The annular seal for the shallow well of the nest shall extend from the filter pack to 2-feet bg Sealant materials may not contain additives Bentonite pellets, bentonite chips or bentonite granules may be used to seal the annular space when there is no standing water in the well above the filter pack and the total well depth is less than 25 feet

E Maintain well opening(s) and casing(s) free of contaminated materials Do not permit cuttings to enter casing(s) when the top is being cut to final elevation

3.11 WELL COMPLETION

A All SVE/Monitor well nests shall be completed as flush grade

3.12 SOIL BORING ABANDONMENT

A All soil borings that are not completed as wells shall be abandoned in accordance with applicable state guidelines It is not anticipated there will be any borings which will be abandoned

3 13 DRILL CUTTINGS

A The Contractor shall collect and containerize all drill cuttings and store them in a location designated by the Owner LBG will be responsible for sampling and coordinating cuttings disposal

3 14 SITE CLEANING

A The Contractor shall be responsible for collecting and disposing of all cement, sand pack and bentonite bags, as well as other refuse and materials, and cleaning up and restoring the areas where drilling has taken place

B Clean surfaces impacted by the spray from concrete coring operations

END OF REQUEST FOR BID

S \TECH\3CHRY\DAYTON\PROJMGMT\BIDS\ONSITE2 RFB

QUADRANGLE LOCATION

U S G S. TOPOGRAPHIC

DAYTON NORTH, OHIO

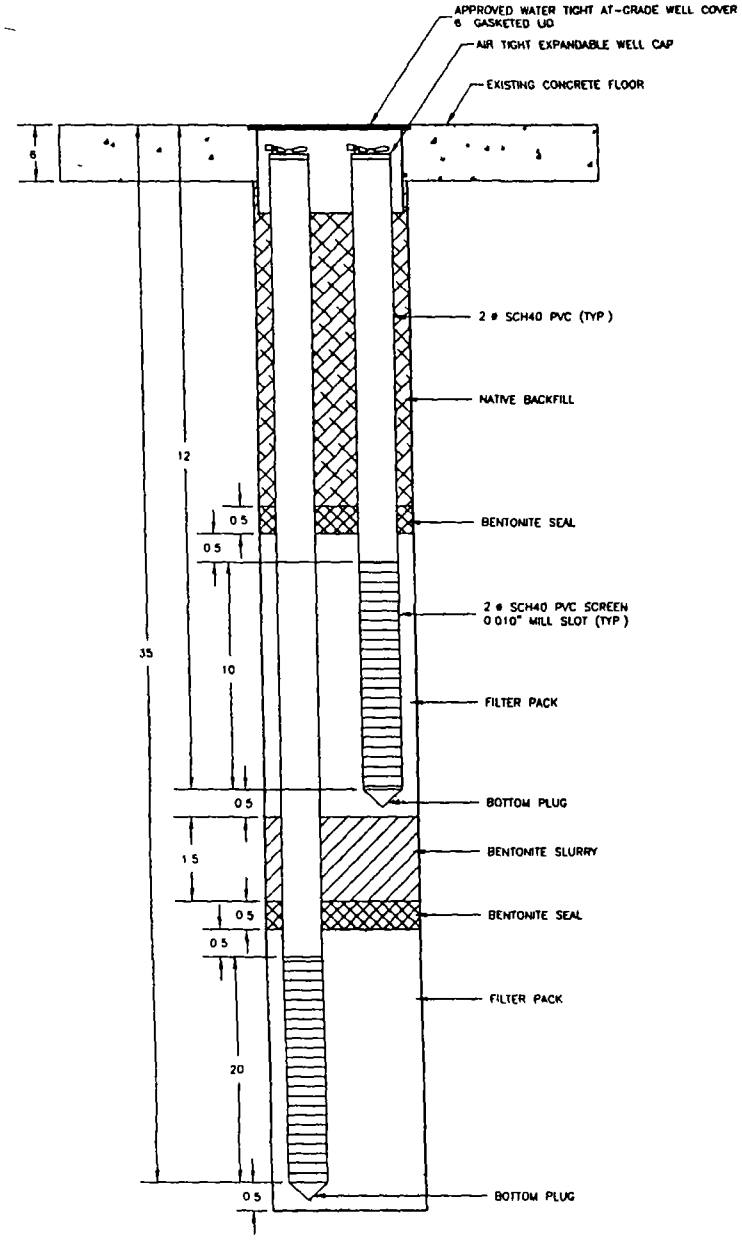
7 5 MINUTE QUADRANGLE

DAYTON THERMAL PRODUCTS PLANT

DAYTON, OHIO

AREA LOCATION MAP

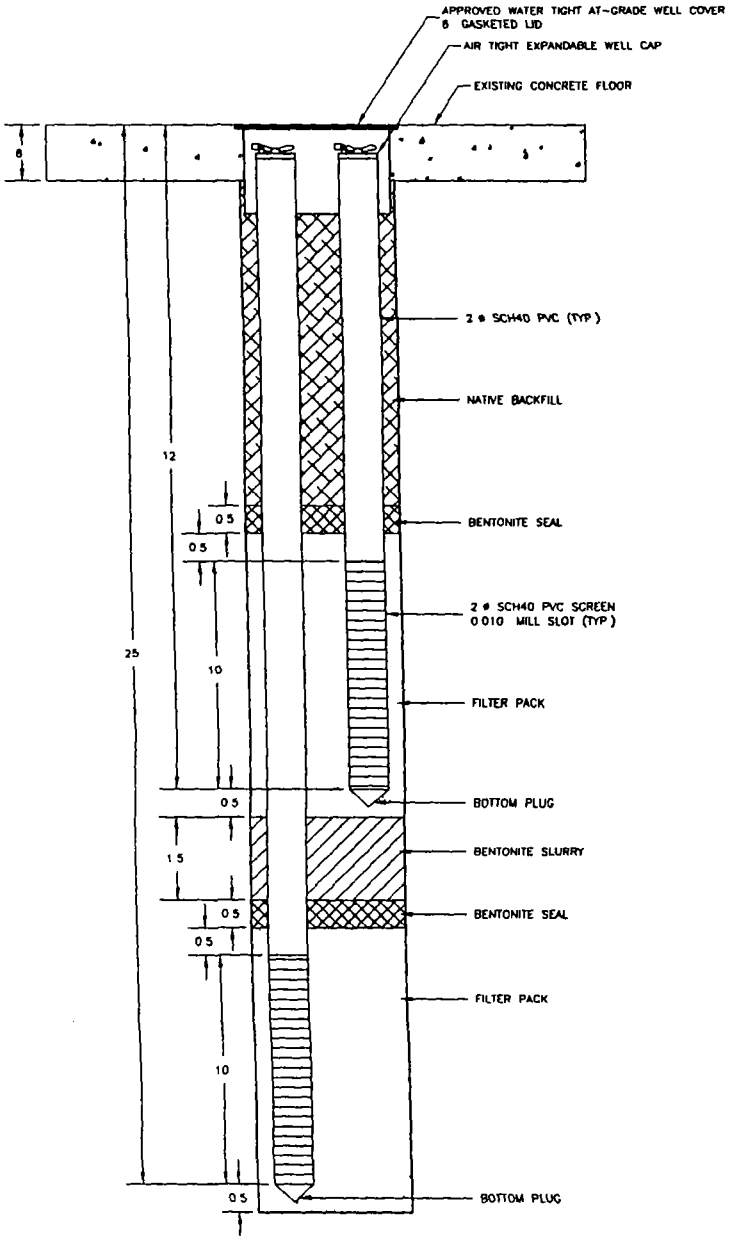
DATE	REVISED	PREPARED BY
		LEGGETTE, BRASHEARS & GRAHAM, INC Professional Ground-Water and Environmental Services Northpark Corporate Center 1210 W County Road E, Suite 700 St. Paul, MN 55112 (612) 490-1405
FILE		DATE MARCH 2000 FIGURE 1



SVE/MONITOR WELL NEST CONSTRUCTION

NOT TO SCALE

DATE	REVISED	Prepared By: LEGGETTE, BRASHEARS & GRAHAM INC Professional Ground-Water and Environmental Services Northpark Corporate Center 1210 W County Road E Suite 700 St Paul MN 55112 (651) 490-1405	DAYTON THERMAL PRODUCTS PLANT DAYTON OHIO
			SVE/MONITOR WELL NEST CONSTRUCTION
			FILE: 3CHDA09Y.DWG DATE: MARCH 2000 FIGURE: 3



SVE WELL NEST CONSTRUCTION

NOT TO SCALE

DATE	REVISED

Prepared By
LEGGETTE BRASHEARS & GRAHAM INC
Professional Ground-Water and Environmental Services
Northpark Corporate Center
1210 W County Road E Suite 700
St Paul MN 55112
(651) 490-1400

DAYTON THERMAL PRODUCTS PLANT
DAYTON OHIO

SVE WELL NEST CONSTRUCTION

FILE: 3CHDA09Y.DWG | DATE: MARCH 2000 | FIGURE: 2

REQUEST FOR BID FOR DRILLING SERVICES FOR INSTALLATION OF SVE WELLS AT THE DAYTON THERMAL PRODUCTS

PART 1 GENERAL

INVITATION TO BID

Your firm is hereby requested to submit a proposal for performing the complete work as described in the Contract Documents consisting of these specifications, the bid form, and included drawings and sketches

Information regarding existing conditions at the job site are believed to be reasonably correct, but LBG cannot guarantee its completeness or accuracy The Contractor will be held to have examined the Contract Documents, the premises and the job site and to have satisfied himself as to the scope of work and field conditions before the delivery of his proposal

1 0) Bids and Prices

Contractor's base bid must be in accordance with the Specifications Contractor may, at its option, offer alternate bids in addition to the base bid Each alternate bid must be clearly identified as an alternate and must identify all exceptions taken to the Specifications, listing each item separately and the reason for the exception Contractor must submit to LBG any alternate price, unit price and separate price that LBG may require All prices quoted will be firm and with no provision for escalation, unless otherwise specified in writing when the Contract is awarded Prices must include all applicable taxes

When the Specifications provide for a specific item or its equal, Contractor must calculate the price of the make or type specified If Contractor prefers to use a substitute material or method that Contractor believes to be of equal or greater value than the specified item, Contractor must state in its bid proposal the price difference to be added to or deducted from the bid price if the specified item were replaced by the substitute If substitute materials include regulated substances, Contractor must submit a completed "Supplier Regulated Substances Certification Report" to DaimlerChrysler

If a choice of more than one make or type of article or material is specified and Contractor requires an adjustment in the bid price because of the alternatives specified, Contractor must state in its bid proposal the make or type upon which the bid proposal is based and the amount to be added to or deducted from the bid price if other makes or types named in the Specifications are selected If that type of statement is not in Contractor's proposal, LBG may select any specified make or type without incurring a change in the price In any event, whenever LBG has a choice of alternate materials, the final selection is LBG's

1.1 SCOPE OF WORK

A Leggette, Brashears & Graham, Inc (LBG), is soliciting cost proposals for drilling, soil sampling, well installation, and well development at DaimlerChrysler Corporation's Dayton Thermal Products in Dayton, Ohio (figure 1) **Thirty-nine (39) borings with two (2) nested SVE wells per boring, and three (3) borings with a SVE well and monitor well per boring will be installed in the interior of an active manufacturing facility (figure 2). All drilling activities shall be completed using a skid rig or other equipment of similar dimensions capable of completing the work.**

B All boring locations must be inspected by the Contractor to verify that the skid rig will clear any access limitations Once the locations have been cleared, a concrete corer must be used to bore through approximately 1-foot of concrete flooring prior to setting up the skid rig

C Thirty-nine of the borings shall be drilled to approximately 25 feet and 3 of the borings shall be installed to approximately 35 feet below-grade level (bgl) using the hollow-stem auger drilling method or other suitable method The boreholes shall have a minimum 6-inch diameter Soils shall be sampled with a 2-inch device appropriate for the drilling method used, at 5-foot depth intervals, or as directed by the on-site LBG representative Contractor shall containerize all drill cuttings All wells shall meet the specifications recorded in this Request for Bid, and be in accordance with the Ohio EPA guidance document titled "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring"

D The Contractor shall provide a portable steam cleaner or pressure washer and other necessary equipment and supplies necessary to decontaminate all drill augers All decontamination fluids shall be containerized

E **Contractor shall provide trade-specific union labor, signatory to the terms of the National Maintenance Agreement, the local collective bargaining agreement, and/or as required by the Owner.** There is no specific bid item number provided for this provision Include costs associated with this provision in the bid items given

F The Contractor shall provide all services, equipment, material, labor, tools, taxes and any other resources, in good working order, required for the completion of the Work specified in this Request for Bid

1.2 DEFINED TERMS

A Certain terms used in this Request for Bid have the meanings indicated below, which are applicable to both the singular and plural thereof

1 Owner - DaimlerChrysler Corporation

2 Bidder - one who submits a Bid directly to LBG as distinct from a sub-bidder, who submits a bid to a Bidder Bidder is synonymous with Contractor

3 Successful Bidder - the Bidder to whom LBG and Owner make an award

4 LBG - Leggette, Brashears & Graham, Inc, synonymous with Owner's Representative and Consultant

1 3 INSTRUCTIONS TO BIDDERS

A The Contractor shall itemize costs and completely fill out the attached Bid Form, providing unit costs for all activities and materials, as the scope of work for this job is flexible The Contractor shall be compensated on a unit

cost basis for the actual quantities of Work/materials utilized The cost proposal shall include any project management costs required to perform the Work as well as the cost per hour for down time that is not caused by drilling problems

B Bidders that would like to be considered for the Work outlined in this Request of Bid, should fax completed Bid Forms to Kenneth D Vogel no later than **noon Central Daylight Savings Time, _____, 2000.** Bids received after this time may not be accepted Bids will be opened privately

C The proposed rig type and rig dimensions along with an estimate of the time required to complete the Work outlined in this Request for Bid should be submitted with the completed Bid Form

D LBG reserves the right to be sole judge of all bids and can reject any and all bids for any reason If you have any questions or comments in regard to the proposed work, Please contact Kenneth D Vogel at Leggette, Brashears & Graham, Inc , 1210 West County Road E, Suite 700, St Paul, MN 55112, Phone (651) 490-1405, ext 202 Fax (651) 490-1006, Email kvogel@lbgmn com

E The selected Contractor shall contract directly with LBG, per the Terms and Conditions of LBG's Standard Form Contract (example attached)

F All Bids should include a schedule and a discussion of the Contractor's availability and ability to meet the time deadline set forth in the Scheduling section of this Request for Bid for initiation of Work

G The quantities provided on the Bid Form are estimates based upon available site data Actual payment will be based on Work completed

H Bidders are encouraged to include Minority Business Enterprise (MBE) firms for subcontracted services and/or supplies, when possible Such MBE firms must be certified by an Owner-approved state or national MBE certification entity Bidder shall identify any such proposed MBE sub-contractors in their bid.

1.4 SITE LOCATION AND CONDITIONS

A Dayton Thermal Products is located at 1600 Webster Street, Dayton, Montgomery County, Ohio

B The drilling locations include forty-two (42) locations within the plant (figure 2, and plates 1 and 2) All locations will be in high traffic areas The Contractor shall provide adequate safety cones, barriers, signs, and/or equipment for drilling in traffic areas of the plant

C Coring through concrete surfaces will be required

D The soil at the drilling locations is expected to consist of glacial outwash deposits consisting of sand, gravel, and cobbles with minor quantities of clay Previous drilling at the site with hollow stem augers has encountered occasional advancement difficulties due to cobbles and/or other subsurface factors The depth to ground water is expected to be approximately 27 feet bgl

1 5 CONTRACTOR USE OF SITE AND PREMISES

A Stage equipment and materials in location(s) designated by the Owner's Representative in order to minimize interference with Owner's operations

B Time restrictions for conducting work general work hours are limited to 6 30 a m to 6 30 p m daily Other plant restrictions may also apply Evening and weekend access may be permitted

C Every precaution shall be taken to minimize disruption to current plant operations Fugitive dust, noise and/or vapor emissions shall be minimized and contained within the work area

D The Contractor shall confine their equipment, storage of materials, and the operations of their workmen to limits indicated by law, ordinances, permits and directions of the Owner The Contractor shall enforce the Owner's instructions regarding signs, advertisements, fires and smoking Smoking on the premises will be permitted only in areas where the Owner's regulations do not forbid the same

The Contractor and all Sub-Contractors and their employees shall be subject to and at all times conform to the Owner's rules and requirements for the protection of the plant, materials, equipment and Owner's employees

E Contractor will not unreasonably encumber the job site with materials or equipment and will confine its equipment, materials storage and the operation of its workmen within such areas as DaimlerChrysler may indicate from time to time Contractor will, at no cost to DaimlerChrysler, move, as directed by DaimlerChrysler, material or equipment temporarily placed on the job site when necessary for performance for the Project

F Contractor must not load or permit any part of a structure to be loaded with a weight that will endanger its safety Contractor will keep the job site and surrounding areas free from accumulation of waste materials or rubbish caused by operations under the Contract Contractor will upon completion of the Project leave all buildings broom clean and remove from and around the job site waste materials, rubbish, tools, construction equipment, machinery and surplus materials If Contractor fails to clean up, DaimlerChrysler may do so at Contractor's expense

G Contractor will afford DaimlerChrysler and DaimlerChrysler's other contractors, if any, reasonable opportunity for introducing and storing their materials and equipment and for performing their activities on the job site Contractor will carry on its work so as not to unduly hinder, delay or interfere with their progress Contractor will perform any cutting and altering of, and fitting to, its work to make possible other work, including that of trades not covered by the Contract, as indicated on the Drawings even though not specifically stated in the Contract Documents

H Contractor and its subcontractors will not disconnect, remove, connect, change or otherwise alter in any way any pipelines, sewers, conduits, cables or other utilities located on DaimlerChrysler's premises without the specific, prior written approval of DaimlerChrysler

I Contractor will not store or use dynamite or other explosives on DaimlerChrysler's property without the express prior written approval by DaimlerChrysler

J If required by DaimlerChrysler, Contractor will furnish its employees and those of its subcontractors with a badge or a card, acceptable to DaimlerChrysler, which will identify them as employees of Contractor or its subcontractors, respectively, and admit them to the job site

1 6 OWNER OCCUPANCY

A The Owner will occupy the premises during the contract period

B Contractor shall cooperate with Owner to minimize

conflict and to facilitate Owner's operations

C Contractor shall schedule the Work to accommodate this requirement

1 7 WORK SEQUENCE

A Conduct Work to accommodate Owner's occupancy requirement during the Work Coordinate schedule with Owner's Representative Conduct Work so inspections and testing can be conducted at a time acceptable to and in the presence of the Owner's Representative

1 8 REFERENCES

A Ohio EPA guidance document "Technical Guidance Manual for Hydrogeologic Investigations and Ground Water Monitoring" and other relevant regulatory guidance

1 9 PROJECT RECORD DOCUMENTS

A Submit, to Owner's Representative, signed copies of well records or other documents required by state, local or federal agencies

B ***Submit, to Owner's Representative, prior to initiating work, Certificates of Insurance documenting required insurance coverages and naming Leggette, Brashears & Graham, Inc. and DaimlerChrysler Corporation as additional insureds.***

C Submit, to Owner's representative, prior to initiating work, a site-specific Health and Safety plan for the work

1 10 REGULATORY REQUIREMENTS

A Contractor shall conform to applicable code of state and local regulatory authorities

B Contractor shall have all state, local or federal licenses necessary to legally conduct the Work described in this Request for Bid

C The Contractor shall obtain any and all permits required for the installation of the borings and wells

D Conduct Work in accordance with OSHA regulations, State of Ohio, and Owner health and safety protocols applicable to the Work

1 11 UTILITIES

A Owner will verify utility clearance for drilling locations on the plant facility

1.12 HEALTH AND SAFETY

A *The project involves soil boring and well installation activities associated with the investigation of soil and ground water impacted by chlorinated and petroleum hydrocarbons All or some of the Work may involve potential or actual exposure to chlorinated and petroleum hydrocarbon vapors, liquids, and/or impacted materials*

B Contractor shall have a health and safety plan in place prior to initiation of Work Level D protection is anticipated for this Work

C All site workers shall provide documentation to the on-site drilling supervisor that the field personnel have been trained in the proper use of protective clothing and equipment in accordance with 29 CFR Part 1910

D The presence of LBG and/or Owner on the site does not relieve the Contractor's responsibility for complying with all federal, state and local health and safety guidelines

1 13 SCHEDULING

A The anticipated start date for the Work outlined in this specification Section is the week of _____, 2000

B The Contractor shall notify LBG of any anticipated schedule conflicts or delays a minimum of 5 working days in advance

C Once Work is initiated, Work shall be conducted on consecutive working days until the scope is completed

1.14 LBG RESPONSIBILITIES

A LBG will obtain permission from Owner to gain access to the site LBG will provide a full-time drilling supervisor to identify drilling locations and observe and log soil samples

B The presence of LBG on the site does not relieve the Contractor's responsibility for proper workmanship and well construction/installation as required by state codes

C LBG will coordinate disposal of soil cuttings

PART 2 PRODUCTS

2.1 WELL PRODUCTS

All materials shall be new product

A Well Casing
  1 2-inch diameter Schedule-40 PVC pipe with flush joint thread and Buna O-rings for each connection

B Bentonite Chips/Pellets/Grout
  1 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

C Bentonite and/or Cement Seal
  1 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

D Filter Pack Sand
  1 Red Flint No 30 sand or equivalent sand that is compatible with 10-slot screen
  2 Manufacturer and specific product shall be at the Contractor's discretion and as accepted by the Owner's Representative, in accordance with Ohio well code

E SVE Well Nest Screen
  1 2-inch diameter, Schedule 40 PVC screen, 10-slot (0 010 inch) openings, and flush, joint thread with Buna O-Rings for each connection
  2 Screens length shall be ten (10) feet
  3 Screen shall be fitted with a bottom plug
  4 Screens will be set from 3 to 13 and 15 to 25 feet bgl

F SVE/Monitor Well Nest Screen
  1 2-inch diameter, Schedule 40 PVC screen, 10-slot (0 010 inch) openings, and flush joint thread with Buna O-Rings for each connection
  2 Screens length shall be ten (10) and twenty (20) feet
  3 Screen shall be fitted with a bottom plug
  4 Screens will be set from 3 to 13 and 15 to 35 feet bgl

G Flush-Mounted Well Installation
  1 All borings shall be constructed as flush-grade wells
  2 The wells will be protected in a watertight vault installed in a concrete pad with minimum 28-day compressive strength of 4,000 psi and a unit weight between 140 and 150 lb/ft^3
  3 The indoor wells will be completed flat with the floor elevation and the watertight vaults will cemented in place

4 The watertight vaults shall be Morrison Fig 9" 418XAW, New Welded Manhole, available from Morrison Brothers Company, P O Box 238, Dubuque, IA 52001, (800) 553-4840, FAX (319) 583-5028 The covers shall be clearly marked with the standard monitoring well warning symbol and labeled "Monitoring Well "

5 Flush-mount wells shall be fitted with watertight, flip-top, compression type, locking well caps provided by the Contractor

6 Contractor shall provide necessary materials to insure proper curing of concrete by providing protection against inclement and/or freezing weather conditions Should concrete pad(s) crack, split, or otherwise be insufficient, Contractor shall immediately replace the concrete pad at Contractor's sole expense

2 2 SAMPLING METHODS AND MATERIALS

A 2-inch diameter split-spoon sampler, or other appropriate device for drilling method used

B Decontamination equipment and materials

2.3 PRODUCTS FURNISHED BY OWNER

A Key-alike locks for SVE/Monitor wells

B LBG will help Contractor secure source of power and water from the site

PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

A Contractor shall verify that site conditions are safe and suitable for all personnel and equipment for conducting the Work

B Contractor shall protect structures near the wells from damage

3 2 LOCATING AND PROTECTING EXISTING UTILITIES

A Owner will verify utility clearance for drilling locations located on the plant facility

3.3 DRILLING

A Drill borehole to diameters and depths specified in this Request for Bid

B Hollow-stem auger method or other suitable method of drilling shall be utilized

3 4 SOIL BORING SPECIFICATIONS

A The soil borings shall be drilled and sampled in accordance with ASTM D 1586, "Penetration Test and the Split-Barrel Sampling of Soils "

B Borings shall be advanced as minimum 6-inch diameter boreholes

C Exhaust fumes must be routed to outside of the facility or equipment must be fitted with scrubbers The runs may be up to 150 to 200 feet in length

3 5 SOIL SAMPLING

A Soil samples shall be collected starting from just below the concrete flooring and at 5-foot intervals thereafter, to boring termination (25-feet bgl), and/or as directed by the on-site LBG representative

3 6 DECONTAMINATION

A Split spoons shall be decontaminated onsite

B Contractor shall construct a temporary decontamination pad in a location approved by Owner

3.7 SVE WELL NEST CONSTRUCTION

A The SVE wells shall have the following characteristics and be constructed per figure 3

1 Bore Hole shall be minimum 6-inch diameter, to depths of approximately 25 feet bgl Actual depths will be determined on the basis of field conditions and findings

2 SVE Well Casings 2-inch diameter, Schedule 40, PVC, from flush with existing grade to approximately 3 and 15 feet bgl

3 SVE Well Screen The on-site LBG representative will determine screen setting depths but are anticipated to be set from 3 to 13 and 15 to 25 feet bgl

3.8 SVE WELL NEST INSTALLATION

A Prior to use, the casings and couplings shall be inspected for cuts, deformations, gouges, deep scratches, damaged ends, and other imperfections Any casing or coupling having such a defect(s) may not be used Trim and smooth ends and remove burrs from well casings Remove any debris or dirt, on inside and outside of casings, before assembly

B The well casing and screen assembly shall be constructed during the drilling of the borehole Place well casing(s) and screen assembly(s) immediately after drilling Set firmly in place Allow inspection of casing(s) prior to placement of bentonite Place sand pack(s) and bentonite seal(s) in accordance with this Request for Bid

C Filter pack sand shall be emplaced so as to extend from the bottom of the well to 0 5 foot above the top of the well screen Contractor shall ensure that the filter pack is installed evenly surrounding the well screen and casing over the proper interval by using a tape measure, measuring rod or similar device The filter pack sand shall not be allowed to bridge If bridging occurs, the filter pack sand shall be tamped into place to surround the well screen and/or casing

D All wells shall be constructed with an annular space seal designed to achieve a permeability of 1 X 10 -7 centimeters per second or less The annular space seal for the deep well of the nest shall extend from the filter pack to 0 5 foot below the shallow well bottom plug The annular seal for the shallow well of the nest shall extend from the filter pack to 2-feet bg Sealant materials may not contain additives Bentonite pellets, bentonite chips or bentonite granules may be used to seal the annular space when there is no standing water in the well above the filter pack and the total well depth is less than 25 feet

E Maintain well opening(s) and casing(s) free of contaminated materials Do not permit cuttings to enter casing(s) when the top is being cut to final elevation

3 9 SVE/MONITOR WELL NEST CONSTRUCTION

A The SVE/Monitor wells shall have the following characteristics and be constructed per figure 4

1 Bore Hole shall be minimum 6-inch diameter, to depths of approximately 35 feet bgl Actual depths will be determined on the basis of field conditions and findings

2 SVE Well Casings 2-inch diameter, Schedule 40,

PVC, from flush with existing grade to approximately 3 and 15 feet bgl

3 SVE Well Screen The on-site LBG representative will determine screen setting depths but are anticipated to be set from 3 to 13 and 15 to 35 feet bgl

3.10 SVE/MONITOR WELL NEST INSTALLATION

A Prior to use, the casings and couplings shall be inspected for cuts, deformations, gouges, deep scratches, damaged ends, and other imperfections Any casing or coupling having such a defect(s) may not be used Trim and smooth ends and remove burrs from well casings Remove any debris or dirt, on inside and outside of casings, before assembly

B The well casing and screen assembly shall be constructed during the drilling of the borehole Place well casing(s) and screen assembly(s) immediately after drilling Set firmly in place Allow inspection of casing(s) prior to placement of bentonite Place sand pack(s) and bentonite seal(s) in accordance with this Request for Bid

C Filter pack sand shall be emplaced so as to extend from the bottom of the well to 0 5 foot above the top of the well screen Contractor shall ensure that the filter pack is installed evenly surrounding the well screen and casing over the proper interval by using a tape measure, measuring rod or similar device The filter pack sand shall not be allowed to bridge If bridging occurs, the filter pack sand shall be tamped into place to surround the well screen and/or casing

D All wells shall be constructed with an annular space seal designed to achieve a permeability of 1 X 10 -7 centimeters per second or less The annular space seal for the deep well of the nest shall extend from the filter pack to 0 5 foot below the shallow well bottom plug The annular seal for the shallow well of the nest shall extend from the filter pack to 2-feet bg Sealant materials may not contain additives Bentonite pellets, bentonite chips or bentonite granules may be used to seal the annular space when there is no standing water in the well above the filter pack and the total well depth is less than 25 feet

E Maintain well opening(s) and casing(s) free of contaminated materials Do not permit cuttings to enter casing(s) when the top is being cut to final elevation

3.11 WELL COMPLETION

A All SVE/Monitor well nests shall be completed as flush grade

3 12 SOIL BORING ABANDONMENT

A All soil borings that are not completed as wells shall be abandoned in accordance with applicable state guidelines It is not anticipated there will be any borings which will be abandoned

3.13 DRILL CUTTINGS

A The Contractor shall collect and containerize all drill cuttings and store them in a location designated by the Owner LBG will be responsible for sampling and coordinating cuttings disposal

3 14 SITE CLEANING

A The Contractor shall be responsible for collecting and disposing of all cement, sand pack and bentonite bags, as well as other refuse and materials, and cleaning up and restoring the areas where drilling has taken place

B Clean surfaces impacted by the spray from concrete coring operations

END OF REQUEST FOR BID

S \TECH\3CHRY\DAYTON\PROJMGMT\BIDS\ONSITE2 RFB

0 2000

SCALE IN FEET

QUADRANGLE LOCATION

U S.G S. TOPOGRAPHIC

DAYTON NORTH, OHIO

7 5 MINUTE QUADRANGLE

DAYTON THERMAL PRODUCTS PLANT

DAYTON, OHIO

AREA LOCATION MAP

DATE	REVISED	PREPARED BY
		LEGGETTE, BRASHEARS & GRAHAM, INC.
		Professional Ground-Water and Environmental Services
		Northpark Corporate Center
		1210 W County Road E, Suite 700
		St Paul, MN 55112
		(612) 490-1405
FILE		DATE MARCH 2000 FIGURE 1

BID FORM FOR ONSITE SVE WELL INSTALLATION

TO Mr Kenneth D Vogel
Leggette, Brashears & Graham, Inc
1210 West County Road E, Ste 700
St Paul, Minnesota 55112

FOR Drilling and SVE
Well Installation Services
DaimlerChrysler Corporation
Dayton Thermal Products
Dayton, Ohio

The undersigned has carefully examined the Request for Bid for Drilling Services and other conditions relative to the work, and has made all evaluations and investigations necessary to gain a full understanding of pertinent site conditions and all regulatory, material, equipment, and labor requirements necessary to successfully and safely complete the work, as well as any reasonable difficulties which may be encountered in performing the work

BID SCHEDULE

The undersigned hereby proposes and agrees to furnish all labor, materials, equipment, tools, taxes, services and all other items necessary or appropriate for the proper and complete execution of the work for the following estimated amount

Base Bid Estimate
All work _____Dollars ($_____)

The undersigned agrees, if this proposal is accepted, to enter into an agreement with Leggette, Brashears & Graham, Inc , per the Terms and Conditions of LBG's Standard Form Contract, for the above unit price-based, estimated Contract Sum

Unit Prices
This bid estimate is based upon, and all work shall be performed in accordance with, the Unit Prices listed below Should additions or subtractions to the scope of work be required, adjustment will be made to the Contract Sum at the following Unit Prices, which shall include all associated expenses, including taxes, overhead and profit

UNIT PRICE TABLE

I D	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
A	Mobilize and demobilize 1 drilling rig, equipment and work crew to/from Dayton, Ohio	L S	1		
B	Drill 39 boreholes, 6-inch O D to 25 feet	L F	975		
C	Drill 3 boreholes, 6-inch O D to 35 feet	L F	105		
D	Soil Sample, 2-inch diameter sampling device at 5-foot intervals	Each	216		
E	SVE well nest installation/construction	Each	39		
F	SVE/Monitor well nest installation/construction	Each	3		
G	Flush-grade SVE/Monitor well finishing	Each	42		
H	2-inch, flip top, vented, compression well caps	Each	84		

I D	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
I	Containerization of drill cuttings	L S	1		
J	Decontamination equipment and supplies	L S	1		
K	Decontamination	Per Hour			
L	Standby, non-equipment failure	Per Hour	0		
M	Per Diem, entire crew	Per Day			
N	Level C Personal Protection	Per Man	0		
	TOTAL ESTIMATED BID	--------	------	--------	

L S = Lump Sum L F = Linear Foot

NOTE: Bidder shall provide estimated quantities for all equipment/materials/services on Unit Price Table for which no estimated quantities are indicated

Contractor proposes to use _____ (number) drilling rig(s)
Contractor estimates _____days to complete this work

PROJECT INITIATION

If awarded this contract, the undersigned proposes and agrees to start work as early as _____, 2000

ADDENDA RECEIVED (IF REQUIRED)

The undersigned hereby acknowledges receipt of the following Addenda which shall become part of the Contract Documents

Addendum Number 1 Dated_____ Addendum Number 2 Dated_____

Any Bid Addenda received during the bid process should be acknowledged by the Contractor by transferring the date of the Addenda to the appropriate line above

BID ACCEPTANCE

In submitting this proposal, it is understood that Leggette, Brashears & Graham, Inc and DaimlerChrysler Corporation reserve the right to reject any or all bids, waive any formalities or technicalities in any bid and to make an award in the best interest of Leggette, Brashears & Graham, Inc and DaimlerChrysler Corporation It is further understood and agreed that this proposal may not be withdrawn for a period of sixty (60) calender days after the date set for bid receipt

Our company **IS**_____, **IS NOT**_____ a Certified Minority Business Enterprise (MBE) firm If so, please attach certification documentation

Respectfully Submitted

_____
Contractor

_____
Signature

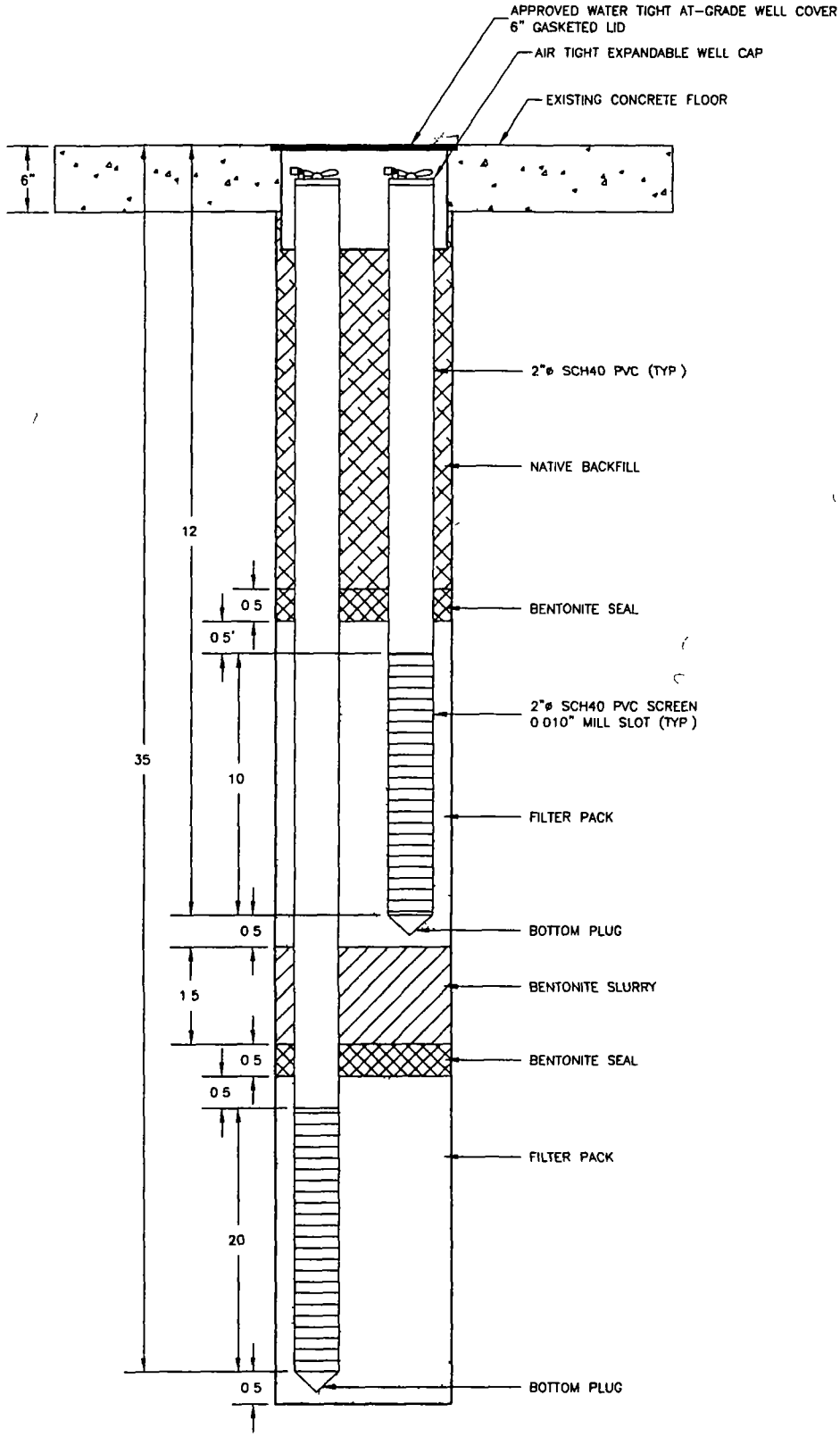
_____
Name and Title

_____
Date

(_____)_____
Telephone Number

(_____)_____
Fax Number

S \TECH\3CHRY\DAYTON\PROJMGMT\BIDS\ONSITE FRM



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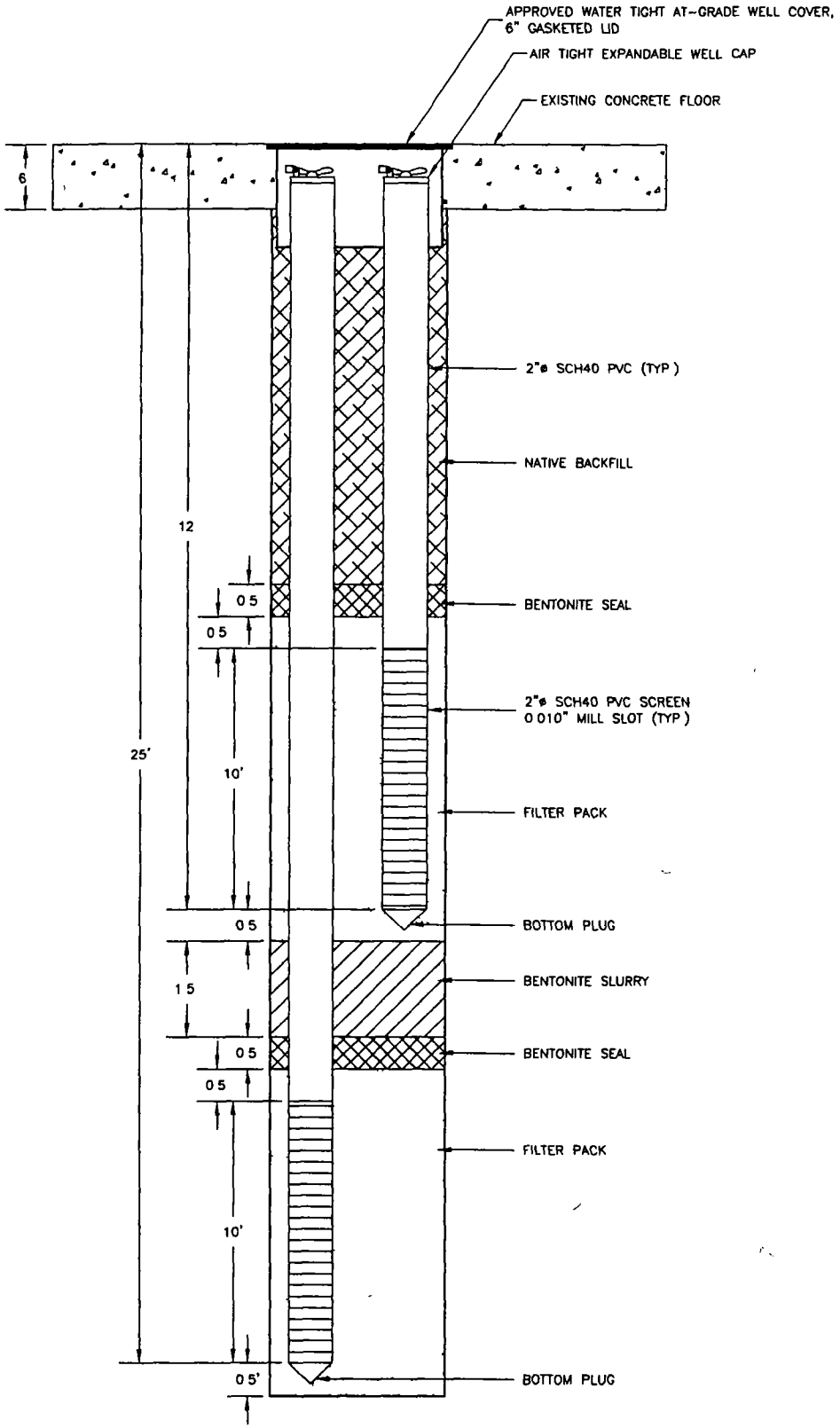
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

SVE/MONITOR WELL NEST CONSTRUCTION

FILE	3CHDA09Y DWG	DATE	MARCH 2000	FIGURE	3



SVE WELL NEST CONSTRUCTION

NOT TO SCALE

DATE	REVISED	Prepared By	DAYTON THERMAL PRODUCTS PLANT DAYTON, OHIO
		LEGGETTE BRASHEARS & GRAHAM INC Professional Ground-Water and Environmental Services Northpark Corporate Center 1210 W County Road E Suite 700 St Paul MN 55112 (651) 490-1405	SVE WELL NEST CONSTRUCTION
			FILE 3CHDA09Y DWG DATE MARCH 2000 FIGURE 2

Vision Environmental, Inc
8585 PGA Drive, Suite 101, Walled Lake, MI 48390, Phone (248)926-1199, Fax (248)926-5586

DATE 28-Apr-98 NUMBER OF PAGES: 10
(Including Cover Sheet)

TO: Chuck Moeser

COMPANY: Chrysler SE&E

FAX NO : (248) 576-7928 PHONE NO :

FROM: Tony Percha

MESSAGE. Chuck.

See page #7, Subpart (nn) of the attached regarding Permit to Install exemptions for on-site remediation projects in Ohio

Regards,

Tony

PLEASE NOTE The information contained in this facsimile message is intended only for the personal and confidential use of the designated recipient(s) named above If you have received this communication in error, please notify us by telephone at (248) 926-1199 followed by return of the original message to the address specified above

3745-31-03 Permit to install exemptions.

(A) A permit to install as required by rule 3745-31-02 of the Administrative Code must be obtained for the installation or modification of A NEW AIR CONTAMINANT SOURCE UNLESS EXEMPTED FROM THE REQUIREMENTS:

(1) ~~A new air contaminant source other than:~~ PERMANENT EXEMPTIONS

(a) ~~Fuel fired boilers, furnaces, preheaters or water heaters less than one million British thermal units per hour except units burning hazardous waste fuels or waste oil~~ FOSSIL FUEL-FIRED BOILERS, PREHEATERS, AIR HEATERS, WATER HEATERS, OR HEATERS USED FOR OTHER HEAT EXCHANGE MEDIA LESS THAN TEN MILLION BRITISH THERMAL UNITS PER HOUR BURNING ONLY NATURAL GAS, DISTILLATE OIL (WITH LESS THAN OR EQUAL TO 0.5 PER CENT BY WEIGHT SULFUR), OR LIQUID PETROLEUM GAS.

(b) FOSSIL OR WOOD FUEL-FIRED BOILERS, PREHEATERS, AIR HEATERS, OR WATER HEATERS LESS THAN ONE MILLION BRITISH THERMAL UNITS PER HOUR EXCEPT UNITS BURNING WASTE FUELS OR WASTE OIL.

(c) FOSSIL FUEL-FIRED FURNACES OR DRYERS LESS THAN TEN MILLION BRITISH THERMAL UNITS PER HOUR AND BURNING ONLY NATURAL GAS, DISTILLATE OIL (WITH LESS THAN OR EQUAL TO 0.5 PER CENT BY WEIGHT SULFUR), OR LIQUID PETROLEUM GAS AND THE ONLY EMISSIONS ARE FROM THE PRODUCTS OF COMBUSTION FROM FUEL AND WATER VAPORS AND WHERE NO MELTING OR REFINING OCCURS NOR WHERE ANY BURNING OF ANY MATERIAL OCCURS.

~~(b)~~ (d) Tumblers used for the cleaning or deburring of metal products without abrasive blasting.

~~(c)~~ (e) Equipment used exclusively for the packaging of lubricants or greases, AND WATER-BORNE ADHESIVES, COATINGS OR BINDERS.

~~(d)~~ (f) Equipment used exclusively for the mixing and blending of materials at ambient temperature to make ~~water based~~ WATER-BORNE adhesives, COATINGS OR BINDERS.

(g) BAKERY OVENS THAT BAKE:

(i) CHEMICALLY LEAVENED PRODUCTS; OR

3745-31-03

(ii) YEAST DOUGH PRODUCTS AND THAT ARE NOT LOCATED AT A COMMERCIAL BAKERY; OR

(iii) BISCUITS, CRACKERS, COOKIES AND OTHER SIMILAR NONLEAVENED PRODUCTS; OR

(iv) YEAST DOUGH, BREAD, BUNS AND ROLLS AT A BAKERY HAVING A TOTAL MAXIMUM YEAST DOUGH, BREAD, BUNS AND ROLLS PRODUCTION RATE OF LESS THAN OR EQUAL TO ONE THOUSAND POUNDS PER HOUR.

~~(e)~~ (h) ~~Bakery ovens, mixers~~ MIXERS and blenders and deep fat fryers (except deep fat fryers used to produce potato chips) where the products are edible and intended for human consumption.

~~(f)~~ (i) Laboratory equipment AND LABORATORY FUME HOODS exclusively for chemical or physical analyses and bench scale laboratory equipment.

~~(g)~~ (j) Photographic process equipment by which an image reproduced upon material sensitized to radiant energy.

~~(h)~~ (k) Equipment used for compression and injection molding of plastics (with the exception where the equipment requires an outside source of heat that either liquifies the plastic or causes sublimation of previous solid plastic material or the equipment requires the use of organic compounds as mold release agents).

~~(i) Storage tanks for water, aqueous solutions, and inorganic liquids (at standard temperature and pressure) except concentrated acids stored in tanks of greater than seven thousand five hundred gallons.~~

(l) STORAGE TANKS FOR:

(i) INORGANIC LIQUIDS INCLUDING WATER (AT STANDARD TEMPERATURE AND PRESSURE) EXCEPT AS DESCRIBED IN PARAGRAPH (V) OF THIS SECTION;

(ii) PRESSURIZED STORAGE FOR INORGANIC

COMPOUNDS OR PROPANE, BUTANE, ISOBUTANE, AND LIQUID PETROLEUM GASES;

(iii) LIQUIDS WITH A CAPACITY OF LESS THAN SEVEN HUNDRED GALLONS;

(iv) LIQUIDS WITH A CAPACITY OF LESS THAN OR EQUAL TO TEN THOUSAND GALLONS EQUIPPED WITH SUBMERGED FILL AND WHICH STORE ORGANIC LIQUIDS OR MIXTURES CONTAINING ORGANIC LIQUIDS (EXCLUDING PESTICIDES) WITH EACH ORGANIC LIQUID COMPONENT'S VAPOR PRESSURE OF LESS THAN OR EQUAL TO 1.5 POUNDS PER SQUARE INCH ABSOLUTE AT SEVENTY DEGREES FAHRENHEIT;

(v) ACIDS (AS DEFINED IN THE MOST RECENT EDITION OF THE CHEMICAL RUBBER COMPANY (CRC) HANDBOOK OF CHEMISTRY AND PHYSICS) STORED IN TANKS LESS THAN OR EQUAL TO SEVEN THOUSAND FIVE HUNDRED GALLONS CAPACITY.

~~(j)~~ (m) Presses used for the curing of plastic products (with the exception of presses where external heat is introduced which either liquifies or causes sublimation of ~~previous~~ PREVIOUSLY solid plastic material).

~~(k)~~ (n) Presses used exclusively for extruding clay.

~~(l)~~ (o) Storage tanks, storage silos, and other farm equipment located on a farm and utilized exclusively for the production of food or grain on the premises.

~~(m) Temporary source which, as so ordered by the director at his discretion, is to be operated for the purpose of testing air contaminant pollution emissions so that a suitable control technology can be ascertained.~~

~~(n)~~ (p) The relocation of any portable ~~or mobile facility~~ SOURCE in the state of Ohio which meets EITHER OF the following criteria:

(i) THE COMPANY HAD DEMONSTRATED THE FOLLOWING:

~~(i)~~ (a) The source is equipped with the

best available control technology for such source; and

~~(ii)~~ (b) The source is operating pursuant to a currently effective permit to operate; and

~~(iii)~~ (c) The applicant has provided proper notice of intent to relocate the source to the director within a minimum of thirty days prior to the scheduled relocation; and

~~(iv)~~ (d) In the director's judgment, the proposed site is acceptable under rule 3745-15-07 of the Administrative Code.

(ii) THE DIRECTOR HAS ISSUED A SITE APPROVAL FOR THE NEW LOCATION PURSUANT TO RULE 3745-31-05 OF THE ADMINISTRATIVE CODE.

~~(o)~~ (q) A drycleaning facility constructed between January 1, 1974 and December 31, 1981 in which the annual amounts of fabric drycleaned with perchloroethylene is less than sixty thousand pounds and is not located in Butler, Clermont, Cuyahoga, Franklin, Greene, Hamilton, Lake, Lorain, Lucas, Mahoning, Medina, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood counties.

~~(p)~~ (r) Noncontinuous solvent recycling OR RECLAIMING units with less than twenty gallons capacity.

~~(q)~~ (s) Nonheat-set or sheet-fed presses with ~~maxium~~ AN ORGANIC COMPOUND potential TO EMIT ~~organic compounds emissions~~ of less than three tons per year.

~~(r)~~ (t) An incinerator designed and used to dispose of residential wastes and having a capacity for serving no more than five households.

~~(s)~~ (u) Equipment used for spraying or applying insecticides, pesticides and herbicides except at facilities producing these substances or mixtures for sale or distribution.

~~(t) Storage of organic or inorganic materials in tanks of less than five hundred gallons capacity.~~

~~(u)~~ (v) Combustors used exclusively for the purpose of research and development of more efficient combustion of coal or more effective prevention of air pollutant emissions from coal combustion, less than ten million British thermal units per hour and an annual average capacity factor of not more than twenty per cent.

(w) SOLVENT COLD CLEANERS THAT MEET THE PROVISIONS OF PARAGRAPH (O) OF RULE 3745-21-09 OF THE ADMINISTRATIVE CODE AND HAVE A LIQUID SURFACE AREA LESS THAN OR EQUAL TO TEN SQUARE FEET OR A RESERVOIR OPENING OF LESS THAN SIX INCHES IN DIAMETER.

(x) INK-JET PRINTERS.

(y) GRINDING AND MACHINING OPERATIONS, ABRASIVE BLASTING, PNEUMATIC CONVEYING, AND WOOD WORKING OPERATIONS CONTROLLED WITH A FABRIC FILTER, SCRUBBER OR MIST COLLECTOR DESIGNED TO EMIT NO MORE THAN 0.03 GRAINS PER DRY STANDARD CUBIC FOOT OF EXHAUST GAS WITH LESS THAN FOUR THOUSAND ACFM VOLUME AND VENTING INSIDE A BUILDING.

(z) GRINDING, MACHINING, AND SANDING OPERATIONS, ABRASIVE CLEANING OPERATIONS (DRY OR WET), PNEUMATIC CONVEYING AND WOODWORKING OPERATIONS THAT HAVE NO VISIBLE EMISSIONS AND VENT TO THE INSIDE OF A BUILDING.

(aa) PARTS WASHERS AND RINSE TANKS USING DETERGENT CLEANERS.

(bb) ALUMINUM DIE-CASTING MACHINES.

(cc) AIR CONTAMINANT SOURCES AT NONPRODUCTION RESEARCH AND DEVELOPMENT OPERATIONS WITH A POTENTIAL TO EMIT FROM ANY SOURCE OF LESS THAN ONE TON PER YEAR OF ANY CRITERIA POLLUTANT PER SOURCE.

(dd) VEGETABLE OIL STORAGE TANKS AND PUMPS AND VALVES USED IN VEGETABLE OIL PROCESSING OPERATIONS.

3745-31-03

(ee) GASOLINE DISPENSING FACILITIES, AS DEFINED IN PARAGRAPH (H) OF RULE 3745-21-01 OF THE ADMINISTRATIVE CODE, OR OTHER MOTOR FUEL DISPENSING FACILITIES THAT ARE EQUIPPED WITH STAGE I VAPOR CONTROL AND ARE NOT LOCATED IN ASHTABULA, BUTLER, CLARK, CLERMONT, CLINTON, COLUMBIANA, CUYAHOGA, DELAWARE, FRANKLIN, GEAUGA, GREENE, HAMILTON, JEFFERSON, LAKE, LICKING, LORAIN, LUCAS, MAHONING, MEDINA, MIAMI, MONTGOMERY, PORTAGE, PREBLE, STARK, SUMMIT, TRUMBULL, WARREN, WASHINGTON, OR WOOD COUNTIES.

(ff) GASOLINE DISPENSING FACILITIES, AS DEFINED IN PARAGRAPH (H) OF RULE 3745-21-01 OF THE ADMINISTRATIVE CODE, OR OTHER MOTOR FUEL DISPENSING FACILITIES THAT HAVE AN INDIVIDUAL MAXIMUM ANNUAL THROUGHPUT OF LESS THAN SIX THOUSAND GALLONS PER YEAR.

(gg) AIR SEPARATION PLANTS.

(hh) ALL MAINTENANCE WELDING.

(ii) ARC WELDING WHERE EMISSIONS OF PARTICULATE MATTER ARE VENTED TO A CONTROL DEVICE LOCATED AND VENTED INSIDE THE BUILDING.

(jj) PASSIVE METHANE VENTING SYSTEMS FROM NON-HAZARDOUS WASTE LANDFILLS.

(kk) COATING APPLICATORS WITH PROPERLY DESIGNED AND OPERATED PARTICULATE CONTROL DEVICES AND VENTING SYSTEMS THAT EMPLOY LESS THAN FIVE GALLONS OF ONLY AIR-DRIED COATING MATERIAL IN ANY ONE DAY PROVIDED THAT THE APPLICATORS ARE:

(i) NOT LOCATED IN A NONATTAINMENT AREA FOR OZONE,

(ii) NOT SUBJECT TO LIMITS SPECIFIED IN OR SPECIFICALLY EXEMPTED FROM RULE 3745-21-09 OF THE ADMINISTRATIVE CODE,

(iii) NOT SUBJECT TO FEDERAL STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES; AND

(iv) NOT LOCATED AT A FACILITY WITH ACTUAL

3745-31-03

EMISSIONS OF TWENTY-FIVE OR MORE TONS OF VOLATILE ORGANIC MATERIALS PER YEAR AND ARE NOT SUBJECT TO A STANDARD UNDER TITLE III OF THE CLEAN AIR ACT.

(ll) REFRIGERANT RECLAIMING AND RECYCLING MACHINES LOCATED AT MOTOR VEHICLE REPAIR FACILITIES.

(mm) NOTWITHSTANDING THE ABOVE EXEMPTIONS, ANY SOURCE REGULATED UNDER THE NATIONAL EMISSION STANDARDS FOR HAZARDOUS POLLUTANTS AND/OR THE NEW SOURCE PERFORMANCE STANDARDS SHALL APPLY FOR AND OBTAIN A PERMIT TO INSTALL PRIOR TO CONSTRUCTION OF THE NEW SOURCE.

Joe →

(nn) CLEANUP ACTIVITIES ASSOCIATED WITH THE REMOVAL OR REMEDIAL ACTION CONDUCTED ENTIRELY ON SITE, WHERE SUCH REMEDIAL ACTION IS SELECTED AND CARRIED OUT IN COMPLIANCE WITH THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) SECTION 121 (E) AND WHERE SUCH ACTION MEETS ALL APPLICABLE AIR POLLUTION EMISSION LIMITS AND POLICIES.

(2) DISCRETIONARY EXEMPTIONS

~~(2)~~ (a) The director may, at his discretion, exempt the installation of an air contaminant source or any other source associated with the clean-up of a spill or a leaking underground storage tank from the requirements to obtain a permit to install.

~~(3)~~ (b) The director may, at his discretion, exempt the installation of an air contaminant source from the requirements to obtain a permit to install to deal with an emergency situation involving immediate threats to human health, property or the environment.

~~(4)~~ (c) The director may, at his discretion, exempt the installation of an air contaminant source from the requirements to obtain a permit to install for the emergency replacement of storage tanks associated with a leaking underground storage tank for a period not to exceed six months.

~~(5)~~ (d) The director may, at his discretion and in

writing, exempt the installation or modification of an air contaminant source from the requirements to obtain a permit to install for a period of up to six months for purposes of research and development of more effective prevention or control of air pollutant emissions or of more efficient combustion of coal.

(e) A TEMPORARY SOURCE WHICH, AS SO ORDERED BY THE DIRECTOR AT HIS DISCRETION, IS TO BE OPERATED FOR THE PURPOSE OF TESTING AIR CONTAMINANT POLLUTION EMISSIONS SO THAT A SUITABLE CONTROL TECHNOLOGY CAN BE ASCERTAINED AND WILL NOT OPERATE FOR MORE THAN TWO CALENDAR YEARS.

(f) THE DIRECTOR MAY, AT HIS DISCRETION AND IN WRITING, EXEMPT THE TEMPORARY MODIFICATION OF AN AIR CONTAMINANT SOURCE FROM THE REQUIREMENTS TO OBTAIN A PERMIT TO INSTALL FOR A PERIOD OF UP TO SIXTY DAYS FOR THE PURPOSE OF EVALUATING NEW PRODUCTION FEASIBILITY AND/OR AIR QUALITY IMPACTS FROM THE TEMPORARY MODIFICATION. SUCH REQUESTS FOR THIS EXEMPTION SHALL BE MADE IN WRITING AND SHALL PROVIDE A DETAILED DESCRIPTION OF THE PROPOSED TEMPORARY MODIFICATION TO THE SOURCE, THE TIME PERIOD OVER WHICH THE MODIFICATION WILL OCCUR, ANY CHANGES IN AIR EMISSIONS FROM THE SOURCE AS A RESULT OF THE TEMPORARY MODIFICATION, AND THE AMBIENT IMPACT OF THE EMISSIONS FROM THE SOURCE AS A RESULT OF THE TEMPORARY MODIFICATION. THE DIRECTOR MAY REQUIRE THAT PERFORMANCE TESTS BE CONDUCTED DURING THE PERIOD OF THE TEMPORARY MODIFICATION.

(g) THE DIRECTOR MAY, AT HIS DISCRETION AND IN WRITING, EXEMPT ANY TREATABILITY STUDIES OR ON-SITE RESPONSE ACTIONS (CLEANUP OPERATIONS) THAT MEET ALL APPLICABLE AIR EMISSION LIMITS AND POLICIES FROM THE REQUIREMENT TO OBTAIN A PERMIT TO INSTALL. ANYONE REQUESTING THIS EXEMPTION MUST PROVIDE THE DIRECTOR WITH SUFFICIENT INFORMATION TO MAKE THIS DECISION.

(B) No permit to install or plan approval, whichever is applicable, is required for the modification of a disposal system if:

3745-31-03

(1) After modification, the disposal system will be a type that could have been installed without a permit to install or a plan approval; or

(2) The result of the modification on environmental quality is so slight that the director has, by rule, exempted the modification from the requirements of rule 3745-31-02 of the Administrative Code.

(C) This rule shall not exempt any person from compliance with any other applicable law.

Replaces: _____

Effective: _____

Certification: _____
Donald R. Schregardus, Director
Ohio Environmental Protection Agency

_____
Date

Promulgated under: R.C. Chapter 119
Rule amplifies: R.C. 3704.03, 3734.02, 3745.05, 6111.03
Prior effective date: 1/1/74, 8/15/82. 9/18/87, 8/14/89

REGIONAL AIR POLLUTION CONTROL AGENCY
Serving Clark, Darke Greene Miami, Montgomery & Preble Counties
451 W Third Street, P O Box 972, Dayton, Ohio 45422-1280
Phone (937) 225-4435 Fax (937) 225-3486
Visit our Home Page at http //www repca org

July 27, 1998

Ms Kimberly Blomker
Leggette, Brashears & Graham, Inc
1210 West County Road E, Suite 700
Saint Paul, MN 55112

Re: PTI exemption for SVE system at Chrysler Dayton Thermal Systems (Facility ID 0857040734)

Dear Ms Blomker

On July 23, 1998, you submitted a Permit to Install (PTI) exemption request for a soil vapor extraction (SVE) system at Chrysler Dayton Thermal Systems. Within the PTI exemption request, you indicate that actual emissions of volatile organic compounds (VOC) are less than 10 pounds per day after controls a granular activated carbon bed In addition, the letter indicated that the operation of the SVE system would be temporary, between 6 and 12 months

Pursuant to Ohio Administrative Code (OAC) rule 3745-15-05(D), the SVE proposed in your July 23 1998 letter is a de minimis" air contaminant source, and therefore, does not require a PTI In accordance with the aforementioned rule the operator of the SVE is required to maintain records that adequately demonstrate that actual emissions of any regulated pollutant do not exceed 10 pounds per day (or 1 ton per year of any hazardous air pollutant).

In accordance with OAC rule 3745-15-05(E) all the following information, if applicable, shall be adequate to demonstrate that actual emissions do not exceed 10 pounds per day (or 1 ton per year HAP)

1. A narrative description of how the emissions from the SVE were determined and maintained at or below the daily exemption level, and for emissions of HAP at or below the annual exemption level

2. A description of the air pollution control equipment used on the SVE and a statement that the source is not capable of operating without the pollution control equipment functioning.

3. A copy of any report of the results of any emission test that was conducted

following Ohio EPA approved methods.

4 A description of all production constraints required for the SVE to comply with the exemption level,

5 Records of actual operations that demonstrate that the daily and annual emissions from the SVE were maintained at or below the exemption level by the by the use of necessary production constraints of pollution control equipment;

6 A list of similar emissions units at Chrysler Dayton Thermal Products, and a statement for each source of the annual potential emissions.

7 A summation of the total emissions from each exempt or similar emissions unit, a summation of stated potential emissions from all emissions units identified in (6), and a certification under oath that the applicable exemption levels were compliant

Thank you for your cooperation with these matters If you have any questions or concerns, please feel free to contact me at (937)225-5923

Sincerely,

James S Pellegrino Jr.

James S Pellegrino Jr.
Air Pollution Control Specialist
Abatement Unit

c. Joe Whitlock, Chrysler
file

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Vision Environmental Inc.

8585 PGA Drive Suite 101, Walled Lake MI 48390, Phone (248)926-1199 Fax (248)926-5586

DATE 6-19-98 NUMBER OF PAGES. 4 (including cover sheet)

TO GARY STANCZUK

COMPANY CHRYSLER SE&E

FAX NO 576-7369

FROM TONY PERCHA

MESSAGE.

GARY

ATTACHED IS THE REVISED LANGUAGE AND MARK-UP I FORWARDED TO JOE WHITLOCK

REGARDS,

TONY

CC: C. MOESER

PLEASE NOTE The information contained in this facsimile message is intended for the personal and confidential use of the designated recipient(s) named above If you have received this communication in error, please notify us by telephone at (248) 926-1199 followed by return of the original message to the address specified above

Vision Environmental, Inc.

8585 PGA Drive Suite 101 Walled Lake, MI 48390 Phone (248) 926-1199 Fax (248) 926-5586

DATE: June 9, 1998 Number of Pages (including cover sheet): 3

TO: Joe Whitlock 937-224-2915

OF: Chrysler Dayton Thermal Products ~~(248) 576-7928~~

FROM. Tony Percha

RE: DTP Remediation Project and Ohio PTI Applicability

Joe, per my conversation with Chuck Moeser, the attached letter should be revised to state that Chrysler does not believe a PTI is necessary based upon 3745-31-03, Subpart (g), however, information representing a PTI application has been included should RAPCA wish to review and comment on the project The background information (i e , description of wells, schedule, etc) can remain the same, however, it should be on your letterhead.

Subpart 2(a) and

You should also include a statement such that if you do not hear from RAPCA within 15 days, you will assume they concur with the conclusion that the remediation is exempt from the requirement to obtain a PTI and will proceed with its implementation.

Call me if you have questions.

Tony Percha

cc: C. Moeser

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LEGGETTE, BRASHEARS & GRAHAM, INC.
Northpark Corporate Center
1210 West County Road E
Suite 700
St. Paul, MN 55112
651-490-1405
651-490-1006 (FAX)

LETTER OF TRANSMITTAL

DATE	01-Mar-02	JOB NO	3CHRY4/DAYTON
ATTN	Britt Crider		
RE·	Building 50 Rolloff		

TO. Britt Crider
Dayton Thermal Products
1600 Webster Street
Dayton , OH 45404

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items
☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			Laboratory report
1			Analytical summary table

THESE ARE TRANSMITTED as checked below
☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted ☐ Resubmit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE___20___ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS. Attached are the analytical results for the Building 50 soils generated during the SVE trenching and well installation The results indicate that the soils are non-hazardous

I have forwarded a copy of the lab report and summary table to ONYX for their review

Use the attached report and table as needed for disposal

COPY TO Mike Webb - ONYX
Gary Stanczuk - DaimlerChrysler

SIGNED: David Strand
Dave Strand

S/TECH/3CHRY/DAYTON/FINALDOC/LTRTRANS15 XLS

TABLE 1

DAYTON THERMAL PRODUCTS
DAYTON, OHIO

BUILDING 50 SVE INSTALLATION ROLLOFF SAMPLING
SUMMARY OF POSITIVE DETECTIONS IN SOIL

VOLATILE ORGANIC COMPOUNDS

UNITS ARE IN MICROGRAMS PER KILOGRAM (ug/kg)

SAMPLE LOCATION	SAMPLE DATE	1,1,1-TRICHLOROETHANE	TETRACHLOROETHENE	TRICHLOROETHENE
VAP RESIDENTIAL LIMITS ug/kg		1,200,000	94,000	77,000
VAP INDUSTRIAL LIMITS ug/kg		9,800,000	370,000	330,000
TCLP LIMIT ug/L		—	700	500
BUILDING 50 ROLLOFF	01/29/2002	6 J	4,800	6
TCLP ANALYSES (ug/L)		–	<20	<20

VAP- OHIO EPA VOLUNTARY ACTION PROGRAM REGULATIONS "GENERIC DIRECT-CONTACT SOIL STANDARDS"
(OHIO ADMINISTRATIVE CODE RULE 3745-300-08)

TCLP- TOXICITY CHARACTERISTIC LEACHING PROCEDURE

ug/L MICRGRAMS PER LITER

mg/L MILLIGRAMS PER LITER

— NOT ESTABLISHED

J ESTIMATED VALUE

EXCEEDS ONE OR MORE CRITERIA

TABLE 2

DAYTON THERMAL PRODUCTS
DAYTON, OHIO

BUILDING 50 SVE INSTALLATION ROLLOFF SAMPLING
SUMMARY OF POSITIVE DETECTIONS IN SOIL

SEMI-VOLATILE ORGANIC COMPOUNDS
CONCENTRATIONS IN MICROGRAMS PER KILOGRAM (ug/kg)

SAMPLE LOCATION	SAMPLE DATE	ACENAPHTHENE	ANTHRACENE	BENZO (a) ANTHRACENE	BENZO (a) PYRENE	BENZO (b) FLUORANTHENE	BENZO (g,h,i) PERYLENE	BENZO (k) FLUORANTHENE	BIS (2-ETHYLHEXYL) PHTHALATE	CARBAZOLE	CHRYSENE	DIBENZO (a,h) ANTHRACENE	FLUORANTHENE	FLUORENE	INDENO (1,2,3-cd) PYRENE	PHENANTHRENE	PYRENE
VAP RESIDENTIAL LIMITS ug/kg		1,900,000	9,500,000	5,500	550	5,500	—	55,000	150,000	—	550,000	550	1,300,000	1,300,000	5,500	—	950,000
VAP INDUSTRIAL LIMITS ug/kg		18,000,000	89,000,000	31,000	3,100	31,000	—	310,000	860,000	—	3,100,000	3,100	12,000,000	12,000,000	31,000	—	8,900,000
TCLP LIMIT ug/L		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
BUILDING 50 ROLLOFF	01/29/2002	61 J	310 J	1500	930	1300	480	650	98 J	99 J	1500	210 J	2500	100 J	520	1100	2500

VAP OHIO EPA VOLUNTARY ACTION PROGRAM REGULATIONS "GENERIC DIRECT-CONTACT SOIL STANDARDS"
(OHIO ADMINISTRATIVE CODE RULE 3745-300-08)
TCLP TOXICITY CHARACTERISTIC LEACHING PROCEDURE
ug/L MICRGRAMS PER LITER
— NOT ESTABLISHED
J ESTIMATED VALUE
EXCEEDS ONE OR MORE CRITERIA

TABLE 3

DAYTON THERMAL PRODUCTS
DAYTON, OHIO

BUILDING 50 SVE INSTALLATION ROLLOFF SAMPLING
SUMMARY OF POSITIVE DETECTIONS IN SOIL

TOTAL METALS

CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg)

SAMPLE LOCATION	DATE	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM*	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
VAP RESIDENTIAL LIMITS mg/kg			6 9	5,000	—	32	230	—	400	16	450	—	—	—	19,000
VAP INDUSTRIAL LIMITS mg/kg			86	140,000	—	300	2,800	—	2,800	230	3,700	—	—	—	370,000
TCLP LIMIT mg/L			5 0	100 0	—	1 0	5 0	—	5 0	0 2	—	1 0	5 0	—	—
BUILDING 50 ROLLOFF	01/29/2002	<0 73	**7 7**	–	0 52 J	0 40 J	**17.0**	25 6	**41.1**	**0.23**	13 4	<0 54	<0 16	1 7 J	67 9
TCLP ANALYSES (mg/L)		–	<0 0053	0 513	–	0 00090 J	<0 0017	–	<0 0088	<0 00002	–	0 0061 J	<0 0013	–	–

VAP OHIO EPA VOLUNTARY ACTION PROGRAM REGULATIONS "GENERIC DIRECT-CONTACT SOIL STANDARDS"
(OHIO ADMINISTRATIVE CODE RULE 3745-300-08)

TCLP TOXICITY CHARACTERISTIC LEACHING PROCEDURE

— NOT ESTABLISHED OR NOT ANALYZED

mg/L MILLILGRAMS PER LITER

J ESTIMATED VALUE

< LESS THAN

* CHROMIUM LIMITS BASED ON CHROMIUM VI CHROMIUM III RESIDENTIAL = 8 800 mg/kg, INDUSTRIAL = 63,000 mg/kg

EXCEEDS ONE OR MORE CRITERIA

TABLE 4

DAYTON THERMAL PRODUCTS
DAYTON, OHIO

BUILDING 50 SVE INSTALLATION ROLLOFF SAMPLING
SUMMARY OF POSITIVE DETECTIONS IN SOIL

PCBs AND PESTICIDES

CONCENTRATIONS IN MICROGRAMS PER KILOGRAM (ug/kg)

SAMPLE LOCATION	SAMPLE DATE	PCB 1254	GAMMA CHLORDAE	DIELDRIN
VAP RESIDENTIAL LIMITS ug/kg		1,000	—	—
VAP INDUSTRIAL LIMITS ug/kg		25,000	—	—
TCLP LIMIT ug/L		—	—	—
BUILDING 50 ROLLOFF	01/29/2002	340 J	8.9 J	11 J

VAP OHIO EPA VOLUNTARY ACTION PROGRAM REGULATIONS "GENERIC DIRECT-CONTACT SOIL STANDARDS"
(OHIO ADMINISTRATIVE CODE RULE 3745-300-08)

TCLP TOXICITY CHARACTERISTIC LEACHING PROCEDURE

ug/L MICRGRAMS PER LITER

— NOT ESTABLISHED

J ESTIMATED VALUE

< LESS THAN

TABLE 5

DAYTON THERMAL PRODUCTS
DAYTON, OHIO

BUILDING 50 SVE INSTALLATION ROLLOFF SAMPLING
SUMMARY OF POSITIVE DETECTIONS IN SOIL

HERBICIDES

CONCENTRATIONS IN MICROGRAMS PER KILOGRAM (ug/kg)

SAMPLE LOCATION	SAMPLE DATE	DINOSEB	2,4-D	2,4,5-T	2,4,5-TP
VAP RESIDENTIAL LIMITS ug/kg		—	—	—	—
VAP INDUSTRIAL LIMITS ug/kg		—	—	—	—
TCLP LIMIT ug/L		—	10,000	400,000	1,000
BUILDING 50 ROLLOFF	01/29/2002	<1 9	<3 8	0 52 J	0 53 J

VAP OHIO EPA VOLUNTARY ACTION PROGRAM REGULATIONS "GENERIC DIRECT-CONTACT SOIL STANDARDS"
(OHIO ADMINISTRATIVE CODE RULE 3745-300-08)

TCLP TOXICITY CHARACTERISTIC LEACHING PROCEDURE

— NOT ESTABLISHED OR NOT ANALYZED

ug/L MICRGRAMS PER LITER

J ESTIMATED VALUE

< LESS THAN

Analysis Report

Lancaster Laboratories
Where quality is a science

MAR - 1 2002

ANALYTICAL RESULTS

Prepared for

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

248-576-5741

Prepared by

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 795083 Samples arrived at the laboratory on Wednesday, January 30, 2002 The PO# for this group is N99C403749-B

Client Description		Lancaster Labs Number
Rolloff_Bldg _50 Composite Soil Sample		3766313
Rolloff_Bldg _50 Composite Soil Sample	TCLP NVE	3766314
Rolloff_Bldg _50 Composite Soil Sample	TCLP ZHE	3766315
TCLP_NVE_Tumbler_Blank		3766316
TCLP_ZHE_Tumbler_Blank		3766317

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles

1 COPY TO Leggette, Brashears & Graham Attn Mr Ken Vogel

Lancaster Laboratories
Where quality is a science

Questions? Contact your Client Services Representative
Katherine A Klinefelter at (717) 656-2300

Respectfully Submitted,

Christine M. Dulaney
Sr. Chemist

Lancaster Laboratories Inc
2425 New Holland Pike
PO Box 12425
Lancaster PA 17605-2425
717-656-2300 Fax 717 656-2681

MEMBER ACIL

Analysis Report

Lancaster Laboratories
Where quality is a science

MAR - 1 2002

Lancaster Laboratories Sample No. SW 3766313

Collected 01/29/2002 14 10 by KM

Account Number: 10160

Submitted 01/30/2002 09·00
Reported 02/27/2002 at 16 17
Discard. 04/29/2002
Rolloff_Bldg _50 Composite Soil Sample
Site Code SC001 RFA#. LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG# DCJ24-01

CAT No	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
00159	Mercury	7439-97-6	0 23		0 0028	mg/kg	1
01625	Thallium	7440-28-0	1 7	J	0 96	mg/kg	1
01644	Antimony	7440-36-0	N D		0 73	mg/kg	1
01647	Beryllium	7440-41-7	0 52	J	0 021	mg/kg	1
01649	Cadmium	7440-43-9	0 40	J	0 062	mg/kg	1
01651	Chromium	7440-47-3	17 0		0 16	mg/kg	1
01653	Copper	7440-50-8	25 6		0 17	mg/kg	1
01655	Lead	7439-92-1	41 1		0 92	mg/kg	1
01661	Nickel	7440-02-0	13 4		0 23	mg/kg	1
01666	Silver	7440-22-4	N D		0 16	mg/kg	1
01672	Zinc	7440-66-6	67 9		0 37	mg/kg	1
06935	Arsenic TR	7440-38-2	7 7		0 43	mg/kg	1
06936	Selenium TR	7782-49-2	N D		0 54	mg/kg	1
00111	Moisture	n a	12 2		0 50	% by wt	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius The result reported above is on an as-received basis						
00394	pH	n a	8 75		0 010		1
	The pH was performed on a 1 1 slurry (25 gms of sample and 25 ml of deionized water) after being tumbled for 30 min						
00496	Corrosivity	n a	See Below			See Below	1
	Corrosivity The pH of a 1 1 slurry (with deionized water) was 8 75 indicating that the waste is not corrosive A waste is corrosive if it exhibits a pH equal to or less than 2 or equal to or greater than 12 5						
00542	Ignitability	n a	See Below			See Below	1
	The sample did not spontaneously ignite when exposed to air or water The sample did not ignite by friction The sample vapors did not ignite when exposed to a flame using a closed cup apparatus						
01121	Reactivity	n a	See Below			See Below	1
	Reactivity The sample was extracted by the interim method described in SW 846,						

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2425 New Holland Pike
PO Box 12425
Lancaster PA 17605-2425
717 656 2300 Fax 717 656 2681

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Lancaster Laboratories Sample No. SW 3766313

Collected 01/29/2002 14:10 by KM

Account Number· 10160

Submitted 01/30/2002 09 00
Reported 02/27/2002 at 16 17
Discard: 04/29/2002
Rolloff_Bldg _50 Composite Soil Sample
Site Code· SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG#. DCJ24-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
	Chapter 7 3 This solution was analyzed for cyanide and sulfide This waste is not considered reactive and hazardous because it does not generate a quantity of hydrogen cyanide exceeding 250 mg/kg or hydrogen sulfide exceeding 500 mg/kg These interim threshold limits were established by the Solid Waste Branch of EPA, July, 1992 These results do not reflect total cyanide or total sulfide						
01122	Sulfide (Reactivity)	n a	N D		20	mg/kg	1
01123	Cyanide (Reactivity)	n a	N D		99	mg/kg	1
01225	TCL Pesticides in Solids						
01218	Gamma BHC - Lindane	58-89-9	N D		3 9	ug/kg	20
01219	Heptachlor	76-44-8	N D		3 9	ug/kg	20
01220	Aldrin	309-00-2	N D		3 9	ug/kg	20
01221	p,p-DDT	50-29-3	N D		11	ug/kg	20
01222	Dieldrin	60-57-1	11	J	7 5	ug/kg	20
01223	Endrin	72-20-8	N D		7 5	ug/kg	20
01859	Methoxychlor	72-43-5	N D		91	ug/kg	20
01981	Alpha BHC	319-84-6	N D		3 9	ug/kg	20
01982	Beta BHC	319-85-7	N D		3 9	ug/kg	20
01983	Delta BHC	319-86-8	N D		3 9	ug/kg	20
01984	Heptachlor Epoxide	1024-57-3	N D		3 9	ug/kg	20
01985	p,p-DDE	72-55-9	N D		7 5	ug/kg	20
01986	p,p-DDD	72-54-8	N D		14	ug/kg	20
01988	Toxaphene	8001-35-2	N D		250	ug/kg	20
01989	Endosulfan I	959-98-8	N D		3 9	ug/kg	20
01990	Endosulfan II	33213-65-9	N D		7 5	ug/kg	20
01991	Endosulfan Sulfate	1031-07-8	N D		7 5	ug/kg	20
01992	Endrin Aldehyde	7421-93-4	N D		14	ug/kg	20
01993	PCB-1016	12674-11-2	N D		93	ug/kg	20
01994	PCB-1221	11104-28-2	N D		150	ug/kg	20
01995	PCB-1232	11141-16-5	N D		80	ug/kg	20
01996	PCB-1242	53469-21-9	N D		180	ug/kg	20
01997	PCB-1248	12672-29-6	N D		75	ug/kg	20
01998	PCB-1254	11097-69-1	340	J	75	ug/kg	20
01999	PCB-1260	11096-82-5	N D		75	ug/kg	20
03017	Endrin Ketone	53494-70-5	N D		7 5	ug/kg	20

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Lancaster Laboratories Sample No. SW 3766313

Collected.01/29/2002 14 10 by KM

Account Number· 10160

Submitted: 01/30/2002 09 00
Reported. 02/27/2002 at 16·17
Discard· 04/29/2002
Rolloff_Bldg._50 Composite Soil Sample
Site Code· SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG# DCJ24-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
03025	Alpha Chlordane	5103-71-9	N D		3 9	ug/kg	20
03026	Gamma Chlordane	5103-74-2	8 9	J	3 9	ug/kg	20

DCB surrogate recovery is outside the QC limits due to the dilution required for analysis of the sample

Accurate spike recoveries could not be determined for the MS/MSD due to the dilution required for analysis

The associated LCS data is within the QC specifications with the exception of Endrin Aldehyde Recovery for Endrin Aldehyde is high enough to ensure no adverse effect on the validity of the data The data is reported at the client's request

01863 Appendix IX Herbicides in Soil

04174	2,4-D	94-75-7	N D		3 8	ug/kg	1
04175	Dinoseb	88-85-7	N D		1 9	ug/kg	1
04176	2,4,5-TP	93-72-1	0 53	J	0 38	ug/kg	1
04177	2,4,5-T	93-76-5	0 52	J	0 38	ug/kg	1

04688 TCL SW846 Semivolatiles Soil

01185	Phenol	108-95-2	N D		76	ug/kg	1
01186	2-Chlorophenol	95-57-8	N D		38	ug/kg	1
01187	1,4-Dichlorobenzene	106-46-7	N D		38	ug/kg	1
01188	N-Nitroso-di-n-propylamine	621-64-7	N D		38	ug/kg	1
01189	1,2,4-Trichlorobenzene	120-82-1	N D		38	ug/kg	1
01190	4-Chloro-3-methylphenol	59-50-7	N D		76	ug/kg	1
03746	2-Nitrophenol	88-75-5	N D		76	ug/kg	1
03747	2,4-Dimethylphenol	105-67-9	N D		76	ug/kg	1
03748	2,4-Dichlorophenol	120-83-2	N D		76	ug/kg	1
03749	2,4,6-Trichlorophenol	88-06-2	N D		76	ug/kg	1
03753	bis(2-Chloroethyl)ether	111-44-4	N D		38	ug/kg	1
03754	1,3-Dichlorobenzene	541-73-1	N D		38	ug/kg	1
03755	1,2-Dichlorobenzene	95-50-1	N D		38	ug/kg	1
03757	Hexachloroethane	67-72-1	N D		38	ug/kg	1
03758	Nitrobenzene	98-95-3	N D		38	ug/kg	1

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Lancaster Laboratories Sample No. SW 3766313

Collected 01/29/2002 14 10 by KM

Account Number 10160

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Reported: 02/27/2002 at 16·17
Discard· 04/29/2002
Rolloff_Bldg._50 Composite Soil Sample
Site Code· SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG# DCJ24-01

CAT No	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
03759	Isophorone	78-59-1	N D		38	ug/kg	1
03760	bis(2-Chloroethoxy)methane	111-91-1	N D		76	ug/kg	1
03761	Naphthalene	91-20-3	N D		38	ug/kg	1
03762	Hexachlorobutadiene	87-68-3	N D		76	ug/kg	1
03763	Hexachlorocyclopentadiene	77-47-4	N D		190	ug/kg	1
03764	2-Chloronaphthalene	91-58-7	N D		38	ug/kg	1
03765	Acenaphthylene	208-96-8	N D		38	ug/kg	1
03766	Dimethylphthalate	131-11-3	N D		76	ug/kg	1
04690	2-Methylphenol	95-48-7	N D		38	ug/kg	1
04691	2,2'-oxybis(1-Chloropropane)	108-60-1	N D		38	ug/kg	1
04692	4-Methylphenol	106-44-5	N D		76	ug/kg	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis The result reported for 4-methylphenol represents the combined total of both compounds						
04693	4-Chloroaniline	106-47-8	N D		38	ug/kg	1
04694	2-Methylnaphthalene	91-57-6	N D		38	ug/kg	1
04695	2,4,5-Trichlorophenol	95-95-4	N D		76	ug/kg	1
04696	2-Nitroaniline	88-74-4	N D		38	ug/kg	1
04689	TCL SW846 Semivolatiles/Soil						
01191	Acenaphthene	83-32-9	61	J	38	ug/kg	1
01192	4-Nitrophenol	100-02-7	N D		190	ug/kg	1
01193	2,4-Dinitrotoluene	121-14-2	N D		76	ug/kg	1
01194	Pentachlorophenol	87-86-5	N D		190	ug/kg	1
01195	Pyrene	129-00-0	2,500		38	ug/kg	1
03750	2,4-Dinitrophenol	51-28-5	N D		760	ug/kg	1
03751	4,6-Dinitro-2-methylphenol	534-52-1	N D		190	ug/kg	1
03767	2,6-Dinitrotoluene	606-20-2	N D		38	ug/kg	1
03768	Fluorene	86-73-7	100	J	38	ug/kg	1
03769	4-Chlorophenyl-phenylether	7005-72-3	N D		38	ug/kg	1
03770	Diethylphthalate	84-66-2	N D		76	ug/kg	1
03772	N-Nitrosodiphenylamine	86-30-6	N D		38	ug/kg	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine The result reported for N-nitrosodiphenylamine represents the combined total of both compounds						
03773	4-Bromophenyl-phenylether	101-55-3	N D		76	ug/kg	1

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Discard 04/29/2002
Rolloff_Bldg _50 Composite Soil Sample
Site Code: SC001 RFA# LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG#: DCJ24-01

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit	Units	Dilution Factor
03774	Hexachlorobenzene	118-74-1	N D		38	ug/kg	1
03775	Phenanthrene	85-01-8	1,100		38	ug/kg	1
03776	Anthracene	120-12-7	310	J	38	ug/kg	1
03777	Di-n-butylphthalate	84-74-2	N D		76	ug/kg	1
03778	Fluoranthene	206-44-0	2,500		38	ug/kg	1
03780	Butylbenzylphthalate	85-68-7	N D		76	ug/kg	1
03781	Benzo(a)anthracene	56-55-3	1,500		38	ug/kg	1
03782	Chrysene	218-01-9	1,500		38	ug/kg	1
03783	3,3'-Dichlorobenzidine	91-94-1	N D		76	ug/kg	1
03784	bis(2-Ethylhexyl)phthalate	117-81-7	98	J	76	ug/kg	1
03785	Di-n-octylphthalate	117-84-0	N D		76	ug/kg	1
03786	Benzo(b)fluoranthene	205-99-2	1,300		38	ug/kg	1
03787	Benzo(k)fluoranthene	207-08-9	650		38	ug/kg	1
03788	Benzo(a)pyrene	50-32-8	930		38	ug/kg	1
03789	Indeno(1,2,3-cd)pyrene	193-39-5	520		38	ug/kg	1
03790	Dibenz(a,h)anthracene	53-70-3	210	J	38	ug/kg	1
03791	Benzo(g,h,i)perylene	191-24-2	480		38	ug/kg	1
04697	3-Nitroaniline	99-09-2	N D		76	ug/kg	1
04698	Dibenzofuran	132-64-9	N D		38	ug/kg	1
04700	4-Nitroaniline	100-01-6	N D		76	ug/kg	1
04702	Carbazole	86-74-8	99	J	76	ug/kg	1
06292	TCL by 8260 (soil)						
05444	Chloromethane	74-87-3	N D		2	ug/kg	1
05445	Vinyl Chloride	75-01-4	N D		1	ug/kg	1
05446	Bromomethane	74-83-9	N D		2	ug/kg	1
05447	Chloroethane	75-00-3	N D		2	ug/kg	1
05449	1,1-Dichloroethene	75-35-4	N D		1	ug/kg	1
05450	Methylene Chloride	75-09-2	N D		2	ug/kg	1
05451	trans-1,2-Dichloroethene	156-60-5	N D		1	ug/kg	1
05452	1,1-Dichloroethane	75-34-3	N D		1	ug/kg	1
05454	cis-1,2-Dichloroethene	156-59-2	N D		1	ug/kg	1
05455	Chloroform	67-66-3	N D		1	ug/kg	1
05457	1,1,1-Trichloroethane	71-55-6	6	J	1	ug/kg	1
05458	Carbon Tetrachloride	56-23-5	N D		1	ug/kg	1
05460	Benzene	71-43-2	N D		1	ug/kg	1

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Collected 01/29/2002 14 10 by KM

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Rolloff_Bldg._50 Composite Soil Sample
Site Code: SC001 RFA#· LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG#: DCJ24-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Units	Dilution Factor
05461	1,2-Dichloroethane	107-06-2	N D	1	ug/kg	1
05462	Trichloroethene	79-01-6	6	1	ug/kg	1
05463	1,2-Dichloropropane	78-87-5	N D	1	ug/kg	1
05465	Bromodichloromethane	75-27-4	N D	1	ug/kg	1
05466	Toluene	108-88-3	N D	1	ug/kg	1
05467	1,1,2-Trichloroethane	79-00-5	N D	1	ug/kg	1
05468	Tetrachloroethene	127-18-4	4,800	140	ug/kg	125
05470	Dibromochloromethane	124-48-1	N D	1	ug/kg	1
05472	Chlorobenzene	108-90-7	N D	1	ug/kg	1
05474	Ethylbenzene	100-41-4	N D	1	ug/kg	1
05477	Styrene	100-42-5	N D	1	ug/kg	1
05478	Bromoform	75-25-2	N D	1	ug/kg	1
05480	1,1,2,2-Tetrachloroethane	79-34-5	N D	1	ug/kg	1
06293	Acetone	67-64-1	N D	8	ug/kg	1
06294	Carbon Disulfide	75-15-0	N D	1	ug/kg	1
06296	2-Butanone	78-93-3	N D	5	ug/kg	1
06297	trans-1,3-Dichloropropene	10061-02-6	N D	1	ug/kg	1
06298	cis-1,3-Dichloropropene	10061-01-5	N D	1	ug/kg	1
06299	4-Methyl-2-pentanone	108-10-1	N D	3	ug/kg	1
06300	2-Hexanone	591-78-6	N D	3	ug/kg	1
06301	Xylene (Total)	1330-20-7	N D	1	ug/kg	1

Laboratory Chronicle

CAT No	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	02/05/2002 08 53	Damary Valentin	1
01625	Thallium	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01644	Antimony	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01647	Beryllium	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01649	Cadmium	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01651	Chromium	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01653	Copper	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01655	Lead	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01661	Nickel	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
01666	Silver	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1

Lancaster Laboratories
Where quality is a science

Lancaster Laboratories Sample No. SW 3766313

Collected 01/29/2002 14 10 by KM

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Discard. 04/29/2002
Rolloff_Bldg _50 Composite Soil Sample
Site Code: SC001 RFA#· LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

AR-50 SDG#· DCJ24-01

01672	Zinc	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
06935	Arsenic TR	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
06936	Selenium TR	SW-846 6010B	1	02/05/2002 10 17	Joanne M Gates	1
00111	Moisture	EPA 160 3 modified	1	02/05/2002 17 44	Justin M Bowers	1
00394	pH	SW-846 9045C (modified)	1	02/01/2002 15 30	Luz M Groff	1
00496	Corrosivity	SW-846 Chapter 7	1	02/01/2002 15 30	Luz M Groff	1
00542	Ignitability	40 CFR 261 21	1	02/04/2002 18 25	Justin M Bowers	1
01121	Reactivity	SW-846 Chapter 7 3	1	02/01/2002 06 30	Susan A Engle	1
01122	Sulfide (Reactivity)	SW-846 9034	1	02/01/2002 06 30	Susan A Engle	1
01123	Cyanide (Reactivity)	SW-846 9012A (modified)	1	02/03/2002 16 41	Matthew J Mercer	1
01225	TCL Pesticides in Solids	SW-846 8081A/8082	1	02/09/2002 03 30	Anita M Dale	20
01863	Appendix IX Herbicides in Soil	SW-846 8151A	1	02/04/2002 23 24	Tiffany A Leyda	1
04688	TCL SW846 Semivolatiles Soil	SW-846 8270C	1	02/07/2002 03 54	Jolene M Graham	1
04689	TCL SW846 Semivolatiles/Soil	SW-846 8270C	1	02/07/2002 03 54	Jolene M Graham	1
06292	TCL by 8260 (soil)	SW-846 8260B	1	02/01/2002 18 58	Bryan J Polick	125
06292	TCL by 8260 (soil)	SW-846 8260B	1	02/04/2002 17 57	Patricia L Nolt	1
00374	GC/MS VOA Soil Prep	SW-846 5030A	1	02/01/2002 13 48	Susan McMahon-Luu	n a
00374	GC/MS VOA Soil Prep	SW-846 5030A	2	02/04/2002 17 15	Patricia L Nolt	n a
00381	BNA Soil Extraction	SW-846 3550B	1	02/05/2002 08 15	John A Myers	1
00819	Solid Sample Pesticide Extract	SW-846 3550B	1	02/05/2002 17 45	Luis E Villamil	1
04181	Herbicide Soil Extraction	SW-846 3550B/8151A	1	02/01/2002 07 30	Deborah M Zimmerman	1
05708	SW SW846 ICP Digest	SW-846 3050B	1	02/04/2002 19 45	Annamaria Stipkovits	1
05711	SW SW846 Hg Digest	SW-846 7471A modified	1	02/04/2002 20 50	Annamaria Stipkovits	1

Analysis Report

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Lancaster Laboratories Sample No. TL 3766314

Collected 01/29/2002 14:10 by KM

Account Number: 10160

Submitted. 01/30/2002 09 00
Reported: 02/25/2002 at 10:18
Discard 04/27/2002
Rolloff_Bldg._50 Composite Soil Sample TCLP NVE
Site Code SC001 RFA#. LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

NVE50 SDG#. DCJ24-02

CAT No	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00259	Mercury	7439-97-6	N D	0 000026	mg/l	1

The metal analyses were performed on a non-volatile leachate prepared according to the procedure specified in SW-846, Chapter 7 4 (Revision 3, December, 1994) A sample is considered to have failed the Toxicity Characteristic (TC) test and is considered a hazardous waste if any of the metal concentrations (mg/l) in the leachate exceed the following maxima (100 times the Primary Drinking Water Standards)

Arsenic	5 0	Cadmium	1 0	Lead	5 0	Selenium	1 0
Barium	100 0	Chromium	5 0	Mercury	0 2	Silver	5 0

01335	Arsenic	7440-38-2	N D	0 0053	mg/l	1
01336	Selenium	7782-49-2	0 0061 J	0 0043	mg/l	1
01746	Barium	7440-39-3	0 513	0 00042	mg/l	1
01749	Cadmium	7440-43-9	0 00090J	0 00064	mg/l	1
01751	Chromium	7440-47-3	N.D	0 0017	mg/l	1
01755	Lead	7439-92-1	N D	0 0088	mg/l	1
01766	Silver	7440-22-4	N D	0 0013	mg/l	1

Laboratory Chronicle

CAT No	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	02/21/2002 07 42	Damary Valentin	1
01335	Arsenic	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01336	Selenium	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01746	Barium	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01749	Cadmium	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01751	Chromium	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01755	Lead	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
01766	Silver	SW-846 6010B	1	02/21/2002 06 56	Joanne M Gates	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	01/31/2002 15 15	Thomas H Collins	n a
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	02/20/2002 17 00	Irimar Leon	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	02/20/2002 20 25	Nelli S Markaryan	1

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Lancaster Laboratories Sample No. TL 3766314

Collected.01/29/2002 14:10 by KM

Submitted· 01/30/2002 09 00
Reported: 02/25/2002 at 10:18
Discard: 04/27/2002
Rolloff_Bldg _50 Composite Soil Sample TCLP NVE
Site Code: SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

NVE50 SDG# DCJ24-02

Account Number: 10160

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

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' 2 - 1 2002

Lancaster Laboratories Sample No TL 3766315

Collected:01/29/2002 14:10 by KM

Account Number: 10160

Submitted: 01/30/2002 09:00
Reported: 02/25/2002 at 10:19
Discard· 04/27/2002
Rolloff_Bldg._50 Composite Soil Sample TCLP ZHE
Site Code: SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

ZHE50 SDG#: DCJ24-03

CAT No	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
03636	TCLP by 8260					
05386	Vinyl Chloride	75-01-4	N D.	0 020	mg/l	20
05390	1,1-Dichloroethene	75-35-4	N D	0 020	mg/l	20
05396	Chloroform	67-66-3	N D	0 020	mg/l	20
05399	Carbon Tetrachloride	56-23-5	N D	0 020	mg/l	20
05401	Benzene	71-43-2	N D	0 020	mg/l	20
05402	1,2-Dichloroethane	107-06-2	N D	0 020	mg/l	20
05403	Trichloroethene	79-01-6	N D	0 020	mg/l	20
05409	Tetrachloroethene	127-18-4	N D	0 020	mg/l	20
05413	Chlorobenzene	108-90-7	N D	0 020	mg/l	20
06305	2-Butanone	78-93-3	N D	0 060	mg/l	20

The volatile organic analyses were performed on a zero headspace toxicity characteristic leachate of the submitted waste The leachate was prepared according to the procedure specified in SW-846, Chapter 7 4 (Revision 3, 12/94)
If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR Part 261 24, the waste possesses the characteristic of toxicity and is a hazardous waste These limits are listed below in mg/L
Other limits may apply for analyses performed under other regulations

Benzene	0 5	1,1-Dichloroethene	0 7
Carbon Tetrachloride	0 5	Methyl Ethyl Ketone (2-Butanone)	200 0
Chlorobenzene	100 0	Tetrachloroethene	0 7
Chloroform	6 0	Trichloroethene	0 5
1,2-Dichloroethane	0 5	Vinyl Chloride	0 2

The sample was analyzed after the 14-day holding time had expired, as per client request

Laboratory Chronicle

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Lancaster, PA 17605-2425
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Lancaster Laboratories Sample No TL 3766315

Collected:01/29/2002 14:10 by KM

Account Number: 10160

Submitted: 01/30/2002 09:00
Reported: 02/25/2002 at 10 19
Discard: 04/27/2002

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

Rolloff_Bldg._50 Composite Soil Sample TCLP ZHE
Site Code· SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

ZHE50 SDG#: DCJ24-03

CAT No	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
03636	TCLP by 8260	SW-846 8260B	1	02/21/2002 14 38	Joseph P Casillo	20
00946	TCLP Zero Headspace Extraction	SW-846 1311	1	01/31/2002 16.10	William P Stafford	n.a
01163	GC/MS VOA Water Prep	SW-846 5030B	1	02/21/2002 14 38	Joseph P Casillo	n a

Analysis Report

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MAR -1 2002

Lancaster Laboratories Sample No. TL 3766316

Collected: n.a.

Account Number: 10160

Submitted: 01/30/2002 09·00
Reported: 02/25/2002 at 10·19
Discard. 04/27/2002
TCLP_NVE_Tumbler_Blank
Site Code: SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

NVTBB SDG#: DCJ24-04BL

CAT No	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00259	Mercury	7439-97-6	N D	0 000026	mg/l	1

The metal analyses were performed on a non-volatile leachate prepared according to the procedure specified in SW-846, Chapter 7 4 (Revision 3, December, 1994) A sample is considered to have failed the Toxicity Characteristic (TC) test and is considered a hazardous waste if any of the metal concentrations (mg/l) in the leachate exceed the following maxima (100 times the Primary Drinking Water Standards)

Arsenic 5 0	Cadmium 1 0	Lead 5 0	Selenium 1 0
Barium 100 0	Chromium 5 0	Mercury 0 2	Silver 5 0

01335	Arsenic	7440-38-2	N D.	0 0053	mg/l	1
01336	Selenium	7782-49-2	N D	0 0043	mg/l	1
01746	Barium	7440-39-3	0 0017 J	0 00042	mg/l	1
01749	Cadmium	7440-43-9	N D	0 00064	mg/l	1
01751	Chromium	7440-47-3	N D	0 0017	mg/l	1
01755	Lead	7439-92-1	N.D	0.0088	mg/l	1
01766	Silver	7440-22-4	N D	0 0013	mg/l	1

Laboratory Chronicle

CAT No	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00259	Mercury	SW-846 7470A	1	02/21/2002 07 49	Damary Valentin	1
01335	Arsenic	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01336	Selenium	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01746	Barium	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01749	Cadmium	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01751	Chromium	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01755	Lead	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
01766	Silver	SW-846 6010B	1	02/21/2002 07 45	Joanne M Gates	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	01/31/2002 15 15	Thomas H Collins	n a
05705	WW/TL SW 846 ICP Digest (tot)	SW-846 3010A	1	02/20/2002 17 00	Irimar Leon	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	02/20/2002 20 25	Nelli S Markaryan	1

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Lancaster Laboratories Sample No. TL 3766316

Collected. n a.

Submitted: 01/30/2002 09 00
Reported: 02/25/2002 at 10:19
Discard· 04/27/2002
TCLP_NVE_Tumbler_Blank
Site Code· SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

NVTBB SDG#. DCJ24-04BL

Account Number: 10160

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Livonia MI 48153-7933

Analysis Report

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Lancaster Laboratories Sample No. TL 3766317

Collected· n a.

Account Number: 10160

Submitted: 01/30/2002 09:00
Reported: 02/25/2002 at 10:19
Discard: 04/27/2002
TCLP_ZHE_Tumbler_Blank
Site Code: SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

ZHTBB SDG# DCJ24-05BL*

CAT No	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
03636	TCLP by 8260					
05386	Vinyl Chloride	75-01-4	N D	0 020	mg/l	20
05390	1,1-Dichloroethene	75-35-4	N D	0 020	mg/l	20
05396	Chloroform	67-66-3	N D	0 020	mg/l	20
05399	Carbon Tetrachloride	56-23-5	N D	0 020	mg/l	20
05401	Benzene	71-43-2	N D	0 020	mg/l	20
05402	1,2-Dichloroethane	107-06-2	N D.	0 020	mg/l	20
05403	Trichloroethene	79-01-6	N D	0 020	mg/l	20
05409	Tetrachloroethene	127-18-4	0 066 J	0.020	mg/l	20
05413	Chlorobenzene	108-90-7	N D.	0 020	mg/l	20
06305	2-Butanone	78-93-3	N D	0 060	mg/l	20

The volatile organic analyses were performed on a zero headspace toxicity characteristic leachate of the submitted waste The leachate was prepared according to the procedure specified in SW-846, Chapter 7 4 (Revision 3, 12/94)
If the TCLP extract contains any one of the Toxicity Characteristic (TC) constituents in an amount equal to or exceeding the concentrations specified in 40 CFR Part 261 24, the waste possesses the characteristic of toxicity and is a hazardous waste These limits are listed below in mg/L. Other limits may apply for analyses performed under other regulations

Benzene	0 5	1,1-Dichloroethene	0 7
Carbon Tetrachloride	0 5	Methyl Ethyl Ketone (2-Butanone)	200 0
Chlorobenzene	100 0	Tetrachloroethene	0 7
Chloroform	6 0	Trichloroethene	0 5
1,2-Dichloroethane	0 5	Vinyl Chloride	0 2

The sample was analyzed after the 14-day holding time had expired, as per client request

Laboratory Chronicle

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2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
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Analysis Report

Lancaster Laboratories
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Lancaster Laboratories Sample No. TL 3766317

Collected: n a.

Account Number: 10160

Submitted: 01/30/2002 09 00
Reported: 02/25/2002 at 10.19
Discard: 04/27/2002
TCLP_ZHE_Tumbler_Blank
Site Code: SC001 RFA#: LBG02004
Dayton Thermal, Bldg 50 SVE/Dayton, OH

DaimlerChrysler Corporation
PO Box 537933
Livonia MI 48153-7933

ZHTBB SDG# DCJ24-05BL*

CAT No	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
03636	TCLP by 8260	SW-846 8260B	1	02/21/2002 14 13	Joseph P Casillo	20
00946	TCLP Zero Headspace Extraction	SW-846 1311	1	01/31/2002 16 10	William P Stafford	n a
01163	GC/MS VOA Water Prep	SW-846 5030B	1	02/21/2002 14 13	Joseph P Casillo	n a.

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MAR - 1 2002

Quality Control Summary

Client Name DaimlerChrysler Corporation
Reported 02/28/02 at 07 34 AM

Group Number· 795083

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number 020310015A	Sample number(s)		3766313					
2,4-D	N D	3 3	ug/kg	77		63-132		
Dinoseb	N D	1 7	ug/kg	7		1-36		
2,4,5-TP	N D	33	ug/kg	88		57-135		
2,4,5-T	N D	33	ug/kg	93		50-159		
Batch number 02032039401A	Sample number(s)		3766313					
pH				100	100	98-102	0	1
Batch number 02032112101A	Sample number(s)		3766313					
Sulfide (Reactivity)	N D	20	mg/kg	87		80-120		
Batch number 02034104101A	Sample number(s)		3766313					
Cyanide (Reactivity)	N D	99 9800 04	mg/kg	102		88-114		
Batch number 020355708001	Sample number(s)		3766313					
Thallium	N D	85	mg/kg	106		57-143		
Antimony	N D	65	mg/kg	137		26-174		
Beryllium	N D	019	mg/kg	100		78-122		
Cadmium	N D	055	mg/kg	96		77-123		
Chromium	0 18 J	14	mg/kg	104		80-120		
Copper	N D	15	mg/kg	102		82-117		
Lead	N D	82	mg/kg	97		76-124		
Nickel	0 25 J	2	mg/kg	98		78-122		
Silver	N D	14	mg/kg	131		93-156		
Zinc	0 42 J	33	mg/kg	100		77-123		
Arsenic TR	0 44 J	38	mg/kg	100		74-126		
Selenium TR	N D	48	mg/kg	105		74-126		
Batch number 020355711001	Sample number(s)		3766313					
Mercury	N D	0025	mg/kg	86		68-132		
Batch number 02035SLE026	Sample number(s)		3766313					
Phenol	N D	67	ug/kg	91		59-121		
2-Chlorophenol	N D	33	ug/kg	94		71-114		
1,4-Dichlorobenzene	N D	33	ug/kg	90		61-110		
N-Nitroso-di-n-propylamine	N D	33	ug/kg	90		62-118		
1,2,4-Trichlorobenzene	N D	33	ug/kg	93		63-116		
4-Chloro-3-methylphenol	N D	67	ug/kg	87		72-123		
Acenaphthene	N D	33	ug/kg	98		70-115		
4-Nitrophenol	N D	170	ug/kg	67		63-138		
2,4-Dinitrotoluene	N D	67	ug/kg	98		70-130		
Pentachlorophenol	N D	170	ug/kg	85		52-112		
Pyrene	N D	33	ug/kg	100		67-123		
2-Nitrophenol	N D	67	ug/kg	92		76-114		
2 4-Dimethylphenol	N D	67	ug/kg	92		60-110		
2,4-Dichlorophenol	N D	67	ug/kg	91		71-118		
2,4,6-Trichlorophenol	N D	67	ug/kg	96		72-118		
2,4-Dinitrophenol	N D	670	ug/kg	82		32-125		
4,6-Dinitro-2-methylphenol	N D	170	ug/kg	99		52-125		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ
(2) The background result was more than four times the spike added

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Quality Control Summary

Client Name DaimlerChrysler Corporation Group Number: 795083
Reported 02/28/02 at 07 34 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
bis(2-Chloroethyl)ether	N D	33	ug/kg	91		66-114		
1,3-Dichlorobenzene	N D.	33	ug/kg	90		60-110		
1,2-Dichlorobenzene	N D	33	ug/kg	91		64-107		
Hexachloroethane	N D	33	ug/kg	87		60-113		
Nitrobenzene	N D	33	ug/kg	90		65-116		
Isophorone	N D	33	ug/kg	93		64-108		
bis(2-Chloroethoxy)methane	N D	67	ug/kg	96		68-122		
Naphthalene	N D	33	ug/kg	93		65-113		
Hexachlorobutadiene	N D	67	ug/kg	96		61-121		
Hexachlorocyclopentadiene	N D	170	ug/kg	124		8-127		
2-Chloronaphthalene	N D	33	ug/kg	95		69-114		
Acenaphthylene	N D	33	ug/kg	102		72-117		
Dimethylphthalate	N D	67	ug/kg	94		72-119		
2,6-Dinitrotoluene	N D	33	ug/kg	95		74-115		
Fluorene	N D	33	ug/kg	92		65-119		
4-Chlorophenyl-phenylether	N D	33	ug/kg	98		64-119		
Diethylphthalate	N D	67	ug/kg	93		71-121		
N-Nitrosodiphenylamine	N D	33	ug/kg	104		60-120		
4-Bromophenyl-phenylether	N D	67	ug/kg	100		71-115		
Hexachlorobenzene	N D	33	ug/kg	104		62-128		
Phenanthrene	N D	33	ug/kg	90		64-116		
Anthracene	N D	33	ug/kg	92		64-116		
Di-n-butylphthalate	N D	67	ug/kg	90		72-119		
Fluoranthene	N D	33	ug/kg	87		65-115		
Butylbenzylphthalate	N D	67	ug/kg	92		59-150		
Benzo(a)anthracene	N D	33	ug/kg	95		69-115		
Chrysene	N D	33	ug/kg	96		67-119		
3,3'-Dichlorobenzidine	N D	67	ug/kg	86		21-104		
bis(2-Ethylhexyl)phthalate	N D	67	ug/kg	90		73-126		
Di-n-octylphthalate	N D	67	ug/kg	101		69-131		
Benzo(b)fluoranthene	N D	33	ug/kg	95		66-122		
Benzo(k)fluoranthene	N D	33	ug/kg	98		66-122		
Benzo(a)pyrene	N D	33	ug/kg	96		72-118		
Indeno(1,2,3-cd)pyrene	N D	33	ug/kg	85		73-118		
Dibenz(a,h)anthracene	N D	33	ug/kg	97		78-126		
Benzo(g,h,i)perylene	N D	33	ug/kg	90		73-119		
2-Methylphenol	N D	33	ug/kg	90		66-111		
2,2'-oxybis(1-Chloropropane)	N D	33	ug/kg	110		65-139		
4-Methylphenol	N D	67	ug/kg	93		49-130		
4-Chloroaniline	N D	33	ug/kg	98		9-100		
2-Methylnaphthalene	N D	33	ug/kg	91		65-108		
2,4,5-Trichlorophenol	N D	67	ug/kg	94		74-117		
2-Nitroaniline	N D	33	ug/kg	94		78-122		
3-Nitroaniline	N D	67	ug/kg	71		29-103		
Dibenzofuran	N D	33	ug/kg	95		66-111		
4-Nitroaniline	N D	67	ug/kg	61		48-116		
Carbazole	N D	67	ug/kg	89		71-114		
Batch number 020360010A	Sample number(s) 3766313							
Gamma BHC - Lindane	N D	17	ug/kg	88		74-138		
Heptachlor	N D	17	ug/kg	91		73-141		
Aldrin	N D	17	ug/kg	94		75-145		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ
(2) The background result was more than four times the spike added

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Quality Control Summary

Client Name. DaimlerChrysler Corporation Group Number: 795083
Reported 02/28/02 at 07 34 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDT	N D	5	ug/kg	94		78-155		
Dieldrin	N D	33	ug/kg	91		76-135		
Endrin	N D	33	ug/kg	107		80-155		
Methoxychlor	N D	4	ug/kg	124		71-179		
Alpha BHC	N D	17	ug/kg	82		66-141		
Beta BHC	N D	17	ug/kg	85		79-147		
Delta BHC	N D	17	ug/kg	94		67-170		
Heptachlor Epoxide	N D	17	ug/kg	91		81-140		
p,p-DDE	N D	33	ug/kg	90		68-151		
p,p-DDD	N D	6	ug/kg	88		77-150		
Toxaphene	N D	11	ug/kg					
Endosulfan I	N D	17	ug/kg	94		60-146		
Endosulfan II	N D	33	ug/kg	91		73-144		
Endosulfan Sulfate	N D	33	ug/kg	84		80-151		
Endrin Aldehyde	N D	6	ug/kg	61*		77-125		
PCB-1016	N D	4 1	ug/kg					
PCB-1221	N D	6 5	ug/kg					
PCB-1232	N D	3 5	ug/kg					
PCB-1242	N D	7 8	ug/kg					
PCB-1248	N D	3 3	ug/kg					
PCB-1254	N D	3 3	ug/kg					
PCB-1260	N D	3 3	ug/kg					
Endrin Ketone	N D	33	ug/kg	87		75-143		
Alpha Chlordane	N D	17	ug/kg	91		79-142		
Gamma Chlordane	N D	17	ug/kg	91		73-144		
Batch number 02036820003B	Sample number(s) 3766313							
Moisture				100	100	99-101	0	4
Batch number 020515705002	Sample number(s) 3766314,3766316							
Arsenic	N D	0053	mg/l	100		90-110		
Selenium	N D	0043	mg/l	99		90-110		
Barium	N D	00042	mg/l	100		93-109		
Cadmium	N D	00064	mg/l	100		94-110		
Chromium	N D	0017	mg/l	99		95-110		
Lead	N D	0088	mg/l	99		94-110		
Silver	N D	0013	mg/l	106		94-110		
Batch number 020515713002	Sample number(s) 3766314,3766316							
Mercury	N D	000026	mg/l	96		84-124		
Batch number D020282AC	Sample number(s) 3766313							
Chloromethane	N D	2	ug/kg	97		40-117		
Vinyl Chloride	N D	1	ug/kg	100		45-122		
Bromomethane	N D	2	ug/kg	102		48-129		
Chloroethane	N D	2	ug/kg	102		51-130		
1,1-Dichloroethene	N D	1	ug/kg	109		64-144		
Methylene Chloride	N D	2	ug/kg	105		76-129		
trans-1,2-Dichloroethene	N D	1	ug/kg	111		78-131		
1,1-Dichloroethane	N D	1	ug/kg	107		82-130		
cis-1,2-Dichloroethene	N D	1	ug/kg	113		85-127		
Chloroform	N D	1	ug/kg	109		84-123		

*- Outside of specification
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Quality Control Summary

Client Name DaimlerChrysler Corporation Group Number· 795083
Reported 02/28/02 at 07·34 AM

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,1,1-Trichloroethane	N D	1	ug/kg	107		69-133		
Carbon Tetrachloride	N D	1	ug/kg	115		61-139		
Benzene	N D	1	ug/kg	108		85-125		
1,2-Dichloroethane	N D	1	ug/kg	111		81-128		
Trichloroethene	N D	1	ug/kg	106		78-129		
1,2-Dichloropropane	N D	1	ug/kg	103		81-126		
Bromodichloromethane	N D	1	ug/kg	108		80-123		
Toluene	N D	1	ug/kg	99		84-125		
1,1,2-Trichloroethane	N D	1	ug/kg	98		82-121		
Dibromochloromethane	N D	1	ug/kg	103		75-123		
Chlorobenzene	N D	1	ug/kg	100		86-122		
Ethylbenzene	N D	1	ug/kg	101		86-127		
Styrene	N D	1	ug/kg	103		87-124		
Bromoform	N D	1	ug/kg	107		66-128		
1,1,2,2-Tetrachloroethane	N D	1	ug/kg	97		69-125		
Acetone	N D	7	ug/kg	154		37-168		
Carbon Disulfide	N D	1	ug/kg	111		49-163		
2-Butanone	N D	4	ug/kg	142		48-148		
trans-1,3-Dichloropropene	N D	1	ug/kg	93		79-121		
cis-1,3-Dichloropropene	N D	1	ug/kg	104		82-122		
4-Methyl-2-pentanone	N D	3	ug/kg	115		62-137		
2-Hexanone	N D	3	ug/kg	111		51-142		
Xylene (Total)	N D	1	ug/kg	103		87-127		
Batch number N020521AC	Sample number(s)	3766315,3766317						
Vinyl Chloride	N D	20	ug/l	116		55-121		
1,1-Dichloroethene	N D	20	ug/l	120		67-140		
Chloroform	N D	20	ug/l	110		86-124		
Carbon Tetrachloride	N D	20	ug/l	102		77-130		
Benzene	N D	20	ug/l	108		84-120		
1,2-Dichloroethane	N D	20	ug/l	119		77-132		
Trichloroethene	N D	20	ug/l	102		87-117		
Tetrachloroethene	N D	20	ug/l	89		79-136		
Chlorobenzene	N D	20	ug/l	96		87-121		
2-Butanone	N D	60	ug/l	97		58-141		
Batch number R020321AA	Sample number(s)	3766313						
Tetrachloroethene	N D	125	ug/kg	106		76-141		

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number 020310015A	Sample number(s)		3766313						
2,4-D	119	89	41-158	29	50				
Dinoseb	1	5	1-48	24	50				
2,4,5-TP	97	96	30-151	1	50				
2,4,5-T	112	81	13-189	30	50				

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Quality Control Summary

Client Name DaimlerChrysler Corporation Group Number 795083
Reported 02/28/02 at 07:34 AM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number 02032039401A	Sample number(s) 3766313								
pH						4 94	4 95	0	2
Batch number 02032112101A	Sample number(s) 3766313								
Sulfide (Reactivity)	51	58	19-113	13	22				
Batch number 02034104101A	Sample number(s) 3766313								
Cyanide (Reactivity)	0	0	0-5	0	19				
Batch number 020355708001	Sample number(s) 3766313								
Thallium	91	94	72-109	3	20	1 5 J	1 3 J	12 (1)	20
Antimony	91	95	75-125	4	20	N D	N D	0 (1)	20
Beryllium	99	100	89-113	2	20	0 46 J	0 64	34* (1)	20
Cadmium	90	91	75-125	1	20	0 35 J	0 41 J	17 (1)	20
Chromium	103	107	75-125	2	20	14 9	16 0	7 (1)	20
Copper	111	111	75-125	0	20	22 5	26 5	16	20
Lead	95	110	75-125	9	20	36 0	43 2	18 (1)	20
Nickel	92	94	75-125	2	20	11 8	14 6	22* (1)	20
Silver	104	107	76-124	3	20	N D	0 14 J	200* (1)	20
Zinc	118	109	75-125	4	20	59 7	71 3	18	20
Arsenic TR	96	98	76-109	2	20	6 7	7 4	9	20
Selenium TR	96	98	74-112	3	20	N D	N D	0 (1)	20
Batch number 020355711001	Sample number(s) 3766313								
Mercury	84	118	80-120	15	20	0 20	0 21	4 (1)	20
Batch number 02035SLE026	Sample number(s) 3766313								
Phenol	73	73	58-119	0	30				
2-Chlorophenol	66	70	57-122	6	30				
1,4-Dichlorobenzene	67	70	40-122	4	30				
N-Nitroso-di-n-propylamine	67	73	58-122	9	30				
1,2,4-Trichlorobenzene	67	72	50-124	7	30				
4-Chloro-3-methylphenol	65	77	61-129	16	30				
Acenaphthene	49*	48*	51-132	4	30				
4-Nitrophenol	-72*	-72*	31-162	0	30				
2,4-Dinitrotoluene	36*	36*	61-133	1	30				
Pentachlorophenol	66	70	17-128	6	30				
Pyrene	67	80	34-151	14	30				
2-Nitrophenol	57	57	50-133	1	30				
2,4-Dimethylphenol	64	70	46-124	8	30				
2,4-Dichlorophenol	64	74	42-140	15	30				
2,4,6-Trichlorophenol	0*	45	44-139	200*	30				
2,4-Dinitrophenol	0*	0*	20-150	0	30				
4,6-Dinitro-2-methylphenol	0*	0*	16-145	0	30				
bis(2-Chloroethyl)ether	73	108	50-130	39*	30				
1,3-Dichlorobenzene	69	70	39-122	1	30				
1,2-Dichlorobenzene	67	69	43-119	2	30				
Hexachloroethane	68	69	25-132	1	30				
Nitrobenzene	67	69	50-131	2	30				
Isophorone	63	67	38-133	6	30				

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Quality Control Summary

Client Name DaimlerChrysler Corporation Group Number. 795083
Reported: 02/28/02 at 07 34 AM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
bis(2-Chloroethoxy)methane	70	74	58-132	6	30				
Naphthalene	101	106	43-133	3	30				
Hexachlorobutadiene	71	73	44-130	3	30				
Hexachlorocyclopentadiene	48	44	5-176	8	30				
2-Chloronaphthalene	0*	23*	56-124	200*	30				
Acenaphthylene	53*	58*	60-125	10	30				
Dimethylphthalate	37*	38*	63-123	0	30				
2,6-Dinitrotoluene	30*	32*	63-122	6	30				
Fluorene	55	56	52-130	1	30				
4-Chlorophenyl-phenylether	47*	46*	60-120	1	30				
Diethylphthalate	45*	45*	65-124	0	30				
N-Nitrosodiphenylamine	86	99	48-136	14	30				
4-Bromophenyl-phenylether	70	77	62-124	10	30				
Hexachlorobenzene	75	77	54-133	2	30				
Phenanthrene	73	78	37-140	6	30				
Anthracene	68	74	49-129	9	30				
Di-n-butylphthalate	65	71	55-132	8	30				
Fluoranthene	60	66	37-135	9	30				
Butylbenzylphthalate	62	70	56-145	13	30				
Benzo(a)anthracene	72	81	40-141	11	30				
Chrysene	69	66	39-143	4	30				
3,3'-Dichlorobenzidine	42	50	3-123	16	30				
bis(2-Ethylhexyl)phthalate	145*	146*	56-141	0	30				
Di-n-octylphthalate	70	76	53-144	8	30				
Benzo(b)fluoranthene	64	67	39-137	5	30				
Benzo(k)fluoranthene	67	74	45-136	9	30				
Benzo(a)pyrene	62	65	40-143	4	30				
Indeno(1,2,3-cd)pyrene	65	68	26-151	5	30				
Dibenz(a,h)anthracene	69	74	35-159	7	30				
Benzo(g,h,i)perylene	62	66	27-149	7	30				
2-Methylphenol	65	69	62-109	6	30				
2,2'-oxybis(1-Chloropropane)	90	95	50-145	5	30				
4-Methylphenol	66	71	60-115	7	30				
4-Chloroaniline	40	42	19-106	5	30				
2-Methylnaphthalene	68	75	57-114	8	30				
2,4,5-Trichlorophenol	106	73	53-132	37*	30				
2-Nitroaniline	36*	11*	71-128	108*	30				
3-Nitroaniline	28*	32*	33-117	12	30				
Dibenzofuran	166*	156*	48-129	2	30				
4-Nitroaniline	36	40	31-128	9	30				
Carbazole	64	70	61-118	9	30				
Batch number 020360010A	Sample number(s) 3766313								
Gamma BHC - Lindane	0*	0*	43-154	0	50				
Heptachlor	0*	0*	70-138	0	50				
Aldrin	0*	0*	65-134	0	50				
p,p-DDT	0*	0*	62-166	0	50				
Dieldrin	0*	0*	68-139	0	50				
Endrin	0*	0*	48-188	0	50				
Methoxychlor	(2)	(2)	74-162	104*	50				
Alpha BHC	0*	0*	64-134	0	50				

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Quality Control Summary

Client Name· DaimlerChrysler Corporation
Reported· 02/28/02 at 07 34 AM

Group Number: 795083

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Beta BHC	0*	0*	31-176	0	50				
Delta BHC	0*	0*	29-191	0	50				
Heptachlor Epoxide	0*	0*	69-133	0	50				
p,p-DDE	0*	0*	48-175	0	50				
p,p-DDD	0*	0*	52-181	0	50				
Endosulfan I	0*	0*	62-133	0	50				
Endosulfan II	0*	0*	65-144	0	50				
Endosulfan Sulfate	0*	0*	65-154	0	50				
Endrin Aldehyde	0*	0*	63-125	0	50				
Batch number 02036820003B	Sample number(s) 3766313								
Moisture						7 06	6 91	2	11
Batch number 020515705002	Sample number(s) 3766314,3766316								
Arsenic	103	102	82-122	0	20	N D	N D	0 (1)	20
Selenium	103	101	75-125	2	20	0 0061 J	N D	200* (1)	20
Barium	98	96	75-125	1	20	0 513	0 463	10 (1)	20
Cadmium	97	97	78-121	1	20	0 00090 J	0 0014 J	43* (1)	20
Chromium	97	97	80-119	0	20	N D	0 0017 J	200* (1)	20
Lead	101	100	75-125	0	20	N D	N D	0 (1)	20
Silver	111	109	75-125	1	20	N D	N D	0 (1)	20
Batch number 020515713002	Sample number(s) 3766314,3766316								
Mercury	108	102	80-120	6	20	N D	N D	0 (1)	20
Batch number D020282AC	Sample number(s) 3766313								
Chloromethane	81	79	15-128	2	30				
Vinyl Chloride	82	81	16-141	0	30				
Bromomethane	86	87	24-140	1	30				
Chloroethane	84	85	33-147	1	30				
1,1-Dichloroethene	94	95	40-159	1	30				
Methylene Chloride	95	94	41-157	1	30				
trans-1,2-Dichloroethene	98	98	47-152	0	30				
1,1-Dichloroethane	95	95	51-147	0	30				
cis-1,2-Dichloroethene	101	97	53-146	4	30				
Chloroform	100	98	53-142	2	30				
1,1,1-Trichloroethane	99	95	41-153	3	30				
Carbon Tetrachloride	102	97	39-150	5	30				
Benzene	98	95	43-151	3	30				
1,2-Dichloroethane	99	96	59-144	3	30				
Trichloroethene	97	97	40-152	1	30				
1,2-Dichloropropane	92	93	55-138	1	30				
Bromodichloromethane	96	100	52-137	4	30				
Toluene	97	96	27-163	1	30				
1,1,2-Trichloroethane	95	91	51-149	4	30				
Dibromochloromethane	99	94	45-142	5	30				
Chlorobenzene	95	90	46-139	5	30				
Ethylbenzene	95	91	30-158	4	30				
Styrene	96	92	19-156	4	30				
Bromoform	101	97	27-145	4	30				

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Quality Control Summary

Client Name· DaimlerChrysler Corporation Group Number 795083
Reported. 02/28/02 at 07 34 AM

Sample Matrix Quality Control

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
1,1,2,2-Tetrachloroethane	90	87	23-180	3	30				
Acetone	87	83	10-202	4	30				
Carbon Disulfide	95	94	23-176	1	30				
2-Butanone	95	87	22-181	8	30				
trans-1,3-Dichloropropene	87	88	41-139	0	30				
cis-1,3-Dichloropropene	93	94	45-136	2	30				
4-Methyl-2-pentanone	103	97	31-154	6	30				
2-Hexanone	86	79	18-171	8	30				
Xylene (Total)	97	93	46-158	4	30				
Batch number N020521AC	Sample number(s) 3766315,3766317								
Vinyl Chloride	119	128	54-133	7	30				
1,1-Dichloroethene	120	126	75-152	5	30				
Chloroform	111	114	76-138	3	30				
Carbon Tetrachloride	105	111	75-149	5	30				
Benzene	92	105	78-134	5	30				
1,2-Dichloroethane	123	129	75-141	5	30				
Trichloroethene	102	108	82-133	6	30				
Tetrachloroethene	86	93	81-148	8	30				
Chlorobenzene	(2)	(2)	81-125	5	30				
2-Butanone	98	100	56-141	2	30				
Batch number R020321AA	Sample number(s) 3766313								
Tetrachloroethene	97	96	31-174	1	30				

Surrogate Quality Control

Analysis Name Appendix IX Herbicides in Soil
Batch number 020310015A

	2,4-Dichlorophenylacetic acid
3766313	65
Blank	77
LCS	83
MS	119
MSD	121
Limits	39-192

Analysis Name TCL SW846 Semivolatiles Soil
Batch number 02035SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5
3766313	87	82	89	84
Blank	103	99	103	86
LCS	98	91	104	90

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Quality Control Summary

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Surrogate Quality Control

MS	66	63	66	61
MSD	72	67	67	67
Limits	46-120	46-122	37-139	50-132

	2-Fluorobiphenyl	Terphenyl-d14
3766313	94	104
Blank	90	101
LCS	101	118
MS	58	71
MSD	61	83
Limits	57-123	48-141

Analysis Name TCL Pesticides in Solids
Batch number 020360010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
3766313	87	227*
Blank	88	101
LCS	95	112
MS	0*	0*
MSD	0*	0*
Limits	58-149	62-159

Analysis Name TCL by 8260 (soil)
Batch number D020282AC

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3766313	94	87	93	86
Blank	87	87	86	88
LCS	98	93	91	94
MS	97	92	93	92
MSD	96	87	96	89
Limits	80-120	80-120	81-117	74-121

Analysis Name TCLP by 8260
Batch number N020521AC

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
3766315	98	93	92	91
3766317	97	95	91	93
Blank	99	93	90	90
LCS	95	94	97	103
MS	94	93	94	100
MSD	95	92	95	101
Limits	86-118	80-120	88-110	86-115

Analysis Name 8260 Master Scan (soil)
Batch number R020321AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene

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Quality Control Summary

Client Name DaimlerChrysler Corporation Group Number. 795083
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Surrogate Quality Control

Blank	102	103	98	96
LCS	104	104	102	102
MS	99	100	96	96
MSD	98	102	96	95
Limits	80-120	80-120	81-117	74-121

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ULCT#10160 CL# 5100315-4

DAIMLERCHRYSLER

Chain-of-Custody

1904 B

Lancaster Laboratories	Project Name: Soils / SVE System Installation	Consultant: LBG	
2425 New Holland Pike	Site Location: Dayton Thermal	Address: 1210 West County Rd E., Ste 700	
Lancaster, PA 17601	Site Code: SC001	St. Paul, MN 55112	
Phone Number (717) 656-2300	RFA Number: LBG02004	Consultant PM: Ken Vogel	
Fax Number (717) 656-2681	DaimlerChrysler PM: GARY STANCZUK	Phone: 651 490-1405	Fax: 651 490-1006

MAR - 1 2002

Turn-around Time Request (circle)
24 calendar hrs
48 calendar hrs
7 calendar days
14 calendar days

Data Package Deliverables (circle)
DaimlerChrysler Level 1
DaimlerChrysler Level 2
CLP

Compound List-Parameter/Method/Bottle Type/Preservative

Matrix Codes
S - Soil, SW - Surface Water, GW - Groundwater, A - Air, Sed. - Sediment, O - Other (specify)

Are aqueous samples field filtered for metals? Yes No

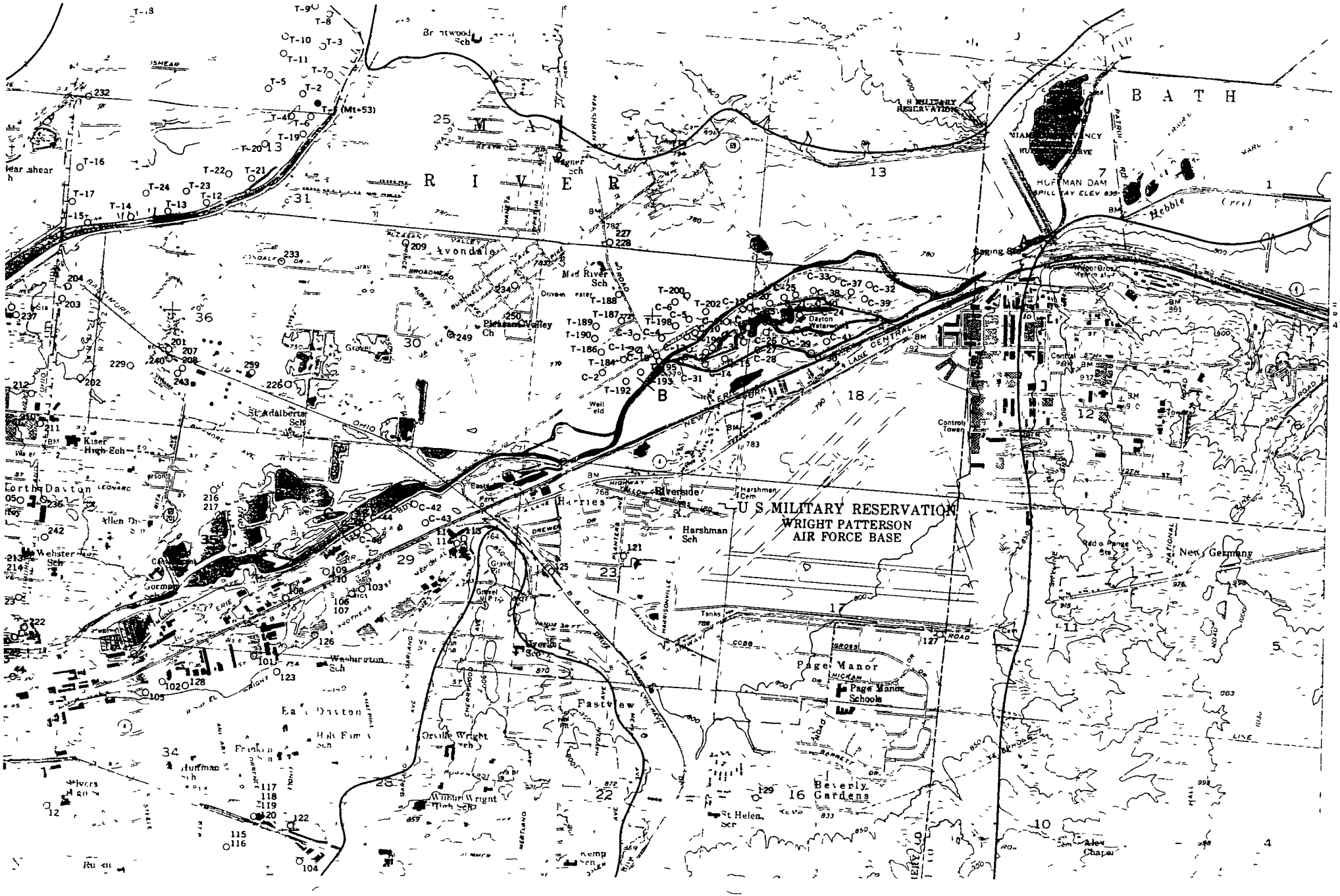
Field Sample Identification	Date Collected	Time Collected	Grab (G) or Composite (C)	Matrix Code	Total # of Containers	Volatiles 8260/TCLP2	Semi Volatiles/PCBs/Hg.1 ~~DRO~~/Metals/Moisture	Reactivity	pH, corrosivity, ignitability, moisture	pesticides, herbicides	TCLP NVE (extract + hold)	TCLP ZHE (extract + hold)			Remarks
Rolloff Bldg 50	1.29.02	1410	C	S	8	X	X	X	X	X	X	X			analyses deleted + added to match RFA in celdm per Dave Strand on 1/30 + 1/31/02. KAKlinefelter 1/31/02

Sampler(s): Kevin McCarty	Cooler ID #			Samples Relinquished under Airbill No 790289087823			Temperature (corrected) 2 °C
	Relinquished by: [signature]	Date: 1.29.02	Time: 1600	Received by:	Date:	Time:	Custody Seal Intact? Yes No
Is RFA sampling complete? Yes No	Relinquished by	Date:	Time:	Received for Laboratory by: [signature]	Date: 1/30/02	Time: 0900	Custody Seal Intact? Yes No

DaimlerChrysler Corporation 800 Chrysler Drive, CIMS 482-00-51, Auburn Hills, Michigan 48326-2757

Distribution White copy Data package Yellow Retained by laboratory Pink Retained by sampler

Revision No 3
Created July 9 1999



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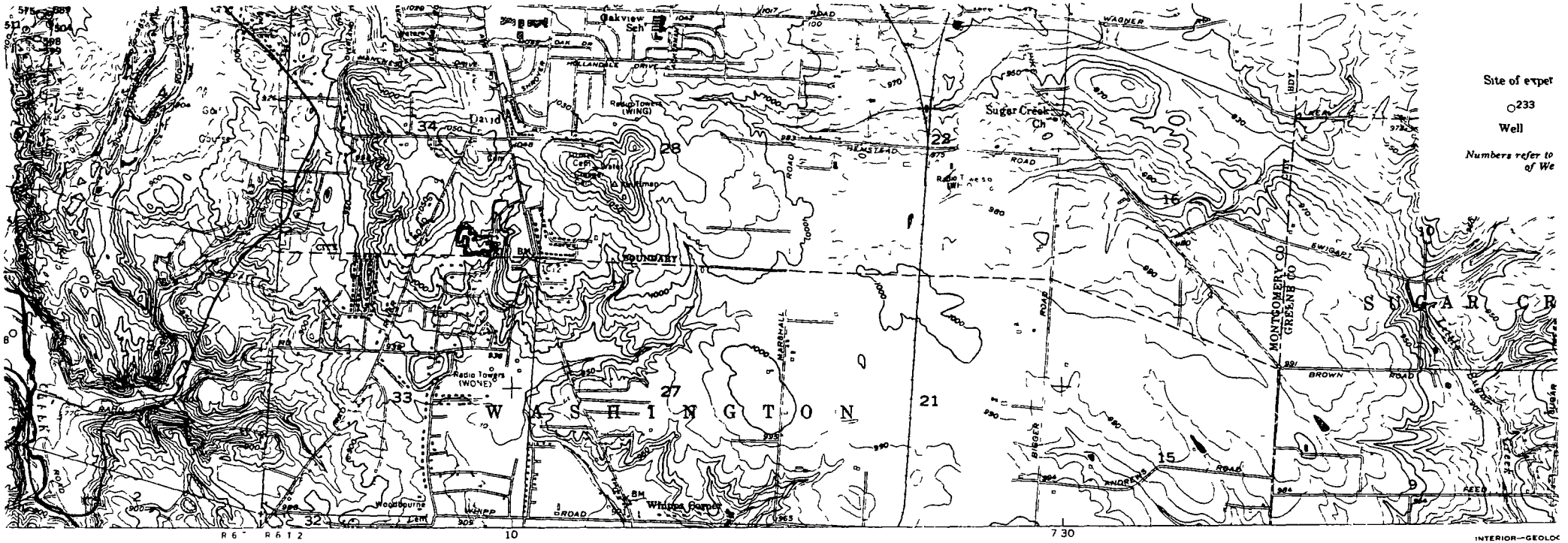

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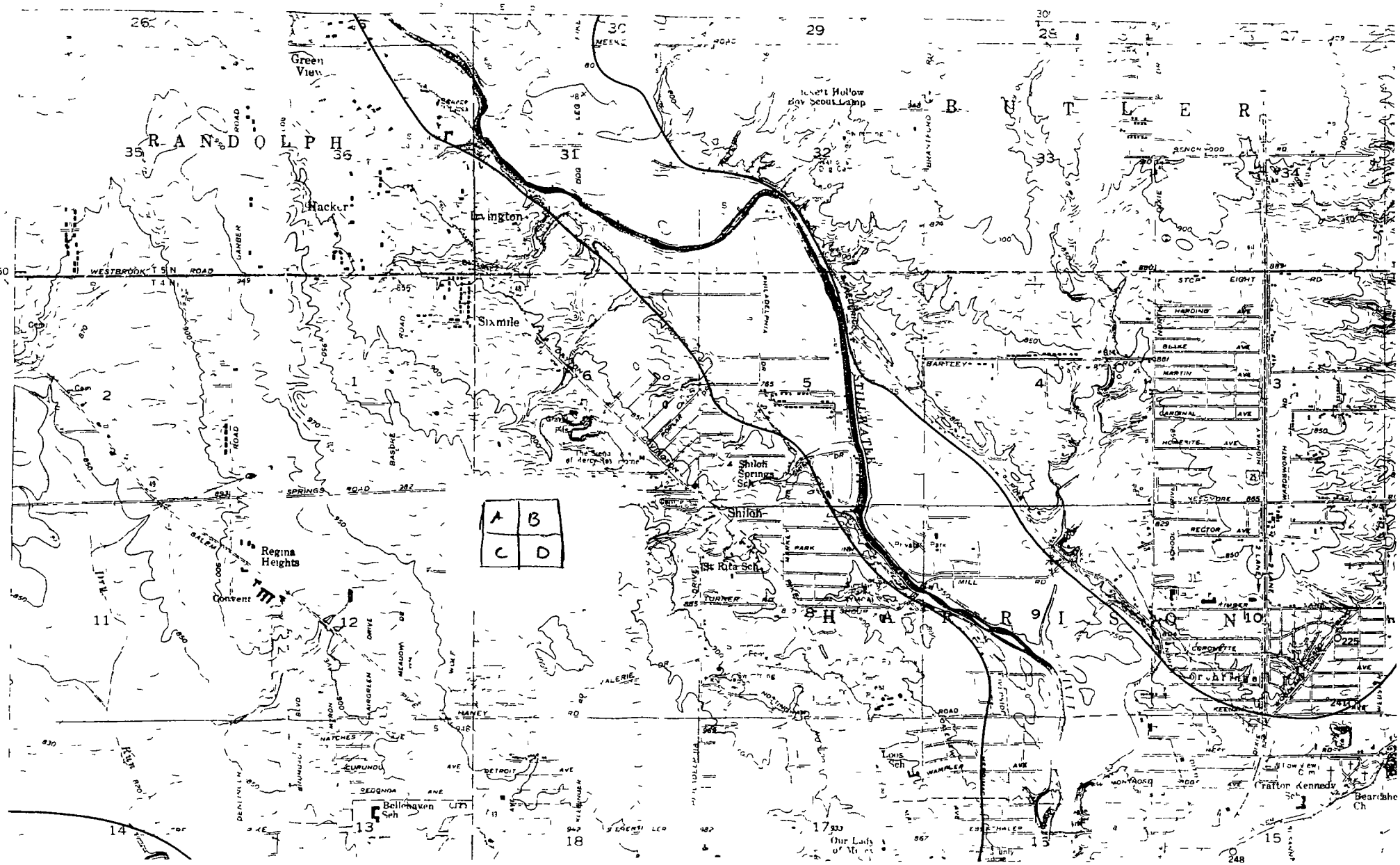
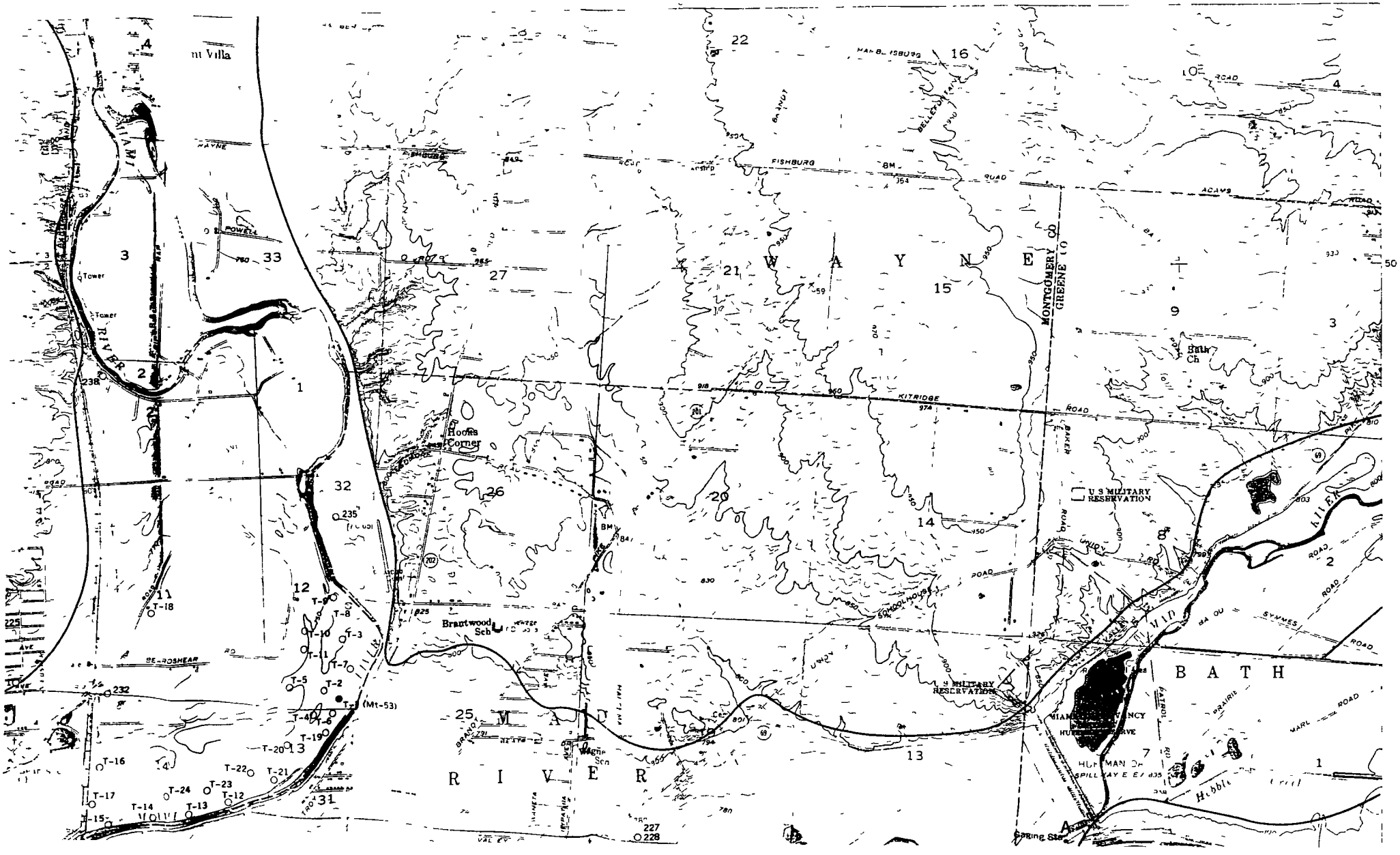
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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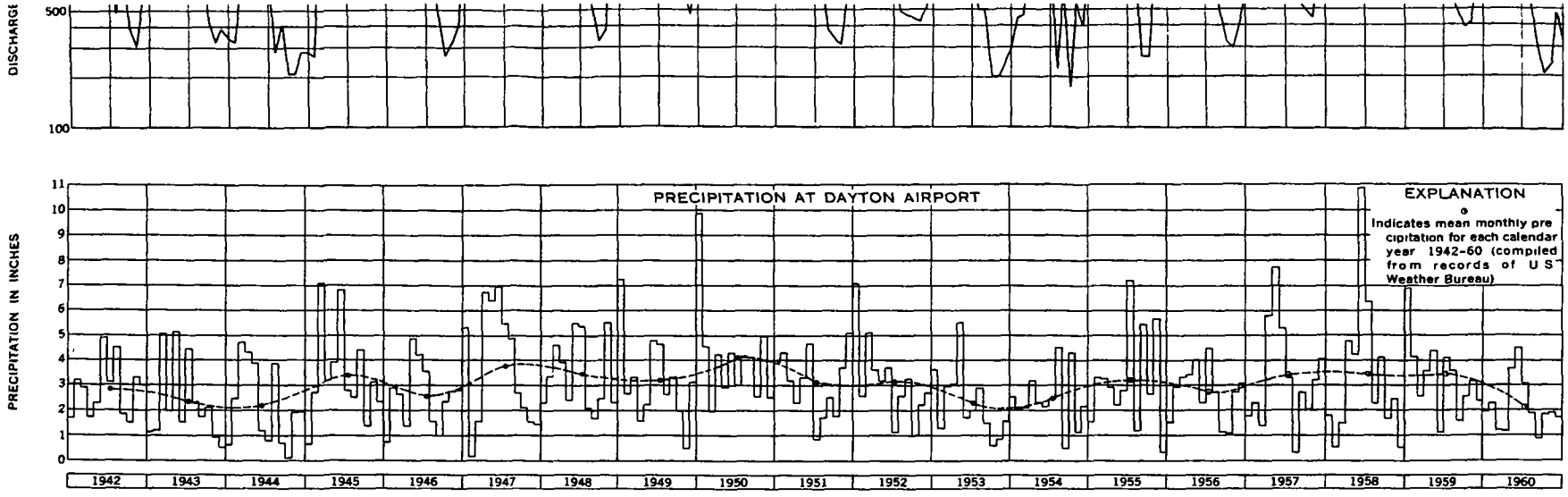

HYDROGRAPHS SHOWING WATER-LEVEL FLUCTUATIONS IN OBSERVATION WELLS, MEAN DISCHARGE OF MIAMI RIVER AT DAYTON, OHIO, AND MONTHLY PRECIPITATION AT DAYTON AIRPORT

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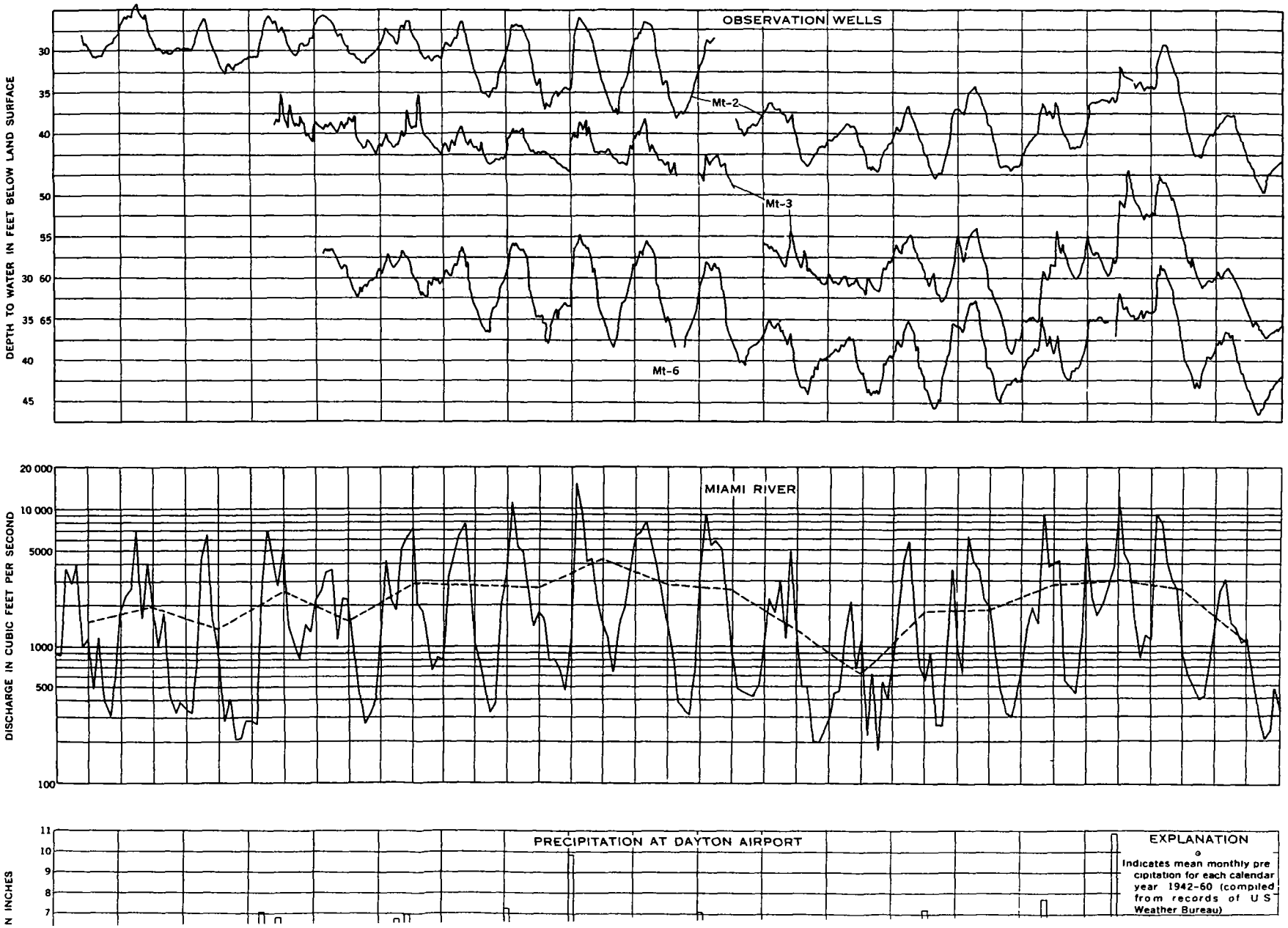
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DEPTH TO WATER IN FEET BELOW LAND SURFACE
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Mt-2
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MIAMI RIVER
DISCHARGE IN CUBIC FEET PER SECOND
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PRECIPITATION AT DAYTON AIRPORT
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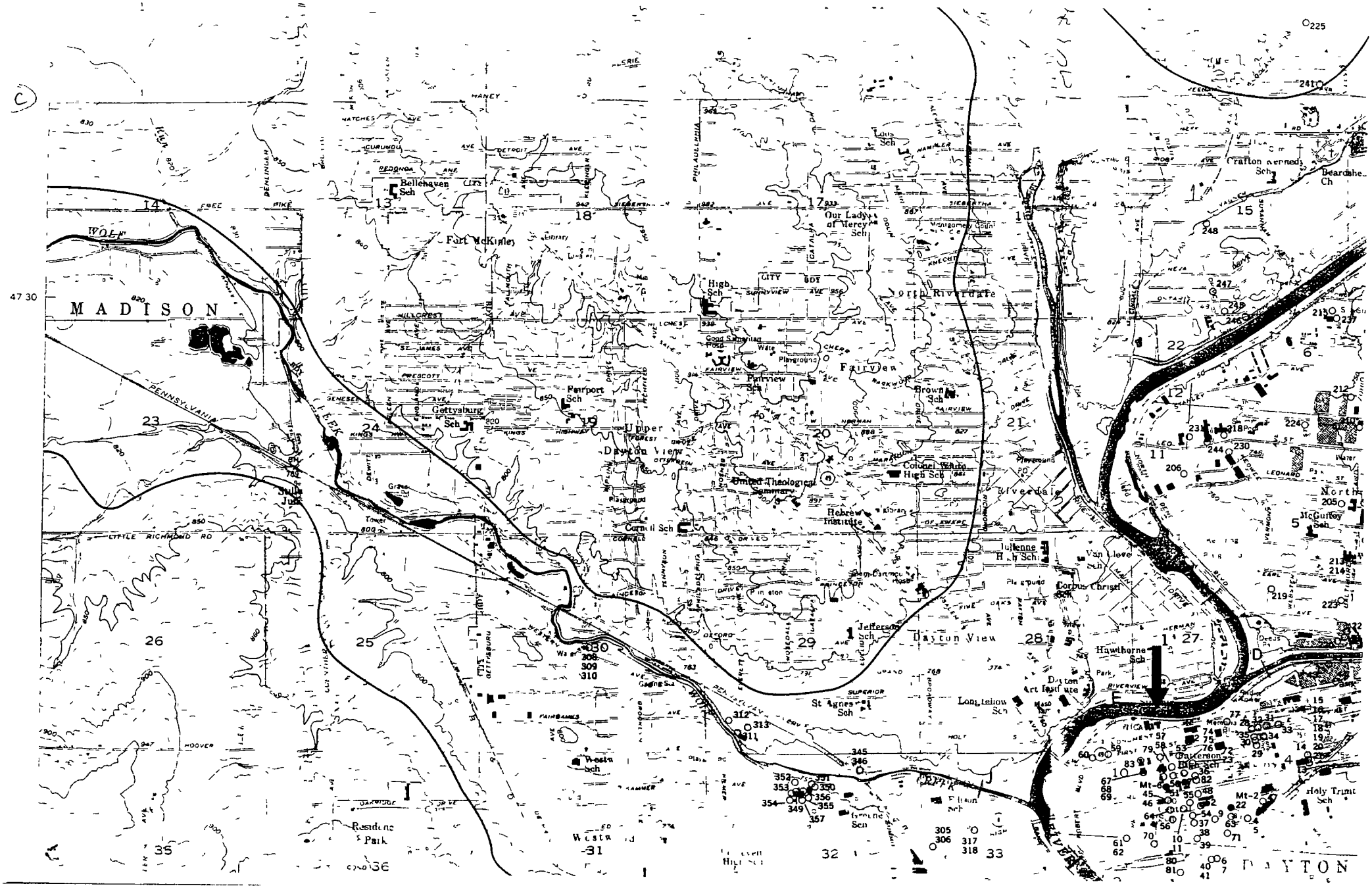

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Fairport Sch
Upper Dayton View
Cornell Sch
United Theological Seminary
Hebrew Institute
Fairview
Fairview Sch
Brown Sch
Colonel Wilbur High Sch
North Riverdale
Our Lady of Mercy Sch
High Sch
Loos Sch
Riverdale
Julienne High Sch
Van Cleve Sch
Corpus Christi Sch
Jefferson Sch
Dayton View
Hawthorne Sch
Dayton Art Institute
Longfellow Sch
St Agnes Sch
Westwood
Residence Park
Crafton Kennedy Sch
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Holy Trinit Sch
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DAYTON
PENNSYLVANIA
LITTLE RICHMOND RD
47 30

DRAFT ENVIRONMENTAL INFORMATION UPDATE

DaimlerChrysler Corporation
Dayton Thermal Products Plant
Dayton, Ohio
February 24, 2000

Background:

Dayton, Ohio has a long history of industrial manufacturing dating to the 1800's Several areas within the shallow groundwater zone have been identified to contain impacted water within and around Dayton

Today, the rich deeper ground-water resources of the Dayton area continue to provide a safe supply of drinking water due to the combined efforts of business and government City of Dayton and State of Ohio environmental professionals have developed a nationally recognized well field protection program to insure a continued safe supply of drinking water As responsible corporate citizens, many local businesses, including DaimlerChrysler Corporation, are currently engaged in the cleanup of historical ground-water impacts

Introduction:

The Dayton Thermal Products plant, located at 1600 Webster Street, was first developed in 1907 as an automobile manufacturing facility The facility currently manufactures heating and air conditioning units for automobiles and other vehicles Recent testing has identified impacted ground water at the site Subsequent offsite screening has suggested that some impacted ground water extends beyond the site's property boundaries DaimlerChrysler Corporation, has undertaken a voluntary cleanup effort to address this issue and is working closely with both the City of Dayton and the Ohio Environmental Protection Agency

Size:

This site is located on approximately 60 acres and contains over 1 3 million square feet of building space

Geology:

The subsurface generally consists of sand and gravel to a depth of approximately 85 feet and is underlain by a stiff clay (till)

Hydrogeology:

Two water-bearing units are present in the area Above the clay, shallow ground water occurs approximately 20 feet below grade in sand and gravel Beneath the clay is a deeper sand and gravel aquifer from which the City of Dayton's ground water supply is produced. Ground water does not readily flow through the clay from one water-bearing unit to another

Ground-Water Impact:

Only shallow ground water is impacted The deeper aquifer from which the City of Dayton's ground water supply is produced is NOT affected

The shallow ground water is impacted by some common industrial solvents typically associated with the cleaning of metal parts These solvents include primarily tetrachloroethylene, trichloroethylene, and trichloroethane The dissolved concentration of each individual solvent varies across the site

Historical Corrective Actions:

- Traditional chlorinated cleaning solvents have been replaced at all DaimlerChrysler facilities

- All underground storage tanks have been properly cleaned and taken out of service This activity eliminated a potential source of ground water impact

- All inactive sewer lines have been cleaned and plugged.

Current Corrective Actions:

- Soil testing was initiated in Building 40B prior to installation of new manufacturing equipment The soil was determined to be impacted by solvents DaimlerChrysler rapidly implemented systems to remove the solvents from the soil beneath the building

Future Corrective Actions:

- Additional systems will be installed in specific areas to remove additional solvents from site soils The areas to be addressed will be based on additional soil testing this year

- Several offsite monitoring wells will be installed to document the extent of ground water impacts. These wells are scheduled for installation this year.
- Once ground-water conditions are determined, DaimlerChrysler will work with the City of Dayton and the Ohio Environmental Protection Agency to develop an appropriate corrective action for the conditions encountered
- DaimlerChrysler will keep community leaders informed of the progress of this cleanup project through public meetings, published updates, and/or reports, as needed

Summary:

The Dayton Thermal Products Plant has been an industrial manufacturing facility for nearly 100 years As a result of historical activities at the facility, ground water has been impacted by solvents

The City of Dayton's drinking water supply is safe and has not been affected

DaimlerChrysler Corporation has voluntarily implemented an aggressive environmental cleanup effort to address soil and ground water impacts that may have resulted from activities at the Dayton Thermal Products Plant Corrective actions include elimination of the "chlorinated" solvents from operations, cleaning and closure of underground storage tanks, cleaning and plugging of all unused sewer lines, soil vapor extraction of impacted soils, and initiation of a comprehensive testing program.

Future activities will include installation of additional soil cleanup systems and test well installation Some property owners may be asked for access to their property for installation of offsite wells

CONTACTS:

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Ohio Environmental Protection Agency
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Div. of Emergency and Remedial Response
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
(937) 285-6040
(937) 285-6404 FAX

City of Dayton
Mr Jim Shoemaker, Environmental Scientist
Department of Water
Division of Environmental Management
320 West Monument Avenue
Dayton, OH 45402
(937) 443-3727
(937) 228-2833 FAX

March --, 2000

Dear Community Resident

You are invited to attend a public meeting on April --, 2000, at the ---- Elementary School Building to discuss a matter of importance to the community around the Dayton Thermal Products plant

As you may know, the site of the Dayton Thermal Products plant, located at 1600 Webster Street, has been the home to automotive manufacturing for more than 90 years Continuing a long tradition, the staff of Dayton Thermal Products, and its parent company DaimlerChrysler Corporation, take pride in being good corporate citizens and an integral part of the Dayton community

To continue our partnership with Dayton, we would like the opportunity to discuss our recent activities in protecting the environment around the plant, including groundwater supplies

Those of us who live and work in Dayton enjoy a safe, clean drinking water supply, thanks to the nationally-recognized efforts of the City, the State of Ohio, and local manufacturers. The well field protection program in place in Dayton insures that the city's residents will continue to have a safe supply of drinking water.

However, recent construction activity at the Dayton Thermal plant has raised the possibility that shallow groundwater near the surface – NOT part of the city's drinking water supply - may contain levels of common industrial solvents that are not acceptable As soon as the potential contamination was identified, Dayton Thermal staff and management began an aggressive program of testing and cleanup, to identify affected areas and remove existing contamination and any sources of potential future contamination State and City officials have been kept informed of our activities

To date, that work has taken place within the grounds of the plant However, recent testing indicates that groundwater outside the boundaries of the plant may be affected

At the meeting on April --, representatives of Dayton Thermal, DaimlerChrysler Corporation, the City of Dayton and the Ohio Environmental Protection Agency will be present to discuss the findings and the program of actions being undertaken to address the issue Also, you will have the opportunity to ask questions

We share the desire of all Dayton residents for a clean, safe environment We urge you to attend this meeting and look forward to your participation.

Sincerely,

S&SR Q&A's

Anticipated Q&As for: Dayton Thermal
NOT APPROVED: CONFIDENTIAL
FOR INTERNAL USE ONLY!

NOT FOR PUBLICATION: INTERNAL USE ONLY

Q 1: Has DC requested a permit from the City of Dayton for soil & GW testing?

A 1: Yes Three permits have been filed with the City of Dayton in order to retrieve soil & GW samples south and east of the Dayton Thermal Products manufacturing facility.

Q 2: Why is DC sampling soil and groundwater in this area?

A 2: DC has requested soil and groundwater samples to test for common industrial solvents along the Southeast corner of the Dayton Thermal Products Plant

Q 3: Why does DC suspect that there are solvents in this area?

A. 3: While performing construction activities at the plant, DaimlerChrysler discovered historical manufacturing residues at the site. Additional testing indicated that the shallow groundwater on the Dayton property has been affected

Q 4: Has DaimlerChrysler found solvents in the groundwater offsite?

A 4: Yes. However the geology and the industrial history of the area complicates the testing, making source identification difficult. We can not be sure where the solvents originated Additional testing will be necessary.

Q 5: Do you know the source of the solvents found at the Dayton Thermal Products site?

A 5: No. We are still evaluating potential historical sources In fact, the Plant has discontinued the use of this type of solvent by 1992

Q 6: Is the Dayton Thermal Products plant responsible for the industrial solvents found off-site?

A 6: It appears that some of the industrial solvent found offsite may be coming from the Plant site However, the geology and the industrial history of this area are complex and source identification is difficult to verify. We can not be sure where the solvents originated. Additional sampling is planned to better understand where the solvents are and to determine what if anything action is necessary to deal with them

Q 7: Are you cleaning affected soil at the Dayton Thermal facility?

A 7: Yes We are evaluating several methods, as additional testing continues. Currently a Soil Vapor Extraction System has been employed to remove historical manufacturing residue from soil at the plant

Q 8: How deep have the solvents been found at the plant?

A 8: Historic residue was found at various depths -- not below 25 feet deep

Q 9: Has the drinking water been affected at the plant?

A 9: No The drinking water is safe at the plant Those of us who live and work in Dayton enjoy a safe, clean drinking water supply, thanks to the nationally-recognized efforts of the City, the State of Ohio, and local manufacturers The well field protection program in place in Dayton insures that the city's residents will continue to have a safe supply of drinking water.

Q 10: Are the residents in any danger?

A 10: No. The residential and industrial drinking water supply comes from the City supply well, which is far below the level where residues have been identified at the Dayton Thermal Product site.

Q 11: What happens next?

A 11: DaimlerChrysler will continue to remove historic residue from the affected area at the Dayton Thermal Products facility. DaimlerChrysler will continue off-site soil and ground water testing. Once DaimlerChrysler obtains the results the City of Dayton and the Ohio EPA will be notified of the findings

Q 12: When will the investigation and digging ever end?
A12. DC is committed to the community and will continue to sample soil and groundwater until we, along with The City of Dayton and the Ohio EPA have developed an appropriate corrective action for the conditions encountered.

Q13. Are the City of Dayton or the OEPA forcing DC to take these actions?
A13. No DC has entered Ohio's Voluntary Action Program. We are working closely with the City and OEPA because of our deep commitment to the community and the environment

Q14. How long have these industrial solvents been in the ground?
A14. We can not be sure when these compounds entered the ground. There have been no reported incidents of a release from our Dayton Plant.

EPA Region 5 Records Ctr
350009

SAMPLING AND ANALYSIS TO EVALUATE SOIL REMEDIATION DAYTON THERMAL PRODUCTS DIVISION DAYTON, OHIO

ACUSTAR INCORPORATED
CHRYSLER MOTORS CORPORATION

September 3, 1991

Revision 0.0

Prepared for:

Acustar, Inc.
1600 Webster Street
Dayton, Ohio 45404

Project 423023

JOHN MATHES & ASSOCIATES, INC.
East Park One Building
701 Rodi Road, Suite 101
Pittsburgh, Pennsylvania 15235-4559
(412) 824-0200

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APPENDIX B - Certificates of Analyses
Belmonte Park Laboratories

JOHN MATHES & ASSOCIATES, INC.
East Park One Building
701 Rodi Road Suite 101
PITTSBURGH, PA 15235-4586
(412) 824-0200

LETTER OF TRANSMITTAL

DATE 9-4-91	JOB NO 423023
ATTENTION Mr. Richard Beck	
RE	

TO Acustar, Inc.
1600 Webster Street
Dayton, OH 45404-1205

GENTLEMEN

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
1			DRAFT (SAMPLING AND ANALYSIS TO EVALUATE SOIL REMEDIATION DAYTON THERMAL PRODUCTS DIVISION

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REMARKS _____

COPY TO L L Blair

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2 Analytical Data Summary, Soil Remediation Evaluation July 1991

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SAMPLING AND ANALYSIS
TO EVALUATE SOIL REMEDIATION
DAYTON THERMAL PRODUCTS DIVISION
DAYTON, OHIO

1 INTRODUCTION

On behalf of Acustar, Inc., John Mathes & Associates, Inc., (Mathes) is remediating contaminated soil by vapor extraction. The contaminated soil was excavated from the footprint of Building 59 at the Dayton Thermal Products Plant (Plant) in Dayton, Ohio (Figure 1). This report presents the sampling and analysis that was conducted to evaluate soil remediation.

1.1 Background Information

Previous site investigations at the Plant indicated that this soil was contaminated with volatile organic compounds (VOCs) and total petroleum hydrocarbons (TPH) from manufacturing activities that took place in the Old Maxwell Complex that was demolished to make way for Building 59.

Excavation of soil from the footprint of Building 59 and construction of vapor extraction beds began March 14, 1991. Remedial activities consisted of the following:

- construction of a stockpile of "clean" soil in the parking lot in the northeast portion of the property;
- construction of a vapor extraction bed north of Building 47 to treat soil contaminated predominantly with oily material and VOCs (TPH bed); and
- construction of an additional vapor extraction bed north of Building 47 to treat soil impacted predominantly with VOCs (VOC bed).

Vapor extraction beds consisted of a series of 4-inch diameter perforated piping connected with a manifold to

regenerative blowers (Figure 2). Both vapor extraction beds and the "clean" soil pile were covered with polyethylene sheeting. Six-inch diameter perforated piping, open to the atmosphere, was installed under the sheeting near the top of the beds to permit air inflow from the atmosphere to the soil in the two vapor extraction beds. The "clean" soil stockpile consists of soil covered with polyethylene having a series of perforated vent pipes extending the entire length of the pile to promote natural ventilation. These vent pipes are located about 12 feet from the base of the pile. Construction activities were completed on April 19, 1991.

The "clean" soil stockpile originally consisted of about 14,050 cubic yards (yd^3) of soil (as emplaced) containing no visible staining, less than 40 milligrams per kilogram (mg/kg) TPH, and less than 50 micrograms per kilogram (ug/kg) VOCs.

The VOC bed consists of about 6,070 yd^3 of soil (as emplaced) containing the highest concentrations of VOCs (up to a total of about 10,000 ug/kg). Two blowers (No. 1 and No. 2) were connected by manifolds to the piping at the base of the bed. Each blower moves 260 cubic feet per minute (ft^3/min) of air at a vacuum of about 7 inches of mercury.

The TPH bed consists of about 13,600 yd^3 of soil (as emplaced) containing the highest concentrations of TPH (from 40 to 3,500 mg/kg) and visibly stained soil. Two blowers (No. 3 and No. 4) were connected by manifolds to the piping at the base of the bed. Each blower moves 350 ft^3/min of air at a vacuum of about 7 inches of mercury.

Mathes sampled emissions for the remediation process and submitted the analytical data to the Regional Air Pollution Control Agency in Dayton, Ohio. Approval to operate the process was obtained on April 30, 1991 (Appendix A).

Subsequent sampling of air emissions from the blowers indicated, as anticipated, a decrease in contaminant concentration with time (Table 1). About two and one-half months has elapsed since contaminants (above the detection limits) have been observed in air emissions from the process.

1.2 Remediation Evaluation

Sampling of the soil stockpile and vapor extraction beds constructed at the Plant to remediate contaminated soil was conducted during the week of July 29, 1991, to evaluate the effectiveness of the treatment. The objective of sampling and analysis of the soil piles was to:

- evaluate the effectiveness of remedial activities;
- evaluate handling options; and
- estimate schedule for required activities.

2 PROCEDURES

Soil piles were evaluated by collecting representative samples using a sampling grid. Selection of the grid spacing was based on procedures outlined in Castanho (1987) and in Montgomery and Clayton (1987). These documents provide guidance on procedures for estimating sampling grid dimensions required to evaluate an area of known size. The actual number of samples composited for each soil pile was established by using the formula:

$$GI = \frac{\sqrt{A/\pi}}{2}$$

where:

GI = grid interval; and

A = area to be sampled.

Based on review of these documents and an estimate of the areas of each pile, the following grid intervals were calculated and selected:

Soil Pile	Sampling GI (Feet)
VOC Bed	32
TPH Bed	39
"Clean" Pile	41

Sample locations and thickness of soil sampled are indicated in Figures 3, 4, and 5. Where feasible, soil samples were collected using a hand-held auger (primarily in areas where total sample depth is less than about 10 feet). In areas where the piles were deeper than about 10 feet, boreholes were advanced using continuous split-spoon sampling procedures followed by hollow-stem augering to maintain an open hole. Total length of each borehole extended from the upper surface of the pile down to

the base of the contaminated soil. The entire length of recovered material from each borehole was screened in the field using an HNu photoionization detector (HNu meter) and composited for analysis.

The field portion of the investigation included the following activities:

- establishing a sampling grid having the required spacing across the soil piles to be evaluated;
- advancing soil boreholes for sample collection and analysis at 15 locations in the "clean" soil stockpile (Figure 3);
- advancing soil boreholes for sample collection and analysis at 15 locations in the TPH bed (Figure 4);
- advancing soil boreholes for sample collection and analysis at 18 locations in the VOC bed (Figure 5); and
- preparing quality assurance/quality control (QA/QC) samples to evaluate data quality.

Sampling devices were decontaminated between sampling events using a potable water/nonphosphate detergent bath and potable water rinse, followed by a high pressure steam rinse. All sampling devices and augers were steam cleaned prior to use at each location.

Upon completion of sampling, each soil test borehole was backfilled with remaining material obtained from that borehole (material not retained for analysis).

Soil samples from the "clean" soil stockpile and the VOC bed were analyzed for VOCs (Method 8240), while soil samples from the TPH bed were analyzed for VOCs (Method 8240) and TPH (Method 418.1). Four samples from the TPH bed were analyzed for TPH using modified Method 8015 to provide a basis of comparison of results for the two methods. QA/QC samples consisted of:

- equipment blanks prepared for each day during sampling activities; and

- trip blanks accompanying each sample shipment from the field location to the laboratory.

Drilling activities were conducted by Bowser-Morner, Inc., Dayton, Ohio. Mathes conducted all sampling activities. The laboratory portion of the investigation was conducted by Belmonte Park Laboratories, Dayton, Ohio.

3 RESULTS

Analytical results for the samples collected from the "clean" soil stockpile, the VOC vapor extraction bed, the TPH vapor extraction bed, and QA/QC samples are summarized in Table 2. Certificates of Analyses for all samples analyzed are presented in Appendix B.

3.1 "Clean" Soil Stockpile

Of the 15 samples analyzed from the "clean" soil stockpile:

- VOCs were not detected above the method detection limit in five samples (C-10, C-12, C-13, C-14, and C-15);
- only trichloroethene, ranging in concentration from 8.3 ug/kg to 54 ug/kg, was detected in six samples (C-1, C-2, C-4, C-5, C-9 and C-11);
- trichloroethene (64 ug/kg) and 1,1,1-trichloroethane (12 ug/kg) were detected in sample C-3; and
- trichloroethene (49, 52, and 46 ug/kg, respectively), 1,1,1-trichloroethane (14, 9.8, and 96 ug/kg, respectively) and tetrachloroethene (13, 21, and 9.8 ug/kg, respectively) were detected in samples C-6, C-7, and C-8.

All analytical data are summarized in Table 2. Data for total VOCs observed at each sampling location are indicated in Figure 6.

3.2 TPH Vapor Extraction Bed

Fifteen samples collected from the TPH vapor extraction bed were analyzed for VOCs and TPH. These data are summarized below.

3.2.1 VOCs

Of the 15 samples analyzed from the TPH extraction bed analyzed for VOCs:

- VOCs were not detected above the method detection limit in three samples (TP-3, TP-4, and TP-14);
- only trichloroethene, ranging in concentration from 8.6 ug/kg to 30 ug/kg, was detected in seven samples (TP-1, TP-2, TP-5, TP-9, TP-10, TP-12, and TP-15);
- trichloroethene (130 and 71 ug/kg, respectively) and 1,1,1-trichloroethane (6.9 and 8.1 ug/kg, respectively) were detected in samples TP-8 and TP-11;
- trichloroethene (86 ug/kg) and chloroform (6.1 ug/kg) were detected in sample TP-6;
- trichloroethene (71 ug/kg), 1,1,1-trichloroethane (8 ug/kg), and chloroform (8.9 ug/kg) were detected in sample TP-13;
- trichloroethene (67 ug/kg), tetrachloroethene (16 ug/kg), and chloroform (9.4 ug/kg) were detected in sample TP-7.

All analytical data are summarized in Table 2. Data for total VOCs observed at each sampling location are indicated in Figure 7.

3.2.2 TPH

TPH was identified in all 15 samples analyzed ranging in concentration from 17.5 mg/kg up to 6,170 mg/kg (Table 2; Figure 8). The four samples from the TPH bed analyzed for TPH using modified Method 8015 ranged in concentration from 35 mg/kg to 1,530 mg/kg (Figure 8).

3.3 VOC Vapor Extraction Bed

Of the 18 samples analyzed from the soil sampled from the VOC vapor extraction bed:

- VOCs were not detected above the method detection limit in seven samples (VO-1, VO-2, VO-4, VO-7, VO-12, VO-15, and VO-17);
- only trichloroethene, ranging in concentration from 4.3 ug/kg to 41 ug/kg, was detected in five samples (VO-3, VO-13, VO-14, VO-16, and VO-18);
- only tetrachloroethene (9 ug/kg) was detected in sample VO-10;
- trichloroethene (24 ug/kg), 1,1,1-trichloroethane (6 ug/kg), ethylbenzene (6.2 ug/kg), xylenes (38 ug/kg), and chloroform (12 ug/kg) were detected in sample VO-5;
- trichloroethene (4.3 ug/kg), ethylbenzene (2 ug/kg), and xylenes (94 ug/kg) were detected in sample VO-6;
- trichloroethene (54 ug/kg), 1,1,1-trichloroethane (17 ug/kg), and tetrachloroethene (10 ug/kg) were detected in sample VO-8;
- trichloroethene (32 ug/kg) and tetrachloroethene (9 ug/kg) were detected in sample VO-9; and
- 1,1,1-trichloroethane (13 ug/kg) and tetrachloroethene (7.8 ug/kg) were detected in sample VO-11.

All analytical data are summarized in Table 2. Data for total VOCs observed at each sampling location are indicated in Figure 9.

3.4 Quality Assurance/Quality Control

Trip blanks accompanying all shipments of samples from the field to the laboratory did not indicate the presence of VOCs above the method detection limit. Field blanks collected during

sampling did not indicate the presence of VOCs above the method detection limit. Based on these data, Mathes concludes that samples analyzed for this investigation represent conditions present in the soils samples and have not been affected by cross-contamination of samples or contamination during shipment of the samples.

4 DISCUSSION

In the three months of operation, vapor extraction has significantly reduced the VOC content of soils undergoing remediation. Based on initial analytical data prior to remedial activities (Mathes, 1991), the results of these analytical data, the volumes represented by each sampling location, and an assumed density of 1,200 kg/yd^3 of soil, the following amounts of VOCs remain in each of the soil piles:

- "clean" soil stockpile:
  - trichloroethene 0.52 pounds
  - 1,1,1-trichloroethane 0.28 pounds
  - tetrachloroethene 0.08 pounds
- VOC vapor extraction bed:
  - trichloroethene 0.16 pounds
  - 1,1,1-trichloroethane 0.04 pounds
  - tetrachloroethene 0.03 pounds
- TPH vapor extraction bed:
  - trichloroethene 1.20 pounds
  - 1,1,1-trichloroethane 0.11 pounds
  - tetrachloroethene 0.04 pounds

About 90 percent of the VOCs have been removed from the soils treated (Table 3). Trichloroethene has been reduced by about 88 percent, 1,1,1-trichloroethane reduced by 95 percent, tetrachloroethene reduced by 83 percent, and total 1,2-dichloroethene and 1,2-dichloroethene reduced each by 100 percent.

The Ohio Environmental Protection Agency policy to evaluate "How Clean is Clean?" requires that the cumulative risk posed by "clean" soil not exceed the 1×10^{-6} excess cancer risk level assuming Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) exposure parameters; however, future land use is not specified. Assuming this material will be landfilled at an uncontrolled construction debris landfill dictates a conservative approach be taken to evaluate potential for this material to pose future risk to the environment. An approach to

evaluate this risk is to use the concept of "drinkable leachate" as required for Resource Conservation and Recovery Act (RCRA) clean closure (USEPA, 1987). Using this scenario, calculated maximum levels for trichloroethene and tetrachloroethene, respectively, are 76 ug/kg and 228 ug/kg. Using these cleanup levels, all soil in both the "clean" soil stockpile and the VOC vapor extraction bed meet the clean closure criteria. Only one sample analyzed from the TPH vapor extraction bed does not meet these criteria; however, the average concentrations for soil in the TPH bed is significantly below these levels.

Mass balances could not be calculated for TPH in the TPH vapor extraction bed due to differences in the analytical methods used to evaluate initial concentrations as present concentrations. Levels of TPH observed in soil in the TPH vapor extraction bed are considerably higher than the regulatory limit of 40 mg/kg (petroleum contaminated soils). Therefore, soil in the TPH vapor extraction bed must either undergo additional remediation or be disposed of as a "Special - Petroleum Contaminated Waste."

Correlation between TPH analyses (EPA Method 418.1 and SW-846 Method 8015) was good for samples TP-3 and TP-5, indicating the hydrocarbons in these samples consist of molecules having carbon numbers ranging from C16 to C28. However, sample TP-4 indicated a TPH content of 375 mg/kg using Method EPA 418.1 compared to 1,530 mg/kg using SW-846 Method 8015 indicating a variation in the solubility or polar nature of the hydrocarbons. Similarly, sample TP-11 indicated a TPH content of 6,170 mg/kg using Method EPA 418.1 compared to 126 mg/kg using SW-846 Method 8015. Clearly, the types and amounts of hydrocarbons present in these samples are variable.

5 RECOMMENDATIONS

Soil stockpiled in the "clean" soil stockpile and soil treated in the VOC vapor extraction bed pose minimal threat to human health, based on the exposure scenario (most conservative) evaluated. Therefore, these materials can be landfilled at a construction debris landfill. If Acustar desires an even more conservative approach to soil handling, the following options should be evaluated:

- landfill as "Special Waste" in a controlled landfill such as Pinnacle Road Landfill;
- use the material on-site for landscaping or raising the elevation of the parking lot (or a combination of the two);
- continue operation of the vapor extraction system followed by landfilling or on-site use when remediation has attained satisfactory cleanup levels; or
- reduce the presently observed levels of VOCs using a more aggressive remediation approach, such as low temperature thermal stripping followed by landfilling or on-site use when remediation has attained satisfactory cleanup levels.

Soil being treated in the TPH vapor extraction bed <u>requires</u> additional remediation, treatment, or proper disposal. The following handling options should be evaluated for this material:

- landfill as "Special Waste" in a controlled landfill such as Pinnacle Road Landfill; and
- reduce the presently observed levels of TPH using a more aggressive remediation approach, such as low temperature thermal stripping or landfarming followed by landfilling or on-site use when remediation has attained satisfactory cleanup levels.

REFERENCES

Castanho, Martina. 1987. "Methods for Soil Sampling" in Comments Toxicology. Vol. 1, No. 3-4, p. 221-227.

Mathes, 1991. "Corrective Action Plan, Dayton Thermal Products Plant, Dayton Ohio," February 25, 1991.

Montgomery, D., and D. Clayton. 1987. "How Clean is Clean II" Interoffice Memo to Michigan Department of Natural Resources Hazardous Waste Permits Unit Staff dated May 5, 1987.

USEPA. 1987. "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" Final Rule, Federal Register, (52)53, March 19.

Table 1

ANALYTICAL DATA SUMMARY
SOIL REMEDIATION BY VAPOR EXTRACTION

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS DIVISION
DAYTON, OHIO

Sample		Sampling Date	VOC 8240[1]	TPH 8015[2]
P1-1	Blower #1	04/19/91	ND	ND
P2-1	Blower #2	04/19/91	trichloroethene @ 2.0 mg/m^3 all others ND	ND
P3-1	Blower #3	04/19/91	1,1,1-trichloroethane @ 2.7 mg/m^3 trichloroethene @ 2.5 mg/m^3 all others ND	ND
P4-1	Blower #4	04/19/91	1,1,1-trichloroethane @ 2.1 mg/m^3 trichloroethene @ 3.3 mg/m^3 all others ND	ND
2-1A	Blower #1	04/24/91	ND	NA
2-2A	Blower #2	04/24/91	ND	NA
2-3A	Blower #3	04/24/92	NA	ND
2-4A	Blower #4	04/24/92	NA	ND
P1-3A	Blower #1	05/10/91	ND	NA
P2-3A	Blower #2	05/10/91	ND	NA
P3-3A	Blower #3	05/10/91	ND	NA
P4-3A	Blower #4	05/10/91	trichloroethene @ 2.2 mg/m^3	NA
P1-4A	Blower #1	05/24/91	ND	NA
P2-4A	Blower #2	05/24/91	ND	NA
P3-4A	Blower #3	05/24/91	NA	ND
P4-4A	Blower #4	05/24/91	NA	ND

Table 1 (Continued)

ANALYTICAL DATA SUMMARY
SOIL REMEDIATION BY VAPOR EXTRACTION

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS DIVISION
DAYTON, OHIO

Sample	Sampling Date	VOC 8240[1]	TPH 8015[2]
P1-5A Blower #1	06/07/91	ND	NA
P2-5A Blower #2	06/07/91	ND	NA
P3-5A Blower #3	06/07/91	ND	ND
P4-5A Blower #4	06/07/91	ND	ND
P1-6A Blower #1	06/26/91	ND	NA
P2-6A Blower #2	06/26/91	ND	NA
P3-6A Blower #3	06/26/91	ND	NA
P4-6A Blower #4	06/26/91	ND	NA
P1 Blower #1	07/22/91	ND	NA
P2 Blower #2	07/22/91	ND	NA
P3 Blower #3	07/22/91	ND	NA
P4 Blower #4	07/22/91	ND	NA

(1) Volatile organic compounds (VOCs) analyzed using SW-846 Method 8240.
(2) Total petroleum hydrocarbons (TPH) analyzed using modified SW-846 Method 8015.
NA - Not analyzed.
ND - Not detected at the method detection limits, which vary for each compound (see Appendix B - Certificates of Analyses).

Blowers #1 and #2 are part of the VOC bed remediation system.
Blowers #3 and #4 are part of the TPH bed remediation system.

Table 2

ANAYTICAL DATA SUMMARY
SOIL REMEDIATION EVALUATION
JULY 1991

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

Sample I.D.	All VOCs	TCE (ug/kg)	1,1,1-TCA (ug/kg)	PCE (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	Chloroform (ug/kg)	TPH[1] (mg/kg)
Clean Soil Pile								
C-1		8.3	--	--	--	--	--	NA
C-2		15	--	--	--	--	--	NA
C-3		64	12	--	--	--	--	NA
C-4		12	--	--	--	--	--	NA
C-5		54	--	--	--	--	--	NA
C-6		49	14	13	--	--	--	NA
C-7		52	9.8	21	--	--	--	NA
C-8		46	96	9.8	--	--	--	NA
C-9		12	--	--	--	--	--	NA
C-10	ND	--	--	--	--	--	--	NA
C-11		16	--	--	--	--	--	NA
C-12	ND	--	--	--	--	--	--	NA
C-13	ND	--	--	--	--	--	--	NA
C-14	ND	--	--	--	--	--	--	NA
C-15	ND	--	--	--	--	--	--	NA
VOC Vapor Extraction Bed								
VO-1	ND	--	--	--	--	--	--	NA
VO-2	ND	--	--	--	--	--	--	NA
VO-3		17	--	--	--	--	--	NA
VO-4	ND	--	--	--	--	--	--	NA
VO-5		24	6.0	--	6.2	38	12	NA
VO-6		4.3	--	--	2.0	94	--	NA
VO-7	ND	--	--	--	--	--	--	NA
VO-8		54	17	10	--	--	--	NA
VO-9		32	--	--	--	--	--	NA

Table 2 (Continued)

ANAYTICAL DATA SUMMARY
SOIL REMEDIATION EVALUATION
JULY 1991

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

Sample I.D.	All VOCs	TCE (ug/kg)	1,1,1-TCA (ug/kg)	PCE (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	Chloroform (ug/kg)	TPH[1] (mg/kg)
VO-10		--	--	9.0	--	--	--	NA
VO-11		--	13	7.8	--	--	--	NA
VO-12	ND	--	--	--	--	--	--	NA
VO-13		43	--	--	--	--	--	NA
VO-14		41	--	--	--	--	--	NA
VO-15	ND	--	--	--	--	--	--	NA
VO-16		6.9	--	--	--	--	--	NA
VO-17	ND	--	--	--	--	--	--	NA
VO-18		39	--	--	--	--	--	NA
<u>TPH Vapor Extraction Bed</u>								
TP-1		8.8	--	--	--	--	--	93.2
TP-2		11	--	--	--	--	--	70.0
TP-3	ND	--	--	--	--	--	--	57.9 (35)
TP-4	ND	--	--	--	--	--	--	375 (1,530)
TP-5		9.2	--	--	--	--	--	125.5 (130)
TP-6		86	--	--	--	--	6.1	17.5
TP-7		67	16	11	--	--	9.4	96.2
TP-8		130	6.9	--	--	--	--	260
TP-9		30	--	--	--	--	--	98.2
TP-10		8.6	--	--	--	--	--	83.1
TP-11		78	8.1	--	--	--	--	6,170 (126)
TP-12		15	--	--	--	--	--	189
TP-13		71	8.0	--	--	--	8.9	158
TP-14	ND	--	--	--	--	--	--	539
TP-15		19	--	--	--	--	--	92.2

Table 2 (Continued)

ANAYTICAL DATA SUMMARY
SOIL REMEDIATION EVALUATION
JULY 1991

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

Sample I.D.	All VOCs	TCE (ug/kg)	1,1,1-TCA (ug/kg)	PCE (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)	Chloroform (ug/kg)	TPH[1] (mg/kg)
QA/QC Samples								
Trip Blanks								
07/29/91	ND							NA
07/31/91	ND							NA
08/01/91	ND							NA
Equipment Blanks								
07/29/91	ND							NA
07/31/91	ND							NA
08/01/91	ND							NA

VOCs - Volatile organic compounds (Priority Pollutant List).
NA - Not analyzed.
ND - No VOCs were detected at the method detection limit (see Appendix B - Certificates of Analysis).
-- Individual VOCs indicated were not detected at the method detection limit (see Appendix B - Certificates of Analyses).
1,1,1-TCA - 1,1,1-trichloroethane
TCE - Trichloroethene
PCE - Tetrachloroethene
TPH - Total Petroleum Hydrocarbons

Notes:

1 TPH analyzed using Method EPA 418.1. Four samples (TP-3, TP-4, TP-5, and TP-11) were analyzed for TPH using SW-846 modified Method 8015 to compare results using the two methods.

Table 3

CALCULATED AMOUNT OF VOCS PRESENT
IN SOIL REMEDIATED BY VAPOR EXTRACTION

ACUSTAR, INC.
DAYTON THERMAL PRODUCTS PLANT
DAYTON, OHIO

Parameter	Initial Amount (pounds)	Present Amount (pounds)	Percent Reduction
Trichloroethene	15.22	1.87	88
1,1,1-trichloroethane	8.77	0.43	95
Tetrachloroethene	0.88	0.15	83
Total 1,2-dichloroethene	0.95	0	100
1,1-dichloroethene	0.27	0	100
Total VOCs	26.09	2.45	91

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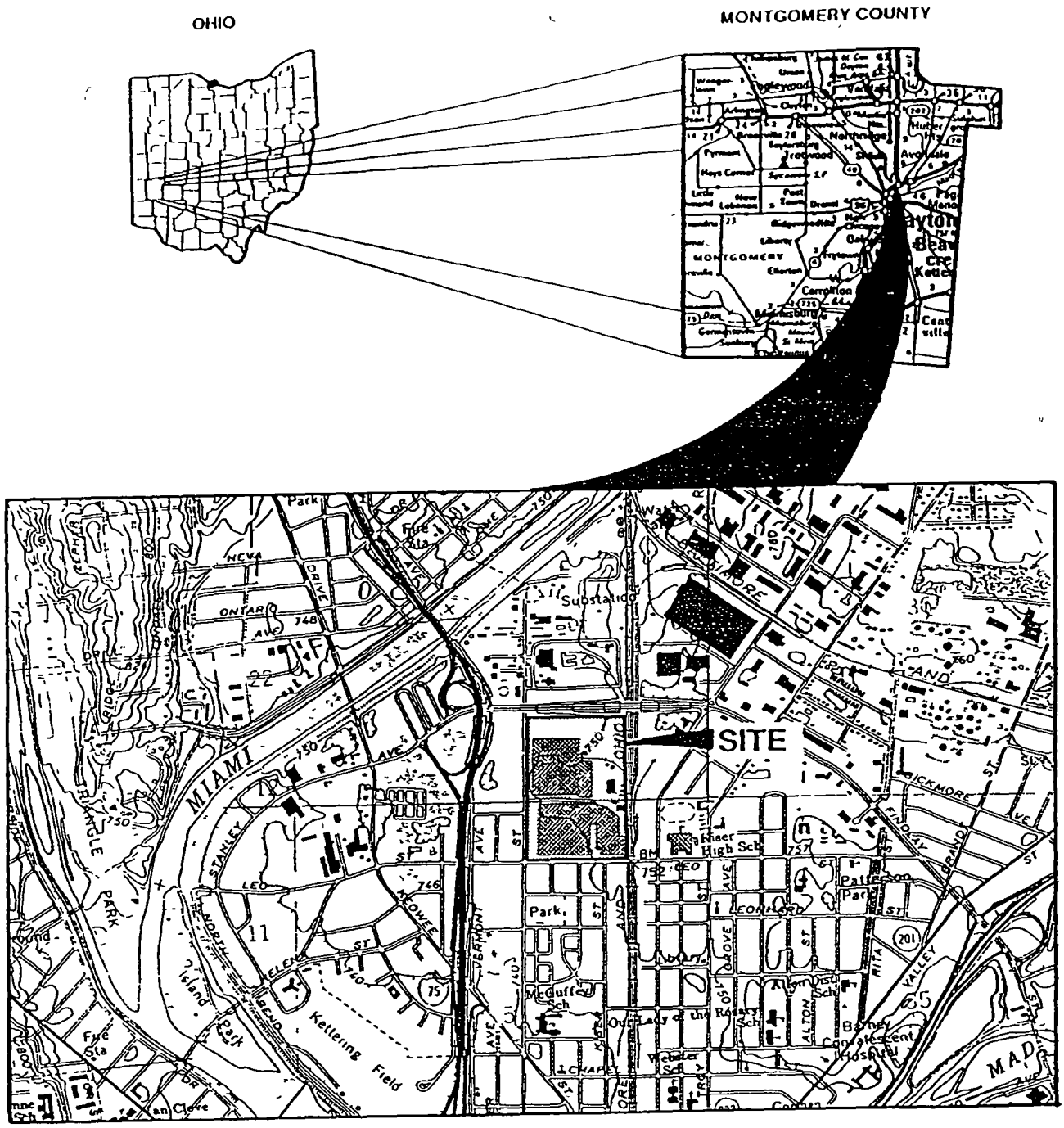

Modified from U S G S Geolical Survey, Dayton North, Ohio quadrangle, photo revised 1981.

John Mathes & Associates, Inc.	
SITE LOCATION MAP	
ACUSTAR DAYTON OHIO 423023	FIGURE 1

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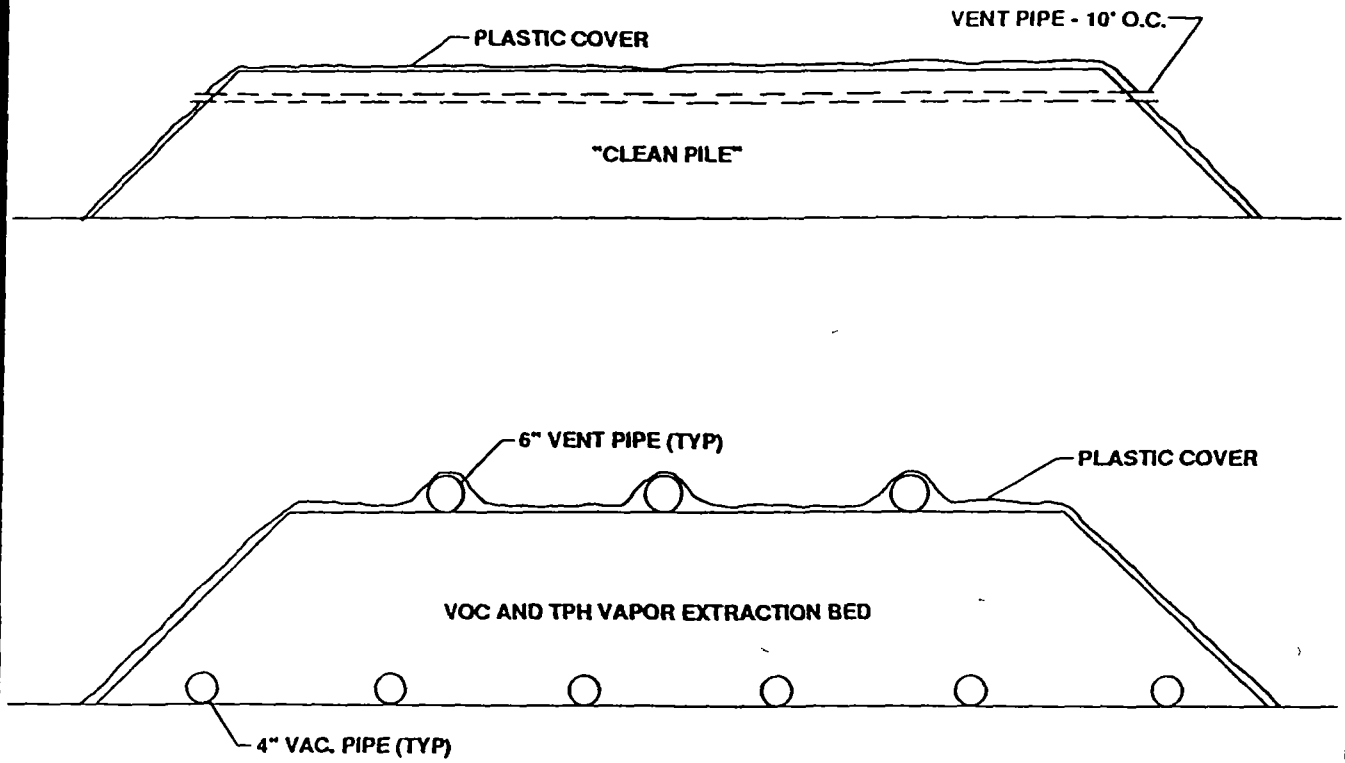


NOTE: Each 750 feet of vacuum pipe is connected by valves and manifold to one blower unit.

APPROXIMATE DIMENSIONS:

"CLEAN" PILE - 210 x 115' x 19' (14,050 cubic yards)
VOC BED - 200' x 75' x 16' (6,070 cubic yards)
TPH BED - 195' x 140' x 32' (13,600 cubic yards)

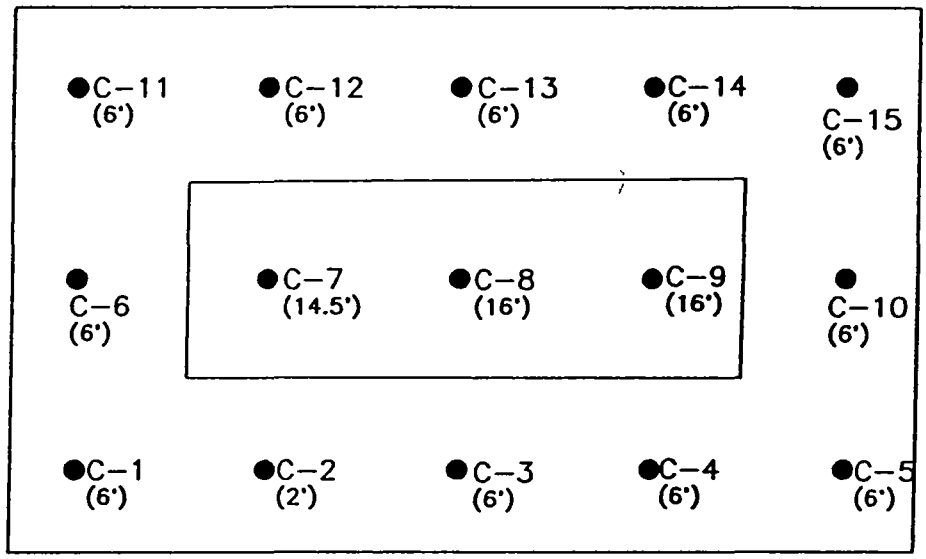
SCALE IS VARIABLE

John Mathes & Associates, Inc.

CONCEPTUAL DESIGN
"CLEAN" SOIL STOCKPILE AND
VAPOR EXTRACTION BEDS

ACUSTAR
DAYTON, OHIO
423023

FIGURE 2



EXPLANATION

C-1 (6') APPROXIMATE SAMPLE LOCATION AND NUMBER WITH THICKNESS OF SAMPLED INTERVAL IN PARENTHESES

0 40 80
SCALE IN FEET

John Mathes & Associates, Inc.

SAMPLING LOCATIONS AND SAMPLED INTERVAL THICKNESS "CLEAN" SOIL STOCKPILE

ACUSTAR
DAYTON, OHIO
423023

FIGURE 3

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PROJECT MANAGER

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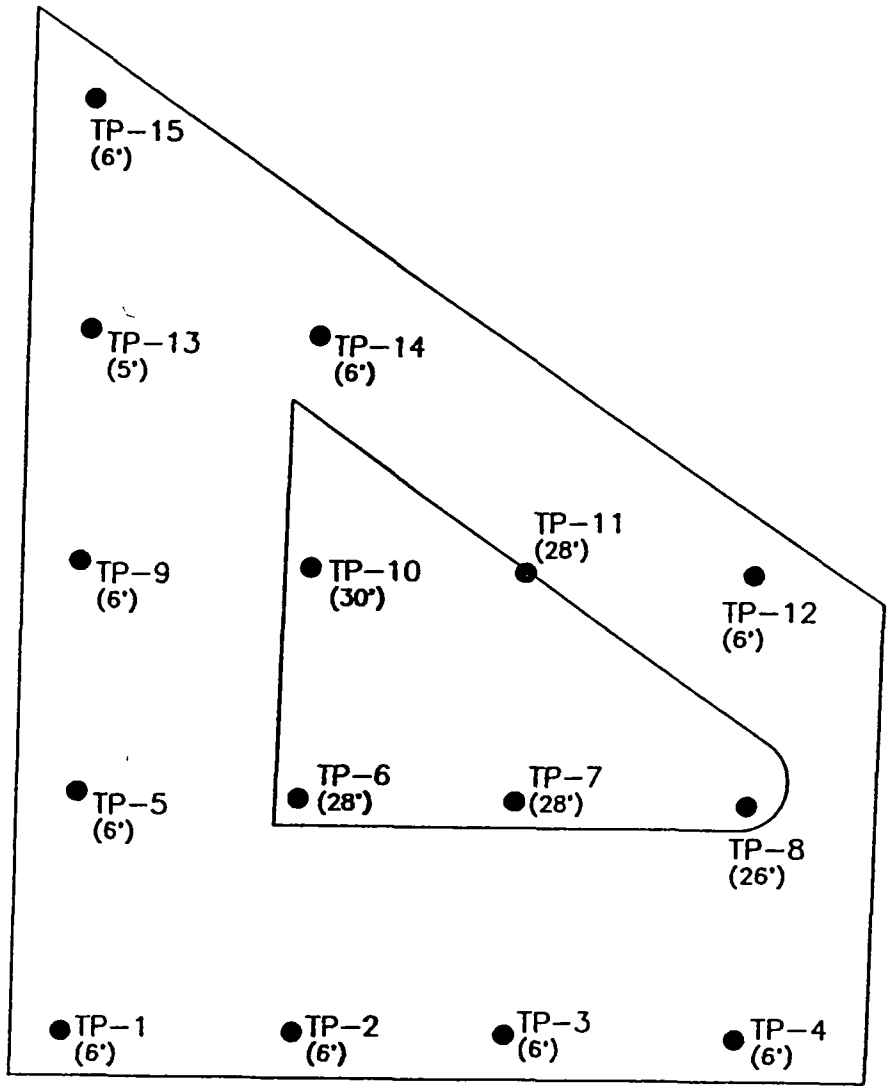

EXPLANATION

●TP-1 (6') APPROXIMATE SAMPLE LOCATION AND NUMBER WITH THICKNESS OF SAMPLED INTERVAL IN PARENTHESES

0 40 80

SCALE IN FEET

N

John Mathes & Associates, Inc.

SAMPLING LOCATIONS AND SAMPLED INTERVAL THICKNESS TPH VAPOR EXTRACTION BED

ACUSTAR
DAYTON, OHIO
423023

FIGURE 4

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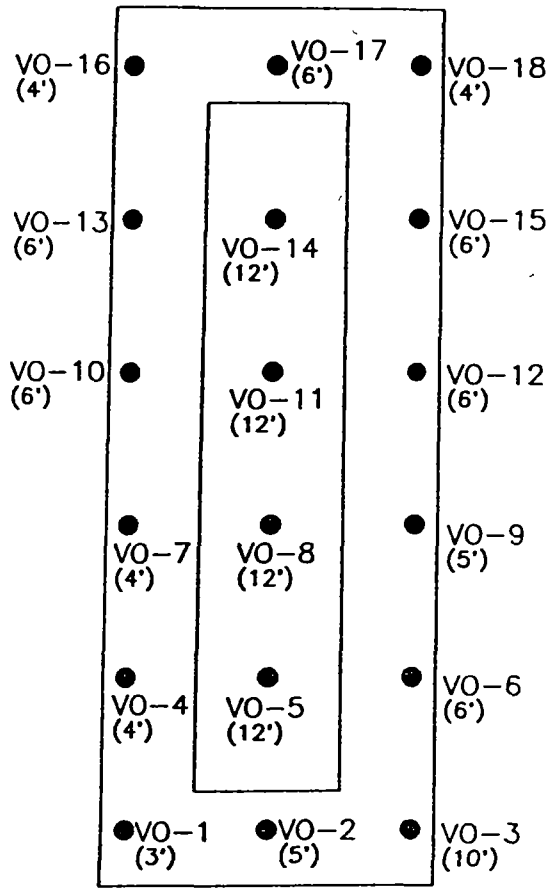

0 40 80
SCALE IN FEET

N

EXPLANATION

VO-1 (3') APPROXIMATE SAMPLE LOCATION AND NUMBER WITH THICKNESS OF SAMPLED INTERVAL IN PARENTHESES

John Mathes & Associates, Inc	
SAMPLING LOCATIONS AND SAMPLED INTERVAL THICKNESS VOC VAPOR EXTRACTION BED	
ACUSTAR DAYTON, OHIO 423023	FIGURE 5

PROJECT MANAGER

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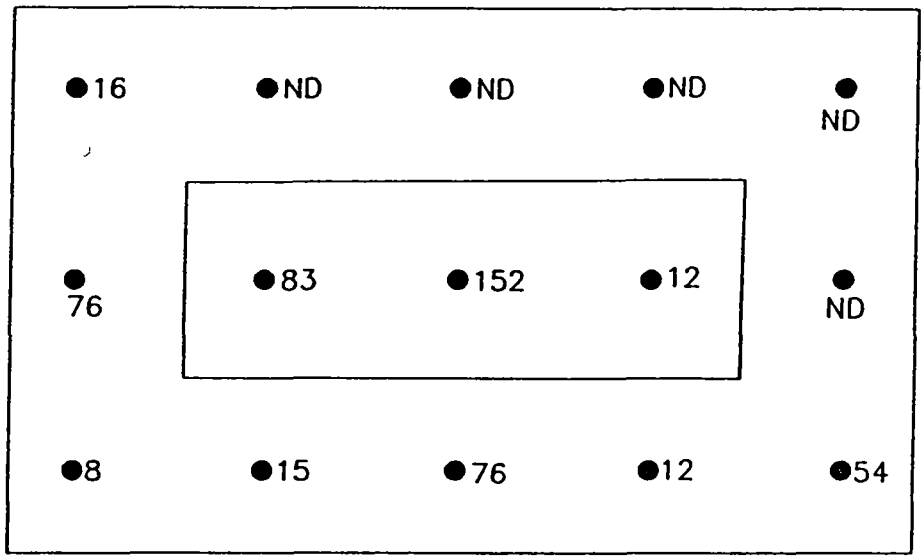

EXPLANATION

●8 APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (ug/kg) IN SAMPLED INTERVAL USING METHOD 8240

0 40 80
SCALE IN FEET

N

John Mathes & Associates, Inc.

TOTAL VOCs IN SAMPLED INTERVAL "CLEAN" SOIL STOCKPILE

ACUSTAR
DAYTON, OHIO
423023

FIGURE 6

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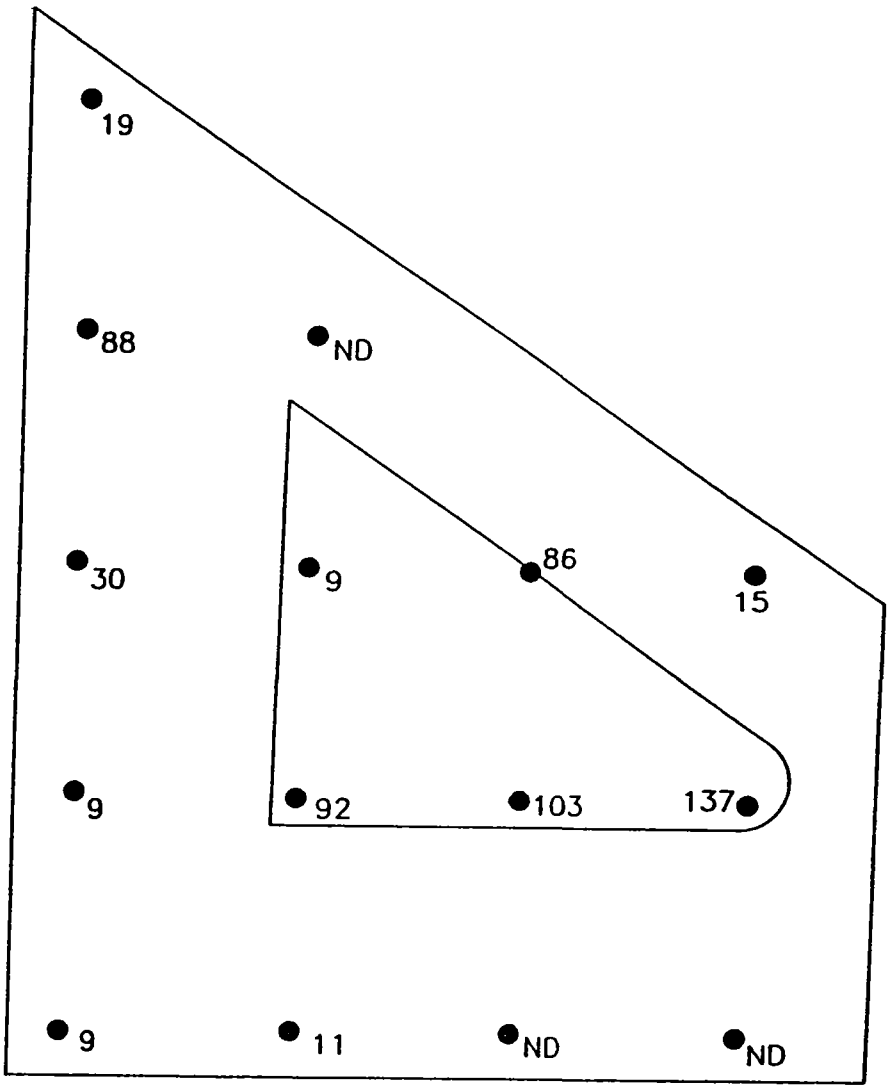

EXPLANATION

●9 APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (ug/kg) IN SAMPLED INTERVAL USING METHOD 82.40

0 40 80
SCALE IN FEET

N

John Mathes & Associates, Inc.	
TOTAL VOCs IN SAMPLED INTERVAL TPH VAPOR EXTRACTION BED	
ACUSTAR DAYTON, OHIO 423023	FIGURE 7

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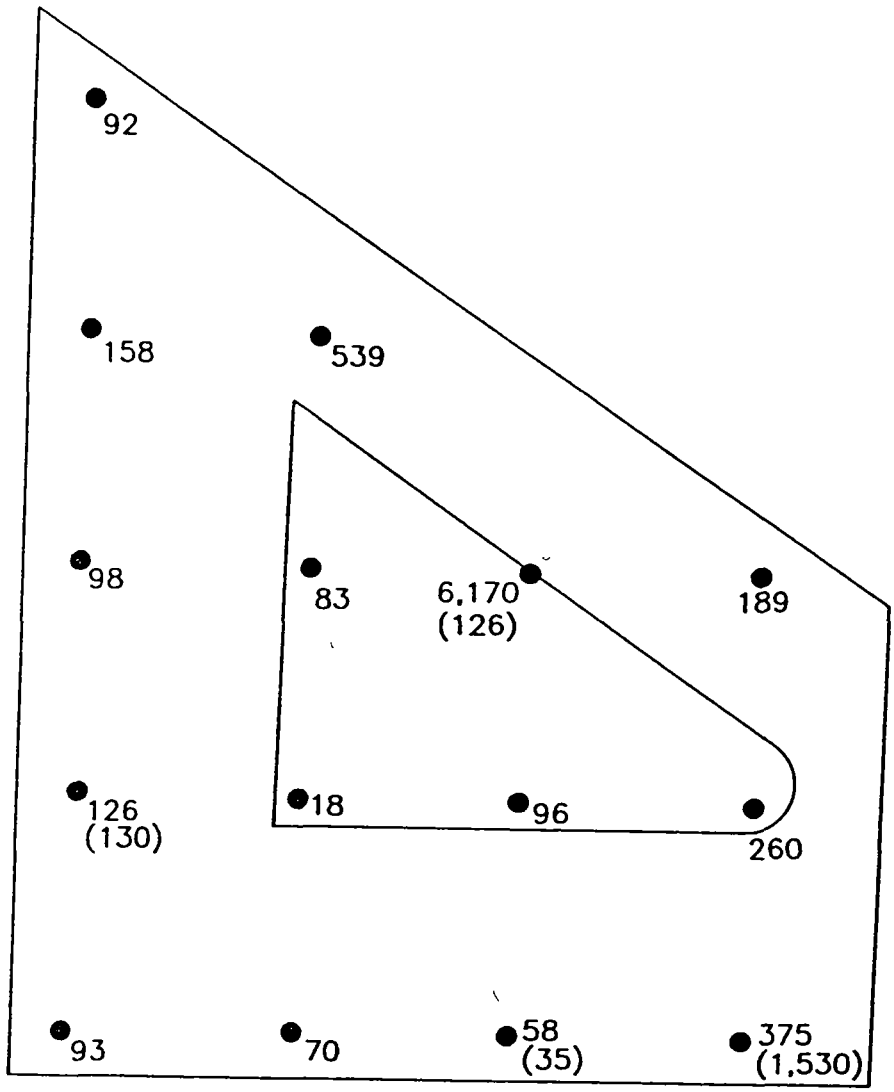

EXPLANATION

●93 APPROXIMATE SAMPLE LOCATION WITH TOTAL PETROLEUM HYDROCARBONS (mg/kg) IN SAMPLED INTERVAL USING METHOD 418 1 TPH RESULTS (mg/kg) FOR SELECTED SAMPLES USING METHOD 8015 INDICATED IN PARENTHESES

0 40 80

SCALE IN FEET

N

John Mathes & Associates, Inc.

TOTAL PETROLEUM HYDROCARBONS IN SAMPLED INTERVAL TPH VAPOR EXTRACTION BED

ACUSTAR
DAYTON, OHIO
423023

FIGURE 8

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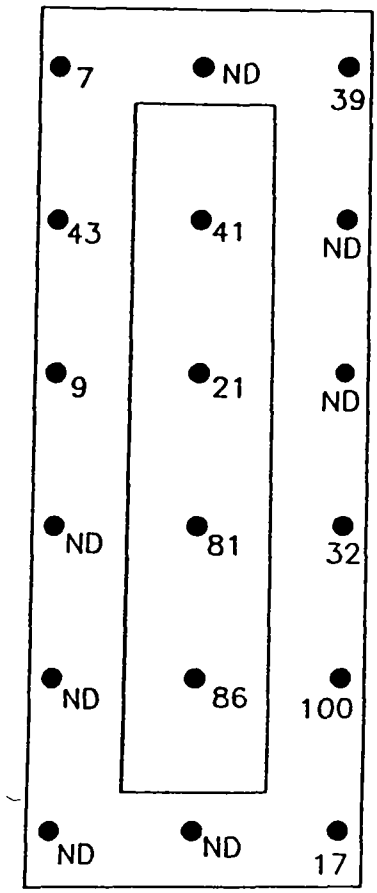

0 40 80
SCALE IN FEET

N

EXPLANATION

●ND APPROXIMATE SAMPLE LOCATION WITH TOTAL VOLATILE ORGANIC COMPOUNDS (ug/kg) IN SAMPLED INTERVAL USING METHOD 8240

John Mathes & Associates, Inc.	
TOTAL VOCs IN SAMPLED INTERVAL VOC VAPOR EXTRACTION BED	
ACUSTAR DAYTON, OHIO 423023	FIGURE 9

APPENDIX A

Approval to Operate Vapor Extraction System

REGIONAL AIR POLLUTION CONTROL AGENCY
Serving Clark Darke Greene, Miami Montgomery & Preble Counties
451 W Third Street P O Box 972 Dayton Ohio 45422 (513)225-4435

May 22, 1991

David Fulbright
John Mathes & Associates, Inc.
210 West Sand Bank Road
P.O. Box 330
Columbia, IL 62236-0330

Dear Mr. Fulbright:

Thank you for the air sampling data from the vapor extraction system at Acustar Industries. Since the project is temporary and air emissions will be insignificant, we have determined this operation can be exempted from the requirements of obtaining a permit under the Ohio Administrative Code Rule 3745-31-03(A)(2).

We would like to make certain the understanding that this source is being exempted in part because it will operate for less than 18 months. It is not the case that you may wait 18 months before applying for a permit to install.

Please inform us of significant changes in the operation of this source.

Sincerely,

Christopher Early

Christopher Early
Air Pollution Control Specialist
Abatement Unit

CE/rm

Sample: 04A TP_2 423023 6003 7/30 0900 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	11		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	82.3	Min: 70		Max: 121	
d8-TOLUENE	89.2	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	83.8	Min: 74		Max: 121	

Sample: 05A TP_3 423023 6003 7/30 0910 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	81.7	Min: 70	Max: 121		
d8-TOLUENE	89.9	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	83.0	Min: 74	Max: 121		

Sample: 06A TP_3 423023 6003 7/30 0910 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	57.9		MG/KG		RP

Sample: 07A TP_4 423023 6003 7/30 1015 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	375		MG/KG		RP

Sample: 08A TP_4 423023 6003 7/30 1015 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1522377 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Unit	Analyzed	By
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	19		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1986 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT. OF HEALTH ALCOHOL TESTING, APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	92.6	Min: 70		Max: 121	
d8-TOLUENE	87.2	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	79.6	Min: 74		Max: 121	

Sample: 09A TP_5 423023 6003 7/30 1105 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1 TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	9.2		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	80.0	Min: 70	Max: 121		
d8-TOLUENE	82.6	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	84.0	Min: 74	Max: 121		

Sample: 10A TP_5 423023 6003 7/30 1105 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	125.5		MG/KG		RP

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Sample: 11A TP_9 423023 6003 7/30 1125 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	98.2		MG/KG		RP

Sample: 12A TP_9 423023 6003 7/30 1125 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS, 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	30		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	102	Min: 70		Max: 121	
d8-TOLUENE	111	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	84.2	Min: 74		Max: 121	

Sample: 13A TP12 423023 6003 7/30 1325; Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 004771 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING
Belmonte Park Laboratories

Test Description	Result	Limit	Units	Analyzed	By
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2 TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	15		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	84.2	Min: 70		Max: 121	
d8-TOLUENE	90.0	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	103	Min: 74		Max: 121	

Sample: 14A TP12 423023 6003 7/30 1325 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	189		MG/KG		RP

Sample: 15A TP11 423023 6003 7/30 1120 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	6170		MG/KG		RP

Sample: 16A TP11 423023 6003 7/30 1120 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG

CERTIFICATIONS
NO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
NO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Unit	Analyzed	By
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG
CHLOROFORM	15		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	< 5		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/04/91	CG

CERTIFICATIONS
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Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	8.1		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	78		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG
XYLENE	< 5		UG/KG	08/04/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	108	Min: 70		Max: 121	
d8-TOLUENE	97.7	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	98.3	Min: 74		Max: 121	

Sample: 17A TP-7 423023 6003 7/30 1340 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG

Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	9.4		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	< 5		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	11		UG/KG	08/04/91	CG
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	16		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	67		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG
XYLENE	< 5		UG/KG	08/04/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	106	Min: 70	Max: 121		
d8-TOLUENE	103	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	88.9	Min: 74	Max: 121		

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
ALL REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Sample: 18A TP-7 423023 6003 7/30 1340 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	96.2		MG/KG		RP

Sample: 19A TP13 423023 6003 7/30 1400 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	158		MG/KG		RP

Sample: 20A TP13 423023 6003 7/30 1400 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG
CHLOROFORM	8.9		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	< 5		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/04/91	CG
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	8.0		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	71		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG
XYLENE	< 5		UG/KG	08/04/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	91.9	Min: 70		Max: 121	
d8-TOLUENE	108	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	82.2	Min: 74		Max: 121	

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Sample: 21A TP14 423023 6003 7/30 1530 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047731 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	99.2	Min: 70		Max: 121	
d8-TOLUENE	97.2	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	98.8	Min: 74		Max: 121	

Sample: 22A TP14 423023 6003 7/30 1530 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	539		MG/KG		RP

Sample: 23A TP-6 423023 6003 7/30 1500 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	17.5		MG/KG		RP

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1590 •
OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
ALL REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Sample: 24A TP-6 423023 6003 7/30 1500 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG
CHLOROFORM	6.1		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	< 5		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
L REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING
Belmonte Park Laboratories

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	12		UG/KG	08/04/91	CG
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	86		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG
XYLENE	< 5		UG/KG	08/04/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	95.6	Min: 70		Max: 121	
d8-TOLUENE	107	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	91.6	Min: 74		Max: 121	

Sample: 25A TP15 423023 6003 7/31 0800 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT of AGRICULTURE LABORATORY CODE NO. J988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG
CHLOROFORM	11		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	< 5		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/04/91	CG
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	19		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/04/91	CO
Surrogates					
d4-1,2-DICHLOROETHANE	96.0	Min: 70	Max: 121		
d8-TOLUENE	99.6	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	96.2	Min: 74	Max: 121		

Sample: 26A TP15 423023 6003 7/31 0800 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON--418.1	92.2		MG/KG		RP

Sample: 27A TP10 423023 6003 7/31 0850 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	83.1		MG/KG		RP

Sample: 28A TP10 423023 6003 7/31 0850 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	8.6		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1068 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #0390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	85.0	Min: 70	Max: 121		
d8-TOLUENE	87.4	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	90.5	Min: 74	Max: 121		

Sample: 29A TP-8 423023 6003 7/31 1010 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
IIO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	6.9		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	130		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	95.8	Min: 70		Max: 121	
d8-TOLUENE	108	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	98.6	Min: 74		Max: 121	

Sample: 30A TP-8 423023 6003 7/31 1010 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	260		MG/KG		RP

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Sample: 31A TB 731 423023 6003 7/31 15 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON--418.1	< 5		MG/L		RP
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/L	08/01/91	CG
ACROLEIN	< 50		UG/L	08/01/91	CG
ACRYLONITRILE	< 50		UG/L	08/01/91	CG
BENZENE	< 5		UG/L	08/01/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/01/91	CG
BROMOFORM	< 5		UG/L	08/01/91	CG
BROMOMETHANE	< 10		UG/L	08/01/91	CG
2-BUTANONE	< 100		UG/L	08/01/91	CG
CARBON DISULFIDE	< 100		UG/L	08/01/91	CG
CARBON TETRACHLORIDE	< 5		UG/L	08/01/91	CG
CHLOROBENZENE	< 5		UG/L	08/01/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/01/91	CG
CHLOROETHANE	< 10		UG/L	08/01/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/01/91	CG
CHLOROFORM	< 5		UG/L	08/01/91	CG
CHLOROMETHANE	< 10		UG/L	08/01/91	CG
DIBROMOMETHANE	< 5		UG/L	08/01/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/01/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/01/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/01/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/01/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/01/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/01/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/01/91	CG
ETHYLBENZENE	< 5		UG/L	08/01/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/01/91	CG
2-HEXANONE	< 50		UG/L	08/01/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3986 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
IODOMETHANE	< 5		UG/L	08/01/91	CG
METHYLENE CHLORIDE	< 5		UG/L	08/01/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/01/91	CG
STYRENE	< 5		UG/L	08/01/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/01/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/01/91	CG
TOLUENE	< 5		UG/L	08/01/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/01/91	CG
TRICHLOROETHENE	< 5		UG/L	08/01/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/01/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/01/91	CG
VINYL ACETATE	< 50		UG/L	08/01/91	CG
VINYL CHLORIDE	< 10		UG/L	08/01/91	CG
XYLENE	< 5		UG/L	08/01/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	86.9	Min: 76	Max: 114		
d8-TOLUENE	102	Min: 88	Max: 110		
4-BROMOMFLUOROBENZENE	88.9	Min: 86	Max: 115		

Sample: 32A WW 731 423023 6003 7/31 07 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	< 5		MG/L		RP
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/L	08/01/91	CG
ACROLEIN	< 50		UG/L	08/01/91	CG
ACRYLONITRILE	< 50		UG/L	08/01/91	CG
BENZENE	< 5		UG/L	08/01/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/01/91	CG
BROMOFORM	< 5		UG/L	08/01/91	CG
BROMOMETHANE	< 10		UG/L	08/01/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT OF AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
2-BUTANONE	< 100		UG/L	08/01/91	CG
CARBON DISULFIDE	< 100		UG/L	08/01/91	CG
CARBON TETRACHLORIDE	< 5		UG/L	08/01/91	CG
CHLOROBENZENE	< 5		UG/L	08/01/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/01/91	CG
CHLOROETHANE	< 10		UG/L	08/01/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/01/91	CG
CHLOROFORM	< 5		UG/L	08/01/91	CG
CHLOROMETHANE	< 10		UG/L	08/01/91	CG
DIBROMOMETHANE	< 5		UG/L	08/01/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/01/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/01/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/01/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/01/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/01/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/01/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/01/91	CG
ETHYLBENZENE	< 5		UG/L	08/01/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/01/91	CG
2-HEXANONE	< 50		UG/L	08/01/91	CG
IODOMETHANE	< 5		UG/L	08/01/91	CG
METHYLENE CHLORIDE	< 5		UG/L	08/01/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/01/91	CG
STYRENE	< 5		UG/L	08/01/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/01/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/01/91	CG
TOLUENE	< 5		UG/L	08/01/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/01/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/01/91	CG
TRICHLOROETHENE	< 5		UG/L	08/01/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/01/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/01/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
VINYL ACETATE	< 50		UG/L	08/01/91	CG
VINYL CHLORIDE	< 10		UG/L	08/01/91	CG
XYLENE	< 5		UG/L	08/01/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	88.7	Min: 76		Max: 114	
d8-TOLUENE	95.3	Min: 88		Max: 110	
4-BROMOMFLUOROBENZENE	88.3	Min: 86		Max: 115	

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT OF AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42526001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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BELMONTE PARK LABORATORIES
11 EAST MAIN STREET
TROTWOOD, OHIO 45426

Attn: M_LAKE
Phone: (513) 837-3744 FAX# 837-1071

JOHN MATHES & ASSOCIATES
210 WEST SAND BANK RD.
COLUMBIA, ILLINOIS 62236-0330

Attn: KATHLEEN BLAINE
Invoice Number:

Order #: 91-07-504
Date: 08/07/91 10:52
Work ID: 423023 6003 VO, TB, WW SAMP
Date Received: 07/31/91
Date Completed: 08/05/91

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	VO-1 423023 6003 7/29 1000
03	VO-3 423023 6003 7/29 1040
05	VO-6 423023 6003 7/29 1120
07	VO-9 423023 6003 7/29 1240
09	TB 7/29 423023 7/29 1415
[illegible]	VO-12 423023 7/30 0720
13	VO-15 423023 7/30 0800
15	VO-14 423023 7/30 0800
17	VO-18 423023 7/30 0830
19	VO-8 423023 6003 7/30 0845

Sample Number	Sample Description
02	VO-2 423023 6003 7/29 1020
04	VO-4 423023 6003 7/29 1100
06	VO-7 423023 6003 7/29 1220
08	VO-10 423023 7/29 1300
10	WW 7/29 423023 7/29 1000
12	VO 13 423023 7/30 0745
14	VO-16 423023 7/30 0810
16	VO-17 423023 7/30 0820
18	VO-11 423023 7/30 0825
20	VO-5 423023 6003 7/30 0910

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1522774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

ENCLOSED ARE THE RESULTS OF SPECIFIED SAMPLES SUBMITTED FOR ANALYSES. IF YOU HAVE ANY QUESTIONS, PLEASE ADVISE. USE THE "LAB #" FOR FASTER IDENTIFICATION.
OHIO EPA CERTIFICATION NUMBER : 836 & 837

Certified By
MATTHEW LAKE

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1523774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047711 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
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Belmonte Park Laboratories

TEST RESULTS BY SAMPLE

Sample: 01A VO-1 423023 6003 7/29 1000 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047713 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	93.2	Min: 70		Max: 121	
d8-TOLUENE	91.1	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	82.2	Min: 74		Max: 121	

Sample: 02A VO-2 423023 6003 7/29 1020 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 19M • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1522774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047731 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1986 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RR244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
VINYL ACETATE	< 50	-	UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	103	Min: 70	Max: 121		
d8-TOLUENE	98.5	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	90.9	Min: 74	Max: 121		

Sample: 03A VO-3 423023 6003 7/29 1040 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/01/91	CG
ACROLEIN	< 50		UG/KG	08/01/91	CG
ACRYLONITRILE	< 50		UG/KG	08/01/91	CG
BENZENE	< 5		UG/KG	08/01/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/01/91	CG
BROMOFORM	< 5		UG/KG	08/01/91	CG
BROMOMETHANE	< 10		UG/KG	08/01/91	CG
2-BUTANONE	< 100		UG/KG	08/01/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/01/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/01/91	CG
CHLOROBENZENE	< 5		UG/KG	08/01/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
CHLOROETHANE	< 10		UG/KG	08/01/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/01/91	CG
CHLOROFORM	< 5		UG/KG	08/01/91	CG
CHLOROMETHANE	< 10		UG/KG	08/01/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/01/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG

CERTIFICATIONS
HCFA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047711 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
1,2-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
ETHYLBENZENE	< 5		UG/KG	08/01/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/01/91	CG
2-HEXANONE	< 50		UG/KG	08/01/91	CG
IODOMETHANE	< 5		UG/KG	08/01/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/01/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/01/91	CG
STYRENE	< 5		UG/KG	08/01/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/01/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/01/91	CG
TOLUENE	< 5		UG/KG	08/01/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
TRICHLOROETHENE	17		UG/KG	08/01/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
VINYL ACETATE	< 50		UG/KG	08/01/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/01/91	CG
XYLENE	< 5		UG/KG	08/01/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	88.5	Min: 70		Max: 121	
d8-TOLUENE	102	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	78.5	Min: 74		Max: 121	

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. J988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Sample: 04A VO-4 423023 6003 7/29 1100 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244149 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	84.2	Min: 70		Max: 121	
d8-TOLUENE	84.0	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	85.1	Min: 74		Max: 121	

Sample: 05A VO-6 423023 6003 7/29 1120 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/01/91	CG
ACROLEIN	< 50		UG/KG	08/01/91	CG
ACRYLONITRILE	< 50		UG/KG	08/01/91	CG
BENZENE	< 5		UG/KG	08/01/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/01/91	CG
BROMOFORM	< 5		UG/KG	08/01/91	CG
BROMOMETHANE	< 10		UG/KG	08/01/91	CG
2-BUTANONE	< 100		UG/KG	08/01/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/01/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/01/91	CG
CHLOROBENZENE	< 5		UG/KG	08/01/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
CHLOROETHANE	< 10		UG/KG	08/01/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/01/91	CG
CHLOROFORM	< 5		UG/KG	08/01/91	CG
CHLOROMETHANE	< 10		UG/KG	08/01/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/01/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
ETHYLBENZENE	2.0		UG/KG	08/01/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/01/91	CG
2-HEXANONE	< 50		UG/KG	08/01/91	CG
IODOMETHANE	< 5		UG/KG	08/01/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/01/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/01/91	CG
STYRENE	< 5		UG/KG	08/01/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/01/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/01/91	CG
TOLUENE	< 5		UG/KG	08/01/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
TRICHLOROETHENE	4.3		UG/KG	08/01/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
VINYL ACETATE	< 50		UG/KG	08/01/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/01/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	94		UG/KG	08/01/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	82.4	Min: 70	Max: 121		
d8-TOLUENE	100	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	76.4	Min: 74	Max: 121		

Sample: 06A VO-7 423023 6003 7/29 1220 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1 DICHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
NJ EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1521774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • NJ DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 158 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RB2645491 • AMERICAN BOARD OF BIOANALYSIS CERT #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3 DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2 HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2 TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	87.9	Min: 70	Max: 121		
d8-TOLUENE	89.4	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	75.9	Min: 74	Max: 121		

Sample: 07A VO-9 423023 6003 7/29 1240 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT of AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	32		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	83.5	Min: 70		Max: 121	
d8-TOLUENE	87.5	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	84.8	Min: 74		Max: 121	

Sample: 08A VO-10 423023 7/29 1300 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1522774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT. OF HEALTH ALCOHOL TESTING, APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	9.0		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	74.7	Min: 70		Max: 121	
d8-TOLUENE	83.7	Min: 81		Max: 117	
4 BROMOMFLUOROBENZENE	85.6	Min: 74		Max: 121	

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 81 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047233 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Sample: 09A TB 729 423023 7/29 1415 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/L	08/03/91	CG
ACROLEIN	< 50		UG/L	08/03/91	CG
ACRYLONITRILE	< 50		UG/L	08/03/91	CG
BENZENE	< 5		UG/L	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/03/91	CG
BROMOFORM	< 5		UG/L	08/03/91	CG
BROMOMETHANE	< 10		UG/L	08/03/91	CG
2-BUTANONE	< 100		UG/L	08/03/91	CG
CARBON DISULFIDE	< 100		UG/L	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/L	08/03/91	CG
CHLOROBENZENE	< 5		UG/L	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/03/91	CG
CHLOROETHANE	< 10		UG/L	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/03/91	CG
CHLOROFORM	< 5		UG/L	08/03/91	CG
CHLOROMETHANE	< 10		UG/L	08/03/91	CG
DIBROMOMETHANE	< 5		UG/L	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/03/91	CG
ETHYLBENZENE	< 5		UG/L	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/03/91	CG
2-HEXANONE	< 50		UG/L	08/03/91	CG
IODOMETHANE	< 5		UG/L	08/03/91	CG

CERTIFICATIONS
U.S. EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221274 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047233 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 159 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/L	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/03/91	CG
STYRENE	< 5		UG/L	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/03/91	CG
TOLUENE	< 5		UG/L	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/03/91	CG
TRICHLOROETHENE	< 5		UG/L	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/03/91	CG
VINYL ACETATE	< 50		UG/L	08/03/91	CG
VINYL CHLORIDE	< 10		UG/L	08/03/91	CG
XYLENE	< 5		UG/L	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	94.1	Min: 70	Max: 121		
d8-TOLUENE	81.3	Min: 81	Max: 117		
4 BROMOFLUOROBENZENE	84.4	Min: 74	Max: 121		

Sample: 10A WW 729 423023 7/29 1000 Collected: 07/29/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/L	08/03/91	CG
ACROLEIN	< 50		UG/L	08/03/91	CG
ACRYLONITRILE	< 50		UG/L	08/03/91	CG
BENZENE	< 5		UG/L	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/03/91	CG
BROMOFORM	< 5		UG/L	08/03/91	CG
BROMOMETHANE	< 10		UG/L	08/03/91	CG
2-BUTANONE	< 100		UG/L	08/03/91	CG
CARBON DISULFIDE	< 100		UG/L	08/03/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221274 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244149 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/L	08/03/91	CG
CHLOROBENZENE	< 5		UG/L	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/03/91	CG
CHLOROETHANE	< 10		UG/L	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/03/91	CG
CHLOROFORM	< 5		UG/L	08/03/91	CG
CHLOROMETHANE	< 10		UG/L	08/03/91	CG
DIBROMOMETHANE	< 5		UG/L	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/03/91	CG
ETHYLBENZENE	< 5		UG/L	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/03/91	CG
2-HEXANONE	< 50		UG/L	08/03/91	CG
IODOMETHANE	< 5		UG/L	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/L	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/03/91	CG
STYRENE	< 5		UG/L	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/03/91	CG
TOLUENE	< 5		UG/L	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/03/91	CG
TRICHLOROETHENE	< 5		UG/L	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/03/91	CG
VINYL ACETATE	< 50		UG/L	08/03/91	CG
VINYL CHLORIDE	< 10		UG/L	08/03/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/L	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	90.1	Min: 70	Max: 121		
d8-TOLUENE	96.1	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	100	Min: 74	Max: 121		

Sample: 11A VO-12 423023 7/30 0720 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
D EPA CERTIFICATION NUMBERS 816 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047731 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
D DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D190
EPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3 DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2 TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	85.9	Min: 70	Max: 121		
d8-TOLUENE	86.6	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	85.4	Min: 74	Max: 121		

Sample: 12A VO-13 423023 7/30 0745 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 83 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1986 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 159 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047731 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Belmonte Park Laboratories

Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	43		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	81.9	Min: 70	Max: 121		
d8-TOLUENE	88.0	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	82.8	Min: 74	Max: 121		

Sample: 13A VO-15 423023 7/30 0800 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 198M • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
PORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	80.0	Min: 70		Max: 121	
d8-TOLUENE	92.5	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	93.4	Min: 74		Max: 121	

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 759 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Sample: 14A VO-16 423023 7/30 0810 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO 2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 3550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	6.0		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	75.6	Min: 70	Max: 121		
d8-TOLUENE	96.2	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	98.3	Min: 74	Max: 121		

Sample: 15A VO-14 423023 7/30 0800 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42526001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PR244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4 DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	5.5		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	41		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	86.0	Min: 70	Max: 121		
d8-TOLUENE	93.5	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	96.7	Min: 74	Max: 121		

Sample: 16A VO-17 423023 7/30 0820 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4 DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
DEPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PH244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG
TOLUENE	< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
VINYL ACETATE	< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/02/91	CG
XYLENE	< 5		UG/KG	08/02/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	96.3	Min: 70		Max: 121	
d8-TOLUENE	96.1	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	94.0	Min: 74		Max: 121	

Sample: 17A VO-18 423023 7/30 0830 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/02/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047233 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/KG	08/02/91	CG
ACRYLONITRILE	< 50		UG/KG	08/02/91	CG
BENZENE	< 5		UG/KG	08/02/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/02/91	CG
BROMOFORM	< 5		UG/KG	08/02/91	CG
BROMOMETHANE	< 10		UG/KG	08/02/91	CG
2-BUTANONE	< 100		UG/KG	08/02/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/02/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/02/91	CG
CHLOROBENZENE	< 5		UG/KG	08/02/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
CHLOROETHANE	< 10		UG/KG	08/02/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/02/91	CG
CHLOROFORM	< 5		UG/KG	08/02/91	CG
CHLOROMETHANE	< 10		UG/KG	08/02/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/02/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/02/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/02/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/02/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/02/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/02/91	CG
ETHYLBENZENE	< 5		UG/KG	08/02/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/02/91	CG
2-HEXANONE	< 50		UG/KG	08/02/91	CG
IODOMETHANE	< 5		UG/KG	08/02/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/02/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/02/91	CG
STYRENE	< 5		UG/KG	08/02/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/02/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/02/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description		Result	Limit	Units	Analyzed	By
TOLUENE		< 5		UG/KG	08/02/91	CG
1,1,1-TRICHLOROETHANE		< 5		UG/KG	08/02/91	CG
1,1,2-TRICHLOROETHANE		< 5		UG/KG	08/02/91	CG
TRICHLOROETHENE		39		UG/KG	08/02/91	CG
TRICHLOROFLUOROMETHANE		< 5		UG/KG	08/02/91	CG
1,2,3-TRICHLOROPROPANE	U	< 5		UG/KG	08/02/91	CG
VINYL ACETATE		< 50		UG/KG	08/02/91	CG
VINYL CHLORIDE		< 10		UG/KG	08/02/91	CG
XYLENE		< 5		UG/KG	08/02/91	CG
Surrogates						
d4-1,2-DICHLOROETHANE		88.5	Min: 70		Max: 121	
d8-TOLUENE		102	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE		88.5	Min: 74		Max: 121	

Sample: 18A VO-11 423023 7/30 0825 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG

CERTIFICATIONS
O.E.P.A. CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O.DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 359 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	7.8		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	13		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	73		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	79.3	Min: 70		Max: 121	
d8-TOLUENE	97.0	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	97.1	Min: 74		Max: 121	

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047713 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Sample: 19A VO-8 423023 6003 7/30 0845 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/03/91	CG
ACROLEIN	< 50		UG/KG	08/03/91	CG
ACRYLONITRILE	< 50		UG/KG	08/03/91	CG
BENZENE	< 5		UG/KG	08/03/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/03/91	CG
BROMOFORM	< 5		UG/KG	08/03/91	CG
BROMOMETHANE	< 10		UG/KG	08/03/91	CG
2-BUTANONE	< 100		UG/KG	08/03/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/03/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/03/91	CG
CHLOROBENZENE	< 5		UG/KG	08/03/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
CHLOROETHANE	< 10		UG/KG	08/03/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/03/91	CG
CHLOROFORM	< 5		UG/KG	08/03/91	CG
CHLOROMETHANE	< 10		UG/KG	08/03/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/03/91	CG
1,4-DICHLORO 2- BUTENE	< 100		UG/KG	08/03/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/03/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/03/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
cis 1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
trans 1,3-DICHLOROPROPENE	< 5		UG/KG	08/03/91	CG
ETHYLBENZENE	< 5		UG/KG	08/03/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/03/91	CG
2-HEXANONE	< 50		UG/KG	08/03/91	CG
IODOMETHANE	< 5		UG/KG	08/03/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047731 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/03/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/03/91	CG
STYRENE	< 5		UG/KG	08/03/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/03/91	CG
TETRACHLOROETHENE	10		UG/KG	08/03/91	CG
TOLUENE	< 5		UG/KG	08/03/91	CG
1,1,1-TRICHLOROETHANE	17		UG/KG	08/03/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/03/91	CG
TRICHLOROETHENE	54		UG/KG	08/03/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/03/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/03/91	CG
VINYL ACETATE	< 50		UG/KG	08/03/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/03/91	CG
XYLENE	< 5		UG/KG	08/03/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	74.2	Min: 70		Max: 121	
d8-TOLUENE	96.8	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	90.7	Min: 74		Max: 121	

Sample: 20A VO-5 423023 6003 7/30 0910 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/04/91	CG
ACROLEIN	< 50		UG/KG	08/04/91	CG
ACRYLONITRILE	< 50		UG/KG	08/04/91	CG
BENZENE	< 5		UG/KG	08/04/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/04/91	CG
BROMOFORM	< 5		UG/KG	08/04/91	CG
BROMOMETHANE	< 10		UG/KG	08/04/91	CG
2-BUTANONE	< 100		UG/KG	08/04/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/04/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • D DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0190
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/04/91	CG
CHLOROBENZENE	< 5		UG/KG	08/04/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
CHLOROETHANE	< 10		UG/KG	08/04/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/04/91	CG
CHLOROFORM	12		UG/KG	08/04/91	CG
CHLOROMETHANE	< 10		UG/KG	08/04/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/04/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/04/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/04/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/04/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/04/91	CG
ETHYLBENZENE	6.2		UG/KG	08/04/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/04/91	CG
2-HEXANONE	< 50		UG/KG	08/04/91	CG
IODOMETHANE	< 5		UG/KG	08/04/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/04/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/04/91	CG
STYRENE	< 5		UG/KG	08/04/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/04/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/04/91	CG
TOLUENE	< 5		UG/KG	08/04/91	CG
1,1,1-TRICHLOROETHANE	6.0		UG/KG	08/04/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/04/91	CG
TRICHLOROETHENE	24		UG/KG	08/04/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/04/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/04/91	CG
VINYL ACETATE	< 50		UG/KG	08/04/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/04/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 1522 1774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. FR244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	38		UG/KG	08/04/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	90.0	Min: 70	Max: 121		
d8-TOLUENE	83.1	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	84.2	Min: 74	Max: 121		

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. RB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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BELMONTE PARK LABORATORIES
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JOHN MATHES & ASSOCIATES
210 WEST SAND BANK RD.
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Attn: JIM PINTA / KATHLEEN BLAINE
Invoice Number:

Order #: 91-08-016
Date: 08/07/91 11:45
Work ID: 423023 6003 C-1 THRU 15 TB WW
Date Received: 08/01/91
Date Completed: 08/06/91

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	C-1 423023 6003 7/31 0950	02	C-2 423023 6003 7/31 1400
03	C-3 423023 6003 7/31 1410	04	C-4 423023 6003 7/31 1500
05	C-5 423023 6003 7/31 0825	06	C-6 423023 6003 7/31 1430
07	C-7 423023 6003 7/31 1330	08	C-8 423023 6003 7/31 1400
09	C-9 423023 6003 7/31 1420	10	C-10 423023 6003 8/1 0855
11	C-11 423023 6003 8/1 1400	12	C-12 423023 6003 8/1 1335
13	C-13 423023 6003 8/1 1500	14	C-14 423023 6003 8/1 1230
15	C-15 423023 6003 8/1 0935	16	TB-81 423023 6003 8/1 0800
17	WW-81 423023 6003 8/1 0800		

CERTIFICATIONS
D EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT OF AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
D DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING
Belmonte Park Laboratories

ENCLOSED ARE THE RESULTS OF SPECIFIED SAMPLES SUBMITTED FOR ANALYSES. IF YOU HAVE ANY QUESTIONS, PLEASE ADVISE. USE THE "LAB #" FOR FASTER IDENTIFICATION.
OHIO EPA CERTIFICATION NUMBER : 836 & 837

Certified By
MATTHEW LAKE

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. 4988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 3550 •
O DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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TEST RESULTS BY SAMPLE

Sample: 01A C-1 423023 6003 7/31 0950 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 636 & 637 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. [illegible] • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER [illegible] • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS [illegible] • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER [illegible] •
O DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. [illegible] • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. [illegible] • AMERICAN BOARD OF BIOANALYSIS CERT. [illegible]
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	8.3		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	111	Min: 70	Max: 121		
d8-TOLUENE	105	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	96.7	Min: 74	Max: 121		

Sample: 02A C-2 423023 6003 7/31 1400 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 8047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO P[illegible] • AMERICAN BOARD OF BIOANALYSIS CERT. 4D310.
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
2-BUTANONE	< 100		UG/KG	08/05/91	CC
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	~15		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1530 • O DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528801 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D398.
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	96.9	Min: 70	Max: 121		
d8-TOLUENE	99.9	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	104	Min: 74	Max: 121		

Sample: 03A C-3 423023 6003 7/31 1410 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 5		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 10		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 8047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528881 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. 6D300.
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Test Description	Result	Limit	Units	Analyzed	By
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	10		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	12		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	64		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	98.9	Min: 70	Max: 121		
d8-TOLUENE	105	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	96.2	Min: 74	Max: 121		

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Sample: 04A C-4 423023 6003 7/31 1500 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
O DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #0390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	12		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	93.1	Min: 70		Max: 121	
d8-TOLUENE	103	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	107	Min: 74		Max: 121	

Sample: 05A C-5 423023 6003 7/31 0825 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	54		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG

CERTIFICATIONS
) EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
) DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
EPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	102	Min: 70		Max: 121	
d8-TOLUENE	110	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	92.0	Min: 74		Max: 121	

Sample: 06A C-6 423023 6003 7/31 1430 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/05/91	CG
ACROLEIN	< 50		UG/KG	08/05/91	CG
ACRYLONITRILE	< 50		UG/KG	08/05/91	CG
BENZENE	< 5		UG/KG	08/05/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/05/91	CG
BROMOFORM	< 5		UG/KG	08/05/91	CG
BROMOMETHANE	< 10		UG/KG	08/05/91	CG
2-BUTANONE	< 100		UG/KG	08/05/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/05/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/05/91	CG
CHLOROBENZENE	< 5		UG/KG	08/05/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
CHLOROETHANE	< 10		UG/KG	08/05/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/05/91	CG
CHLOROFORM	< 5		UG/KG	08/05/91	CG
CHLOROMETHANE	< 10		UG/KG	08/05/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/05/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/05/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/05/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT of AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Belmonte Park Laboratories

Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/05/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/05/91	CG
ETHYLBENZENE	< 5		UG/KG	08/05/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/05/91	CG
2-HEXANONE	< 50		UG/KG	08/05/91	CG
IODOMETHANE	< 5		UG/KG	08/05/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/05/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/05/91	CG
STYRENE	< 5		UG/KG	08/05/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/05/91	CG
TETRACHLOROETHENE	13		UG/KG	08/05/91	CG
TOLUENE	< 5		UG/KG	08/05/91	CG
1,1,1-TRICHLOROETHANE	14		UG/KG	08/05/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/05/91	CG
TRICHLOROETHENE	49		UG/KG	08/05/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/05/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/05/91	CG
VINYL ACETATE	< 50		UG/KG	08/05/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/05/91	CG
XYLENE	< 5		UG/KG	08/05/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	97.7	Min: 70	Max: 121		
d8-TOLUENE	102	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	103	Min: 74	Max: 121		

Sample: 07A C-7 423023 6003 7/31 1330 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	21		UG/KG	08/06/91	CG

CERTIFICATIONS
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Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	9.8		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	52		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	102	Min: 70		Max: 121	
d8-TOLUENE	100	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	112	Min: 74		Max: 121	

Sample: 08A C-8 423023 6003 7/31 1400 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	9.8		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	96		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	46		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	118	Min: 70	Max: 121		
d8-TOLUENE	102	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	107	Min: 74	Max: 121		

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Sample: 09A C-9 423023 6003 7/31 1420 Collected: 07/31/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	12		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	88.4	Min: 70		Max: 121	
d8-TOLUENE	101	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	93.6	Min: 74		Max: 121	

Sample: 10A C-10 423023 6003 8/1 0855 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
L REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	112	Min: 70	Max: 121		
d8-TOLUENE	101	Min: 81	Max: 117		
4-BROMOFLUOROBENZENE	91.7	Min: 74	Max: 121		

Sample: 11A C-11 423023 6003 8/1 1400 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG

CERTIFICATIONS
O EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221274 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • O DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	16		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	114	Min: 70		Max: 121	
d8-TOLUENE	99.8	Min: 81		Max: 117	
4-BROMOFLUOROBENZENE	101	Min: 74		Max: 121	

Sample: 12A C-12 423023 6003 8/1 1335 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG

CERTIFICATIONS
U.S. EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. J988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • N.J. DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG

CERTIFICATIONS
EPA CERTIFICATION NUMBERS 836 & 837 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	94.4	Min: 70		Max: 121	
d8-TOLUENE	99.9	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	92.2	Min: 74		Max: 121	

Sample: 13A C-13 423023 6003 8/1 1500 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. OF AGRICULTURE LABORATORY CODE NO. J988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
L REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	<50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	95.3	Min: 70		Max: 121	
d8-TOLUENE	103	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	94.1	Min: 74		Max: 121	

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15221774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047713 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Sample: 14A C-14 423023 6003 8/1 1230 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG

CERTIFICATIONS
OHIO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT OF AGRICULTURE LABORATORY CODE NO. 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • OHIO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #0390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS. ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT'S CONSENT TO DO SO IN WRITING.

Test Description	Result	Limit	Units	Analyzed	By
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	94.7	Min: 70		Max: 121	
d8-TOLUENE	101	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	94.0	Min: 74		Max: 121	

Sample: 15A C-15 423023 6003 8/1 0935 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/06/91	CG
ACROLEIN	< 50		UG/KG	08/06/91	CG
ACRYLONITRILE	< 50		UG/KG	08/06/91	CG
BENZENE	< 5		UG/KG	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/06/91	CG
BROMOFORM	< 5		UG/KG	08/06/91	CG
BROMOMETHANE	< 10		UG/KG	08/06/91	CG
2-BUTANONE	< 100		UG/KG	08/06/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/06/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PR244549 • AMERICAN BOARD OF BIOANALYSIS CERT. #D390
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Test Description	Result	Limit	Units	Analyzed	By
CARBON TETRACHLORIDE	< 5		UG/KG	08/06/91	CG
CHLOROBENZENE	< 5		UG/KG	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
CHLOROETHANE	< 10		UG/KG	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/06/91	CG
CHLOROFORM	< 5		UG/KG	08/06/91	CG
CHLOROMETHANE	< 10		UG/KG	08/06/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/06/91	CG
ETHYLBENZENE	< 5		UG/KG	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/06/91	CG
2-HEXANONE	< 50		UG/KG	08/06/91	CG
IODOMETHANE	< 5		UG/KG	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/06/91	CG
STYRENE	< 5		UG/KG	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/06/91	CG
TOLUENE	< 5		UG/KG	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/06/91	CG
TRICHLOROETHENE	< 5		UG/KG	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/06/91	CG
VINYL ACETATE	< 50		UG/KG	08/06/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/06/91	CG

CERTIFICATIONS
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HIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
XYLENE	< 5		UG/KG	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	102	Min: 70	Max: 121		
d8-TOLUENE	97.6	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	98.8	Min: 74	Max: 121		

Sample: 16A TB-81 423023 6003 8/1 0800 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 0240					
ACETONE	< 100		UG/L	08/06/91	CG
ACROLEIN	< 50		UG/L	08/06/91	CG
ACRYLONITRILE	< 50		UG/L	08/06/91	CG
BENZENE	< 5		UG/L	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/06/91	CG
BROMOFORM	< 5		UG/L	08/06/91	CG
BROMOMETHANE	< 10		UG/L	08/06/91	CG
2-BUTANONE	< 100		UG/L	08/06/91	CG
CARBON DISULFIDE	< 100		UG/L	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/L	08/06/91	CG
CHLOROBENZENE	< 5		UG/L	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/06/91	CG
CHLOROETHANE	< 10		UG/L	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/06/91	CG
CHLOROFORM	< 5		UG/L	08/06/91	CG
CHLOROMETHANE	< 10		UG/L	08/06/91	CG
DIBROMOMETHANE	< 5		UG/L	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/06/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
HIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/06/91	CG
ETHYLBENZENE	< 5		UG/L	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/06/91	CG
2-HEXANONE	< 50		UG/L	08/06/91	CG
IODOMETHANE	< 5		UG/L	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/L	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/06/91	CG
STYRENE	< 5		UG/L	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/06/91	CG
TOLUENE	< 5		UG/L	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/06/91	CG
TRICHLOROETHENE	< 5		UG/L	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/06/91	CG
VINYL ACETATE	< 50		UG/L	08/06/91	CG
VINYL CHLORIDE	< 10		UG/L	08/06/91	CG
XYLENE	< 5		UG/L	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	110	Min: 78	Max: 121		
d8-TOLUENE	96.9	Min: 81	Max: 117		
4-BROMOMFLUOROBENZENE	97.2	Min: 74	Max: 121		

Sample: 17A WW-81 423023 6003 8/1 0800 Collected: 08/01/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/L	08/06/91	CG

CERTIFICATIONS
HIO EPA CERTIFICATION NUMBERS 836 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
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Test Description	Result	Limit	Units	Analyzed	By
ACROLEIN	< 50		UG/L	08/06/91	CG
ACRYLONITRILE	< 50		UG/L	08/06/91	CG
BENZENE	< 5		UG/L	08/06/91	CG
BROMODICHLOROMETHANE	< 5		UG/L	08/06/91	CG
BROMOFORM	< 5		UG/L	08/06/91	CG
BROMOMETHANE	< 10		UG/L	08/06/91	CG
2-BUTANONE	< 100		UG/L	08/06/91	CG
CARBON DISULFIDE	< 100		UG/L	08/06/91	CG
CARBON TETRACHLORIDE	< 5		UG/L	08/06/91	CG
CHLOROBENZENE	< 5		UG/L	08/06/91	CG
CHLORODIBROMOMETHANE	< 5		UG/L	08/06/91	CG
CHLOROETHANE	< 10		UG/L	08/06/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/L	08/06/91	CG
CHLOROFORM	< 5		UG/L	08/06/91	CG
CHLOROMETHANE	< 10		UG/L	08/06/91	CG
DIBROMOMETHANE	< 5		UG/L	08/06/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/L	08/06/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/L	08/06/91	CG
1,1-DICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,2-DICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,1-DICHLOROETHENE	< 5		UG/L	08/06/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/L	08/06/91	CG
1,2-DICHLOROPROPANE	< 5		UG/L	08/06/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/L	08/06/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/L	08/06/91	CG
ETHYLBENZENE	< 5		UG/L	08/06/91	CG
ETHYL METHACRYLATE	< 5		UG/L	08/06/91	CG
2-HEXANONE	< 50		UG/L	08/06/91	CG
IODOMETHANE	< 5		UG/L	08/06/91	CG
METHYLENE CHLORIDE	< 5		UG/L	08/06/91	CG
4-METHYL-2-PENTANONE	< 50		UG/L	08/06/91	CG
STYRENE	< 5		UG/L	08/06/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/L	08/06/91	CG
TETRACHLOROETHENE	< 5		UG/L	08/06/91	CG

CERTIFICATIONS
HO EPA CERTIFICATION NUMBERS 816 & 817 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • HO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
TOLUENE	< 5		UG/L	08/06/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/L	08/06/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/L	08/06/91	CG
TRICHLOROETHENE	< 5		UG/L	08/06/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/L	08/06/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/L	08/06/91	CG
VINYL ACETATE	< 50		UG/L	08/06/91	CG
VINYL CHLORIDE	< 10		UG/L	08/06/91	CG
XYLENE	< 5		UG/L	08/06/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	109	Min: 70		Max: 121	
d8-TOLUENE	97.5	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	99.3	Min: 74		Max: 121	

CERTIFICATIONS
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ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

CLIENT: JOHN MATHES & ASSOCIATES, INC.
210 WEST SAND BANK ROAD P.O. BOX 330
COLUMBIA, IL 62236-0330
ATTN: KATHY BLAINE

REPORT: 262201TP(67)
DATE : 08-27-91

SAMPLE MATRIX : SOIL
ATAS # : 2622.01
DATE SUBMITTED : 08-21-91
DATE EXTRACTED : 08-26-91
DATE ANALYZED : 08-26-91
METHOD REFERENCE: METHOD 8015
PROJECT : #423023 ACUSTAR DAYTON
SAMPLE ID : TP-3

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION(PPM)

PARAMETER	DET. LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
GASOLINE C6-C10	1.0	mg/Kg	ND
DIESEL C10-C22	1.0	mg/Kg	ND
KEROSENE C9-C18	1.0	mg/Kg	ND
JP-4 C6-C14	1.0	mg/Kg	ND
NAPHTHA C6-C12	1.0	mg/Kg	ND
#6 FUEL OIL C12-C24	1.0	mg/Kg	ND
MISCELLANEOUS C16-C28 (1)	1.0	mg/Kg	35.1

QA/QC SURROGATE RECOVERY

* NAPHTHALENE 81 %

(1) = ANALYSIS SHOWS MISCELLANEOUS PEAKS WHICH CANNOT BE IDENTIFIED AS ANY SPECIFIC PATTERN. THE RESPONSE FACTOR FOR DIESEL WAS USED.
(2) = PATTERN IS SIMILAR BUT NOT IDENTICAL TO STANDARD.
ND = NOT DETECTED ABOVE QUANTITATION LIMIT
NA = NOT APPLICABLE
* = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

IENT: JOHN MATHES & ASSOCIATES, INC.
210 WEST SAND BANK ROAD P.O. BOX 330
COLUMBIA, IL 62236-0330
ATTN: KATHY BLAINE

REPORT: 262202TP(67)
DATE : 08-27-91

SAMPLE MATRIX : SOIL
ATAS # : 2622.02
DATE SUBMITTED : 08-21-91
DATE EXTRACTED : 08-26-91
DATE ANALYZED : 08-27-91
METHOD REFERENCE: METHOD 8015
PROJECT : #423023 ACUSTAR DAYTON
SAMPLE ID : TP-4

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION(PPM)

PARAMETER	DET. LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
SOLINE C6-C10	1.0	mg/Kg	ND
ESEL C10-C22	1.0	mg/Kg	ND
EROSENE C9-C18	1.0	mg/Kg	ND
P-4 C6-C14	1.0	mg/Kg	ND
PHTHA C6-C12	1.0	mg/Kg	ND
6 FUEL OIL C12-C24	1.0	mg/Kg	ND
ISCELLANEOUS C16-C28 (1)	1.0	mg/Kg	1530.0

QA/QC SURROGATE RECOVERY

* NAPHTHALENE 90 %

) = ANALYSIS SHOWS MISCELLANEOUS PEAKS WHICH CANNOT BE IDENTIFIED AS ANY SPECIFIC PATTERN. THE RESPONSE FACTOR FOR DIESEL WAS USED.
) = PATTERN IS SIMILAR BUT NOT IDENTICAL TO STANDARD.
) = NOT DETECTED ABOVE QUANTITATION LIMIT
A = NOT APPLICABLE
= NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

ATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

IENT: JOHN MATHES & ASSOCIATES, INC.
210 WEST SAND BANK ROAD P.O. BOX 330
COLUMBIA, IL 62236-0330
ATTN: KATHY BLAINE

REPORT: 262203TP(67)
DATE : 08-27-91

SAMPLE MATRIX : SOIL
ATAS # : 2622.03
DATE SUBMITTED : 08-21-91
DATE EXTRACTED : 08-26-91
DATE ANALYZED : 08-26-91
METHOD REFERENCE: METHOD 8015
PROJECT : #423023 ACUSTAR DAYTON
SAMPLE ID : TP-5

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION(PPM)

PARAMETER	DET. LIMIT	UNIT	RESULTS
TAL EXTRACTABLE HYDROCARBONS			
SOLINE C6-C10	1.0	mg/Kg	ND
ESEL C10-C22	1.0	mg/Kg	ND
EROSENE C9-C18	1.0	mg/Kg	ND
P-4 C6-C14	1.0	mg/Kg	ND
PHTHA C6-C12	1.0	mg/Kg	ND
FUEL OIL C12-C24	1.0	mg/Kg	ND
ISCELLANEOUS C16-C28 (1)	1.0	mg/Kg	130.0

QA/QC SURROGATE RECOVERY

* NAPHTHALENE 85 %

1) = ANALYSIS SHOWS MISCELLANEOUS PEAKS WHICH CANNOT BE IDENTIFIED AS ANY SPECIFIC PATTERN. THE RESPONSE FACTOR FOR DIESEL WAS USED.
) = PATTERN IS SIMILAR BUT NOT IDENTICAL TO STANDARD.
) = NOT DETECTED ABOVE QUANTITATION LIMIT
A = NOT APPLICABLE
= NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

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CLIENT: JOHN MATHES & ASSOCIATES, INC.
210 WEST SAND BANK ROAD P.O. BOX 330
COLUMBIA, IL 62236-0330
ATTN: KATHY BLAINE

REPORT: 262204TP(67)
DATE : 08-27-91

SAMPLE MATRIX : SOIL
ATAS # : 2622.04
DATE SUBMITTED : 08-21-91
DATE EXTRACTED : 08-26-91
DATE ANALYZED : 08-26-91
METHOD REFERENCE: METHOD 8015
PROJECT : #423023 ACUSTAR DAYTON
SAMPLE ID : TP-11

RESULTS REPORTED IN mg/Kg OR PARTS PER MILLION(PPM)

PARAMETER	DET. LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
GASOLINE C6-C10	1.0	mg/Kg	ND
DIESEL C10-C22	1.0	mg/Kg	ND
KEROSENE C9-C18	1.0	mg/Kg	ND
JP-4 C6-C14	1.0	mg/Kg	ND
NAPHTHA C6-C12	1.0	mg/Kg	ND
#6 FUEL OIL C12-C24	1.0	mg/Kg	ND
MISCELLANEOUS C16-C28 (1)	1.0	mg/Kg	126.0

QA/QC SURROGATE RECOVERY

* NAPHTHALENE 87 %

(1) = ANALYSIS SHOWS MISCELLANEOUS PEAKS WHICH CANNOT BE IDENTIFIED AS ANY SPECIFIC PATTERN. THE RESPONSE FACTOR FOR DIESEL WAS USED.
(2) = PATTERN IS SIMILAR BUT NOT IDENTICAL TO STANDARD.
ND = NOT DETECTED ABOVE QUANTITATION LIMIT
NA = NOT APPLICABLE
* = NOT QUANTIFIABLE DUE TO MATRIX INTERFERENCE

TATAS 875 Fee Fee Road • Maryland Heights, MO 63043 • (314) 434-4570 - FAX (314) 434-0080

LABORATORY QUALITY CONTROL SEQUENCE

METHOD : MODIFIED 8015
SEQUENCE DATE : 08-26-91

LABORATORY BLANK

MATRIX : SOIL DILUTION FACTOR: 1.0
SAMPLE AMOUNT : 20.0 g
ANALYSIS DATE : 08-26-91
ANALYSIS TIME : 16:18

COMPOUND	DET. LIMIT	UNIT	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS			
GASOLINE	1.0	mg/Kg	ND
NAPHTHA	1.0	mg/Kg	ND
KEROSENE	1.0	mg/Kg	ND
BUNKER C/#6 FUEL OIL	1.0	mg/Kg	ND
DIESEL FUEL	1.0	mg/Kg	ND
JP-4	1.0	mg/Kg	ND

SURROGATE RECOVERY (NAPTHALENE): 84.0 %

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULTS

COMPOUND	SPIKE CONC. (mg/Kg)	3651.01 SAMPLE CONC. (mg/Kg)	3651.01 MS MARTIX SPIKE CONC. (mg/Kg)	PERCENT RECOVERY
KEROSENE	200	0	151	76.0 %

	3651.01 MSD MATRIX SPIKE DUPLICATE CONC. (mg/Kg)	PERCENT RECOVERY	RELATIVE PERCENT DIFFERENCE
KEROSENE	141	71.0 %	7 %

ND = NOT DETECTED ABOVE QUANTITATION LIMIT

CHAIN-OF-CUSTODY RECORD

PAGE 1 OF 1

John Mathes & Associates, Inc.
701 Rodi Road, Suite 101
Pittsburgh, PA 15235-4586

PROJECT NAME	ACUSTAR DAYTON
PROJECT NUMBER	423023
MAJOR TASK	6003
SAMPLERS	JERRY WHITTINGTON
LAB DESTINATION	ATAS LABS

COC SERIAL 0525

SAMPLE ID	DATE MM/DD/YY	MILITARY TIME	NO. OF CONTAINERS	TYPE OF CONTAINERS 8OZ GLASS	WD 8-21-91 AATS IN					PRESERVATIVES ICED	PRESERVATIVES CHEMICALS ADDED	REMARKS (CHEMICAL ANALYSIS REQUEST FORM NUMBER IF APPLICABLE)
TP-3	7/30/91	0830	1	1	2622.01					X		TPH "REMARK"
TP-4	7/30/91	0830	1	1	2622.02					X		TPH 5 DAY
TP-5	7/30/91	0830	1	1	2622.03					X		TPH TURNAROUND
TP-11	7/30/91	0830	1	1	2622.04					X		TPH
	/ /											8015 per KB 8/21/91 [signature]
	/ /											
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	/ /											
	/ /											

RELINQUISHED BY DATE	TIME	SIGNATURE	RECEIVED BY DATE	TIME	SIGNATURE
8/20/91	1530	[signature]	8/21/91	09:25	[signature]
/ /					
/ /					

SHIPPING NOTES
FAX Copys To Dr PINTA (Analysis)
412 824.0480

LAB NOTES

WHITE - LABORATORY COPY BLUE - LABORATORY COPY GOLD - DATA MANAGEMENT COPY

APPENDIX B

Certificates of Analyses
Belmonte Park Laboratories

BELMONTE PARK LABORATORIES
11 EAST MAIN STREET
TROTWOOD, OHIO 45426

Attn: M_LAKE
Phone: (513) 837-3744 FAX# 837-1071

JOHN MATHES & ASSOCIATES
210 WEST SAND BANK RD.
COLUMBIA, ILLINOIS 62236-0330

Attn: JIM PINTA / KATHLEEN BLAINE
Invoice Number:

Order #: 91-08-001
Date: 08/07/91 11:21
Work ID: 423023 6003 (TP 32 SAMPLES)
Date Received: 07/31/91
Date Completed: 08/06/91

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	TP_1 423023 6003 7/30 0840
03	TP_2 423023 6003 7/30 0900
05	TP_3 423023 6003 7/30 0910
07	TP_4 423023 6003 7/30 1015
09	TP_5 423023 6003 7/30 1105
11	TP_9 423023 6003 7/30 1125
13	TP12 423023 6003 7/30 1325
15	TP11 423023 6003 7/30 1120
17	TP-7 423023 6003 7/30 1340
19	TP13 423023 6003 7/30 1400
21	TP14 423023 6003 7/30 1530
23	TP-6 423023 6003 7/30 1500
25	TP15 423023 6003 7/31 0800
27	TP10 423023 6003 7/31 0850
29	TP-8 423023 6003 7/31 1010
31	TB 731 423023 6003 7/31 15

Sample Number	Sample Description
02	TP_1 423023 6003 7/30 0840
04	TP_2 423023 6003 7/30 0900
06	TP_3 423023 6003 7/30 0910
08	TP_4 423023 6003 7/30 1015
10	TP_5 423023 6003 7/30 1105
12	TP_9 423023 6003 7/30 1125
14	TP12 423023 6003 7/30 1325
16	TP11 423023 6003 7/30 1120
18	TP-7 423023 6003 7/30 1340
20	TP13 423023 6003 7/30 1400
22	TP14 423023 6003 7/30 1530
24	TP-6 423023 6003 7/30 1500
26	TP15 423023 6003 7/31 0800
28	TP10 423023 6003 7/31 0850
30	TP-8 423023 6003 7/31 1010
32	WW 731 423023 6003 7/31 07

CERTIFICATIONS
IIO EPA CERTIFICATION NUMBERS 836 & 817 • U S DEPT of AGRICULTURE LABORATORY CODE NO 3988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U S ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 • IIO DEPT OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO VM42528001 • OHIO CERTIFICATE NO 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
REPORTS ARE SUBMITTED AS CONFIDENTIAL PROPERTY TO OUR CLIENTS ANY RELEASE OF OUR REPORTS MUST MEET OUR APPROVAL AND OUR CLIENT S CONSENT TO DO SO IN WRITING

Belmonte Park Laboratories

ENCLOSED ARE THE RESULTS OF SPECIFIED SAMPLES SUBMITTED FOR ANALYSES. IF YOU HAVE ANY QUESTIONS, PLEASE ADVISE. USE THE "LAB #" FOR FASTER IDENTIFICATION.
OHIO EPA CERTIFICATION NUMBER : 836 & 837

Certified By
MATTHEW LAKE

CERTIFICATIONS
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TEST RESULTS BY SAMPLE

Sample: 01A TP_1 423023 6003 7/30 0840 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
VOLATILE ORGANICS 8240					
ACETONE	< 100		UG/KG	08/01/91	CG
ACROLEIN	< 50		UG/KG	08/01/91	CG
ACRYLONITRILE	< 50		UG/KG	08/01/91	CG
BENZENE	< 5		UG/KG	08/01/91	CG
BROMODICHLOROMETHANE	< 5		UG/KG	08/01/91	CG
BROMOFORM	< 5		UG/KG	08/01/91	CG
BROMOMETHANE	< 10		UG/KG	08/01/91	CG
2-BUTANONE	< 100		UG/KG	08/01/91	CG
CARBON DISULFIDE	< 100		UG/KG	08/01/91	CG
CARBON TETRACHLORIDE	< 5		UG/KG	08/01/91	CG
CHLOROBENZENE	< 5		UG/KG	08/01/91	CG
CHLORODIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
CHLOROETHANE	< 10		UG/KG	08/01/91	CG
2-CHLOROETHYL VINYL ETHER	< 10		UG/KG	08/01/91	CG
CHLOROFORM	< 5		UG/KG	08/01/91	CG
CHLOROMETHANE	< 10		UG/KG	08/01/91	CG
DIBROMOMETHANE	< 5		UG/KG	08/01/91	CG
1,4-DICHLORO-2-BUTENE	< 100		UG/KG	08/01/91	CG
DICHLORODIFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,2-DICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
trans-1,2-DICHLOROETHENE	< 5		UG/KG	08/01/91	CG
1,2-DICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
cis-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
trans-1,3-DICHLOROPROPENE	< 5		UG/KG	08/01/91	CG
ETHYLBENZENE	< 5		UG/KG	08/01/91	CG
ETHYL METHACRYLATE	< 5		UG/KG	08/01/91	CG

CERTIFICATIONS
IO EPA CERTIFICATION NUMBERS 836 & 837 • U.S. DEPT. of AGRICULTURE LABORATORY CODE NO. 1988 • FOOD AND DRUG ADMINISTRATION REGISTRATION NUMBER 15223774 • SENIOR MEMBER INSTITUTE OF FOOD TECHNOLOGISTS 0047733 • U.S. ATOMIC ENERGY COMMISSION REGISTRATION NUMBER 1550 •
IO DEPT. OF HEALTH ALCOHOL TESTING APPROVAL PERMIT 259 • ASSOCIATION OFFICIAL ANALYTICAL CHEMISTS NO. VM42528001 • OHIO CERTIFICATE NO. 75 • FEDERAL DRUG ENFORCEMENT REGISTRATION NO. PB244549 • AMERICAN BOARD OF BIOANALYSIS CERT #D390
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Test Description	Result	Limit	Units	Analyzed	By
2-HEXANONE	< 50		UG/KG	08/01/91	CG
IODOMETHANE	< 5		UG/KG	08/01/91	CG
METHYLENE CHLORIDE	< 5		UG/KG	08/01/91	CG
4-METHYL-2-PENTANONE	< 50		UG/KG	08/01/91	CG
STYRENE	< 5		UG/KG	08/01/91	CG
1,1,2,2-TETRACHLOROETHANE	< 5		UG/KG	08/01/91	CG
TETRACHLOROETHENE	< 5		UG/KG	08/01/91	CG
TOLUENE	< 5		UG/KG	08/01/91	CG
1,1,1-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
1,1,2-TRICHLOROETHANE	< 5		UG/KG	08/01/91	CG
TRICHLOROETHENE	8.8		UG/KG	08/01/91	CG
TRICHLOROFLUOROMETHANE	< 5		UG/KG	08/01/91	CG
1,2,3-TRICHLOROPROPANE	< 5		UG/KG	08/01/91	CG
VINYL ACETATE	< 50		UG/KG	08/01/91	CG
VINYL CHLORIDE	< 10		UG/KG	08/01/91	CG
XYLENE	< 5		UG/KG	08/01/91	CG
Surrogates					
d4-1,2-DICHLOROETHANE	88.7	Min: 70		Max: 121	
d8-TOLUENE	102	Min: 81		Max: 117	
4-BROMOMFLUOROBENZENE	108	Min: 74		Max: 121	

Sample: 02A TP_1 423023 6003 7/30 0840 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	93.2		MG/KG		RP

Sample: 03A TP_2 423023 6003 7/30 0900 Collected: 07/30/91

Test Description	Result	Limit	Units	Analyzed	By
T.PETROL HYDROCARBON-418.1	70.0		MG/KG		RP

CERTIFICATIONS
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