PRESCOTT
ENVIRONMENTAL ASSOCIATES, INC.

RECEIVED
MAY 30 2002
GROUNDWATER SECTION
ASHEVILLE REGIONAL OFFICE

May 29, 2002

Mr. Qu Qi
Asheville Regional Office
NC DENR - Division of Water Quality
Groundwater Section
59 Woodfin Place
Asheville, NC 28801-2414

Reference: Semi-Annual Groundwater Monitoring Report
Former Parkway Chevrolet
205 Smoky Park Highway, Asheville, Buncombe County, NC
Groundwater Incident Number: 18332
Incident Rank: 15B

Dear Mr. Qi:

Enclosed please find the most recent report for groundwater monitoring at the referenced Site. We installed a replacement well, MW-2A, and properly abandoned MW-2. The report indicates that tetrachloroethene was again detected at a level above the NC 2L Groundwater Standard.

Thank you. Please let me know if you have any questions on this information.

Sincerely,

PRESCOTT ENVIRONMENTAL ASSOCIATES, INC.

Douglas P. Guild, CEP
President

Enclosure

POST OFFICE BOX 2555, CHAPEL HILL, NORTH CAROLINA 27515 ☎ (919) 942-8006 ❒ (919) 967-4953 prescottenv@earthlink.net

RECEIVED
MAY 30 2002
GROUNDWATER SECTION
ASHEVILLE REGIONAL OFFICE

SEMI-ANNUAL GROUNDWATER MONITORING

Former Parkway Chevrolet Facility
205 Smoky Park Highway
Asheville, Buncombe County, North Carolina

NC DENR Facility I.D. #0-029190
NC DENR Incident I.D. #18332

Prepared For:

Mr. Jan Chenowith
Young Realty Company, LP
7399 Shadeland Avenue, PMB #166
Indianapolis, Indiana 46250
(317) 577-2413

Prepared By:

PRESCOTT ENVIRONMENTAL ASSOCIATES, INC.
POST OFFICE BOX 2555, CHAPEL HILL, NORTH CAROLINA 27515-2555 (919) 942-8006

0

SEMI-ANNUAL
GROUNDWATER
MONITORING

Former Parkway Chevrolet Facility
205 Smoky Park Highway
Asheville, Buncombe County, North Carolina

NC DENR Facility I.D. #0-029190
NC DENR Incident I.D. #18332

Prescott Environmental Job Number 98-007

Prepared For:

Mr. Jan Chenowith
Young Realty Company, LP
7399 Shadeland Avenue, PMB #166
Indianapolis, Indiana 46250
(317) 577-2413

Issue Date: May 24, 2002

NORTH CAROLINA LICENSED SEAL 1164 GEOLOGIST THOMAS ROBERT WILL

Thomas R. Will, PG
Consulting Professional Geologist
NC Licensed Geologist #1164

Signature

Douglas P. Guild, CEP
Senior Environmental Scientist

Signature

Prepared By:

Prescott Environmental Associates, Inc.
P.O. Box 2555
Chapel Hill, North Carolina 27515
(919) 942-8006 Phone (919) 967-4953 Facsimile

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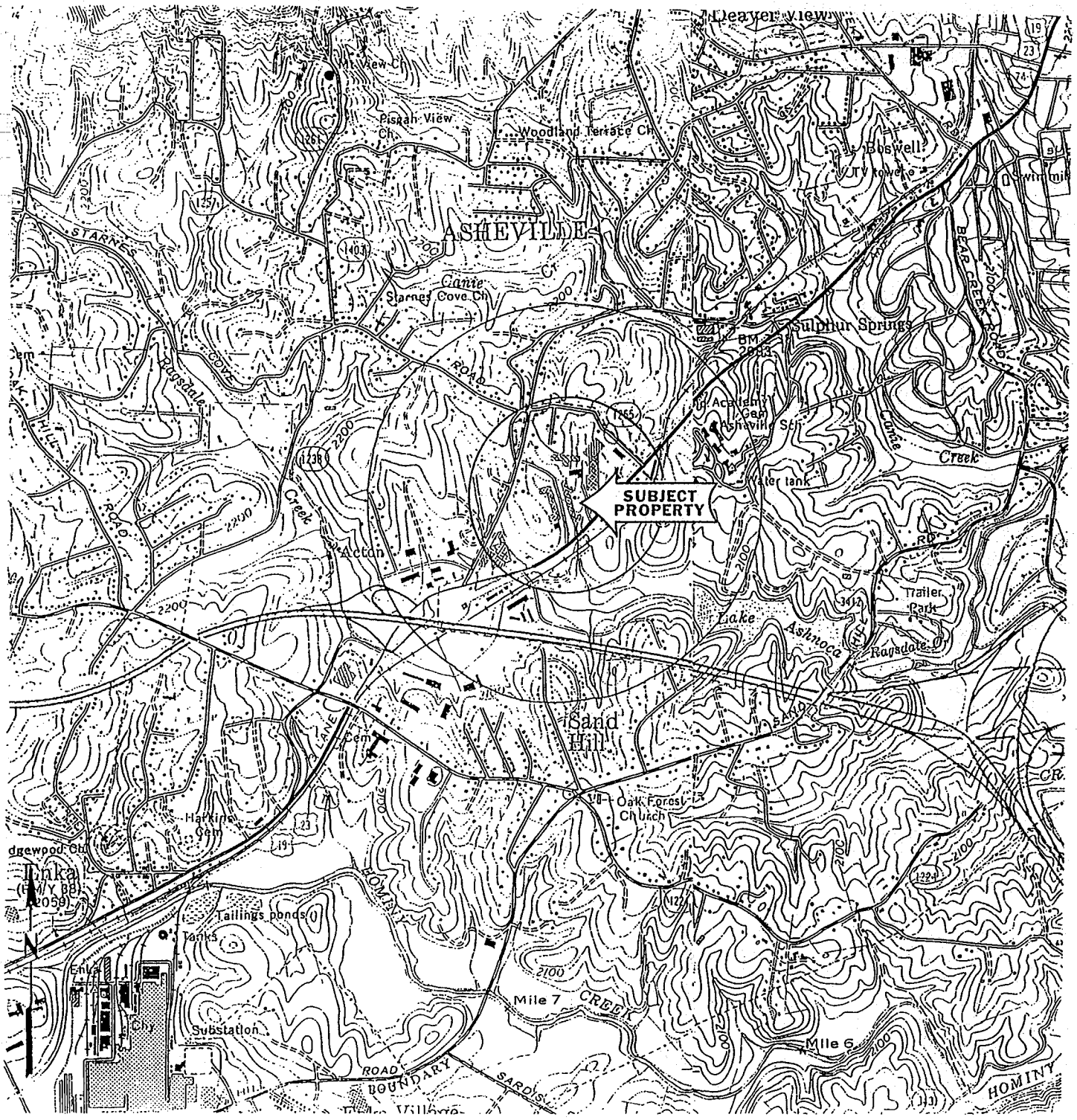
EXECUTIVE SUMMARY

Prescott Environmental Associates, Inc. (Prescott) completed semi-annual groundwater monitoring at the former Parkway Chevrolet property at 205 Smoky Park Highway in Asheville, Buncombe County, North Carolina (the Site). Site work was completed Monday and Tuesday, May 6 and 7, 2002. The objective of this project was to determine the current level of VOCs/semi-VOCs in groundwater at the Site. A new monitoring well, MW-2A was installed and MW-2, which has been dry for two years, was abandoned.

Groundwater samples were collected from the three monitoring wells on the Site. There was no contamination from VOCs or semi-VOCs for the three groundwater samples submitted for analysis, with the exception of MW-3, in which tetrachloroethene was reported at 1.3 ug/L (NC 2L Standard is 0.7 ug/L).

This report represents a reasonable effort to determine potential groundwater contamination, using the methodology described above and standard industry-accepted environmental assessment practices. However, it does not represent a guarantee that all potential contamination has been discovered at the Site or that the total extent of contamination has been determined at the Site.



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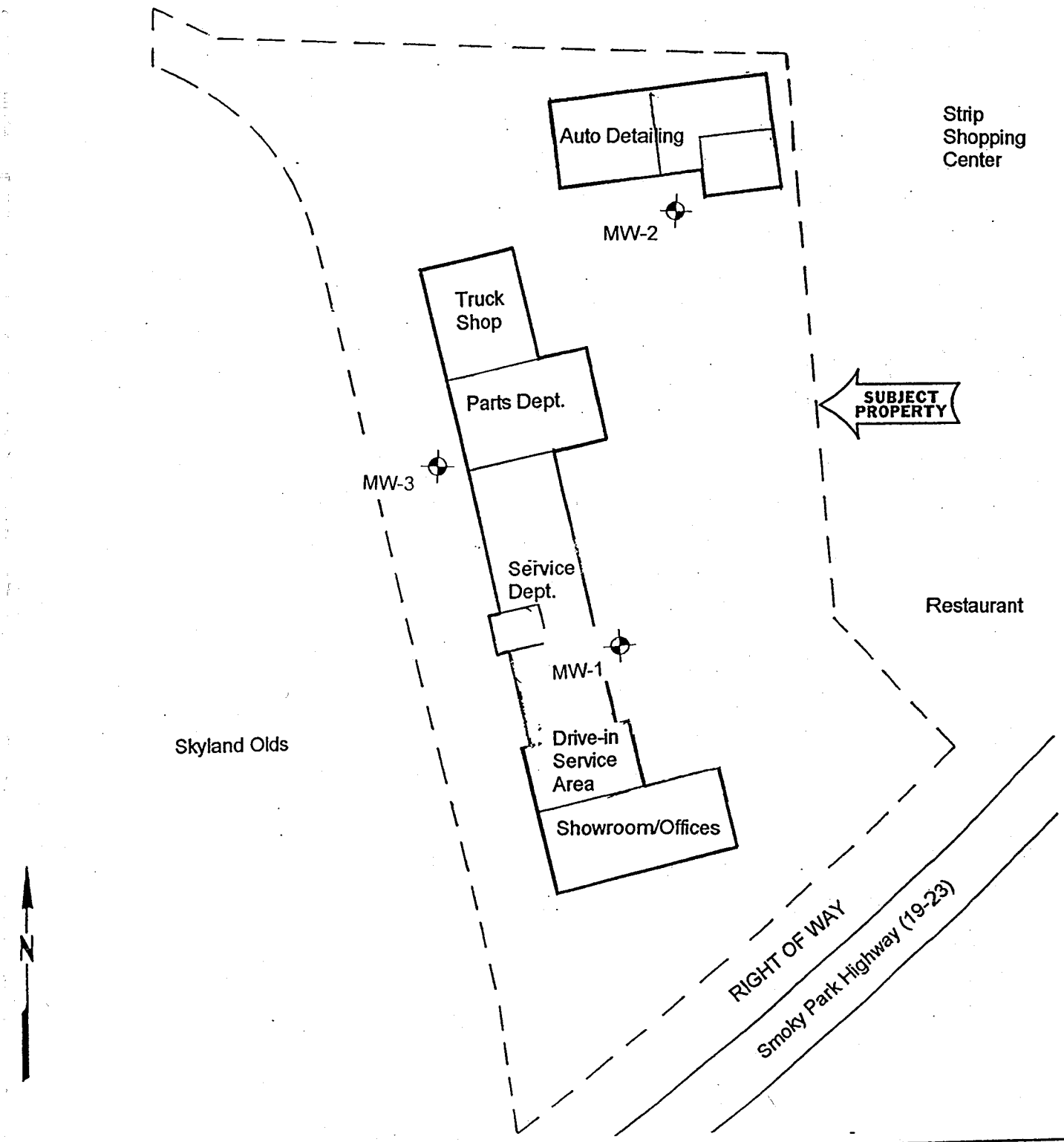
Project:	Job No:	Figure No: 1
Groundwater Monitoring Event Parkway Chevrolet 205 Smoky Park Highway	98-007	Site Map
	Drawn By: CRG	Date: 3/23/98
Asheville, NC	Checked By: DPG	Scale: 1"=2000'

Carolina Truck & Body



PRESCOTT ENVIRONMENTAL ASSOCIATES, INC.
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Project: Groundwater Monitoring Event Semi-Annual Groundwater Monitoring	Job No: 98-007	Figure No: 2 Site Base Map/Layout
	Drawn By: CRG	Date: 3/8/98
	Checked By: DPG	Scale: 1" = 128'

TABLE 1

Semi-Annual
Groundwater Monitoring
Laboratory Analytical Results

Former Parkway Chevrolet Facility
205 Smoky Park Highway
Asheville, Buncombe County, NC

Sample I.D.	Date/Time	Monitoring Well	Lab Results
W-1	5/7/02 - 10:10	MW-3	502.2 - **Tetrachloroethene - 1.3 ug/L** 625+10 - BQL[1,2]
W-2	5/7/02 - 10:25	MW-2A	502.2 - BQL 625 + 10 - BQL
W-3	5/7/02 - 10:40	MW-1	502.2 - BQL 625 + 10 - BQL

[1]BQL - Below Quantitation Limit
[2]Note - very low concentrations of unknown constituents were identified in all three groundwater samples (TICs).

APPENDICES

APPENDIX A

LABORATORY ANALYTICAL REPORTS

CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

COMPUCHEM
Attn: DIANE BYRD
501 MADISON AVENUE
CARY, NC 27513-

REPORT DATE: 05/16/02

SAMPLE NUMBER- 196944 SAMPLE ID- W-1 MW-3
DATE SAMPLED- 05/07/02
DATE RECEIVED- 05/10/02 SAMPLER- NOT SPECIFIED
TIME RECEIVED- 1015 DELIVERED BY- CHRIS BRAND

SAMPLE MATRIX- GW
TIME SAMPLED- 1010
RECEIVED BY- ALT

Page 1 of 3 PROJECT NAME : PARKWAY 98-007

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
VOLATILE ORGANIC COMPOUNDS	502.2	05/15/02	JBR			
BENZENE	502.2			< 0.5	ug/L	0.5
BROMOBENZENE	502.2			< 0.5	ug/L	0.5
BROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMODICHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMOFORM	502.2			< 0.5	ug/L	0.5
BROMOMETHANE	502.2			< 0.5	ug/L	0.5
n-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
sec-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
tert-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
CARBON TETRACHLORIDE	502.2			< 0.5	ug/L	0.5
CHLOROBENZENE	502.2			< 0.5	ug/L	0.5
CHLOROETHANE	502.2			< 0.5	ug/L	0.5
CHLOROFORM	502.2			< 0.5	ug/L	0.5
CHLOROMETHANE	502.2			< 0.5	ug/L	0.5
2-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
4-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
DIBROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMO-3-CHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMOETHANE	502.2			< 0.5	ug/L	0.5
DIBROMOMETHANE	502.2			< 0.5	ug/L	0.5

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

PROJECT NAME : PARKWAY 98-007

CONTINUATION OF DATA FOR SAMPLE NUMBER 196944

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
1,2-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,4-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
DICHLORODIFLUOROMETHANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1 DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
cis-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
trans-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
2,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
cis-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
trans-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
ETHYLBENZENE	502.2			< 0.5	ug/L	0.5
HEXACHLOROBUTADIENE	502.2			< 0.5	ug/L	0.5
ISOPROPYLBENZENE	502.2			< 0.5	ug/L	0.5
p-ISOPROPYLTOLUENE	502.2			< 0.5	ug/L	0.5
METHYLENE CHLORIDE	502.2			< 0.5	ug/L	0.5
NAPHTHALENE	502.2			< 0.5	ug/L	0.5
n-PROPYLBENZENE	502.2			< 0.5	ug/L	0.5
STYRENE	502.2			< 0.5	ug/L	0.5
1,1,1,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
TETRACHLOROETHENE	502.2			< 0.5	ug/L	0.5
TOLUENE	502.2			1.3	ug/L	0.5
1,2,3-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,2,4-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,1,1-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

COMPUCHEM
Attn: DIANE BYRD
501 MADISON AVENUE
CARY, NC 27513-

REPORT DATE: 05/16/02

SAMPLE NUMBER- 196945 SAMPLE ID- W-2 MW-2A
DATE SAMPLED- 05/07/02
DATE RECEIVED- 05/10/02 SAMPLER- NOT SPECIFIED
TIME RECEIVED- 1015 DELIVERED BY- CHRIS BRAND

SAMPLE MATRIX- GW
TIME SAMPLED- 1025
RECEIVED BY- ALT

Page 1 of 3 PROJECT NAME : PARKWAY 98-007

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
VOLATILE ORGANIC COMPOUNDS	502.2	05/15/02	JBR			
BENZENE	502.2			< 0.5	ug/L	0.5
BROMOBENZENE	502.2			< 0.5	ug/L	0.5
BROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMODICHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMOFORM	502.2			< 0.5	ug/L	0.5
BROMOMETHANE	502.2			< 0.5	ug/L	0.5
n-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
sec-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
tert-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
CARBON TETRACHLORIDE	502.2			< 0.5	ug/L	0.5
CHLOROBENZENE	502.2			< 0.5	ug/L	0.5
CHLOROETHANE	502.2			< 0.5	ug/L	0.5
CHLOROFORM	502.2			< 0.5	ug/L	0.5
CHLOROMETHANE	502.2			< 0.5	ug/L	0.5
2-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
4-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
DIBROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMO-3-CHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMOETHANE	502.2			< 0.5	ug/L	0.5
DIBROMOMETHANE	502.2			< 0.5	ug/L	0.5

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

PROJECT NAME : PARKWAY 98-007

CONTINUATION OF DATA FOR SAMPLE NUMBER 196945

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
1,2-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,4-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
DICHLORODIFLUOROMETHANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1 DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
cis-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
trans-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
2,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
cis-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
trans-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
ETHYLBENZENE	502.2			< 0.5	ug/L	0.5
HEXACHLOROBUTADIENE	502.2			< 0.5	ug/L	0.5
ISOPROPYLBENZENE	502.2			< 0.5	ug/L	0.5
p-ISOPROPYLTOLUENE	502.2			< 0.5	ug/L	0.5
METHYLENE CHLORIDE	502.2			< 0.5	ug/L	0.5
NAPHTHALENE	502.2			< 0.5	ug/L	0.5
n-PROPYLBENZENE	502.2			< 0.5	ug/L	0.5
STYRENE	502.2			< 0.5	ug/L	0.5
1,1,1,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
TETRACHLOROETHENE	502.2			< 0.5	ug/L	0.5
TOLUENE	502.2			< 0.5	ug/L	0.5
1,2,3-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,2,4-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,1,1-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

PROJECT NAME : PARKWAY 98-007

CONTINUATION OF DATA FOR SAMPLE NUMBER 196945

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
TRICHLOROETHENE	502.2			< 0.5	ug/L	0.5
TRICHLOROFLUOROMETHANE	502.2			< 0.5	ug/L	0.5
1,2,3-TRICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,2,4-TRIMETHYLBENZENE	502.2			< 0.5	ug/L	0.5
1,3,5-TRIMETHYLBENZENE	502.2			< 0.5	ug/L	0.5
VINYL CHLORIDE	502.2			< 0.5	ug/L	0.5
o-XYLENE	502.2			< 0.5	ug/L	0.5
m,p-XYLENES	502.2			< 0.5	ug/L	0.5
2-BROMO-1-CHLOROPROPANE	502.2			87.6	percent	-
FLUOROBENZENE	502.2			97.7	percent	-

PQL = Practical Quantitation Limit
Results followed by the letter J are estimated concentrations.

NC DENR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

FINAL REPORT OF ANALYSES

COMPUCHEM
Attn: DIANE BYRD
501 MADISON AVENUE
CARY, NC 27513-

REPORT DATE: 05/16/02

SAMPLE NUMBER- 196946 SAMPLE ID- W-3 MW-1 SAMPLE MATRIX- GW
DATE SAMPLED- 05/07/02 TIME SAMPLED- 1040
DATE RECEIVED- 05/10/02 SAMPLER- NOT SPECIFIED RECEIVED BY- ALT
TIME RECEIVED- 1015 DELIVERED BY- CHRIS BRAND

Page 1 of 3 PROJECT NAME : PARKWAY 98-007

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
VOLATILE ORGANIC COMPOUNDS	502.2	05/15/02	JBR			
BENZENE	502.2			< 0.5	ug/L	0.5
BROMOBENZENE	502.2			< 0.5	ug/L	0.5
BROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMODICHLOROMETHANE	502.2			< 0.5	ug/L	0.5
BROMOFORM	502.2			< 0.5	ug/L	0.5
BROMOMETHANE	502.2			< 0.5	ug/L	0.5
n-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
sec-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
tert-BUTYLBENZENE	502.2			< 0.5	ug/L	0.5
CARBON TETRACHLORIDE	502.2			< 0.5	ug/L	0.5
CHLOROBENZENE	502.2			< 0.5	ug/L	0.5
CHLOROETHANE	502.2			< 0.5	ug/L	0.5
CHLOROFORM	502.2			< 0.5	ug/L	0.5
CHLOROMETHANE	502.2			< 0.5	ug/L	0.5
2-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
4-CHLOROTOLUENE	502.2			< 0.5	ug/L	0.5
DIBROMOCHLOROMETHANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMO-3-CHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,2-DIBROMOETHANE	502.2			< 0.5	ug/L	0.5
DIBROMOMETHANE	502.2			< 0.5	ug/L	0.5

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CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

PROJECT NAME : PARKWAY 98-007

CONTINUATION OF DATA FOR SAMPLE NUMBER 196946

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
1,2-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,4-DICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
DICHLORODIFLUOROMETHANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1 DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
cis-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
trans-1,2-DICHLOROETHENE	502.2			< 0.5	ug/L	0.5
1,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,3-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
2,2-DICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,1-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
cis-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
trans-1,3-DICHLOROPROPENE	502.2			< 0.5	ug/L	0.5
ETHYLBENZENE	502.2			< 0.5	ug/L	0.5
HEXACHLOROBUTADIENE	502.2			< 0.5	ug/L	0.5
ISOPROPYLBENZENE	502.2			< 0.5	ug/L	0.5
p-ISOPROPYLTOLUENE	502.2			< 0.5	ug/L	0.5
METHYLENE CHLORIDE	502.2			< 0.5	ug/L	0.5
NAPHTHALENE	502.2			< 0.5	ug/L	0.5
n-PROPYLBENZENE	502.2			< 0.5	ug/L	0.5
STYRENE	502.2			< 0.5	ug/L	0.5
1,1,1,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2,2-TETRACHLOROETHANE	502.2			< 0.5	ug/L	0.5
TETRACHLOROETHENE	502.2			< 0.5	ug/L	0.5
TOLUENE	502.2			< 0.5	ug/L	0.5
1,2,3-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,2,4-TRICHLOROBENZENE	502.2			< 0.5	ug/L	0.5
1,1,1-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5
1,1,2-TRICHLOROETHANE	502.2			< 0.5	ug/L	0.5

P.O. Box 12298 • Research Triangle Park, NC 27709
Telephone (919) 467-3090

Shipping: 102-A Woodwinds Industrial Court • Cary, NC 27511
Fax (919) 467-3515

CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

PROJECT NAME : PARKWAY 98-007

CONTINUATION OF DATA FOR SAMPLE NUMBER 196946

ANALYSIS	METHOD	ANALYSIS DATE	BY	RESULT	UNITS	PQL
TRICHLOROETHENE	502.2			< 0.5	ug/L	0.5
TRICHLOROFLUOROMETHANE	502.2			< 0.5	ug/L	0.5
1,2,3-TRICHLOROPROPANE	502.2			< 0.5	ug/L	0.5
1,2,4-TRIMETHYLBENZENE	502.2			< 0.5	ug/L	0.5
1,3,5-TRIMETHYLBENZENE	502.2			< 0.5	ug/L	0.5
VINYL CHLORIDE	502.2			< 0.5	ug/L	0.5
o-XYLENE	502.2			< 0.5	ug/L	0.5
m,p-XYLENES	502.2			< 0.5	ug/L	0.5
2-BROMO-1-CHLOROPROPANE	502.2			81.5	percent	-
FLUOROBENZENE	502.2			98.4	percent	-

PQL = Practical Quantitation Limit
Results followed by the letter J are estimated concentrations.

NC DENR CERTIFICATIONS: DWQ - 96; PUBLIC WATER SUPPLY - 37724

LABORATORY DIRECTOR

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S 11153

SUBCONTRACT CHAIN-OF-CUSTODY RECORD

COMPUCHEM
a division of Liberty Analytical Corp.

501 Madison Avenue
Cary, NC 27513
1-800-833-5097

Project Name: Parkway 98-007
TAT: 10-Day
Report style: Std.
Disk requirement:

Samples shipped to:
Contact: CET
Address:
Phone: ( )
Project Locale (state)

CompuChem point-of-contact: (4) Diane Byrd
Phone: (919) 379-4100 x109
Fax: (919) 379-4050
Sampling complete? (Y) or N (see Note 1)
Project-specific (PS) or Batch (B) QC? Batch

BOX #1: 1. Surface Water 2. Ground Water 3. Leachate 4. Rinsate 5. Soil / Sediment / Sludge 6. Trip Blank 7. Oil 8. Waste 9. Other _____

BOX #2: A. HCl + Ice B. HNO_3 + Ice C. NaOH + Ice D. H_2SO_4 + Ice E. Unpreserved F. Ice Only G. Other _____ H. $NaHSO_4$ + Ice I. ZnAc+NaOH + Ice J. Methanol

BOX #3: F- Filtered U- Unfiltered

BOX #4: H- High M- Medium L- Low

BOX #5: C- CLP T- TCLP S- SW-846 W- CWA 600-series O- Other _____

Sample ID	Date / Year 03	Time	Box #1 Matrix	Box #2 Preservative	Box #3 Filtered / Unfiltered	Box #4 Expected Conc.	Box #5 Method	# of Bottles	Use for Lab QC (MS or DUP)	PARAMETERS Method 470 Total Fe					CCN	Remarks / Comments (see Notes 2 & 3)
W-1 MW-3	5/7	10:10	2	A	U	L	O	3		✓					R2558-1	196944
W-2 MW-2A	5/7	10:25	2	A	U	L	O	3		✓					✓-2	45
W-3 MW-1	5/7	10:40	2	A	U	L	O	3		✓					✓-3	46

Clients Special Instructions:

Lab: Received in good condition? Y or N Describe any problems:

Temperature 1.0 °C

#1 Relinquished by:(sig)	Date: 5-10-02	#2 Relinquished by:(sig)	Date: 5/10	Relinquished by:(sig)	Date:
Company Name: CompuChem	Time: 9:50	Company Name: CET	Time: 10:15	Company Name:	Time:
#1 Received by:(sig)	Date: 5/10/02	#2 Received by:(sig)	Date: 5/10/02	#2 Received by:(sig)	Date:
Company Name: CET	Time: 9:50	Company Name: CET	Time: 10:15	Company Name:	Time:

Note (1) If "N" lab should batch samples to await remainder of project - maximizing batch size and minimizing QC ratio; if "Y" lab should begin processing batches now.
Note (2) Samples should be stored 60 days after date report mailed at no extra charge.
Note (3) All lab copies of data should be retained for a minimum of 3 years.
Note (4) Please call point-of-contact to verify receipt of samples.

Revision 0 2-10-99

05/20/02 13:28 FAX 919 379 4070 COMPUCHEM 011

CHEMICAL & ENVIRONMENTAL TECHNOLOGY, INC.

ENVIRONMENTAL ANALYTICAL SERVICES

REFERENCES

Wastewater Program References (Includes Groundwater and Solids)

"Rules Governing Laboratory Certification" NCAC, Title 15 DENR, Chapter 2H .0800, February 2, 1994
North Carolina Administrative Code for Wastewater Laboratories

Federal Register, 40 CFR Part 136, July 1, 1998
Metals, Inorganics, and Organics for groundwater and wastewater sampling, preservation, and analysis

Groundwater Section Guidelines for the Investigation and Remediation of Soils and Groundwater, Volumes I and II, May and January 1998, Respectively
Required Methodology for Groundwater and Soil Remediation and Assessment
(UST and Non-UST).

Method for the Determination of Volatile Petroleum Hydrocarbons (VPH), MADEP, January 1998
VPH Method

Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MADEP, January 1998
EPH Method

Guidelines for Site Assessment, cleanup, and UST Closure, State of California Leaking UST Task Force, Appendix D, October 1989
TPH Method for TPH GRO and DRO

SW – 846, Third Edition, Final Update III, June 1997
Inorganics and Organics in soil or sludges. Hazardous Waste. TCLP for Solid and Liquid Waste. Metals in soil, sludge, or groundwater.
(Metals analyses for NC groundwater compliance are digested by Method 3030C, Standard Methods, 18th Edition.)

Drinking Water Program References

"Laboratory Certification" NCAC, Title 15A DHHS, 20D.0200, January 26, 1996
North Carolina Administrative Code for Drinking Water Laboratories

"Rules Governing Public Water Systems" DENR, Division of Environmental Health, Public Water Supply Section, October, 1997 Printing
North Carolina Administrative Code for required Methods and Sampling for Public Water Systems

Federal Register, 40 CFR Parts 141-143, July 1, 1998
Metals, Inorganics, and Organics for drinking water sampling, preservation, and analysis

" Technical Notes on Drinking Water Methods" USEPA, EMSL, EPA-600/R-94-173, October 1994 (NTIS PB95-104766)
General guidance and notes regarding updates for acceptable methods and practices

"Methods for the Determination of Metals in Environmental Samples-Supplement I"
USEPA ORD, EPA-600/R-94/111, May 1994 (NTIS PB95-125472)

"Methods for the Determination of Organic Compounds in Drinking Water", USEPA, EPA-600/4-88-039, December, 1980, Revised July 1991

References Supporting Wastewater and Drinking Water Programs

"Methods for Chemical Analysis of Water and Wastes", USEPA
EPA-600/4-79-020, March 1983
Inorganics and wet chemistry analyses for wastewater, groundwater, and drinking water

"Standard Methods", 18th Edition, 1992
Inorganics, Metals, Organics, Total & Fecal Coliform (and Strep) for groundwater, wastewater, stream samples, and drinking water

"Method 504.1 1,2-Dibromoethane (EDB), 1,2 Dibromo-3-Chloropropane (DBCP), and 1,2,3-trichloropropane (123 TCP) in water by Microextraction and GC, Rev 1.1 USEPA, ORD 1995
Wastewater and Drinking Water

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COMPUCHEM
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May 16, 2002

DOUG GUILD
PRESCOTT ENV.
312 W. FRANKLIN STREET
CHAPEL HILL, NC 27516

Subject:
Report of Data – Project: PARKWAY 98-007 Quote #: Q2558 SDG #: Q2558

Attn.: DOUG GUILD

Enclosed are the results of analytical work performed in accordance with the referenced account number.

This report covers sample(s) appearing on the attached listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097.

Sincerely,

Marlene J. Sempt

CompuChem
A Division of Liberty Analytical

Attachment

501 Madison Avenue ■ Cary, N.C. 27513 ■ Tel: 919-379-4100 ■ Fax: 919-379-4050

SAMPLENUM	CLIENTID	QUOTENUMREF	LOGINNUM	MATNUM	ACCTNUM	PROJECTNUM	RECEIVEDATE
Q2558-1	W-1 MW-3	Q2558	Q2558	WA	PRESCOTT ENV.	PARKWAY 98-007	5/9/02
Q2558-2	W-2 MW-2A	Q2558	Q2558	WA	PRESCOTT ENV.	PARKWAY 98-007	5/9/02
Q2558-3	W-3 MW-1	Q2558	Q2558	WA	PRESCOTT ENV.	PARKWAY 98-007	5/9/02

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA SUMMARY PACKAGE

GC/MS by 625

The sample data summary package shall contain data for all samples in one Sample Delivery Group (SDG) of the Case, as follows:

A. SDG Narrative

B. Tabulated target compound results (Form I)
Tentatively identified compounds (Form I, TIC)
In order by sample

C. Surrogate spike analysis results (Form II)
By matrix (Water or Soil), and
by concentration (Low, Medium, or High)

D. Spike results MS / MSD / LCS (Form III)

E. Blank data (Form IV)
Tabulated blank results (Form I)
Tentatively identified compounds (Form I, TIC)

F. Internal standard area response and retention time data (Form VIII)

LAB CODE: LIBRTY

METHOD: 625

SDG #: Q2558

A. SDG Narrative

COMPUCHEM
A division of Liberty Analytical Corporation
501 MADISON AVE.
CARY, NC 27513
(919) 379-4100

SDG NARRATIVE

SDG #Q2558
PROTOCOL : SW-846
METHOD : 8270C

SAMPLE IDENTIFICATIONS:

W-1 MW-3 **W-2 MW-2A** **W-3 MW-1**

The three (3) water samples listed above were received intact, properly refrigerated, with proper documentation, in sealed shipping containers, on May 9, 2002. The samples were scheduled for the requested analyses of the semivolatile fractions. These samples were prepared and analyzed following 40CFR, Part 136, Method 624/625.

All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices are included in the sample data sections.

SEMIVOLATILE
Extraction and analysis holding time requirements were met for all of these samples. No semivolatile target analytes were identified above the Quantitation Limits (QL) in these samples.

One to two Tentatively Identified Compounds (TICs) were detected in the samples. These TICs were assessed as unknowns, hydroxybiphenyl and amides.

Manual quantitations were performed on one or more of the process files associated with the samples in this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

QC SUMMARY
All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Tailing factor criteria were met for pentachlorophenol and benzidine. The breakdown criterion was met for DDT. These three compounds have been added to the DFTPP solution and analyzed together. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria in the analyses of these samples. The internal standards met response and retention time criteria in the analyses of these samples.

The associated Laboratory Control Sample (LCS) met overall accuracy criteria. The recoveries of 2,4,6-trichlorophenol, diethylphthalate, 4-bromophenyl phenylether and di-n-butylphthalate were flagged as outliers in the LCS.

The associated method blanks met all quality control criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
16 May 2002

GC and GC/MS Column and Trap Specifications Table

COLUMNS

Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
GC Laboratory				
Restek	RTX-1701	0.53	0.5	30
J & W	DB-608	0.53	0.83	30
Restek	CLPesticides	0.53	0.5	30
Restek	CLPesticides II	0.53	0.42	30
GC Volatiles Laboratory				
Restek	RTX-1	0.53	0.5	105
Restek	RTX-502.2	0.53	0.5	105
GC/MS Volatiles Laboratory				
J & W	DB-624	0.53	3.0	30/75
J & W	DB-624	0.25	1.4	60
J & W	DB-624	0.32	1.8	60
Restek	RTX-624	0.32	1.8	60
Supelco	SPB-624	0.32	1.4	60
Supelco	Equity™-624	0.53	3.0	75
Zebron	ZB-624	0.32	1.8	60
GC/MS Semivolatiles Laboratory				
Supelco	ZB-5MS	0.25	0.3	30
J & W	DB-5.625	0.32	1.0	30
J & W	DB5-MS	0.25	0.25	30
Hewlett Packard	HP5-MS	0.25	0.25	30
Optima	5-MS	0.25	0.25	30
Restek	RTX-5	0.32	1.0	30
Restek	RTX-5MS	0.25	0.25	30
HPLC Laboratory				
Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
Restek	Pinnacle Cyano	4.6	5.0	25 cm
Restek	Allure C18	4.6	5.0	25 cm

TRAPS

GC and GC/MS Volatiles Laboratory	
Tekmar 3	* 8 cm of 2,6-diphenylene oxide polymer (Tenax) * 8 cm of silica gel * 7 cm of coconut charcoal * 0.5 cm of silanized glass wool at each end
Tekmar 5	* 1 cm of methyl silicone packing (OV-1 coating) * 8 cm of 2,6-diphenylene oxide polymer (Tenax) * 8 cm of silica gel * 7 cm of coconut charcoal * 0.5 cm of silanized glass wool at each end
Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons) * 6 cm of Carboxen 1000 (Carbon molecular sieves) * 1 cm of Carboxen 1001 (Carbon molecular sieves)

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CompuChem's Pagination Convention

As required by the current EPA CLP Statement of Work (SOW) (Document Number OLM04.0, plus revisions), data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add in an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

CompuChem

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Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These adjustments are performed by the data reviewer, GC/MS operator, or GC chemist. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration of each compound to demonstrate the accuracy of that process. Adjustments are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count as possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that the data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW requires additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC data packages.

Robert E. Meierer
Vice President

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1.0 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide/Aroclor or other GC or HPLC identification criteria, and the result is less than the CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search. For generic characterization of a TIC such as 'chlorinated hydrocarbon', the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the higher of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the higher of the two values, although the choice could be a project specific issue.

DATA REPORTING QUALIFIERS (continued)

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Form Is are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

A : This flag indicates that a TIC is a suspected aldol-condensation product.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y and Z.

B. Form I and Form I - TIC

Organic Analysis Data Sheet (OADS) and Tentatively Identified Compounds (TICs)

- All samples in alphanumeric order
- Matrix Spike/Matrix Spike Duplicate
- Laboratory Control Sample(s)

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-1 MW-3

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q2558-1JA60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	10	U
129-00-0	Pyrene	20	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)Anthracene	20	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-2 MW-2A

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-2

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Q2558-2A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	48	U
100-02-7	4-Nitrophenol	19	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-2 MW-2A

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-2

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Q2558-2A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	19	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	19	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	19	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

W-2 MW-2A

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-2

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Q2558-2A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	9.78	5	J
2.		UNKNOWN AMIDE	21.47	6	J
3.					
4.					
5.					
6.					
7.					
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10.					
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FORM I SV-TIC

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	49	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN AMIDE	21.47	7	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
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FORM I SV-TIC

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-2JA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	54	
108-95-2	Phenol	26	
111-44-4	Bis(2-chloroethyl)ether	94	
95-57-8	2-Chlorophenol	45	
541-73-1	1,3-Dichlorobenzene	75	
106-46-7	1,4-Dichlorobenzene	75	
95-50-1	1,2-Dichlorobenzene	77	
39638-32-9	bis(2-Chloroisopropyl)ether	93	
621-64-7	N-Nitroso-di-N-propylamine	120	
67-72-1	Hexachloroethane	77	
98-95-3	Nitrobenzene	89	
78-59-1	Isophorone	87	
88-75-5	2-Nitrophenol	33	
105-67-9	2,4-Dimethylphenol	70	
111-91-1	Bis(2-chloroethoxy)methane	110	
120-83-2	2,4-Dichlorophenol	47	
120-82-1	1,2,4-Trichlorobenzene	86	
91-20-3	Naphthalene	75	
87-68-3	Hexachlorobutadiene	94	
59-50-7	4-Chloro-3-methylphenol	73	
77-47-4	Hexachlorocyclopentadiene	100	
88-06-2	2,4,6-Trichlorophenol	31	
91-58-7	2-Chloronaphthalene	92	
131-11-3	Dimethylphthalate	110	
606-20-2	2,6-Dinitrotoluene	100	
208-96-8	Acenaphthylene	83	
83-32-9	Acenaphthene	78	
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	100	
84-66-2	Diethylphthalate	120	
7005-72-3	4-Chlorophenyl-phenylether	140	
86-73-7	Fluorene	89	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-2JA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	21	
86-30-6	N-Nitrosodiphenylamine (1)	59	
122-66-7	1,2-Diphenylhydrazine	90	
101-55-3	4-Bromophenyl-phenylether	140	
118-74-1	Hexachlorobenzene	110	
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	87	
120-12-7	Anthracene	87	
84-74-2	Di-n-butylphthalate	120	
206-44-0	Fluoranthene	93	
92-87-5	Benzidine	20	U
129-00-0	Pyrene	84	
85-68-7	Butylbenzylphthalate	110	
117-81-7	bis(2-ethylhexyl)Phthalate	120	
91-94-1	3,3'-Dichlorobenzidine	130	
56-55-3	Benzo(a)Anthracene	85	
218-01-9	Chrysene	85	
117-84-0	Di-n-octylphthalate	140	
205-99-2	Benzo(b)fluoranthene	100	
207-08-9	Benzo(k)fluoranthene	89	
50-32-8	Benzo(a)pyrene	92	
193-39-5	Indeno(1,2,3-c,d)pyrene	110	
53-70-3	Dibenzo(a,h)anthracene	92	
191-24-2	Benzo(g,h,i)perylene	96	

(1) - Cannot be separated from Diphenylamine

C. Form II

Surrogate spike analysis
- By level (low, medium, high) -

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLKWG	40	28	69	66	82	85			0
02	SWGLCS	26	30	93	93	58	105			0
03	W-2 MW-2A	34	25	74	70	75	78			0
04	W-3 MW-1	40	29	62	57	87	64			0
05	W-1 MW-3	48	36	83	84	114	100			0
06										
07										
08										
09										
10										
11										
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		QC LIMITS
S1 (2FP)	= 2-Fluorophenol	(21-100)
S2 (PHL)	= Phenol-d5	(10- 94)
S3 (NBZ)	= Nitrobenzene-d5	(35-114)
S4 (FBP)	= 2-Fluorobiphenyl	(43-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-123)
S6 (TPH)	= Terphenyl-d14	(33-141)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II SV-1

D. Form III

Matrix Spike/Matrix Spike Duplicate results
- By level (low, medium, high) -
Laboratory Control Sample(s)

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	100	26.0	26	5-112
Bis(2-chloroethyl)ether	100	93.8	94	12-158
2-Chlorophenol	100	45.3	45	23-134
1,3-Dichlorobenzene	100	74.6	75	1-172
1,4-Dichlorobenzene	100	75.2	75	20-124
1,2-Dichlorobenzene	100	76.6	77	32-129
bis(2-Chloroisopropyl)e	100	92.6	93	36-166
N-Nitroso-di-N-prop.(1)	100	120	120	1-230
Hexachloroethane	100	77.1	77	40-113
Nitrobenzene	100	89.1	89	35-180
Isophorone	100	87.0	87	21-196
2-Nitrophenol	100	32.9	33	29-182
2,4-Dimethylphenol	100	69.7	70	32-119
Bis(2-chloroethoxy)meth	100	107	107	33-184
2,4-Dichlorophenol	100	47.0	47	39-135
1,2,4-Trichlorobenzene	100	85.8	86	44-142
Naphthalene	100	74.8	75	21-133
Hexachlorobutadiene	100	94.4	94	24-116
4-Chloro-3-methylphenol	100	72.5	72	22-147
2,4,6-Trichlorophenol	100	31.0	31*	37-144
2-Chloronaphthalene	100	92.0	92	60-118
Dimethylphthalate	100	108	108	1-112
2,6-Dinitrotoluene	100	99.9	100	50-158
Acenaphthylene	100	82.8	83	33-145
Acenaphthene	100	78.2	78	47-145
2,4-Dinitrophenol	100	6.88	7	1-191
4-Nitrophenol	100	8.16	8	1-132
2,4-Dinitrotoluene	100	104	104	39-139

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM III SV-1

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Diethylphthalate	100	121	121*	1-114
4-Chlorophenyl-phenylet	100	141	141	25-158
Fluorene	100	88.9	89	59-121
4,6-Dinitro-2-methylphe	100	21.0	21	1-181
4-Bromophenyl-phenyleth	100	136	136*	53-127
Hexachlorobenzene	100	114	114	1-152
Pentachlorophenol	100	14.3	14	14-176
Phenanthrene	100	86.6	87	54-120
Anthracene	100	86.8	87	27-133
Di-n-butylphthalate	100	122	122*	1-118
Fluoranthene	100	92.6	93	26-137
Pyrene	100	83.8	84	52-115
Butylbenzylphthalate	100	114	114	1-152
bis(2-ethylhexyl)Phthal	100	116	116	8-158
3,3'-Dichlorobenzidine	100	127	127	1-262
Benzo(a)Anthracene	100	85.1	85	33-143
Chrysene	100	84.7	85	17-168
Di-n-octylphthalate	100	137	137	4-146
Benzo(b)fluoranthene	100	102	102	24-159
Benzo(k)fluoranthene	100	89.4	89	11-162
Benzo(a)pyrene	100	91.9	92	17-163
Indeno(1,2,3-c,d)pyrene	100	105	105	1-171
Dibenzo(a,h)anthracene	100	92.2	92	1-227
Benzo(g,h,i)perylene	100	96.3	96	1-219

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 4 out of 52 outside limits

COMMENTS:

E. Form IV

Method Blank Results
Form IV, Form I, and Form I - TIC

Method blank summary, OADS, and TICs
- In chronological order of analysis

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID: WG17399-1A60 Lab Sample ID: WG17399-1

Instrument ID: 5972HP60 Date Extracted: 05/13/02

Matrix: (soil/water) WATER Date Analyzed: 05/13/02

Level:(low/med) LOW Time Analyzed: 1906

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SWGLCS	WG17399-2	WG17399-2JA6	05/14/02
02	W-2 MW-2A	Q2558-2	Q2558-2A60	05/14/02
03	W-3 MW-1	Q2558-3	Q2558-3A60	05/14/02
04	W-1 MW-3	Q2558-1	Q2558-1JA60	05/14/02
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COMMENTS:

FORM IV SV

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC

F. Form VIII

Internal standard area and retention time data
(VOA and SV only)

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020513A60 Date Analyzed: 05/13/02

Instrument ID: 5972HP60 Time Analyzed: 1129

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	156234	9.93	581479	12.20	316406	15.43
	UPPER LIMIT	312468	10.43	1162958	12.70	632812	15.93
	LOWER LIMIT	78117	9.43	290740	11.70	158203	14.93
	EPA SAMPLE NO.						
01	SBLKWG	206198	9.95	766133	12.21	438035	15.43
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020513A60 Date Analyzed: 05/13/02

Instrument ID: 5972HP60 Time Analyzed: 1129

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	449204	18.12	260817	22.96	181476	27.54
	UPPER LIMIT	898408	18.62	521634	23.46	362952	28.04
	LOWER LIMIT	224602	17.62	130408	22.46	90738	27.04
	EPA SAMPLE NO.						
01	SBLKWG	672807	18.14	402701	22.97	255504	27.59
02							
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020514A60 Date Analyzed: 05/14/02

Instrument ID: 5972HP60 Time Analyzed: 0921

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	167685	9.93	650145	12.20	456180	15.41
	UPPER LIMIT	335370	10.43	1300290	12.70	912360	15.91
	LOWER LIMIT	83842	9.43	325072	11.70	228090	14.91
	EPA SAMPLE NO.						
01	SWGLCS	165302	9.94	677001	12.20	395130	15.42
02	W-2 MW-2A	214142	9.93	835593	12.20	505816	15.41
03	W-3 MW-1	203359	9.93	798231	12.20	472191	15.41
04	W-1 MW-3	188942	9.94	767348	12.20	441824	15.42
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020514A60 Date Analyzed: 05/14/02

Instrument ID: 5972HP60 Time Analyzed: 0921

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	602116	18.12	447896	22.96	341747	27.56
	UPPER LIMIT	1204232	18.62	895792	23.46	683494	28.06
	LOWER LIMIT	301058	17.62	223948	22.46	170874	27.06
	EPA SAMPLE NO.						
01	SWGLCS	618203	18.11	415214	22.96	262168	27.55
02	W-2 MW-2A	854867	18.10	577551	22.96	366551	27.54
03	W-3 MW-1	771015	18.10	504119	22.96	315675	27.54
04	W-1 MW-3	722125	18.11	446172	22.94	252863	27.55
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

COMPUCHEM
A division of Liberty Analytical Corporation
501 MADISON AVE.
CARY, NC 27513
(919) 379-4100

SDG NARRATIVE

SDG #Q2558
PROTOCOL : SW-846
METHOD : 8270C

SAMPLE IDENTIFICATIONS:

W-1 MW-3 **W-2 MW-2A** **W-3 MW-1**

The three (3) water samples listed above were received intact, properly refrigerated, with proper documentation, in sealed shipping containers, on May 9, 2002. The samples were scheduled for the requested analyses of the semivolatile fractions. These samples were prepared and analyzed following 40CFR, Part 136, Method 624/625.

All pertinent Quality Assurance Notices are included in the narrative section, and all pertinent Laboratory Notices are included in the sample data sections.

SEMIVOLATILE
Extraction and analysis holding time requirements were met for all of these samples. No semivolatile target analytes were identified above the Quantitation Limits (QL) in these samples.

One to two Tentatively Identified Compounds (TICs) were detected in the samples. These TICs were assessed as unknowns, hydroxybiphenyl and amides.

Manual quantitations were performed on one or more of the process files associated with the samples in this SDG. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

QC SUMMARY
All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG. Tailing factor criteria were met for pentachlorophenol and benzidine. The breakdown criterion was met for DDT. These three compounds have been added to the DFTPP solution and analyzed together. Overall QC criteria were met for all initial and continuing calibration standards associated to this SDG.

The surrogates met recovery criteria in the analyses of these samples. The internal standards met response and retention time criteria in the analyses of these samples.

The associated Laboratory Control Sample (LCS) met overall accuracy criteria. The recoveries of 2,4,6-trichlorophenol, diethylphthalate, 4-bromophenyl phenylether and di-n-butylphthalate were flagged as outliers in the LCS.

The associated method blanks met all quality control criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted electronically has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Patricia B. Hopkins

Patricia B. Hopkins
Data Analyst II
16 May 2002

GC and GC/MS Column and Trap Specifications Table

COLUMNS

Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
GC Laboratory				
Restek	RTX-1701	0.53	0.5	30
J & W	DB-608	0.53	0.83	30
Restek	CLPesticides	0.53	0.5	30
Restek	CLPesticides II	0.53	0.42	30
GC Volatiles Laboratory				
Restek	RTX-1	0.53	0.5	105
Restek	RTX-502.2	0.53	0.5	105
GC/MS Volatiles Laboratory				
J & W	DB-624	0.53	3.0	30/75
J & W	DB-624	0.25	1.4	60
J & W	DB-624	0.32	1.8	60
Restek	RTX-624	0.32	1.8	60
Supelco	SPB-624	0.32	1.4	60
Supelco	Equity™-624	0.53	3.0	75
Zebron	ZB-624	0.32	1.8	60
GC/MS Semivolatiles Laboratory				
Supelco	ZB-5MS	0.25	0.3	30
J & W	DB-5.625	0.32	1.0	30
J & W	DB5-MS	0.25	0.25	30
Hewlett Packard	HP5-MS	0.25	0.25	30
Optima	5-MS	0.25	0.25	30
Restek	RTX-5	0.32	1.0	30
Restek	RTX-5MS	0.25	0.25	30
HPLC Laboratory				
Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
Restek	Pinnacle Cyano	4.6	5.0	25 cm
Restek	Allure C18	4.6	5.0	25 cm

TRAPS

GC and GC/MS Volatiles Laboratory	
Tekmar 3	* 8 cm of 2,6-diphenylene oxide polymer (Tenax) * 8 cm of silica gel * 7 cm of coconut charcoal * 0.5 cm of silanized glass wool at each end
Tekmar 5	* 1 cm of methyl silicone packing (OV-1 coating) * 8 cm of 2,6-diphenylene oxide polymer (Tenax) * 8 cm of silica gel * 7 cm of coconut charcoal * 0.5 cm of silanized glass wool at each end
Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons) * 6 cm of Carboxen 1000 (Carbon molecular sieves) * 1 cm of Carboxen 1001 (Carbon molecular sieves)

CompuChem

a division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the current EPA CLP Statement of Work (SOW) (Document Number OLM04.0, plus revisions), data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add in an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

DATA REPORTING QUALIFIERS (continued)

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a response greater than the upper level of the calibration range will have the concentration flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Form Is are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

A : This flag indicates that a TIC is a suspected aldol-condensation product.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y and Z.

COMPUCHEM a Divison of Liberty Analytical
COMMERCIAL RECEIVING LOG

47

Client: Prewitt Env
Project: Parkway 98-007
Quote: Q2558
Login No. Q2558, S2558, R2558.
Subcontract? Y / N
TAT Verbal _____ Report _____

Rec'd Date: 5.9.02
Courier: UPS
Airbill No. 1Z22887622 10003645

PPS/RFA 1155

Lab Instructions

Rpt. PPS 1155V07

Cooler Rec'd By: J. Purdie
Sample Login By: Marlene J. Smith
Temperature: 15.3°C rec'd on ice mjs 5/9/02
Cyanide Samples checked for sulfide & chlorine? Y / NA
Phenol Samples checked for chlorine? Y / NA
Received in Good Condition? Y / N
If no, explain:

CompuChem ID	Client ID	QC	Matrix	Date 2002	Military Time	VOA No. & Type	pH	SVOC No. & Type	pH	No. & Type	pH	No. & Type	pH	No. & Type	pH	No. & Type	pH	No. & Type	pH	No. & Type	pH
Q2558-1	W-1 (MW-~~23~~ 2A) mjs 5/9/02		WA	5/7	10:10	3-40ml		2-1L													
-2	W-2 (MW-2A)				10:25																
-3	W-3 (MW-~~31~~ 2A) mjs 5/9/02				10:40																
S2558-1	S-1		SO	5/6	3:00	1.2oz		1.8oz													
	~~S-1~~		~~SO~~	~~5/6~~	~~3:00~~	~~mjs 5/9/02~~															
R2558-1	W-1 MW-~~23~~ 2A mjs 5/9/02		WA	5/7	10:10	3.40ml															
2	W-2 MW-2A			5/7	10:25	3.40ml															
3	W-3 MW-~~31~~ 2A mjs 5/9/02			5/7	10:40	3.40ml															

Parameters

MJS 5

COMPUCHEM
a division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513
1-800-833-5097

CHAIN-OF-CUSTODY RECORD

No. 062319 1 of 1

Project Name: Parkway 98-007
Client Address: PRESCOTT ENVIRONMENTAL, 312 W. FRANKLIN ST., CHAPEL HILL, NC 27516
Point-of-Contact: DOUG GUILDO
Carrier: HAND DELIVERY
Airbill No.:
Telephone No.:
Sampler Name: DOUGLAS P. GUILD
Sampler Signature:
Sampling complete? Y or N (see Note 1)
Project-specific (PS) or Batch (B) QC? PS

BOX #1: 1. Surface Water, 2. Ground Water, 3. Leachate, 4. Rinsate, 5. Soil / Sediment / Sludge, 6. Trip Blank, 7. Oil, 8. Waste, 9. Other____

BOX #2: A. HCl + Ice, B. HNO3 + Ice, C. NaOH + Ice, D. H2SO4 + Ice, E. Unpreserved, F. Ice Only, G. Other____, H. NaHSO4 + Ice, I. ZnAc+NaOH + Ice

BOX #3: F. Filtered, U. Unfiltered

Box #4: H. High, M. Medium, L. Low

Box #5: C. CLP 3/90, S. SW-846, W. CWA 600-series, O. Other____, T. TCLP

Sample ID (9 characters maximum)	Date: Year 2002	Time	Box #1 Matrix	Box #2 Preservative	Box #3 Filtered / Unfiltered	Box #4 Expected Conc.	Box #5 Method	No. of Bottles	Use for Lab QC (MS or DUP)	VOA 5D2.2	SVOC 625+ID	Pesticide	PCB	Herbicide	Metals / Mercury	Cyanide	TOC / TOX	O&G / TPH	Remarks / Comments (see Notes 2 & 3)
W-1 (MW-3)	5/7	10:10	2	A/F	U	L	S	5		✓	✓								
W-2 (MW-2A)	5/7	10:25	2	A/F	U	L	S	5		✓	✓								
W-3 (MW-1)	5/7	10:40	2	A/F	U	L	S	5		✓	✓								
S-1	[illegible]		S	F	—	L	S	1		✓	✓								
	/	:																	Soil sample rec. in ziplock plastic bag with no label on it JPG 5-9-02
	/	:																	
	/	:																	
	/	:																	
	/	:																	
	/	:																	

Clients Special Instructions: Samples received on ice in 5/9/02

Lab: Received in Good Condition? Y or N Describe Problems, if any: Temperature 15.3°C

#1 Relinquished By: (Sig)	Date:	#2 Relinquished By: (Sig)	Date:	#3 Relinquished By: (Sig)
Company Name:	Time:	Company Name:	Time:	Company Name:
#1 Received By: (Sig)	Date:	#2 Received By: (Sig) Joan Purdie	Date: 5-9-02	#3 Received By: (Sig)
Company Name:	Time:	Company Name: CompuChem	Time: 930	Company Name:

Note (1): If "N" lab will hold samples to await remainder of project-maximizing batch size and minimizing QC ratio; if "Y" lab will begin processing batches now.

COMPUCHEM

Login Chain of Custody Report (In01)

May. 09, 2002 *04:38 PM*

Login Number: S2558

Account: PRESCOTT ENV. PRESCOTT ENVIRONMENTAL

Project: PARKWAY 98-007

Case: Q2558

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date	Comments
S2558-1	S-1	06-MAY-02	09-MAY-02	1	19-MAY-02	PPS 1155*VOA=1155.SUB LIST**SVOA-RPT 625.SUB LIST***OK TO PICK QC***
Soil	S %MOISTURE-UNDECA	Hold: 20-MAY-02				
Soil	S SVOA-LL-8270C	Hold: 20-MAY-02	8oz jar	3	Bottles	
Soil	S VOA-LL-8260B-JAR	Hold: 20-MAY-02	2oz jar	1	Bottles	

Signature : Marlene J. Knight

Date : 5.9.02

COMPUCHEM

Login Chain of Custody Report (ln01)

May. 09, 2002 *02:58 PM*

Login Number: Q2558
Account: PRESCOTT ENV. PRESCOTT ENVIRONMENTAL
Project: PARKWAY 98-007
Case: Q2558

Laboratory Sample Number	Client Sample Number	Collect Date	Receive Date	PR	Due Date	Comments
Q2558-1	W-1 MW-3	07-MAY-02	09-MAY-02	9	19-MAY-02	PPS1~~156~~ 1155 MP **RPT 625+ 10 TICs**LCS OK FOR QC**
Water	S SVOA-625	Hold: 14-MAY-02	amber liter	2	Bottles	
Q2558-2	W-2 MW-2A	07-MAY-02	09-MAY-02	9	19-MAY-02	PPS1~~156~~ 1155 MP **RPT 625+ 10 TICs**LCS OK FOR QC**
Water	S SVOA-625	Hold: 14-MAY-02	amber liter	2	Bottles	
Q2558-3	W-3 MW-1	07-MAY-02	09-MAY-02	9	19-MAY-02	PPS1~~156~~ 1155 MP **RPT 625+ 10 TICs**LCS OK FOR QC**
Water	S SVOA-625	Hold: 14-MAY-02	amber liter	2	Bottles	

Signature : Marlene J. Swift

Date : 5.9.02

C. SDG Data

1. QC Summary
2. Sample Data
3. Standards Data
4. Raw QC Data

LAB CODE: LIBRTY

METHOD: 625

SDG #: Q2558

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLKWG	40	28	69	66	82	85			0
02	SWGLCS	26	30	93	93	58	105			0
03	W-2 MW-2A	34	25	74	70	75	78			0
04	W-3 MW-1	40	29	62	57	87	64			0
05	W-1 MW-3	48	36	83	84	114	100			0
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										

		QC LIMITS
S1 (2FP)	= 2-Fluorophenol	(21-100)
S2 (PHL)	= Phenol-d5	(10- 94)
S3 (NBZ)	= Nitrobenzene-d5	(35-114)
S4 (FBP)	= 2-Fluorobiphenyl	(43-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-123)
S6 (TPH)	= Terphenyl-d14	(33-141)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

FORM II SV-1

b. Spike Summary - MS / MSD / LCS
(Form III SV)

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 625 SWGLCS

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	100	26.0	26	5-112
Bis(2-chloroethyl)ether	100	93.8	94	12-158
2-Chlorophenol	100	45.3	45	23-134
1,3-Dichlorobenzene	100	74.6	75	1-172
1,4-Dichlorobenzene	100	75.2	75	20-124
1,2-Dichlorobenzene	100	76.6	77	32-129
bis(2-Chloroisopropyl)e	100	92.6	93	36-166
N-Nitroso-di-N-prop.(1)	100	120	120	1-230
Hexachloroethane	100	77.1	77	40-113
Nitrobenzene	100	89.1	89	35-180
Isophorone	100	87.0	87	21-196
2-Nitrophenol	100	32.9	33	29-182
2,4-Dimethylphenol	100	69.7	70	32-119
Bis(2-chloroethoxy)meth	100	107	107	33-184
2,4-Dichlorophenol	100	47.0	47	39-135
1,2,4-Trichlorobenzene	100	85.8	86	44-142
Naphthalene	100	74.8	75	21-133
Hexachlorobutadiene	100	94.4	94	24-116
4-Chloro-3-methylphenol	100	72.5	72	22-147
2,4,6-Trichlorophenol	100	31.0	31*	37-144
2-Chloronaphthalene	100	92.0	92	60-118
Dimethylphthalate	100	108	108	1-112
2,6-Dinitrotoluene	100	99.9	100	50-158
Acenaphthylene	100	82.8	83	33-145
Acenaphthene	100	78.2	78	47-145
2,4-Dinitrophenol	100	6.88	7	1-191
4-Nitrophenol	100	8.16	8	1-132
2,4-Dinitrotoluene	100	104	104	39-139

(1) N-Nitroso-di-n-propylamine
Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM III SV-1

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 625 SWGLCS

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Diethylphthalate	100	121	121*	1-114
4-Chlorophenyl-phenylet	100	141	141	25-158
Fluorene	100	88.9	89	59-121
4,6-Dinitro-2-methylphe	100	21.0	21	1-181
4-Bromophenyl-phenyleth	100	136	136*	53-127
Hexachlorobenzene	100	114	114	1-152
Pentachlorophenol	100	14.3	14	14-176
Phenanthrene	100	86.6	87	54-120
Anthracene	100	86.8	87	27-133
Di-n-butylphthalate	100	122	122*	1-118
Fluoranthene	100	92.6	93	26-137
Pyrene	100	83.8	84	52-115
Butylbenzylphthalate	100	114	114	1-152
bis(2-ethylhexyl)Phthal	100	116	116	8-158
3,3'-Dichlorobenzidine	100	127	127	1-262
Benzo(a)Anthracene	100	85.1	85	33-143
Chrysene	100	84.7	85	17-168
Di-n-octylphthalate	100	137	137	4-146
Benzo(b)fluoranthene	100	102	102	24-159
Benzo(k)fluoranthene	100	89.4	89	11-162
Benzo(a)pyrene	100	91.9	92	17-163
Indeno(1,2,3-c,d)pyrene	100	105	105	1-171
Dibenzo(a,h)anthracene	100	92.2	92	1-227
Benzo(g,h,i)perylene	100	96.3	96	1-219

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 4 out of 52 outside limits

COMMENTS:

c. Method Blank Summary (Form IV SV)

If more than a single form is necessary, forms shall be arranged in chronological order by date of analysis of the blanks and by instrument.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID: WG17399-1A60 Lab Sample ID: WG17399-1

Instrument ID: 5972HP60 Date Extracted: 05/13/02

Matrix: (soil/water) WATER Date Analyzed: 05/13/02

Level: (low/med) LOW Time Analyzed: 1906

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SWGLCS	WG17399-2	WG17399-2JA6	05/14/02
02	W-2 MW-2A	Q2558-2	Q2558-2A60	05/14/02
03	W-3 MW-1	Q2558-3	Q2558-3A60	05/14/02
04	W-1 MW-3	Q2558-1	Q2558-1JA60	05/14/02
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COMMENTS:

FORM IV SV

d. GC/MS Instrument Performance Check (Form V SV)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID: DF020429A60 DFTPP Injection Date: 04/29/02

Instrument ID: 5972HP60 DFTPP Injection Time: 0909

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	56.0
70	Less than 2.0% of mass 69	0.0 (0.1)1
127	40.0 - 60.0% of mass 198	44.5
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	17.2
365	Greater than 1.0% of mass 198	1.96
441	Present, but less than mass 443	6.6
442	40.0 - 110.0% of mass 198	44.9
443	17.0 - 23.0% of mass 442	8.5 (19.0)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	HG020429A60	04/29/02	0936
02	SSTD160	SSTD160	HH020429A60	04/29/02	1040
03	SSTD010	SSTD010	HI020429A60	04/29/02	1128
04	SSTD120	SSTD120	HJ020429A60	04/29/02	1216
05	SSTD020	SSTD020	HK020429A60	04/29/02	1305
06	SSTD050	SSTD050	HL020429A60	04/29/02	1353
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID: DF020513A60 DFTPP Injection Date: 05/13/02

Instrument ID: 5972HP60 DFTPP Injection Time: 1044

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	50.3
68	Less than 2.0% of mass 69	0.1 (0.2)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	40.0 - 60.0% of mass 198	45.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.1
365	Greater than 1.0% of mass 198	1.90
441	Present, but less than mass 443	6.4
442	40.0 - 110.0% of mass 198	41.8
443	17.0 - 23.0% of mass 442	8.0 (19.0)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	HG020513A60	05/13/02	1129
02	SBLKWG	WG17399-1	WG17399-1A60	05/13/02	1906
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FORM V SV

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID: DF020514A60 DFTPP Injection Date: 05/14/02

Instrument ID: 5972HP60 DFTPP Injection Time: 0750

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.1 (0.1)1
127	40.0 - 60.0% of mass 198	47.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.3
365	Greater than 1.0% of mass 198	1.90
441	Present, but less than mass 443	6.8
442	40.0 - 110.0% of mass 198	45.4
443	17.0 - 23.0% of mass 442	9.0 (19.9)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	HG020514A60	05/14/02	0921
02	SWGLCS	WG17399-2	WG17399-2JA60	05/14/02	1108
03	W-2 MW-2A	Q2558-2	Q2558-2A60	05/14/02	1243
04	W-3 MW-1	Q2558-3	Q2558-3A60	05/14/02	1331
05	W-1 MW-3	Q2558-1	Q2558-1JA60	05/14/02	1419
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FORM V SV

e. Internal Standard Area and RT Summary (Form VIII SV)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020513A60 Date Analyzed: 05/13/02

Instrument ID: 5972HP60 Time Analyzed: 1129

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	156234	9.93	581479	12.20	316406	15.43
	UPPER LIMIT	312468	10.43	1162958	12.70	632812	15.93
	LOWER LIMIT	78117	9.43	290740	11.70	158203	14.93
	EPA SAMPLE NO.						
01	SBLKWG	206198	9.95	766133	12.21	438035	15.43
02							
03							
04							
05							
06							
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19							
20							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020513A60 Date Analyzed: 05/13/02

Instrument ID: 5972HP60 Time Analyzed: 1129

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	449204	18.12	260817	22.96	181476	27.54
	UPPER LIMIT	898408	18.62	521634	23.46	362952	28.04
	LOWER LIMIT	224602	17.62	130408	22.46	90738	27.04
	EPA SAMPLE NO.						
01	SBLKWG	672807	18.14	402701	22.97	255504	27.59
02							
03							
04							
05							
06							
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

page 1 of 1

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020514A60 Date Analyzed: 05/14/02

Instrument ID: 5972HP60 Time Analyzed: 0921

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	167685	9.93	650145	12.20	456180	15.41
	UPPER LIMIT	335370	10.43	1300290	12.70	912360	15.91
	LOWER LIMIT	83842	9.43	325072	11.70	228090	14.91
	EPA SAMPLE NO.						
01	SWGLCS	165302	9.94	677001	12.20	395130	15.42
02	W-2 MW-2A	214142	9.93	835593	12.20	505816	15.41
03	W-3 MW-1	203359	9.93	798231	12.20	472191	15.41
04	W-1 MW-3	188942	9.94	767348	12.20	441824	15.42
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-1

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Lab File ID (Standard): HG020514A60 Date Analyzed: 05/14/02

Instrument ID: 5972HP60 Time Analyzed: 0921

	EPA SAMPLE NO.	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	602116	18.12	447896	22.96	341747	27.56
	UPPER LIMIT	1204232	18.62	895792	23.46	683494	28.06
	LOWER LIMIT	301058	17.62	223948	22.46	170874	27.06
01	SWGLCS	618203	18.11	415214	22.96	262168	27.55
02	W-2 MW-2A	854867	18.10	577551	22.96	366551	27.54
03	W-3 MW-1	771015	18.10	504119	22.96	315675	27.54
04	W-1 MW-3	722125	18.11	446172	22.94	252863	27.55
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20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV-2

2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I SV and Form I SV-TIC), followed by the raw data for semivolatile samples. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results (Form I SV)
   Tabulated results (identification and quantitation) shall be included.

b. Tentatively Identified Compounds (Form I SV-TIC)
   Lists the client specified number of organic compounds that are non-surrogate/non-internal standard compounds and are not listed on the target compound list. This form shall be included even if no compounds are found.

c. Reconstructed Ion Chromatograms
   Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: Client Sample ID number, date and time of analysis, GC/MS instrument identifier, lab file identifier, and analyst ID.

d. Quantitation Report showing calculations for target analytes
   - Include a printout of the Enhanced Ion Current Profile (EICP) for all manual changes to all compounds, internal standards, and surrogate compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of target analytes identified in the sample.
   - The spectra shall include the following information: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.
   - The compound name must be clearly marked.

f. Quantitation Report showing calculations for TICs

g. Copies of mass spectra of organic compounds not listed on the target compound list (TICs) with associated best-match spectra.
   - The spectra shall be labeled as follows: Client Sample ID number, lab file ID, date and time of analysis, and instrument ID.
   - The compound name must be clearly marked.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-1 MW-3

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q2558-1JA60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
		10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-1 MW-3

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q2558-1JA60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

W-1 MW-3

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: Q2558-1JA60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.97	6	J
2.	90-43-7	O-HYDROXYBIPHENYL	15.62	4	NJ
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
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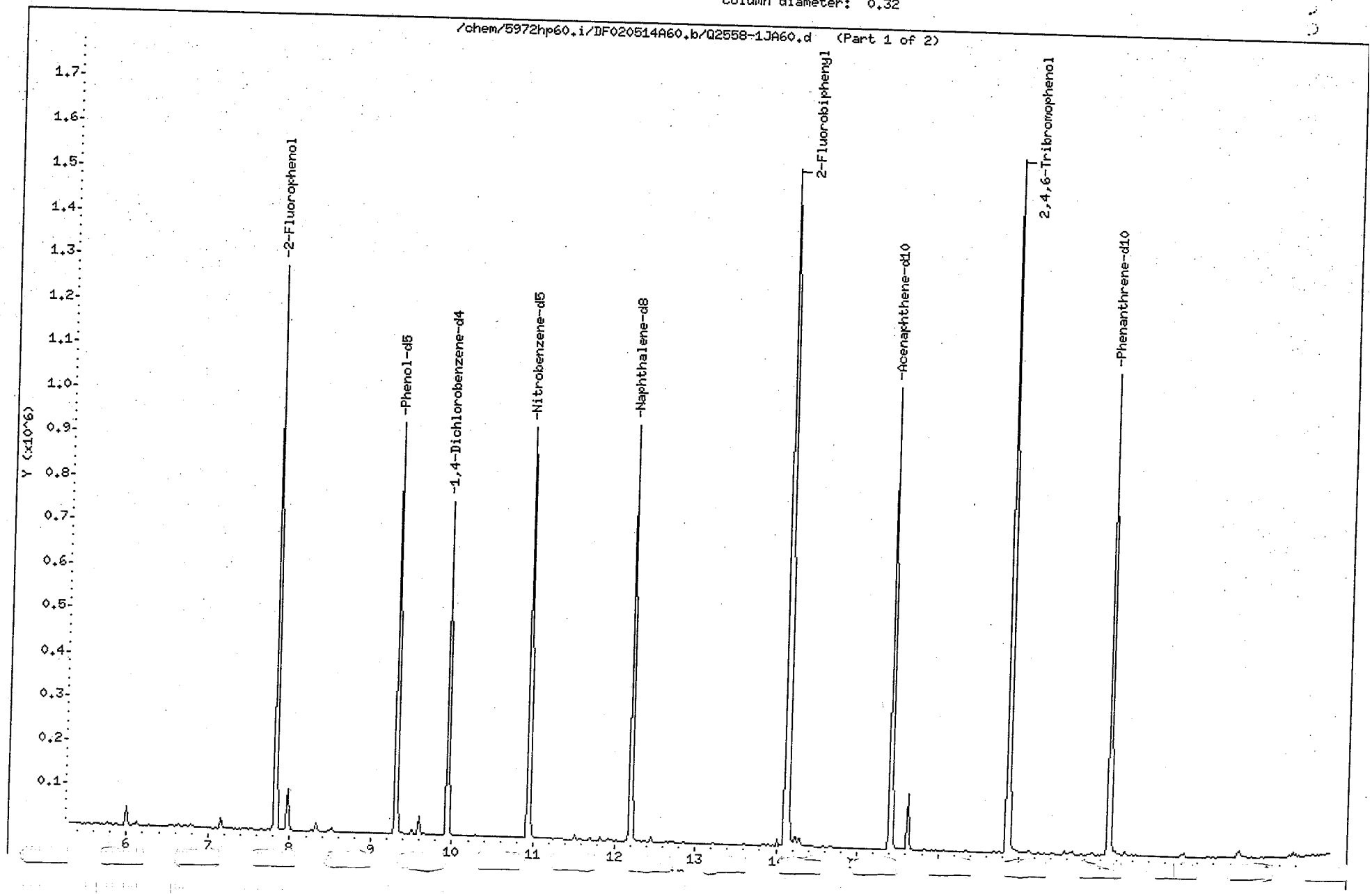
29.					
30.					

FORM I SV-TIC

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Date : 14-MAY-2002 14:19
Client ID: W-1 MW-3
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

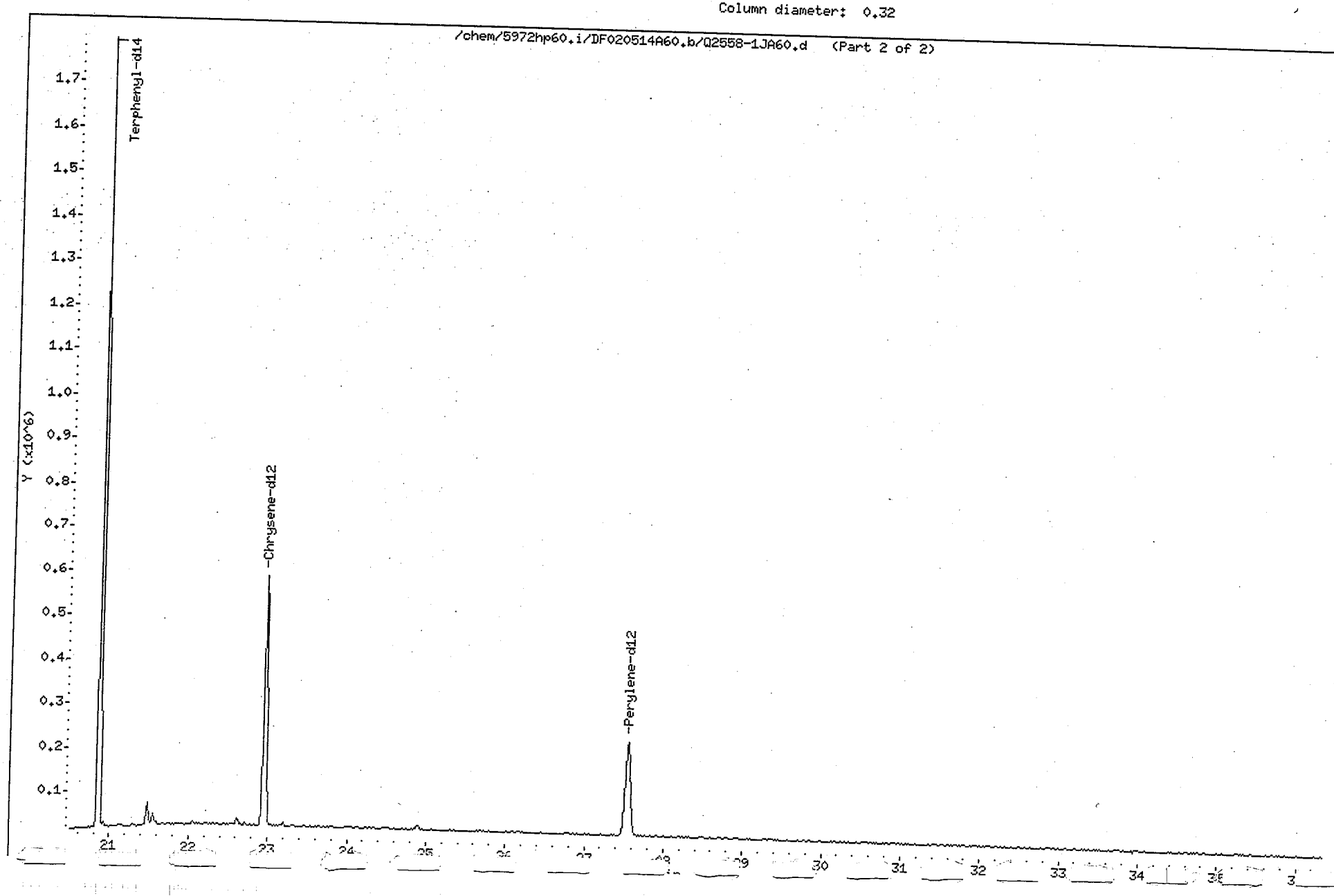
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Date : 14-MAY-2002 14:19
Client ID: W-1 MW-3
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



ata File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
eport Date: 15-May-2030 09:49

CompuChem

Semivolatile Report Method 625

ata file : /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
ab Smp Id: Q2558-1 Client Smp ID: W-1 MW-3
Inj Date : 14-MAY-2002 14:19
perator : 917 Inst ID: 5972hp60.i
mp Info :
Misc Info :
omment :
ethod : /chem/5972hp60.i/DF020514A60.b/625v4.m
eth Date : 15-May-2030 09:24 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
ls bottle: 4
il Factor: 1.00000
integrator: HP RTE
Target Version: 3.50 Compound Sublist: all.sub

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

nd Variable Local Compound Variable

ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
1 1,4-Dichlorobenzene-d4	152	9.935	9.931	(1.000)	188942	40.0000		
2 Naphthalene-d8	136	12.202	12.198	(1.000)	767348	40.0000		8408
3 Acenaphthene-d10	164	15.417	15.412	(1.000)	441824	40.0000		8856
4 Phenanthrene-d10	188	18.106	18.119	(1.000)	722125	40.0000		8870
5 Chrysene-d12	240	22.945	22.957	(1.000)	446172	40.0000		8194
6 Perylene-d12	264	27.547	27.559	(1.000)	252863	40.0000		7234
7 2-Fluorophenol	112	7.820	7.816	(0.787)	535368	96.5138	96.5	8619
8 Phenol-d5	99	9.309	9.305	(0.937)	556774	72.9648	73.0	7266
9 Nitrobenzene-d5	82	10.933	10.946	(0.896)	615147	83.4519	83.5	8451
10 2-Fluorobiphenyl	172	14.114	14.126	(0.916)	1025835	84.2311	84.2	8473
11 2,4,6-Tribromophenol	330	16.871	16.867	(1.094)	408466	228.983	229	0(AM)
12 Terphenyl-d14	244	20.864	20.860	(0.909)	966107	100.390	100	8444
13 N-Nitrosodimethylamine	42	Compound Not Detected.						
14 Phenol	94	Compound Not Detected.						
15 Bis(2-chloroethyl)ether	93	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Report Date: 15-May-2030 09:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
16 2-Chlorophenol	128	Compound Not Detected.						
17 1,3-Dichlorobenzene	146	Compound Not Detected.						
18 1,4-Dichlorobenzene	146	Compound Not Detected.						
19 1,2-Dichlorobenzene	146	Compound Not Detected.						
20 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.						
21 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
22 Hexachloroethane	117	Compound Not Detected.						
23 Nitrobenzene	77	Compound Not Detected.						
24 Isophorone	82	Compound Not Detected.						
25 2-Nitrophenol	139	Compound Not Detected.						
26 2,4-Dimethylphenol	107	Compound Not Detected.						
27 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
28 2,4-Dichlorophenol	162	Compound Not Detected.						
29 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
30 Naphthalene	128	Compound Not Detected.						
31 Hexachlorobutadiene	225	Compound Not Detected.						
32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
33 Hexachlorocyclopentadiene	237	Compound Not Detected.						
34 2,4,6-Trichlorophenol	196	Compound Not Detected.						
35 2-Chloronaphthalene	162	Compound Not Detected.						
36 Dimethylphthalate	163	Compound Not Detected.						
37 2,6-Dinitrotoluene	165	Compound Not Detected.						
38 Acenaphthylene	152	Compound Not Detected.						
39 Acenaphthene	154	Compound Not Detected.						
40 2,4-Dinitrophenol	184	Compound Not Detected.						
41 4-Nitrophenol	109	Compound Not Detected.						
42 2,4-Dinitrotoluene	165	Compound Not Detected.						
43 Diethylphthalate	149	Compound Not Detected.						
44 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
45 Fluorene	166	Compound Not Detected.						
46 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
47 N-Nitrosodiphenylamine	169	Compound Not Detected.						
48 1,2-Diphenylhydrazine	77	Compound Not Detected.						
49 4-Bromophenyl-phenylether	248	Compound Not Detected.						
50 Hexachlorobenzene	284	Compound Not Detected.						
51 Pentachlorophenol	266	Compound Not Detected.						
52 Phenanthrene	178	Compound Not Detected.						
53 Anthracene	178	Compound Not Detected.						
54 Di-n-butylphthalate	149	Compound Not Detected.						
55 Fluoranthene	202	Compound Not Detected.						
56 Benzidine	184	Compound Not Detected.						
57 Pyrene	202	Compound Not Detected.						
58 Butylbenzylphthalate	149	Compound Not Detected.						
59 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
60 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
61 Benzo(a)Anthracene	228	Compound Not Detected.						
62 Chrysene	228	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Report Date: 15-May-2030 09:49

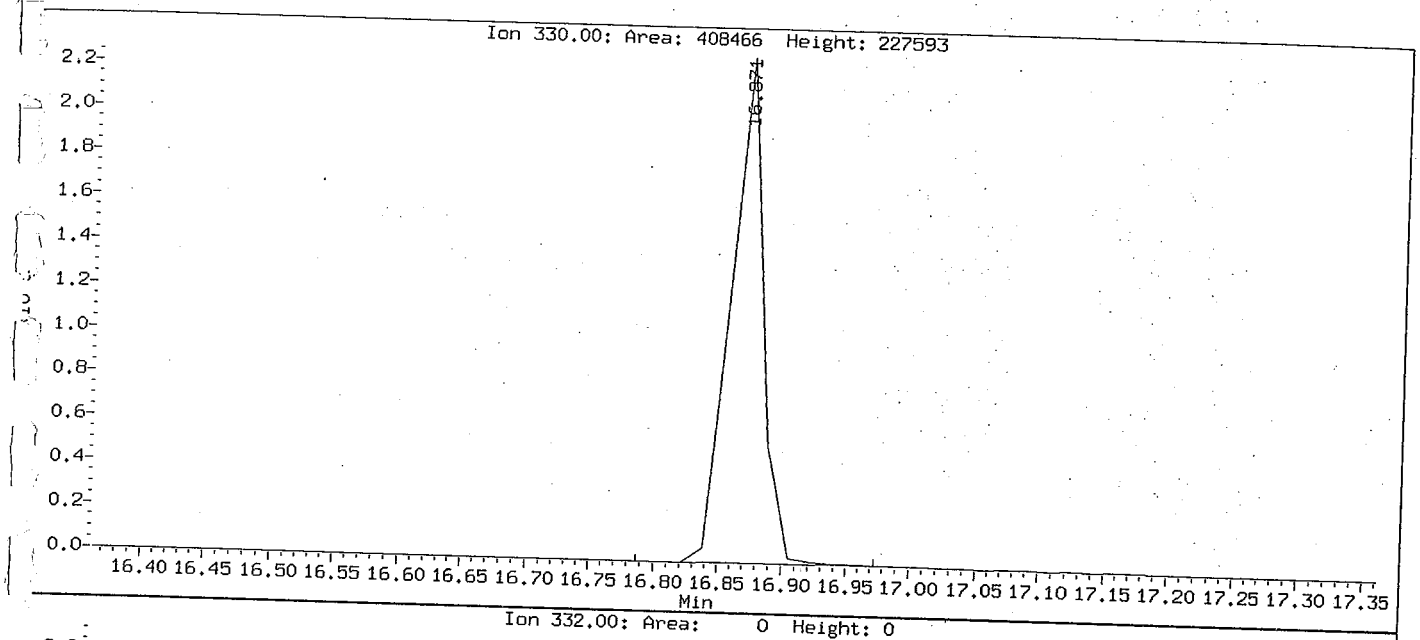
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
63 Di-n-octylphthalate	149	Compound Not Detected.						
64 Benzo(b)fluoranthene	252	Compound Not Detected.						
65 Benzo(k)fluoranthene	252	Compound Not Detected.						
66 Benzo(a)pyrene	252	Compound Not Detected.						
67 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
68 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
69 Benzo(g,h,i)perylene	276	Compound Not Detected.						

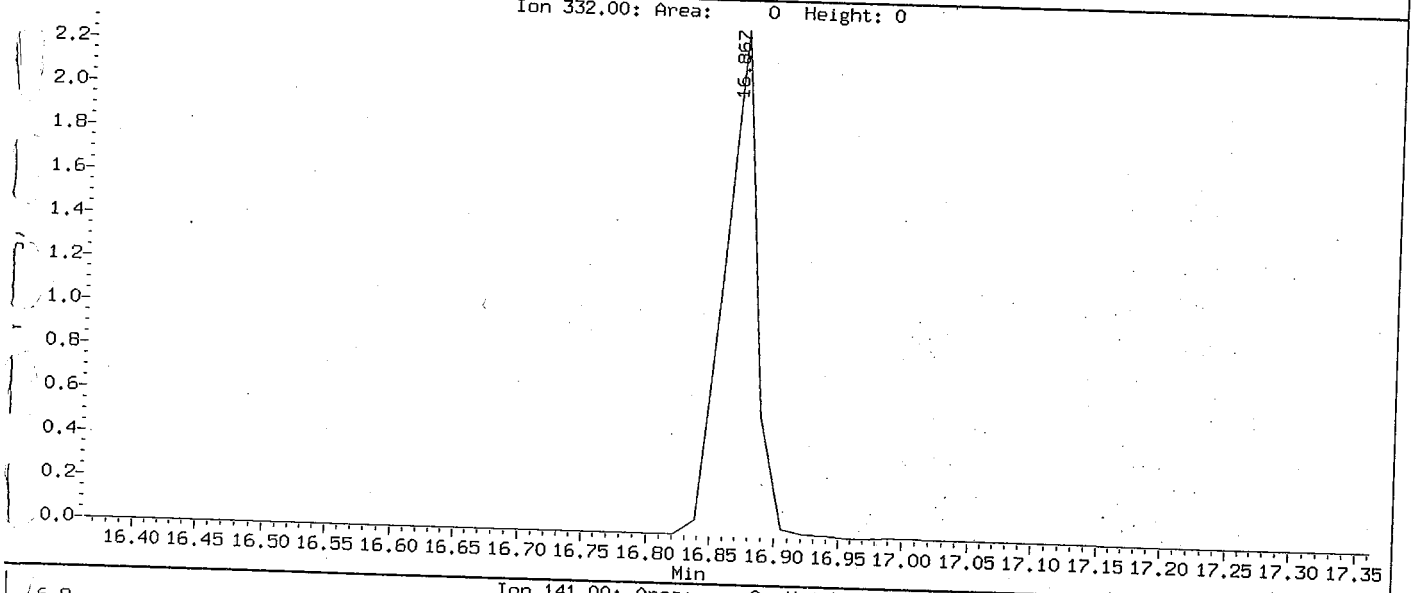
C Flag Legend

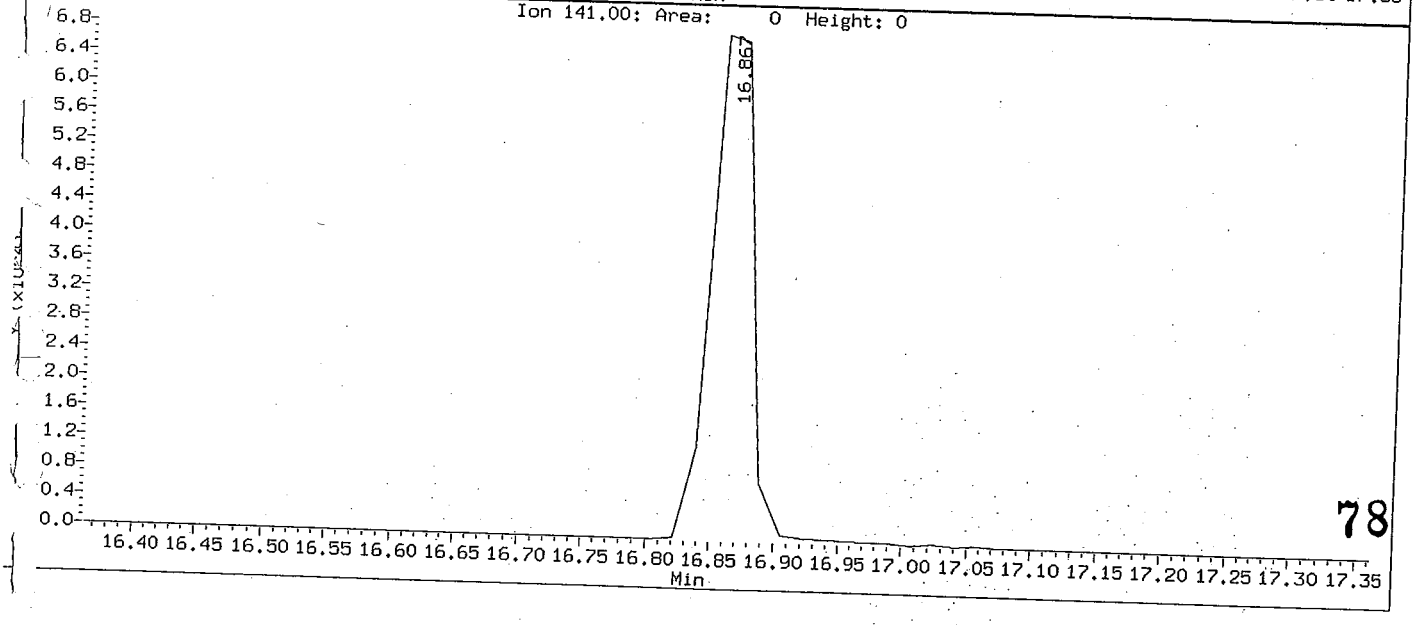
A - Target compound detected but, quantitated amount exceeded maximum amount.
- Compound response manually integrated.

ata File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
njection Date: 14-MAY-2002 14:19
strument: 5972hp60.i
ient Sample ID: W-1 MW-3

ompound: 2,4,6-Tribromophenol
AS Number: 118-79-6







Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Report Date: 15-May-2030 09:49

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d
Lab Smp Id: Q2558-1
Inj Date : 14-MAY-2002 14:19 Client Smp ID: W-1 MW-3
Operator : 917
Smp Info : Inst ID: 5972hp60.i
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020514A60.b/625v4.m
Meth Date : 15-May-2030 09:24 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 3.50 Compound Sublist: all.sub

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

ISTD

	RT	AREA	AMOUNT
1 1,4-Dichlorobenzene-d4	9.935	1217190	40.000
* 3 Acenaphthene-d10	15.417	1954598	40.000

RT	AREA	CONCENTRATIONS ON-COL(NG)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown							
7.973	178368	5.86162701	5.86	CAS #: 0		0	1
2-Hydroxybiphenyl							
15.620	215367	4.40738232	4.41	CAS #: 90-43-7 97	NBS75K.1	68243	3

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d

Date : 14-MAY-2002 14:19

Client ID: W-1 MW-3

Instrument: 5972hp60.i

Sample Info:

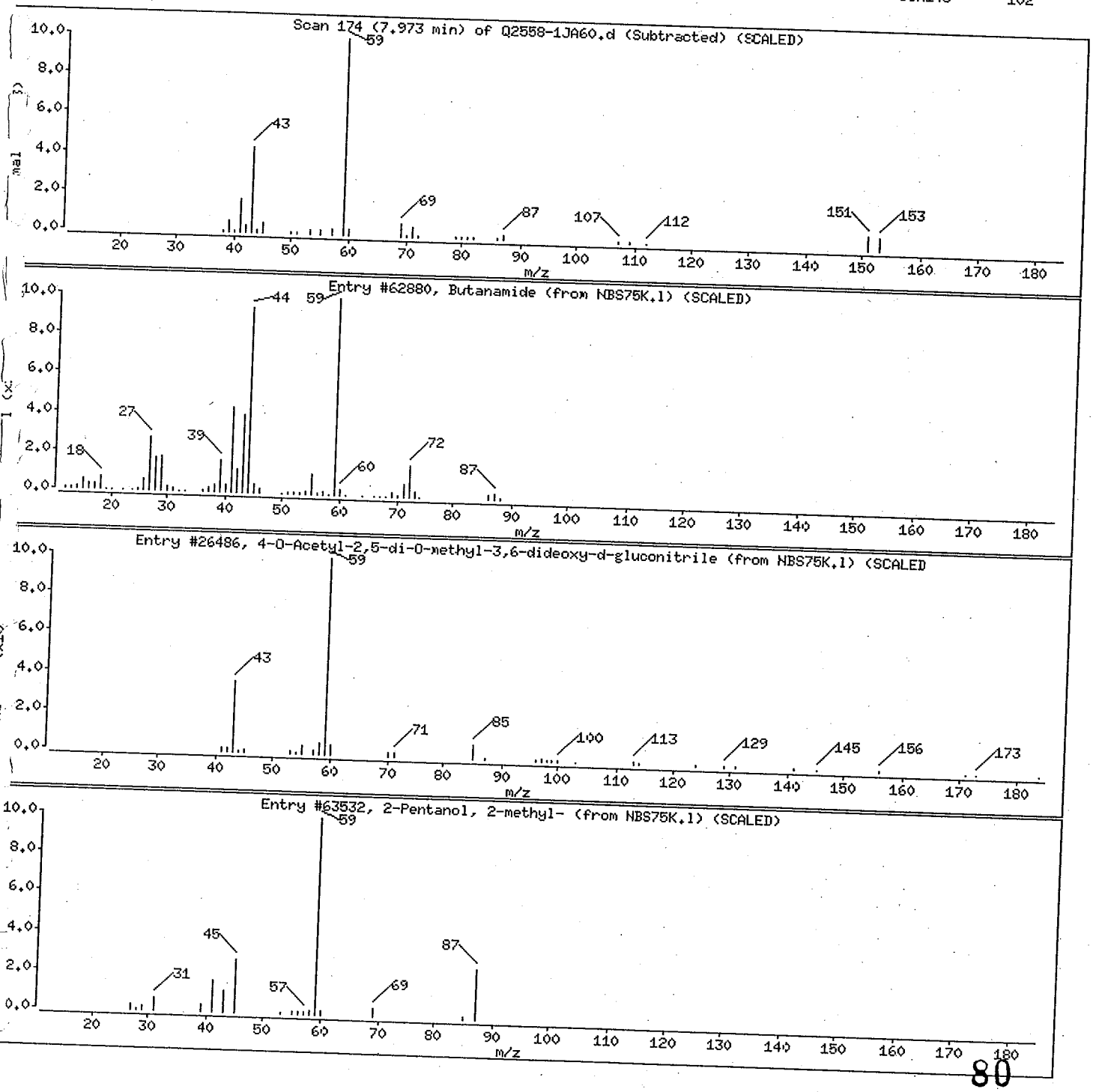
Volume Injected (uL): 1.0

Operator: 917

Column phase: J&W DB5.625

Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanamide	541-35-5	NBS75K.l	62880	50	C4H9NO	87
4-O-Acetyl-2,5-di-O-methyl-3,6-dideoxy-d	0-00-0	NBS75K.l	26486	39	C10H17NO4	215
2-Pentanol, 2-methyl-	590-36-3	NBS75K.l	63532	36	C6H14O	102



Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-1JA60.d

Date : 14-MAY-2002 14:19

Client ID: W-1 MW-3

Instrument: 5972hp60.i

Sample Info:

Volume Injected (uL): 1.0

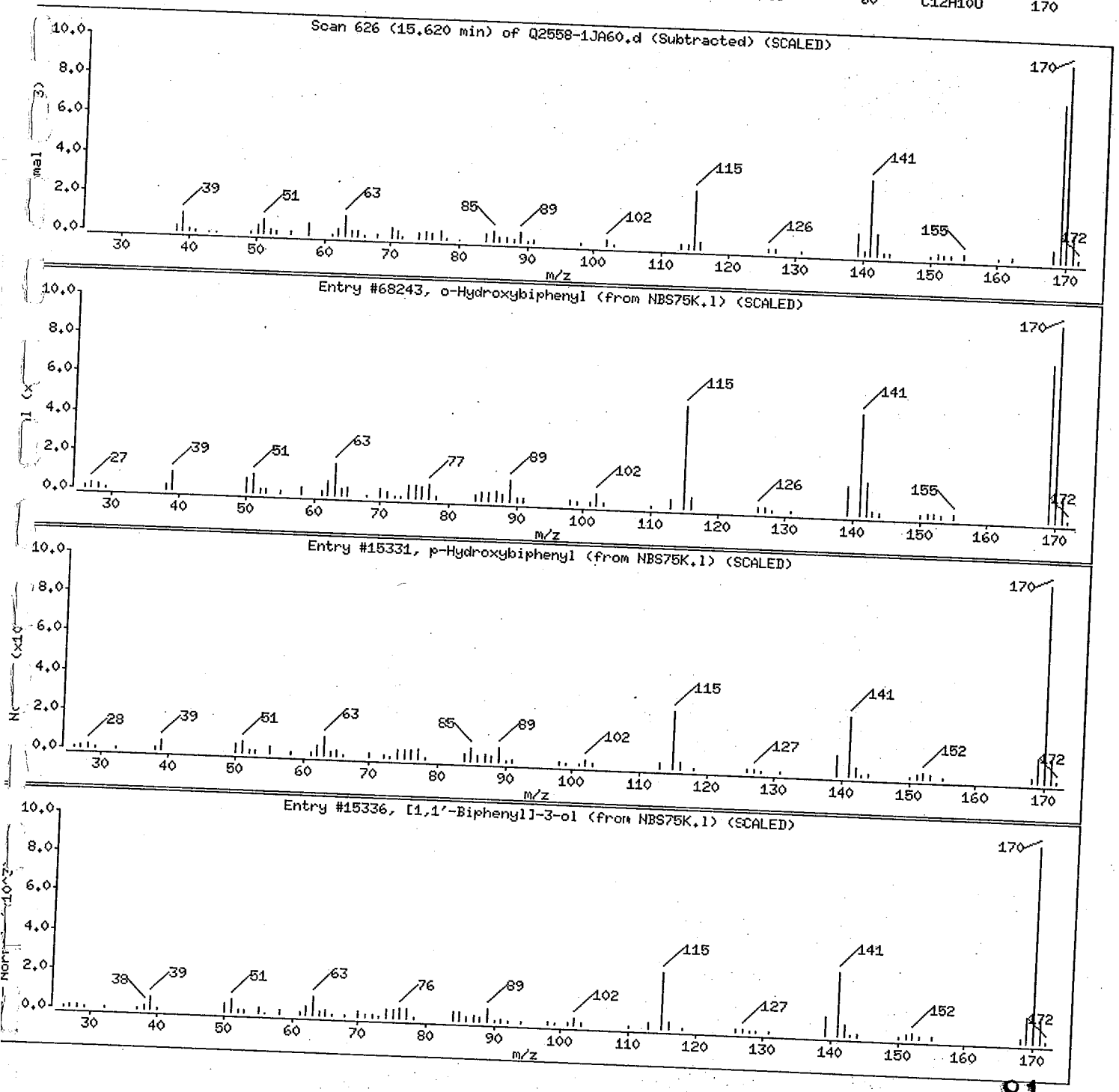
Operator: 917

Column phase: J&W DB5.625

Column diameter: 0.32

Library Search Compound Match

	CAS Number	Library	Entry	Quality	Formula	Weight
o-Hydroxybiphenyl	90-43-7	NBS75K.l	68243	97	C12H10O	170
p-Hydroxybiphenyl	92-69-3	NBS75K.l	15331	90	C12H10O	170
[1,1'-Biphenyl]-3-ol	580-51-8	NBS75K.l	15336	60	C12H10O	170



1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-2 MW-2A

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-2

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Q2558-2A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	19	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	19	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	19	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	19	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

W-2 MW-2A

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-2

Sample wt/vol: 1050 (g/mL) ML Lab File ID: Q2558-2A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.78	5	J
2.	UNKNOWN AMIDE	21.47	6	J
3.				
4.				
5.				
6.				
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9.				
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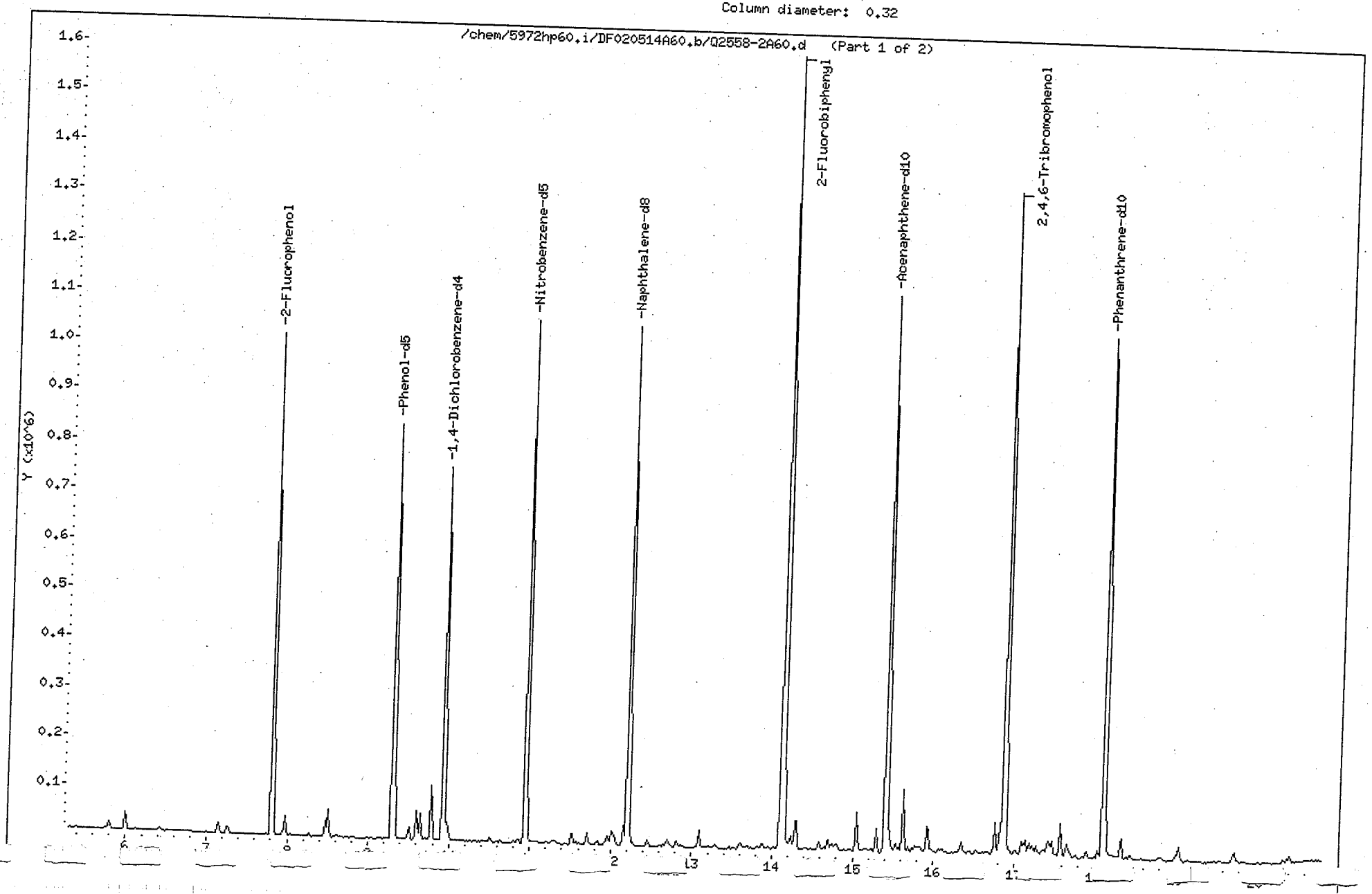
29.				
30.				

FORM I SV-TIC

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Date : 14-MAY-2002 12:43
Client ID: W-2 MW-2A
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

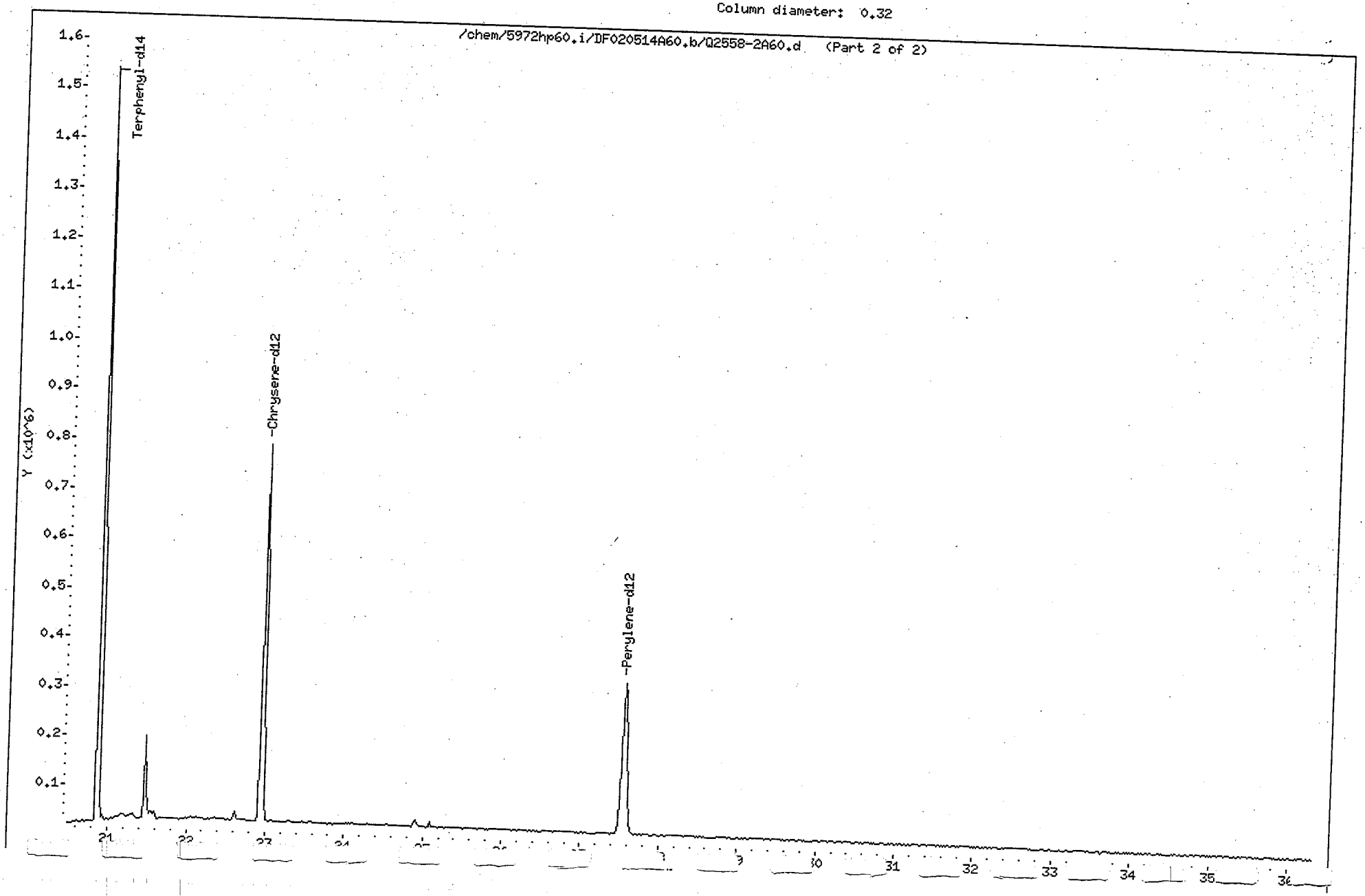
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Date : 14-MAY-2002 12:43
Client ID: W-2 MW-2A
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



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eport Date: 15-May-2030 09:49

CompuChem

Semivolatile Report Method 625

ata file : /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
ab Smp Id: Q2558-2 Client Smp ID: W-2 MW-2A
nj Date : 14-MAY-2002 12:43
perator : 917 Inst ID: 5972hp60.i
mp Info :
isc Info :
omment :
ethod : /chem/5972hp60.i/DF020514A60.b/625v4.m
eth Date : 15-May-2030 09:24 byrd Quant Type: ISTD
al Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
ls bottle: 5
il Factor: 1.00000
ntegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1050.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

pnd Variable Local Compound Variable

ompounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
1 1,4-Dichlorobenzene-d4	152	9.929	9.931	(1.000)	214142	40.0000		
2 Naphthalene-d8	136	12.196	12.198	(1.000)	835593	40.0000		8521
3 Acenaphthene-d10	164	15.411	15.412	(1.000)	505816	40.0000		8975
4 Phenanthrene-d10	188	18.101	18.119	(1.000)	854867	40.0000		8811
5 Chrysene-d12	240	22.956	22.957	(1.000)	577551	40.0000		8628
6 Perylene-d12	264	27.541	27.559	(1.000)	366551	40.0000		7309
7 2-Fluorophenol	112	7.815	7.816	(0.787)	428448	68.1494	64.9	8721
8 Phenol-d5	99	9.303	9.305	(0.937)	427759	49.4607	47.1	7342
9 Nitrobenzene-d5	82	10.944	10.946	(0.897)	598701	74.5873	71.0	8261
10 2-Fluorobiphenyl	172	14.125	14.126	(0.917)	981025	70.3610	67.0	8145
11 2,4,6-Tribromophenol	330	16.866	16.867	(1.094)	307505	150.576	143	9509
12 Terphenyl-d14	244	20.858	20.860	(0.909)	972289	78.0502	74.3	8611
13 N-Nitrosodimethylamine	42	Compound Not Detected.						
14 Phenol	94	Compound Not Detected.						
15 Bis(2-chloroethyl)ether	93	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Report Date: 15-May-2030 09:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
16 2-Chlorophenol	128	Compound Not Detected.						
17 1,3-Dichlorobenzene	146	Compound Not Detected.						
18 1,4-Dichlorobenzene	146	Compound Not Detected.						
19 1,2-Dichlorobenzene	146	Compound Not Detected.						
20 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.						
21 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
22 Hexachloroethane	117	Compound Not Detected.						
23 Nitrobenzene	77	Compound Not Detected.						
24 Isophorone	82	Compound Not Detected.						
25 2-Nitrophenol	139	Compound Not Detected.						
26 2,4-Dimethylphenol	107	Compound Not Detected.						
27 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
28 2,4-Dichlorophenol	162	Compound Not Detected.						
29 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
30 Naphthalene	128	Compound Not Detected.						
31 Hexachlorobutadiene	225	Compound Not Detected.						
32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
33 Hexachlorocyclopentadiene	237	Compound Not Detected.						
34 2,4,6-Trichlorophenol	196	Compound Not Detected.						
35 2-Chloronaphthalene	162	Compound Not Detected.						
36 Dimethylphthalate	163	Compound Not Detected.						
37 2,6-Dinitrotoluene	165	Compound Not Detected.						
38 Acenaphthylene	152	Compound Not Detected.						
39 Acenaphthene	154	Compound Not Detected.						
40 2,4-Dinitrophenol	184	Compound Not Detected.						
41 4-Nitrophenol	109	Compound Not Detected.						
42 2,4-Dinitrotoluene	165	Compound Not Detected.						
43 Diethylphthalate	149	Compound Not Detected.						
44 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
45 Fluorene	166	Compound Not Detected.						
46 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
47 N-Nitrosodiphenylamine	169	Compound Not Detected.						
48 1,2-Diphenylhydrazine	77	Compound Not Detected.						
49 4-Bromophenyl-phenylether	248	Compound Not Detected.						
50 Hexachlorobenzene	284	Compound Not Detected.						
51 Pentachlorophenol	266	Compound Not Detected.						
52 Phenanthrene	178	Compound Not Detected.						
53 Anthracene	178	Compound Not Detected.						
54 Di-n-butylphthalate	149	Compound Not Detected.						
55 Fluoranthene	202	Compound Not Detected.						
56 Benzidine	184	Compound Not Detected.						
57 Pyrene	202	Compound Not Detected.						
58 Butylbenzylphthalate	149	Compound Not Detected.						
59 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
60 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
61 Benzo(a)Anthracene	228	Compound Not Detected.						
62 Chrysene	228	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Report Date: 15-May-2030 09:49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
63 Di-n-octylphthalate	149	Compound Not Detected.						
64 Benzo(b)fluoranthene	252	Compound Not Detected.						
65 Benzo(k)fluoranthene	252	Compound Not Detected.						
66 Benzo(a)pyrene	252	Compound Not Detected.						
67 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
68 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
69 Benzo(g,h,i)perylene	276	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Report Date: 15-May-2030 09:49

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d
Lab Smp Id: Q2558-2
Inj Date : 14-MAY-2002 12:43
Operator : 917
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020514A60.b/625v4.m
Meth Date : 15-May-2030 09:24 byrd
Cal Date : 29-APR-2002 13:53
Vials bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 3.50

Client Smp ID: W-2 MW-2A
Inst ID: 5972hp60.i
Quant Type: ISTD
Cal File: HL020429A60.d
Compound Sublist: all.sub

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1050.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable — Local Compound Variable

ISTD

	RT	AREA	AMOUNT
1 1,4-Dichlorobenzene-d4	9.929	1436382	40.000
5 Chrysene-d12	22.956	1887264	40.000

RT	AREA	CONCENTRATIONS ON-COL(NG)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown							
.777	205044	5.71001192	5.44	CAS #: 0		0	1
Unknown Amide							
21.467	311855	6.60967493	6.29	CAS #: 0		0	5

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d

Date : 14-MAY-2002 12:43

Client ID: W-2 MW-2A

Sample Info:

Volume Injected (uL): 1.0

Column phase: J&W DB5.625

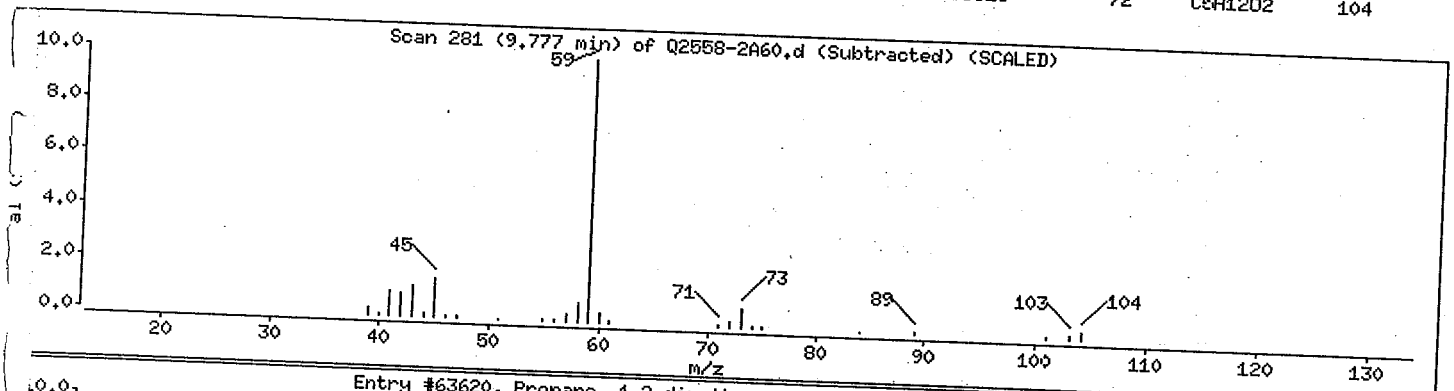
Instrument: 5972hp60.i

Operator: 917

Column diameter: 0.32

Library Search Compound Match

Unknown	CAS Number	Library	Entry	Quality	Formula	Weight
Propane, 1,2-dimethoxy-	7778-85-0	NBS75K.1	63620	78	C5H12O2	104
2-Propanol, 1-(2-methoxypropoxy)-	13429-07-7	NBS75K.1	9233	78	C7H16O3	148
Methane, diethoxy-	462-95-3	NBS75K.1	63623	72	C5H12O2	104



Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-2A60.d

Date : 14-MAY-2002 12:43

Client ID: W-2 MW-2A

Instrument: 5972hp60.i

Sample Info:

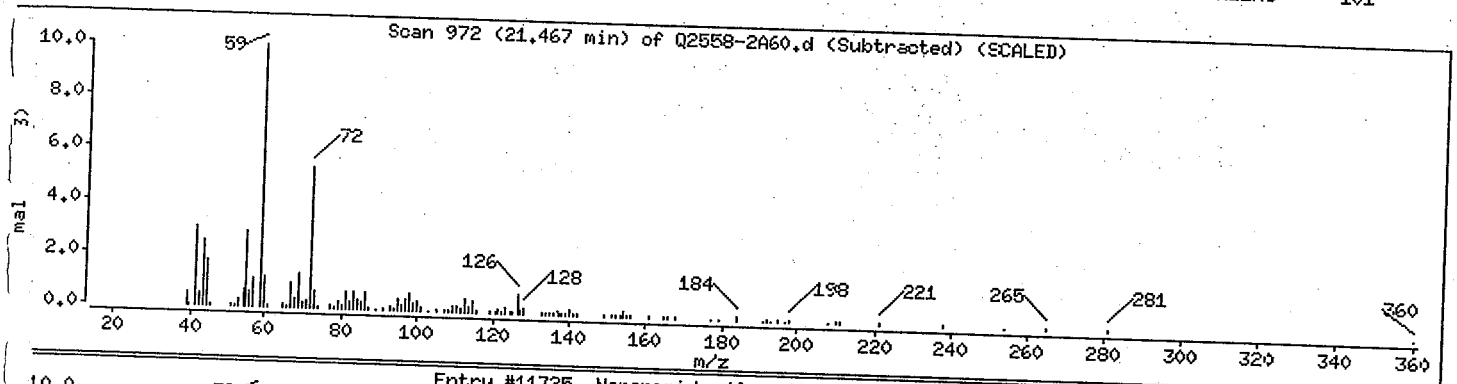
Volume Injected (uL): 1.0

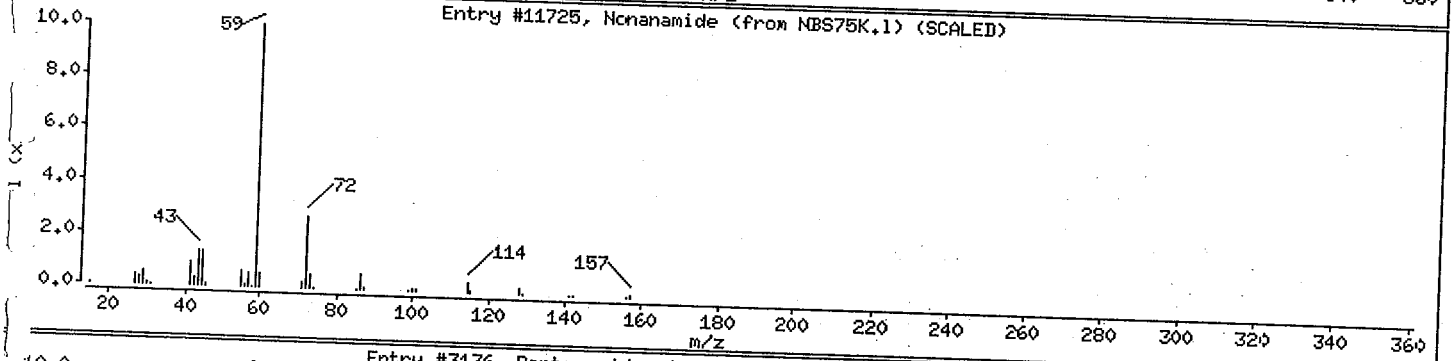
Operator: 917

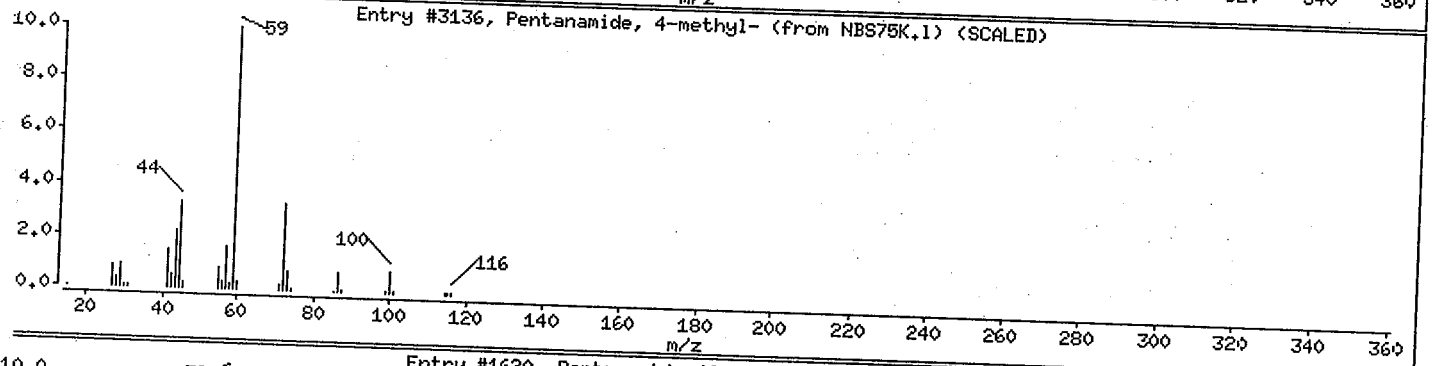
Column phase: J&W DB5.625

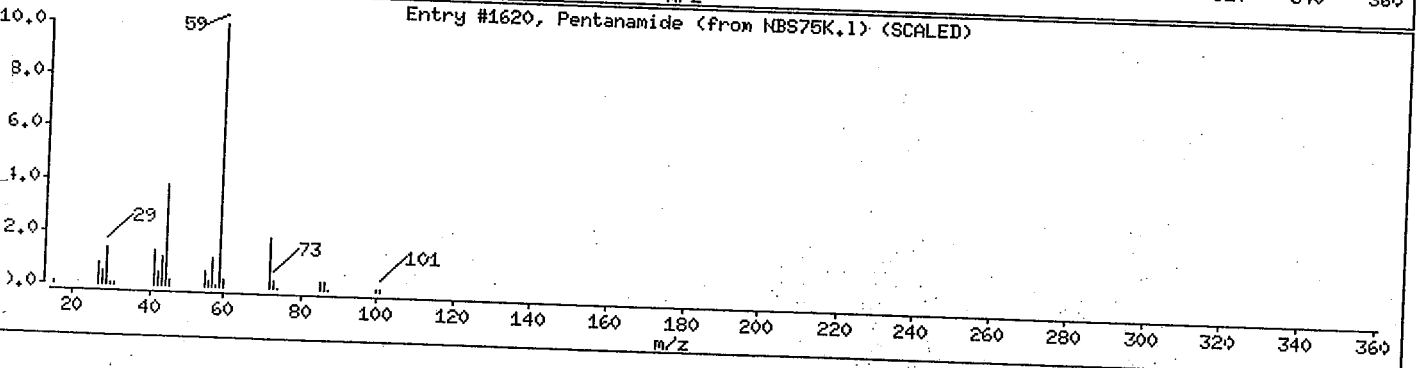
Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Amide						
Nonanamide	1120-07-6	NBS75K.l	11725	50	C9H19NO	157
Pentanamide, 4-methyl-	1119-29-5	NBS75K.l	3136	45	C6H13NO	115
Pentanamide	626-97-1	NBS75K.l	1620	43	C5H11NO	101









CompuChem
a Division of Liberty Analytical Corp.

GC/MS SEMI-VOA WORKSHEET

LAB INSTRUCTIONS: PPS1155**RPT 625+ 10 TICs**LCS OK FOR QC**

RECEIPT DATE: 5/9/02 SAMPLE DATE: 5/7/02 DUE DATE: 5/19/02

CASE#: Q2558 SDG: Q2558 **COMPUCHEM #: Q2558-2**

CLIENT ID: W-2 MW-2A

ANALYSIS DESCRIPTION: SVOA-625

Injection Volume: 1 µL Dilution Prep (if needed) _____

Extraction Date 5 / 13 / 02

DFTPP Filename DF020514A60

Sample File Name **Q2558-2** A60

ANALYST (S): Injection 917 Work-up 917

GC/MS DATE REVIEW

CONDITION CODE

ok

Extraneous Peak Search Results:

Number of peaks found: 2

Number of Hits found: 0

Number of Surrogate Outliers: 0

Quality Assurance Notice (s)
Number of Notices Required 0

Disposition: [✓] Complete

[ ] Reinjection Required

[ ] Re-extraction Required

[ ] Reinject Neat

[ ] Dilute (X)

Comments:

#GC/MS Review [signature] Date 5/15/2 Auditor _____ Date / /

Final Reportable Package(s):

/ Q2558-2A60 /

COMPUCHEM a Division of Liberty Analytical
B/N and Acid Extration of Water-Method 625
EXTRACTION WORKSHEET

ASSIGNED TO: David / Rob / Phillip

EMP ID NUMBER 2503 / 2514 / 2455

-036/-037

DATE EXTRACTED: 5/13/02

5·13·4

96

	SAMPLE NUMBER	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL EXTRACTED VOL	ADJUSTED PH B/N	ADJUSTED PH ACID	COMMENTS
1	Q2558-1		1000	1.0	12.0	1.3	
2	↓ 2		1050	↓	12.0	1.3	
3	↓ 3		1025	↓	12.0	1.3	
4	Q2559-2	QC	500	0.5	13.0	1.3	
5	WG17399-3	SS	500	↓	13.0	1.3	use Q2559-2 for SS – use 500mls
6	↓ 4	SS	500	↓	13.0	1.3	for orig & SS w/ 0.5ml surr ✓
7	ZZ337-1		1050	1.0	12.0	1.3	
8	↓ -2		1050	↓	12.0	1.3	
9							
10							Base added first witness: DH
11							
12							Acid added second witness: P.L.
13							
14							
15							
16							– surrogate 393 lot# 52918 added to
17							Q2559-2, WG17399-3, WG17399-4
18							at a volume of 0.5 ml.
19							– surrogate 393 lot# 52918 at 1.0ml
20							was added to Q2558-1 before the
21							supply of that lot number was exhausted
22						NB 5/13/02	– surrogate 393 lot # 53058 add at
23	WG17399-1	BLK	1000	1.0	12.0	1.3	1.0ml to all others
24	↓ -2	LCS	1000	↓	12.0	1.3	← 1.0ml validation spike added to LCS DH 5/13/02

		S-VOL	SURROGATE & SPIKE ADDED BY:
SURROGATE	NO.	393	RC, 5/13/02
	AMT.	1.0 ml	Initials Date
	LOT	52918/53058	
SPIKE	NO.		VALIDATION SPIKE
	AMT.		1.0 mL
	LOT		52900

FINAL VOLUME VERIFIED: [illegible]

SUPERVISOR REVIEWED: [illegible]

WITNESS DH 5/13/02
Initials Date

Analyst initials. Extracted DH/PL/RC KD NB/GTB/DH N2 DH Bottle up NB

Maunfacturer and lot number of reagents/solvents used Na_2SO_4, # 41324201 / CH_2Cl_2, # CE134 / 10N NaOH, # 709501

/01:d

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	10	U
100-02-7	4-Nitrophenol	49	U
121-14-2	2,4-Dinitrotoluene	20	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

W-3 MW-1

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: Q2558-3

Sample wt/vol: 1025 (g/mL) ML Lab File ID: Q2558-3A60

Level: (low/med) LOW Date Received: 05/09/02

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

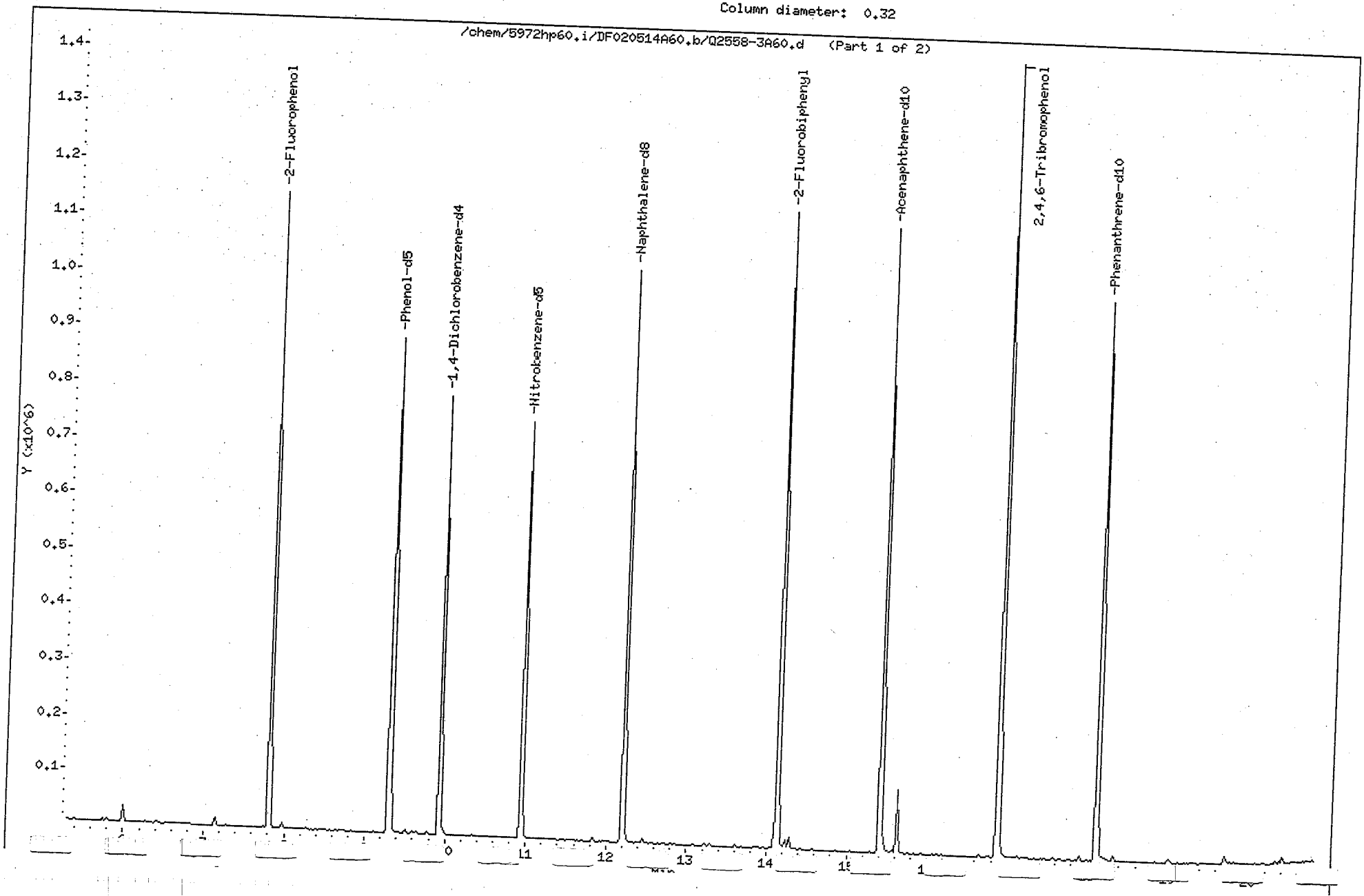
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN AMIDE	21.47	7	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

FORM I SV-TIC

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Date : 14-MAY-2002 13:31
Client ID: W-3 MW-1
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



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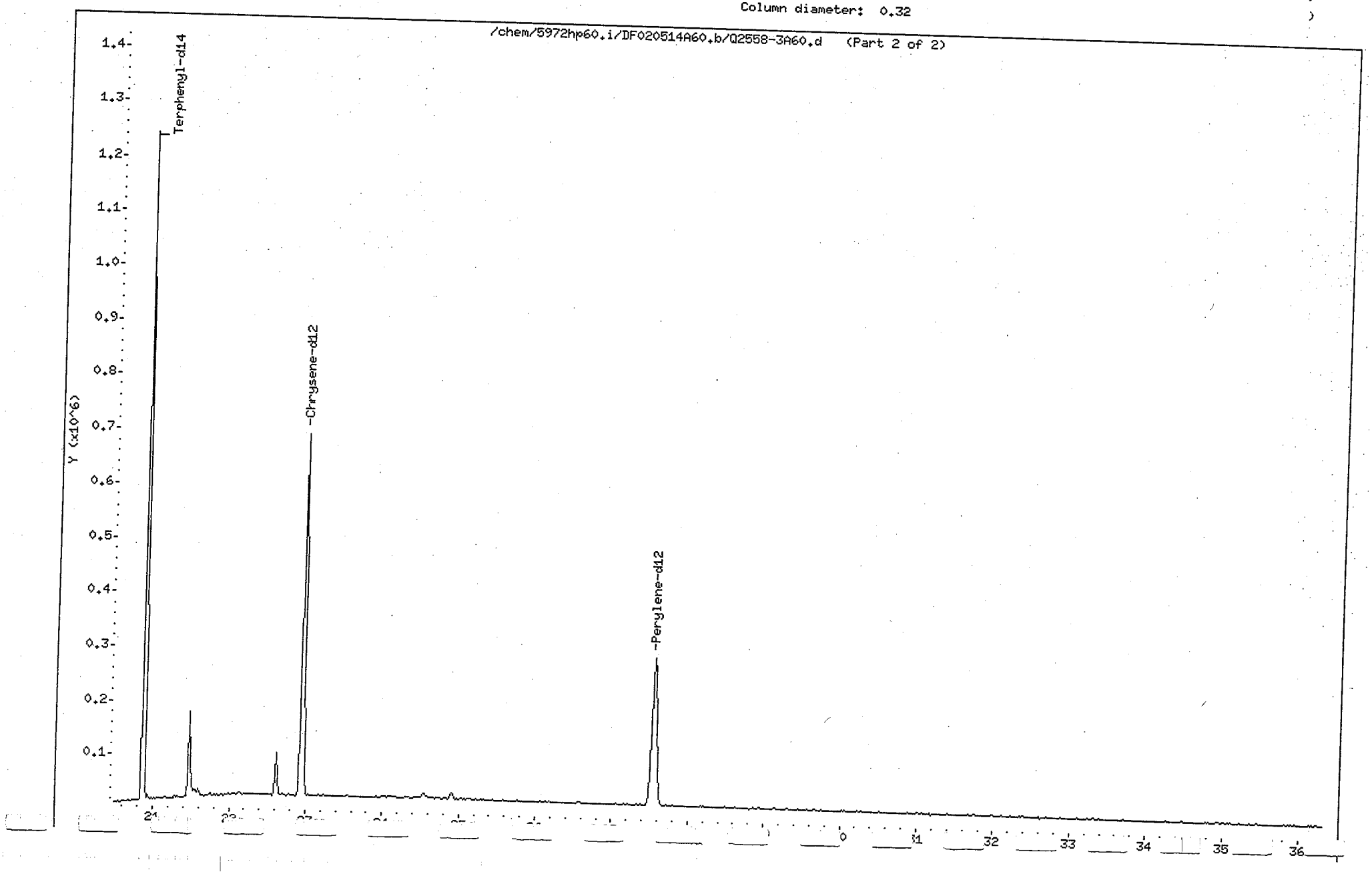
Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Date : 14-MAY-2002 13:31
Client ID: W-3 MW-1
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



ta File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
port Date: 15-May-2030 09:50

CompuChem

Semivolatile Report Method 625

ta file : /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
b Smp Id: Q2558-3 Client Smp ID: W-3 MW-1
nj Date : 14-MAY-2002 13:31
perator : 917 Inst ID: 5972hp60.i
p Info :
isc Info :
omment :
thod : /chem/5972hp60.i/DF020514A60.b/625v4.m
th Date : 15-May-2030 09:24 byrd Quant Type: ISTD
al Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
ls bottle: 6
l Factor: 1.00000
tegrator: HP RTE Compound Sublist: all.sub
arget Version: 3.50

oncentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1025.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

pnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
1 1,4-Dichlorobenzene-d4	152	9.930	9.931	(1.000)	203359	40.0000		
2 Naphthalene-d8	136	12.197	12.198	(1.000)	798231	40.0000		8518
3 Acenaphthene-d10	164	15.411	15.412	(1.000)	472191	40.0000		8963
4 Phenanthrene-d10	188	18.101	18.119	(1.000)	771015	40.0000		8756
5 Chrysene-d12	240	22.956	22.957	(1.000)	504119	40.0000		8513
6 Perylene-d12	264	27.541	27.559	(1.000)	315675	40.0000		7254
7 2-Fluorophenol	112	7.815	7.816	(0.787)	471964	79.0517	77.1	8682
8 Phenol-d5	99	9.304	9.305	(0.937)	472073	57.4790	56.1	7323
9 Nitrobenzene-d5	82	10.945	10.946	(0.897)	473437	61.7424	60.2	8039
10 2-Fluorobiphenyl	172	14.125	14.126	(0.917)	738768	56.7590	55.4	8058
11 2,4,6-Tribromophenol	330	16.866	16.867	(1.094)	330403	173.310	169	9538(A)
12 Terphenyl-d14	244	20.859	20.860	(0.909)	691152	63.5637	62.0	8597
13 N-Nitrosodimethylamine	42	Compound Not Detected.						
14 Phenol	94	Compound Not Detected.						
15 Bis(2-chloroethyl)ether	93	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Report Date: 15-May-2030 09:50

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
16 2-Chlorophenol	128	Compound Not Detected.						
17 1,3-Dichlorobenzene	146	Compound Not Detected.						
18 1,4-Dichlorobenzene	146	Compound Not Detected.						
19 1,2-Dichlorobenzene	146	Compound Not Detected.						
20 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.						
21 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
22 Hexachloroethane	117	Compound Not Detected.						
23 Nitrobenzene	77	Compound Not Detected.						
24 Isophorone	82	Compound Not Detected.						
25 2-Nitrophenol	139	Compound Not Detected.						
26 2,4-Dimethylphenol	107	Compound Not Detected.						
27 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
28 2,4-Dichlorophenol	162	Compound Not Detected.						
29 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
30 Naphthalene	128	Compound Not Detected.						
31 Hexachlorobutadiene	225	Compound Not Detected.						
32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
33 Hexachlorocyclopentadiene	237	Compound Not Detected.						
34 2,4,6-Trichlorophenol	196	Compound Not Detected.						
35 2-Chloronaphthalene	162	Compound Not Detected.						
36 Dimethylphthalate	163	Compound Not Detected.						
37 2,6-Dinitrotoluene	165	Compound Not Detected.						
38 Acenaphthylene	152	Compound Not Detected.						
39 Acenaphthene	154	Compound Not Detected.						
40 2,4-Dinitrophenol	184	Compound Not Detected.						
41 4-Nitrophenol	109	Compound Not Detected.						
42 2,4-Dinitrotoluene	165	Compound Not Detected.						
43 Diethylphthalate	149	Compound Not Detected.						
44 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
45 Fluorene	166	Compound Not Detected.						
46 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
47 N-Nitrosodiphenylamine	169	Compound Not Detected.						
48 1,2-Diphenylhydrazine	77	Compound Not Detected.						
49 4-Bromophenyl-phenylether	248	Compound Not Detected.						
50 Hexachlorobenzene	284	Compound Not Detected.						
51 Pentachlorophenol	266	Compound Not Detected.						
52 Phenanthrene	178	Compound Not Detected.						
53 Anthracene	178	Compound Not Detected.						
54 Di-n-butylphthalate	149	Compound Not Detected.						
55 Fluoranthene	202	Compound Not Detected.						
56 Benzidine	184	Compound Not Detected.						
57 Pyrene	202	Compound Not Detected.						
58 Butylbenzylphthalate	149	Compound Not Detected.						
59 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
60 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
1 Benzo(a)Anthracene	228	Compound Not Detected.						
2 Chrysene	228	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Report Date: 15-May-2030 09:50

pounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
63 Di-n-octylphthalate	149	Compound Not Detected.						
64 Benzo(b)fluoranthene	252	Compound Not Detected.						
65 Benzo(k)fluoranthene	252	Compound Not Detected.						
66 Benzo(a)pyrene	252	Compound Not Detected.						
67 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
68 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
69 Benzo(g,h,i)perylene	276	Compound Not Detected.						

Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Report Date: 15-May-2030 09:50

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d
Lab Smp Id: Q2558-3 Client Smp ID: W-3 MW-1
Inj Date : 14-MAY-2002 13:31
Operator : 917 Inst ID: 5972hp60.i
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020514A60.b/625v4.m
Meth Date : 15-May-2030 09:24 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Vials bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1025.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable — Local Compound Variable

ISTD	RT	AREA	AMOUNT
5 Chrysene-d12	22.956	1677915	40.000

	RT	AREA	CONCENTRATIONS ON-COL(NG)	FINAL(ug/L)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Amide								
2	7.468	286942	6.84042860	6.67	0	CAS #:	0	5

Data File: /chem/5972hp60.i/DF020514A60.b/Q2558-3A60.d

Date : 14-MAY-2002 13:31

Client ID: W-3 MW-1

Instrument: 5972hp60.i

Sample Info:

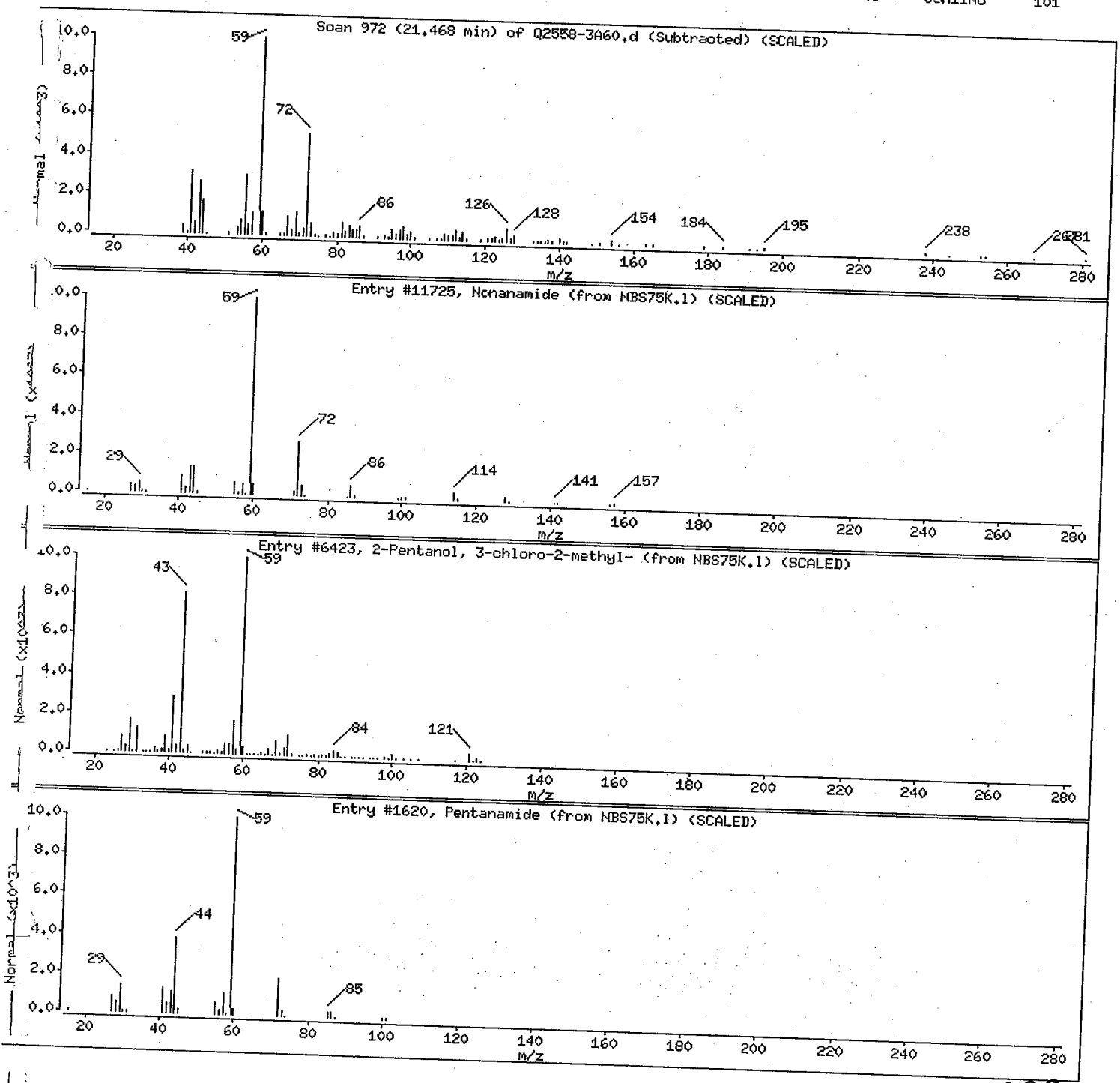
Volume Injected (uL): 1.0

Operator: 917

Column phase: J&W DB5.625

Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Amide						
Nonanamide	1120-07-6	NBS75K.l	11725	50	C9H19NO	157
2-Pentanol, 3-chloro-2-methyl-	74685-49-7	NBS75K.l	6423	47	C6H13ClO	136
Pentanamide	626-97-1	NBS75K.l	1620	43	C5H11NO	101



CompuChem
a Division of Liberty Analytical Corp.

GC/MS SEMI-VOA WORKSHEET

LAB INSTRUCTIONS: PPS1155**RPT 625+ 10 TICs**LCS OK FOR QC**

RECEIPT DATE: 5/9/02 SAMPLE DATE: 5/7/02 DUE DATE: 5/19/02

CASE#: Q2558 SDG: Q2558 **COMPUCHEM #: Q2558-3**

CLIENT ID: W-3 MW-1

ANALYSIS DESCRIPTION: SVOA-625

Injection Volume : 1 µL Dilution Prep (if needed) _____

Extraction Date 5 / 13 / 02

DFTPP Filename DF020514A60

Sample File Name **Q2558-3** A60

ANALYST (S): Injection 917 Work-up 917

GC/MS DATE REVIEW

CONDITION CODE

a

Extraneous Peak Search Results:

Number of peaks found: 1

Number of Hits found: ϕ

Number of Surrogate Outliers: ϕ

Quality Assurance Notice (s)
Number of Notices Required ϕ

Disposition: [✓] Complete

[ ] Reinjection Required

[ ] Re-extraction Required

[ ] Reinject Neat

[ ] Dilute (X)

Comments:

#GC/MS Review [signature] Date 5/15/02 Auditor _____ Date / /

Final Reportable Package(s):

/ Q2558-3 A60 /

SV1 – 6/27/01: PTF

COMPUCHEM a Division of Liberty Analytical
B/N and Acid Extration of Water-Method 625
EXTRACTION WORKSHEET

ASSIGNED TO: David/Rob/Phillip

EMP ID NUMBER 2503/2514/2455

DATE EXTRACTED: 5/13/02

5·13·4

-036/-037

	SAMPLE NUMBER	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL EXTRACTED VOL	ADJUSTED PH B/N	ADJUSTED PH ACID	COMMENTS
1	Q2558-1		1000	1.0	12.0	1.3	
2	2		1050	↓	12.0	1.3	
3	3		1025	↓	12.0	1.3	
4	Q2559-2	QC	500	0.5	13.0	1.3	
5	WG17399-3	SS	500	↓	13.0	1.3	use Q2559-2 for SS – use 500mls ✓
6	4	SS	500	↓	13.0	1.3	for orig & SS w/ 0.5ml surr ✓
7	Z2337-1		1050	1.0	12.0	1.3	
8	-2		1050	↓	12.0	1.3	
9							
10							Base added first witness: [illegible]
11							
12							Acid added second witness: P.L.
13							
14							
15							
16							– surrogate 393 lot# 52918 added to
17							Q2559-2, WG17399-3, WG17399-4
18							at a volume of 0.5 ml.
19							– surrogate 393 lot# 52918 at 1.0ml
20							was added to Q2558-1 before the
21							supply of that lot number was exhausted
22						NB 5/13/02	– surrogate 393 lot # 53058 add at
23	WG17399-1	BLK	1000	1.0	12.0	1.3	1.0ml to all others
24	-2	LCS	1000	↓	12.0	1.3	← 1.0ml validation spike added to LCS

DH 5/13/02

		S-VOL	SURROGATE & SPIKE ADDED BY:
SURROGATE	NO.	393	RC, 5/13/02
	AMT.	1.0 ml	Initials Date
	LOT	52918/53058	
SPIKE	NO.		VALIDATION SPIKE
	AMT.		1.0 mL
	LOT		52900

FINAL VOLUME VERIFIED: [illegible]

SUPERVISOR REVIEWED: [illegible]

WITNESS DH 5/13/02
Initials Date

Analyst initials. Extracted DH/PL/RC KD NB/GTB/DH N2 DH Bottle up NB

Maunfacturer and lot number of reagents/solvents used Na_2SO_4, # 41324201 / CH_2Cl_2, # CE134 / ion NaOH, # 70950

3. Standards Data

a. Initial Calibration Data (Form VI SV)

b. Continuing Calibration Data (Form VII SV)

a. Initial Calibration Data (Form VI SV)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level, from lowest to highest.

(1) Reconstructed Ion Chromatograms and quantitation reports for the initial (five-point) calibration; Spectra not required

(2) EICPs displaying each manual integration

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date(s): 04/29/02 04/29/02

Column: J&W DB5.625 ID: 0.32 (mm) Calibration Time(s): 0936 1353

LAB FILE ID: RF10: HI020429A60 RF20: HK020429A60 RF50: HL020429A60
RF80: HG020429A60 RF120: HJ020429A60RF160: HH020429A60

COMPOUND	RF10	RF20	RF50	RF80	RF120	RF160
N-Nitrosodimethylamine	0.718	0.721	0.692	0.681	0.651	0.694
Phenol	2.394	2.221	1.878	1.776	1.425	1.312
Bis(2-chloroethyl)ether	1.681	1.734	1.574	1.411	1.236	1.173
2-Chlorophenol	1.848	1.783	1.590	1.485	1.294	1.195
1,3-Dichlorobenzene	1.624	1.529	1.362	1.261	1.126	1.019
1,4-Dichlorobenzene	1.674	1.565	1.351	1.251	1.102	0.995
1,2-Dichlorobenzene	1.594	1.530	1.347	1.268	1.094	1.034
bis(2-Chloroisopropyl)ether	3.646	3.398	3.174	2.943	2.800	2.676
N-Nitroso-di-N-propylamine	1.015	0.943	0.786	0.691	0.591	0.576
Hexachloroethane	0.798	0.763	0.695	0.636	0.596	0.567
Nitrobenzene	0.428	0.410	0.386	0.352	0.344	0.318
Isophorone	0.793	0.771	0.717	0.654	0.622	0.602
2-Nitrophenol	0.303	0.290	0.258	0.220	0.193	0.176
2,4-Dimethylphenol	0.446	0.429	0.369	0.328	0.290	0.269
Bis(2-chloroethoxy)methane		0.694	0.569	0.453	0.393	0.356
2,4-Dichlorophenol	0.387	0.372	0.340	0.300	0.274	0.262
1,2,4-Trichlorobenzene	0.338	0.330	0.295	0.266	0.248	0.233
Naphthalene	1.236	1.177	0.999	0.890	0.768	0.708
Hexachlorobutadiene	0.182	0.176	0.160	0.148	0.140	0.135
4-Chloro-3-methylphenol	0.393	0.383	0.355	0.331	0.292	0.277
Hexachlorocyclopentadiene	0.407	0.280	0.282	0.267	0.250	0.244
2,4,6-Trichlorophenol	0.468	0.468	0.432	0.388	0.360	0.349
2-Chloronaphthalene	1.153	1.146	1.039	0.896	0.816	0.757
Dimethylphthalate	1.483	1.452	1.298	1.186	1.053	0.945
2,6-Dinitrotoluene	0.341	0.340	0.331	0.318	0.294	0.277
Acenaphthylene	2.122	2.010	1.836	1.650	1.440	1.318
Acenaphthene	1.279	1.160	1.054	0.888	0.789	0.739
2,4-Dinitrophenol		0.156	0.221	0.176	0.160	0.166
4-Nitrophenol	0.103	0.100	0.120	0.116	0.108	0.115
2,4-Dinitrotoluene	0.436	0.425	0.370	0.309	0.258	0.240
Diethylphthalate	1.503	1.496	1.412	1.262	1.129	1.019
4-Chlorophenyl-phenylether	0.568	0.571	0.486	0.425	0.369	0.353
Fluorene	1.342	1.328	1.207	1.055	0.918	0.834
4,6-Dinitro-2-methylphenol	0.143	0.151	0.160	0.162	0.141	0.133
N-Nitrosodiphenylamine	1.317	1.244	0.982	0.852	0.731	0.723
1,2-Diphenylhydrazine	1.832	1.846	1.727	1.594	1.394	1.210
4-Bromophenyl-phenylether	0.196	0.194	0.183	0.179	0.167	0.167
Hexachlorobenzene	0.200	0.204	0.204	0.198	0.191	0.191
Pentachlorophenol	0.276	0.161	0.170	0.169	0.158	0.162
Phenanthrene	1.142	1.146	1.067	0.999	0.867	0.811
Anthracene	1.159	1.144	1.106	1.008	0.880	0.827
Di-n-butylphthalate	1.628	1.686	1.680	1.532	1.374	1.228
Fluoranthene	1.048	1.040	1.041	0.975	0.859	0.808
Benzidine	0.377	0.326	0.279	0.273	0.240	0.215

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date(s): 04/29/02 04/29/02

Column: J&W DB5.625 ID: 0.32 (mm) Calibration Time(s): 0936 1353

LAB FILE ID: RF10: HI020429A60 RF20: HK020429A60 RF50: HL020429A60
RF80: HG020429A60 RF120: HJ020429A60RF160: HH020429A60

COMPOUND	RF10	RF20	RF50	RF80	RF120	RF160
Pyrene	1.664	1.660	1.450	1.286	1.280	1.206
Butylbenzylphthalate	1.079	1.061	0.985	0.934	0.897	0.808
bis(2-ethylhexyl)Phthalate	1.445	1.455	1.383	1.273	1.236	1.117
3,3'-Dichlorobenzidine	0.218	0.213	0.216	0.203	0.201	0.196
Benzo(a)Anthracene	1.276	1.274	1.218	1.140	1.106	1.047
Chrysene	1.222	1.189	1.131	1.064	1.005	0.980
Di-n-octylphthalate	3.116	3.254	3.340	3.310	3.285	3.052
Benzo(b)fluoranthene	1.527	1.713	1.434	1.456	1.394	1.489
Benzo(k)fluoranthene	1.648	1.448	1.615	1.513	1.518	1.378
Benzo(a)pyrene	1.275	1.294	1.307	1.296	1.296	1.287
Indeno(1,2,3-c,d)pyrene	0.901	0.941	0.999	1.029	1.025	1.020
Dibenzo(a,h)anthracene	0.807	0.858	0.928	0.954	0.954	0.952
Benzo(g,h,i)perylene	0.827	0.838	0.900	0.924	0.927	0.944
2-Fluorophenol	1.374	1.310	1.173	1.157	1.034	0.998
Phenol-d5	1.970	1.885	1.644	1.563	1.359	1.271
Nitrobenzene-d5	0.430	0.416	0.393	0.368	0.358	0.341
2-Fluorobiphenyl	1.352	1.331	1.160	1.018	0.919	0.835
2,4,6-Tribromophenol	0.165	0.166	0.168	0.163	0.151	0.156
Terphenyl-d14	0.962	0.959	0.847	0.812	0.822	0.774

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date(s): 04/29/02 04/29/02

Column: J&W DB5.625 ID: 0.32 (mm) Calibration Time(s): 0936 1353

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2
N-Nitrosodimethylamine	AVRG	0.69279834	3.702	35.000
Phenol	AVRG	1.83435090	23.244	35.000
Bis(2-chloroethyl)ether	AVRG	1.46812832	15.877	35.000
2-Chlorophenol	AVRG	1.53238465	16.981	35.000
1,3-Dichlorobenzene	AVRG	1.32044239	17.587	35.000
1,4-Dichlorobenzene	AVRG	1.32296642	19.821	35.000
1,2-Dichlorobenzene	AVRG	1.31122703	17.223	35.000
bis(2-Chloroisopropyl)ether	AVRG	3.10600423	11.930	35.000
N-Nitroso-di-N-propylamine	AVRG	0.76706462	23.750	35.000
Hexachloroethane	AVRG	0.67562730	13.673	35.000
Nitrobenzene	AVRG	0.37294301	11.266	35.000
Isophorone	AVRG	0.69349771	11.453	35.000
2-Nitrophenol	AVRG	0.23982316	21.644	35.000
2,4-Dimethylphenol	AVRG	0.35497557	20.425	35.000
Bis(2-chloroethoxy)methane	AVRG	0.49322597	28.048	35.000
2,4-Dichlorophenol	AVRG	0.32272091	16.069	35.000
1,2,4-Trichlorobenzene	AVRG	0.28508161	15.151	35.000
Naphthalene	AVRG	0.96324859	22.243	35.000
Hexachlorobutadiene	AVRG	0.15699147	12.250	35.000
4-Chloro-3-methylphenol	AVRG	0.33854347	13.971	35.000
Hexachlorocyclopentadiene	AVRG	0.28856216	20.829	35.000
2,4,6-Trichlorophenol	AVRG	0.41085377	12.849	35.000
2-Chloronaphthalene	AVRG	0.96756315	17.526	35.000
Dimethylphthalate	AVRG	1.23634733	17.437	35.000
2,6-Dinitrotoluene	AVRG	0.31663182	8.217	35.000
Acenaphthylene	AVRG	1.72940915	18.342	35.000
Acenaphthene	AVRG	0.98484141	21.788	35.000
2,4-Dinitrophenol	AVRG	0.17566780	15.102	35.000
4-Nitrophenol	AVRG	0.11036267	7.081	35.000
2,4-Dinitrotoluene	AVRG	0.33970543	24.650	35.000
Diethylphthalate	AVRG	1.30357092	15.420	35.000
4-Chlorophenyl-phenylether	AVRG	0.46203594	20.669	35.000
Fluorene	AVRG	1.11392195	19.105	35.000
4,6-Dinitro-2-methylphenol	AVRG	0.14815050	7.535	35.000
N-Nitrosodiphenylamine	AVRG	0.97488678	26.232	35.000
1,2-Diphenylhydrazine	AVRG	1.60059754	15.924	35.000
4-Bromophenyl-phenylether	AVRG	0.18089876	6.790	35.000
Hexachlorobenzene	AVRG	0.19809376	2.981	35.000
Pentachlorophenol	AVRG	0.18278374	25.063	35.000
Phenanthrene	AVRG	1.00522791	14.009	35.000
Anthracene	AVRG	1.02072938	13.795	35.000
Di-n-butylphthalate	AVRG	1.52143530	12.170	35.000
Fluoranthene	AVRG	0.96200461	10.820	35.000
Benzidine	AVRG	0.28491564	20.638	35.000

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date(s): 04/29/02 04/29/02

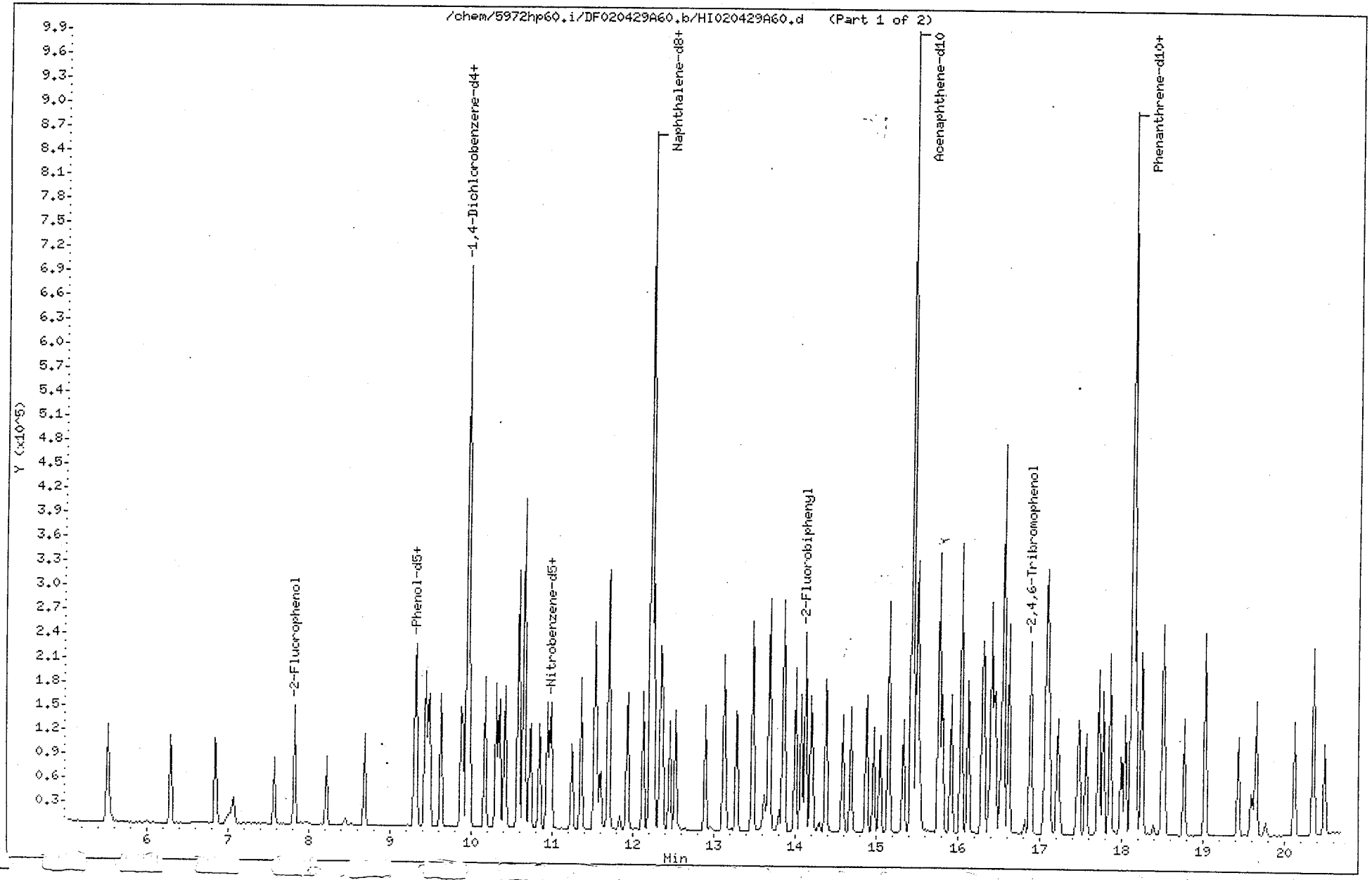
Column: J&W DB5.625 ID: 0.32 (mm) Calibration Time(s): 0936 1353

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2
Pyrene	AVRG	1.42467679	14.084	35.000
Butylbenzylphthalate	AVRG	0.96078025	10.674	35.000
bis(2-ethylhexyl)Phthalate	AVRG	1.31827721	10.080	35.000
3,3'-Dichlorobenzidine	AVRG	0.20792374	4.314	35.000
Benzo(a)Anthracene	AVRG	1.17697073	7.981	35.000
Chrysene	AVRG	1.09852076	8.985	35.000
Di-n-octylphthalate	AVRG	3.22616245	3.577	35.000
Benzo(b)fluoranthene	AVRG	1.50241595	7.508	35.000
Benzo(k)fluoranthene	AVRG	1.52009295	6.635	35.000
Benzo(a)pyrene	AVRG	1.29251754	0.822	35.000
Indeno(1,2,3-c,d)pyrene	AVRG	0.98570728	5.346	35.000
Dibenzo(a,h)anthracene	AVRG	0.90879345	6.829	35.000
Benzo(g,h,i)perylene	AVRG	0.89337576	5.546	35.000
2-Fluorophenol	AVRG	1.17434133	12.585	35.000
Phenol-d5	AVRG	1.61546230	17.195	35.000
Nitrobenzene-d5	AVRG	0.38424670	8.958	35.000
2-Fluorobiphenyl	AVRG	1.10259434	19.455	35.000
2,4,6-Tribromophenol	AVRG	0.16149672	4.053	35.000
Terphenyl-d14	AVRG	0.86276201	9.195	35.000

FORM VI SV

Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Date : 29-APR-2002 11:28
Client ID: SSTD010
Sample Info: SSTD010:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

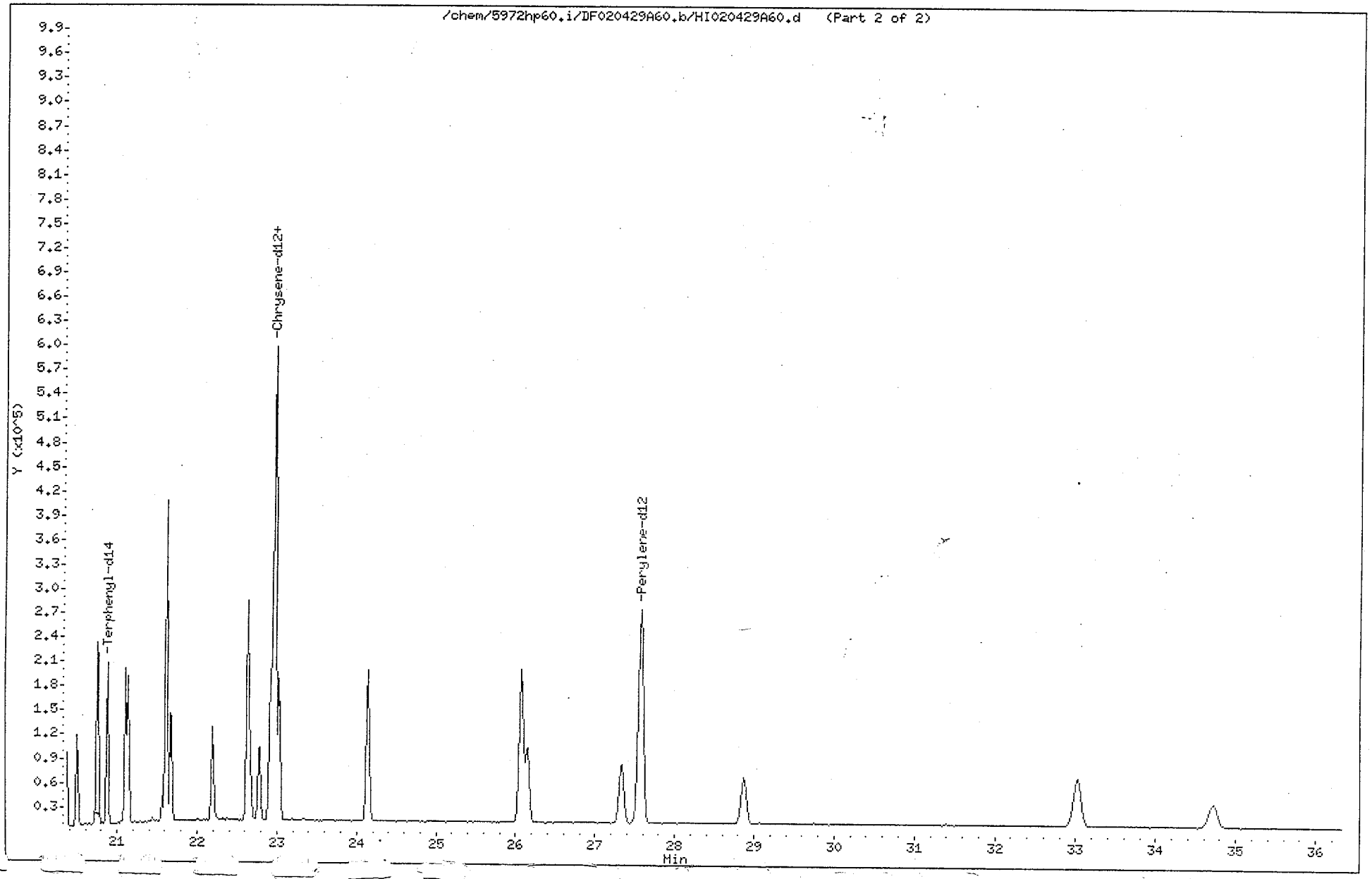
Instrument: 5972hp60.i
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Date : 29-APR-2002 11:28
Client ID: SSTD010
Sample Info: SSTD010;917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Report Date: 29-Apr-2030 11:28

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 29-APR-2002 11:28
Operator : 917 Inst ID: 5972hp60.i
Smp Info : SSTD010:917
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020429A60.b/625v4.m
Meth Date : 29-Apr-2030 11:28 mikhael Quant Type: ISTD
Cal Date : 29-APR-2002 11:28 Cal File: HI020429A60.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.947	9.947	(1.000)	189706	40.0000		
* 2 Naphthalene-d8	136	12.214	12.214	(1.000)	742320	40.0000		8343
* 3 Acenaphthene-d10	164	15.428	15.428	(1.000)	429390	40.0000		8625
* 4 Phenanthrene-d10	188	18.118	18.118	(1.000)	652860	40.0000		8774
* 5 Chrysene-d12	240	22.973	22.973	(1.000)	445071	40.0000		8377
* 6 Perylene-d12	264	27.575	27.575	(1.000)	324955	40.0000		7417
$ 7 2-Fluorophenol	112	7.815	7.815	(0.786)	65142	10.0000	12	8249
$ 8 Phenol-d5	99	9.304	9.304	(0.935)	93430	10.0000	12	8027
$ 9 Nitrobenzene-d5	82	10.945	10.945	(0.896)	79731	10.0000	11	8017
$ 10 2-Fluorobiphenyl	172	14.126	14.126	(0.916)	145133	10.0000	13	7250
$ 11 2,4,6-Tribromophenol	330	16.883	16.883	(1.094)	17702	10.0000	10	0(M)
$ 12 Terphenyl-d14	244	20.876	20.876	(0.909)	107032	10.0000	11	8139
13 N-Nitrosodimethylamine	42	5.514	5.514	(0.554)	34030	10.0000	10	7688
14 Phenol	94	9.321	9.321	(0.937)	113551	10.0000	13	7744

GM
4-29

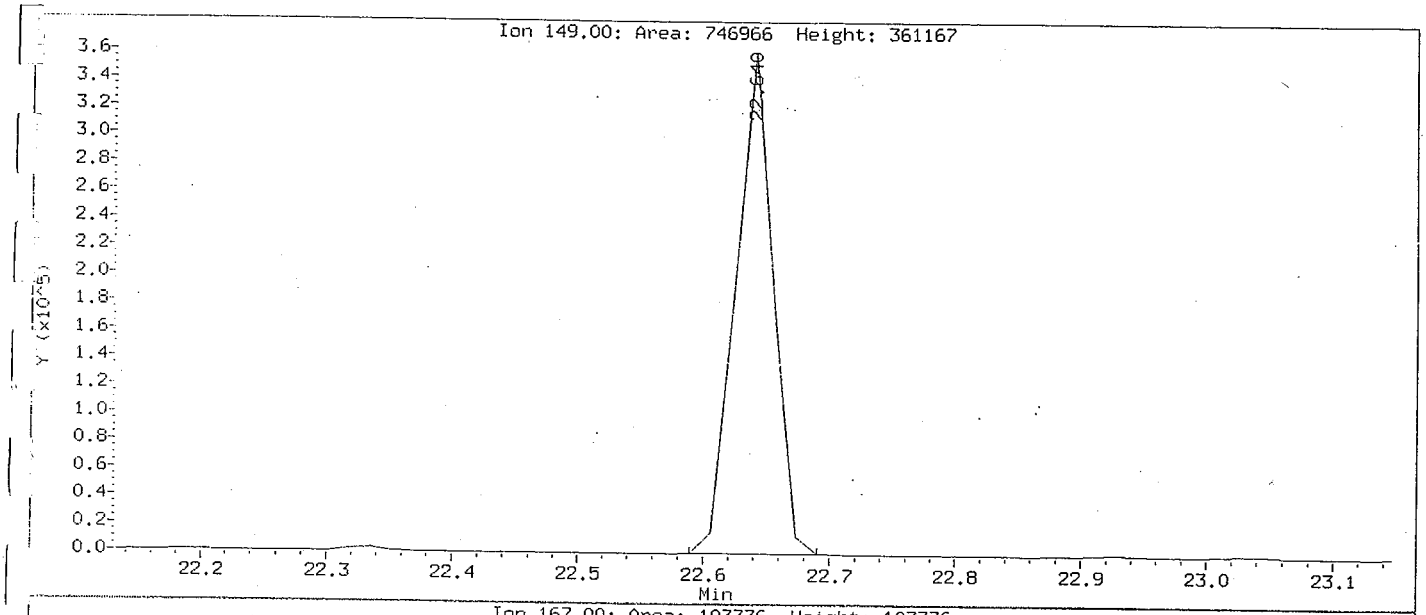
Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Report Date: 29-Apr-2030 11:28

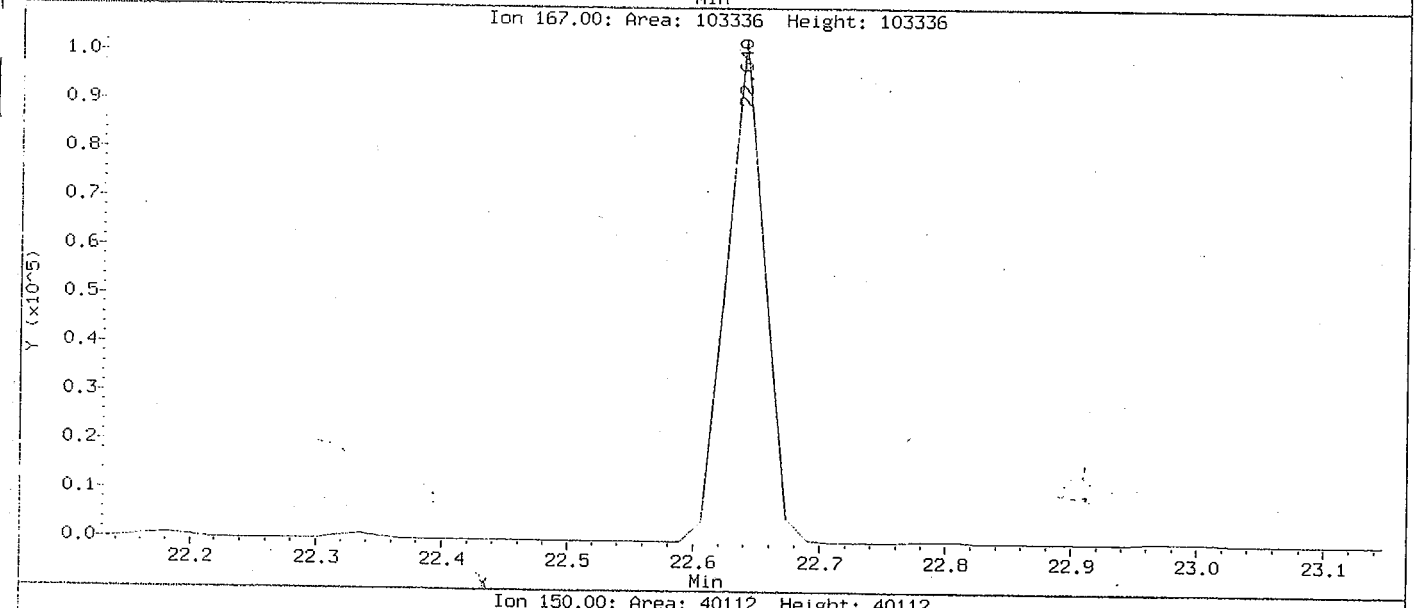
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.490	9.490	(0.954)	79725	10.0000	12	0(M)
16 2-Chlorophenol	128	9.625	9.625	(0.968)	87649	10.0000	12	8369
17 1,3-Dichlorobenzene	146	9.879	9.879	(0.993)	77035	10.0000	12	
18 1,4-Dichlorobenzene	146	9.981	9.981	(1.003)	79383	10.0000	13	
19 1,2-Dichlorobenzene	146	10.302	10.302	(1.036)	75589	10.0000	12	
20 bis(2-Chloroisopropyl)ether	45	10.421	10.421	(1.048)	172899	10.0000	12	8870
21 N-Nitroso-di-N-propylamine	70	10.657	10.657	(1.071)	48145	10.0000	13	8819
22 Hexachloroethane	117	10.843	10.843	(1.090)	37828	10.0000	12	8435
23 Nitrobenzene	77	10.979	10.979	(0.899)	79415	10.0000	12	8159
24 Isophorone	82	11.351	11.351	(0.929)	147216	10.0000	12	7367
25 2-Nitrophenol	139	11.554	11.554	(0.946)	56194	10.0000	13	7120
26 2,4-Dimethylphenol	107	11.520	11.520	(0.943)	82688	10.0000	13	8481
27 Bis(2-chloroethoxy)methane	93	11.706	11.706	(0.958)	140985	10.0000	15	7381
28 2,4-Dichlorophenol	162	11.943	11.943	(0.978)	71905	10.0000	12	0(M)
29 1,2,4-Trichlorobenzene	180	12.112	12.112	(0.992)	62734	10.0000	12	7638
30 Naphthalene	128	12.248	12.248	(1.003)	229358	10.0000	13	
31 Hexachlorobutadiene	225	12.518	12.518	(1.025)	33752	10.0000	12	9239
32 4-Chloro-3-methylphenol	107	13.127	13.127	(1.075)	73023	10.0000	12	8038
33 Hexachlorocyclopentadiene	237	13.872	13.872	(0.899)	43709	10.0000	13	8532
34 2,4,6-Trichlorophenol	196	14.007	14.007	(0.908)	50270	10.0000	12	8596(H)
35 2-Chloronaphthalene	162	14.379	14.379	(0.932)	123753	10.0000	12	
36 Dimethylphthalate	163	14.887	14.887	(0.965)	159246	10.0000	12	7637
37 2,6-Dinitrotoluene	165	15.056	15.056	(0.976)	36570	10.0000	11	7571
38 Acenaphthylene	152	15.158	15.158	(0.982)	227798	10.0000	13	8328
39 Acenaphthene	154	15.479	15.479	(1.003)	137317	10.0000	13	8833
40 2,4-Dinitrophenol	184	15.496	15.496	(1.004)	37399	10.0000	15	(a)
41 4-Nitrophenol	109	15.530	15.530	(1.007)	11069	20.0000	19	(a)
42 2,4-Dinitrotoluene	165	15.767	15.767	(1.022)	46789	10.0000	13	8898
43 Diethylphthalate	149	16.122	16.122	(1.045)	161346	10.0000	12	9096
44 4-Chlorophenyl-phenylether	204	16.325	16.325	(1.058)	60940	10.0000	13	8389
45 Fluorene	166	16.392	16.392	(1.062)	144046	10.0000	12	8337
46 4,6-Dinitro-2-methylphenol	198	16.511	16.511	(0.911)	23340	20.0000	20	
47 N-Nitrosodiphenylamine	169	16.545	16.545	(0.913)	214910	10.0000	14	
48 1,2-Diphenylhydrazine	77	16.612	16.612	(1.077)	196700	10.0000	12	7889
49 4-Bromophenyl-phenylether	248	17.221	17.221	(0.950)	31918	10.0000	11	9268
50 Hexachlorobenzene	284	17.560	17.560	(0.969)	32662	10.0000	10	8438
51 Pentachlorophenol	266	17.847	17.847	(0.985)	45017	20.0000	27	8888
52 Phenanthrene	178	18.169	18.169	(1.003)	186419	10.0000	12	
53 Anthracene	178	18.237	18.237	(1.007)	189202	10.0000	12	
54 Di-n-butylphthalate	149	19.015	19.015	(1.049)	265647	10.0000	11	0(M)
55 Fluoranthene	202	20.351	20.351	(1.123)	171125	10.0000	11	
56 Benzidine	184	20.487	20.487	(0.892)	83869	20.0000	26	9429
57 Pyrene	202	20.757	20.757	(0.904)	185169	10.0000	12	
58 Butylbenzylphthalate	149	21.603	21.603	(0.940)	120074	10.0000	11	8465
59 bis(2-ethylhexyl)Phthalate	149	22.635	22.635	(0.985)	160822	10.0000	11	8343
60 3,3'-Dichlorobenzidine	252	22.787	22.787	(0.992)	48483	20.0000	21	8912
61 Benzo(a)Anthracene	228	22.923	22.923	(0.998)	142009	10.0000	11	

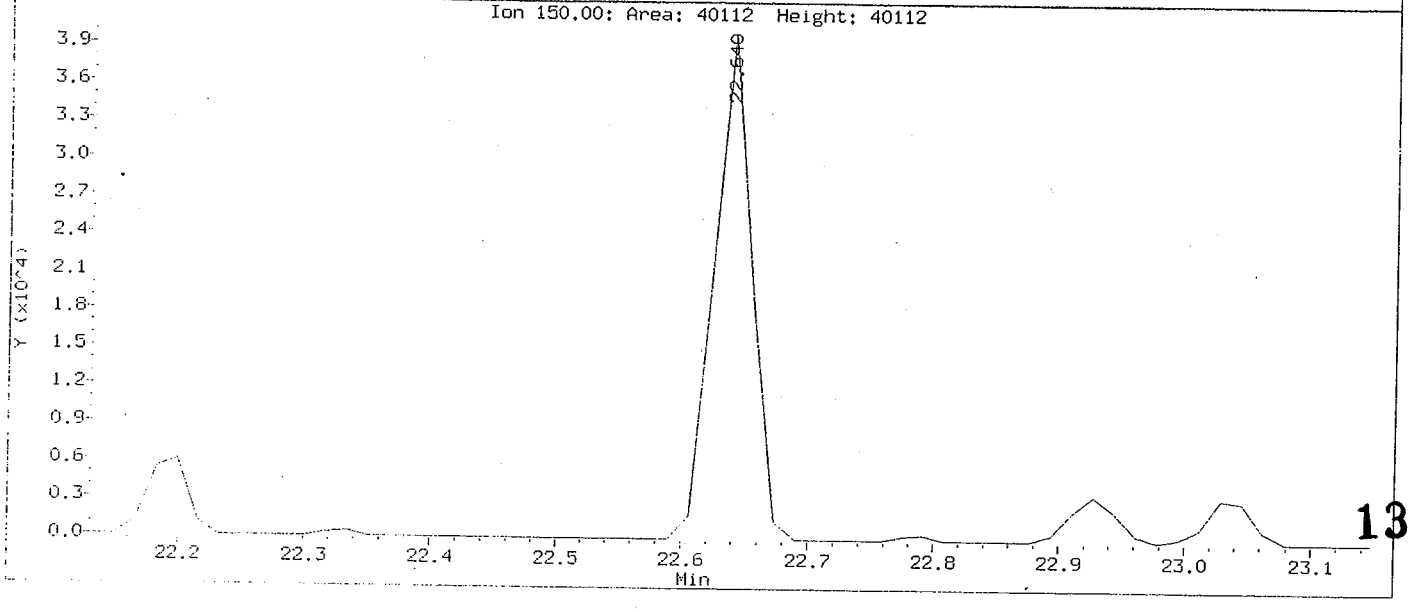
GM
4-29-02

Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Injection Date: 29-APR-2002 13:53
Instrument: 5972hp60.i
Client Sample ID: SSTD050

Compound: bis(2-ethylhexyl)Phthalate
CAS Number: 117-81-7



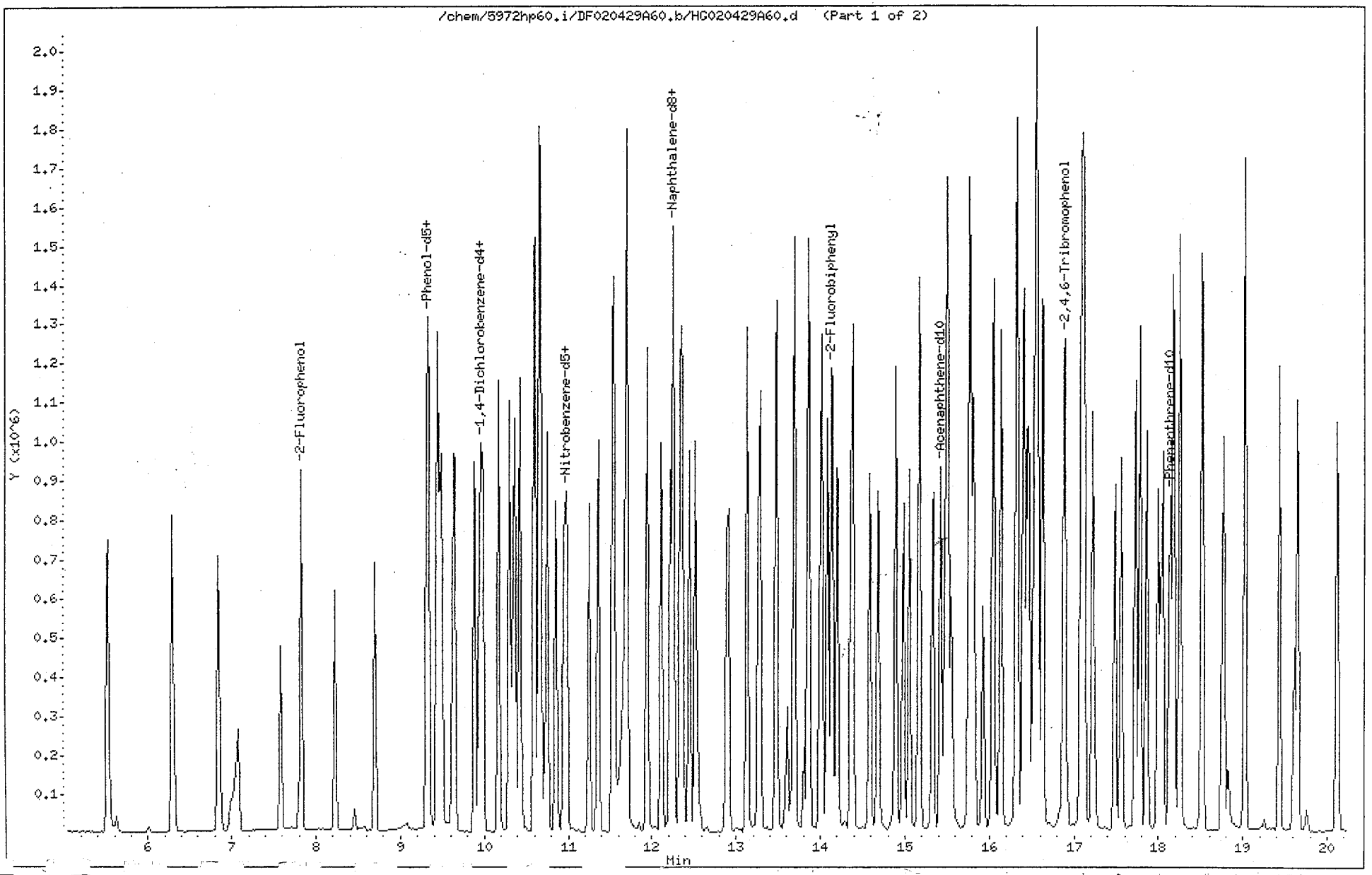




Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Date : 29-APR-2002 09:36
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

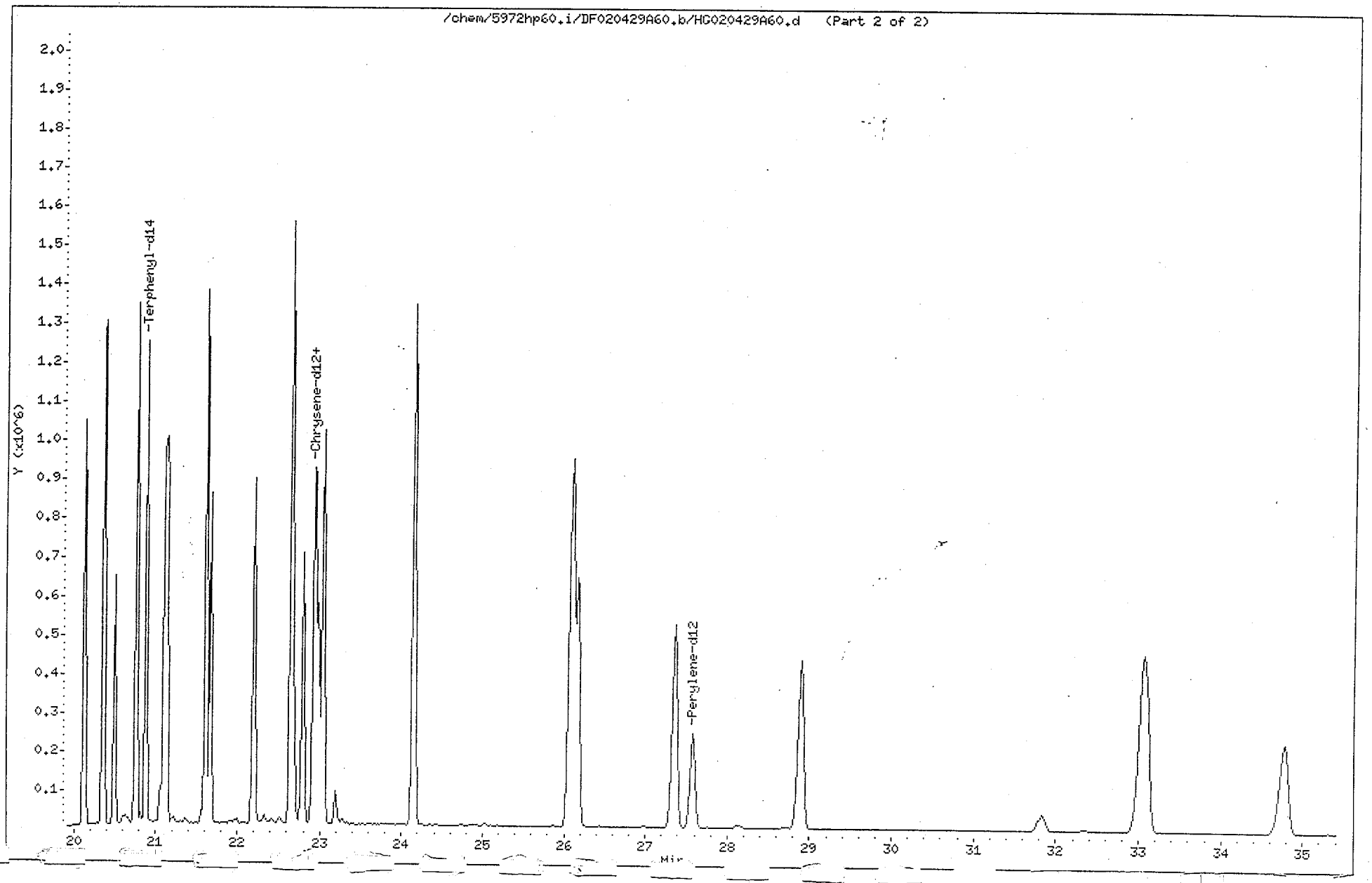
Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Date : 29-APR-2002 09:36
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Report Date: 29-Apr-2030 11:28

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 29-APR-2002 09:36
Operator : 917 Inst ID: 5972hp60.i
Smp Info : SSTD080:917
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020429A60.b/625v4.m
Meth Date : 29-Apr-2030 11:28 mikhael Quant Type: ISTD
Cal Date : 29-APR-2002 09:36 Cal File: HG020429A60.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.947	9.947	(1.000)	187710	40.0000		
* 2 Naphthalene-d8	136	12.214	12.214	(1.000)	743460	40.0000		8349
* 3 Acenaphthene-d10	164	15.428	15.428	(1.000)	427062	40.0000		8550
* 4 Phenanthrene-d10	188	18.135	18.135	(1.000)	606739	40.0000		8830
* 5 Chrysene-d12	240	22.973	22.973	(1.000)	404898	40.0000		8104
* 6 Perylene-d12	264	27.575	27.575	(1.000)	289310	40.0000		7340
$ 7 2-Fluorophenol	112	7.815	7.815	(0.786)	434294	80.0000	80	8504
$ 8 Phenol-d5	99	9.304	9.304	(0.935)	586747	80.0000	80	7678
$ 9 Nitrobenzene-d5	82	10.945	10.945	(0.896)	547131	80.0000	80	8247
$ 10 2-Fluorobiphenyl	172	14.142	14.142	(0.917)	870006	80.0000	80	7179
$ 11 2,4,6-Tribromophenol	330	16.883	16.883	(1.094)	139058	80.0000	80	8964
$ 12 Terphenyl-d14	244	20.876	20.876	(0.909)	657876	80.0000	80	8463
13 N-Nitrosodimethylamine	42	5.514	5.514	(0.554)	255543	80.0000	80	7965
14 Phenol	94	9.338	9.338	(0.939)	666600	80.0000	80	7564

Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Report Date: 29-Apr-2030 11:28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.490	9.490	(0.954)	529720	80.0000	80	7317
16 2-Chlorophenol	128	9.642	9.642	(0.969)	557433	80.0000	80	8165
17 1,3-Dichlorobenzene	146	9.896	9.896	(0.995)	473256	80.0000	80	
18 1,4-Dichlorobenzene	146	9.981	9.981	(1.003)	469700	80.0000	80	
19 1,2-Dichlorobenzene	146	10.302	10.302	(1.036)	475922	80.0000	80	
20 bis(2-Chloroisopropyl)ether	45	10.421	10.421	(1.048)	1104845	80.0000	80	9458
21 N-Nitroso-di-N-propylamine	70	10.674	10.674	(1.073)	259526	80.0000	80	8619
22 Hexachloroethane	117	10.843	10.843	(1.090)	238684	80.0000	80	8638
23 Nitrobenzene	77	10.979	10.979	(0.899)	523694	80.0000	80	8341
24 Isophorone	82	11.368	11.368	(0.931)	973048	80.0000	80	7380
25 2-Nitrophenol	139	11.554	11.554	(0.946)	326780	80.0000	80	8026
26 2,4-Dimethylphenol	107	11.520	11.520	(0.943)	487325	80.0000	80	9218
27 Bis(2-chloroethoxy)methane	93	11.706	11.706	(0.958)	674249	80.0000	80	7675
28 2,4-Dichlorophenol	162	11.943	11.943	(0.978)	446476	80.0000	80	8644
29 1,2,4-Trichlorobenzene	180	12.112	12.112	(0.992)	396201	80.0000	80	7972
30 Naphthalene	128	12.248	12.248	(1.003)	1323905	80.0000	80	
31 Hexachlorobutadiene	225	12.518	12.518	(1.025)	220616	80.0000	80	9317
32 4-Chloro-3-methylphenol	107	13.127	13.127	(1.075)	491580	80.0000	80	8566
33 Hexachlorocyclopentadiene	237	13.872	13.872	(0.899)	227937	80.0000	80	8887
34 2,4,6-Trichlorophenol	196	14.007	14.007	(0.908)	331396	80.0000	80	9134(H)
35 2-Chloronaphthalene	162	14.379	14.379	(0.932)	764935	80.0000	80	
36 Dimethylphthalate	163	14.887	14.887	(0.965)	1012790	80.0000	80	8508
37 2,6-Dinitrotoluene	165	15.056	15.056	(0.976)	271273	80.0000	80	7568
38 Acenaphthylene	152	15.157	15.157	(0.982)	1409752	80.0000	80	8622
39 Acenaphthene	154	15.496	15.496	(1.004)	758906	80.0000	80	8854
40 2,4-Dinitrophenol	184	15.513	15.513	(1.005)	149913	80.0000	80	
41 4-Nitrophenol	109	15.547	15.547	(1.008)	99182	160.000	160	
42 2,4-Dinitrotoluene	165	15.783	15.783	(1.023)	264055	80.0000	80	8851
43 Diethylphthalate	149	16.139	16.139	(1.046)	1077916	80.0000	80	9060
44 4-Chlorophenyl-phenylether	204	16.325	16.325	(1.058)	363235	80.0000	80	8505
45 Fluorene	166	16.409	16.409	(1.064)	901089	80.0000	80	8588
46 4,6-Dinitro-2-methylphenol	198	16.528	16.528	(0.911)	196043	160.000	160	
47 N-Nitrosodiphenylamine	169	16.562	16.562	(0.913)	1034319	80.0000	80	
48 1,2-Diphenylhydrazine	77	16.612	16.612	(1.077)	1361832	80.0000	80	7288
49 4-Bromophenyl-phenylether	248	17.221	17.221	(0.950)	217272	80.0000	80	8902
50 Hexachlorobenzene	284	17.560	17.560	(0.968)	240702	80.0000	80	8759
51 Pentachlorophenol	266	17.864	17.864	(0.985)	204988	160.000	160	9176
52 Phenanthrene	178	18.169	18.169	(1.002)	1212028	80.0000	80	
53 Anthracene	178	18.253	18.253	(1.007)	1222796	80.0000	80	
54 Di-n-butylphthalate	149	19.032	19.032	(1.049)	1859040	80.0000	80	9053
55 Fluoranthene	202	20.368	20.368	(1.123)	1183545	80.0000	80	
56 Benzidine	184	20.503	20.503	(0.892)	441852	160.000	160	9815
57 Pyrene	202	20.757	20.757	(0.904)	1041714	80.0000	80	
58 Butylbenzylphthalate	149	21.603	21.603	(0.940)	756784	80.0000	80	8410
59 bis(2-ethylhexyl)Phthalate	149	22.635	22.635	(0.985)	1030754	80.0000	80	8401(H)
60 3,3'-Dichlorobenzidine	252	22.787	22.787	(0.992)	329478	160.000	160	8899
61 Benzo(a)Anthracene	228	22.940	22.940	(0.999)	923301	80.0000	80	

GM
4-29-02

Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Report Date: 29-Apr-2030 11:28

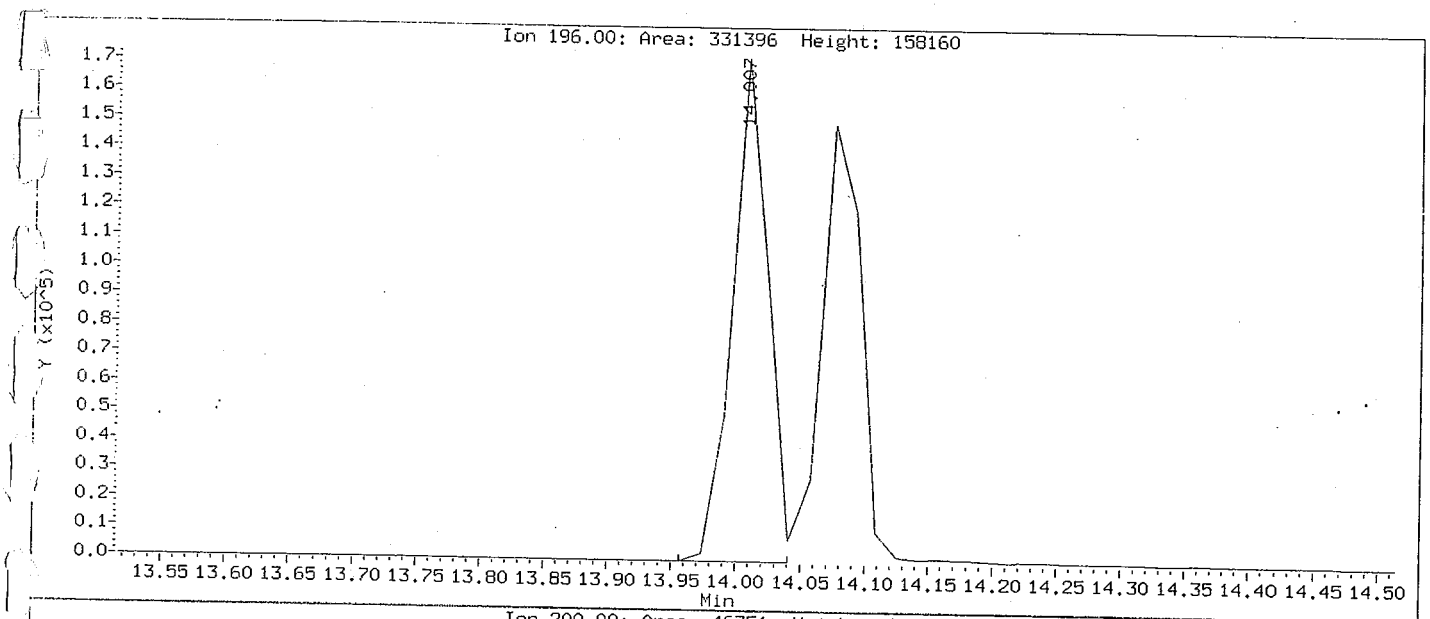
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 Chrysene	228	23.041	23.041	(1.003)	861310	80.0000	80	
63 Di-n-octylphthalate	149	24.141	24.141	(0.875)	1915081	80.0000	80	8517
64 Benzo(b)fluoranthene	252	26.069	26.069	(0.945)	842572	80.0000	80	
65 Benzo(k)fluoranthene	252	26.171	26.171	(0.949)	875548	80.0000	80	
66 Benzo(a)pyrene	252	27.355	27.355	(0.992)	749685	80.0000	80	7821
67 Indeno(1,2,3-c,d)pyrene	276	33.073	33.073	(1.199)	595177	80.0000	80	
68 Dibenzo(a,h)anthracene	278	33.073	33.073	(1.199)	551878	80.0000	80	7587
69 Benzo(g,h,i)perylene	276	34.782	34.782	(1.261)	534600	80.0000	80	7516

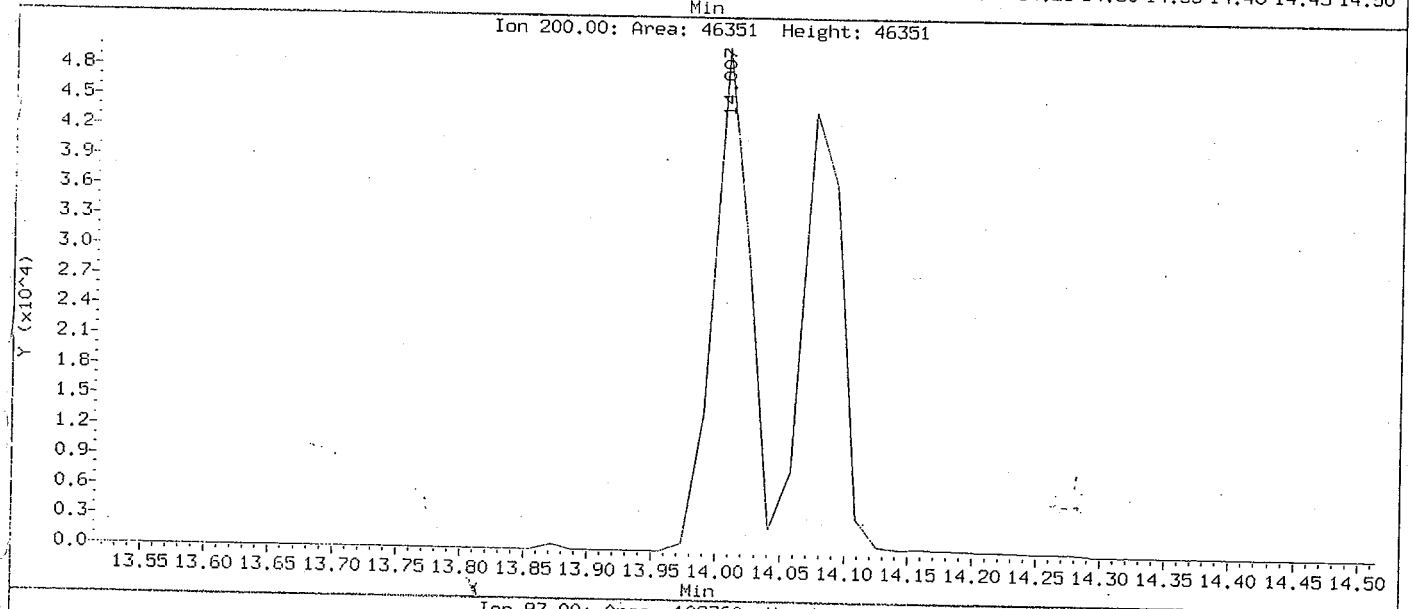
QC Flag Legend

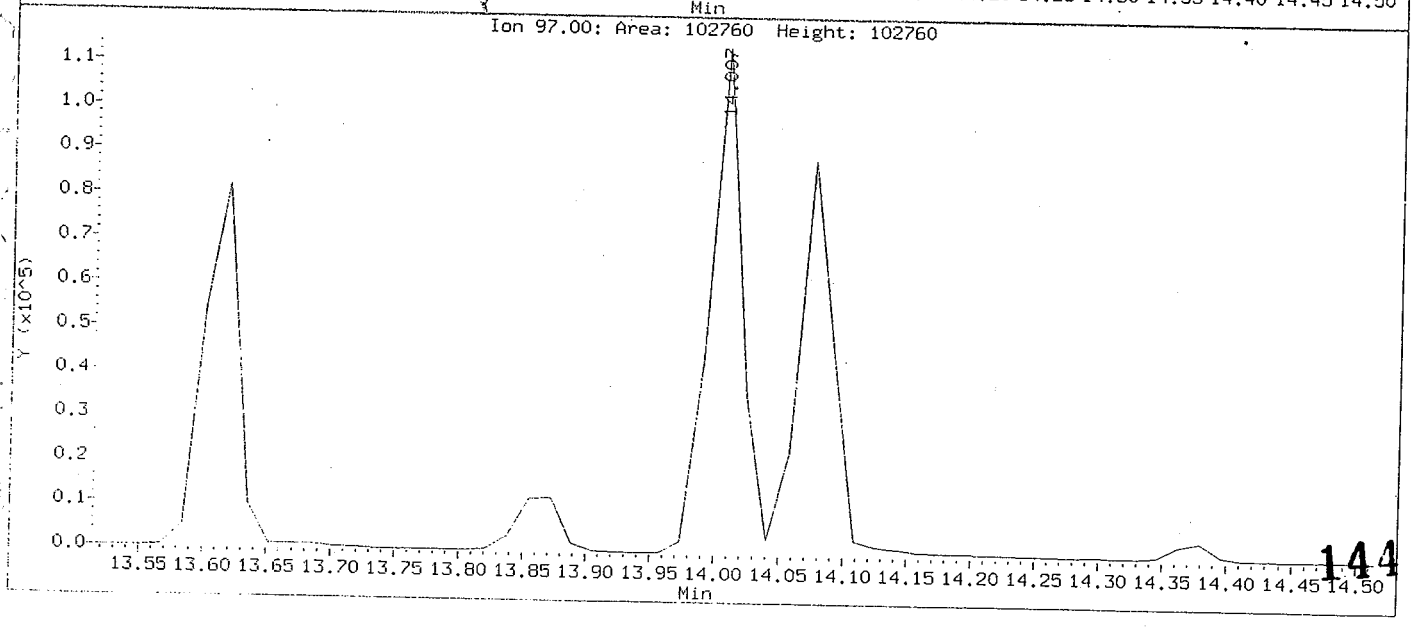
I - Operator selected an alternate compound hit.

Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Injection Date: 29-APR-2002 09:36
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2

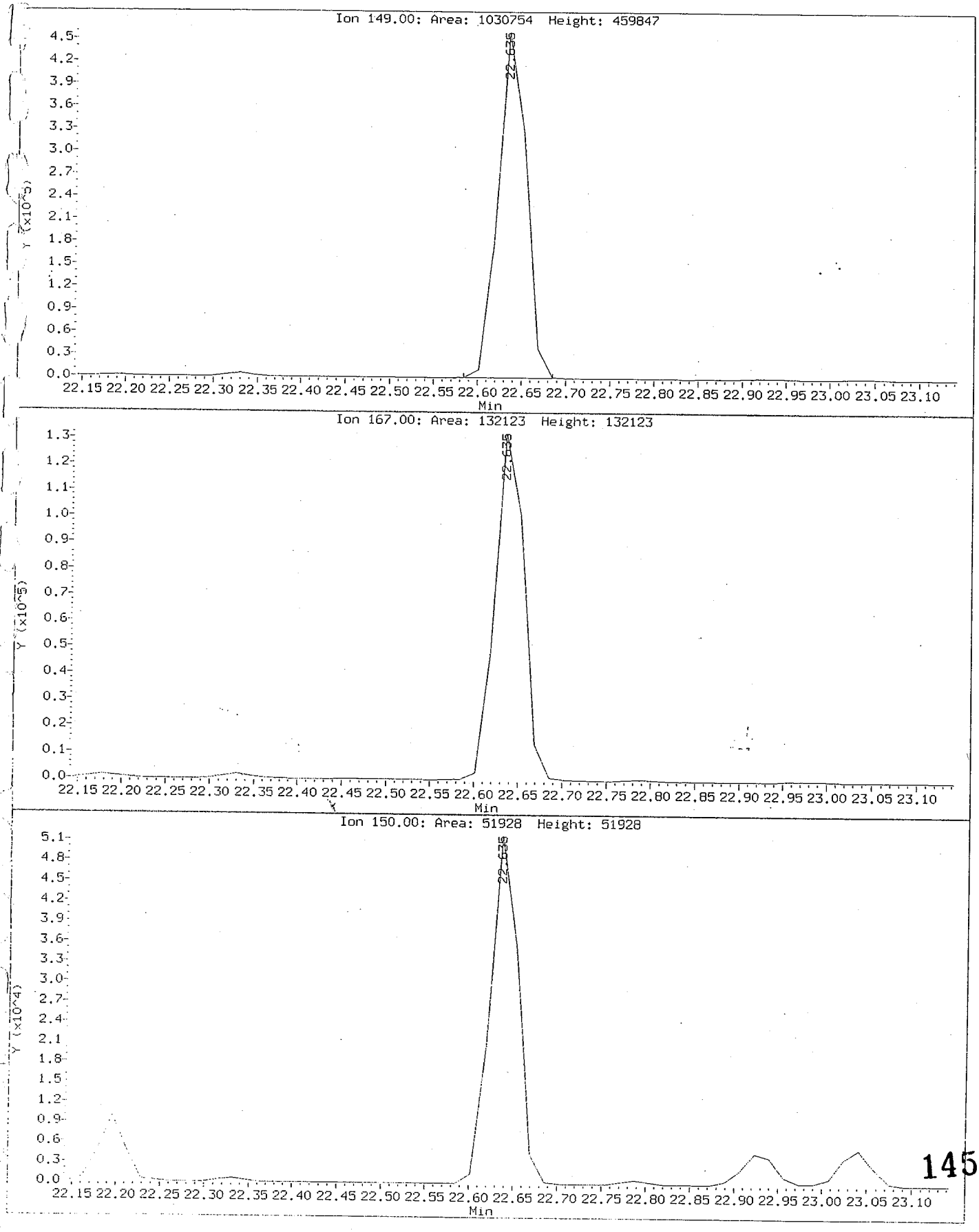






Data File: /chem/5972hp60.i/DF020429A60.b/HG020429A60.d
Injection Date: 29-APR-2002 09:36
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: bis(2-ethylhexyl)Phthalate
CAS Number: 117-81-7



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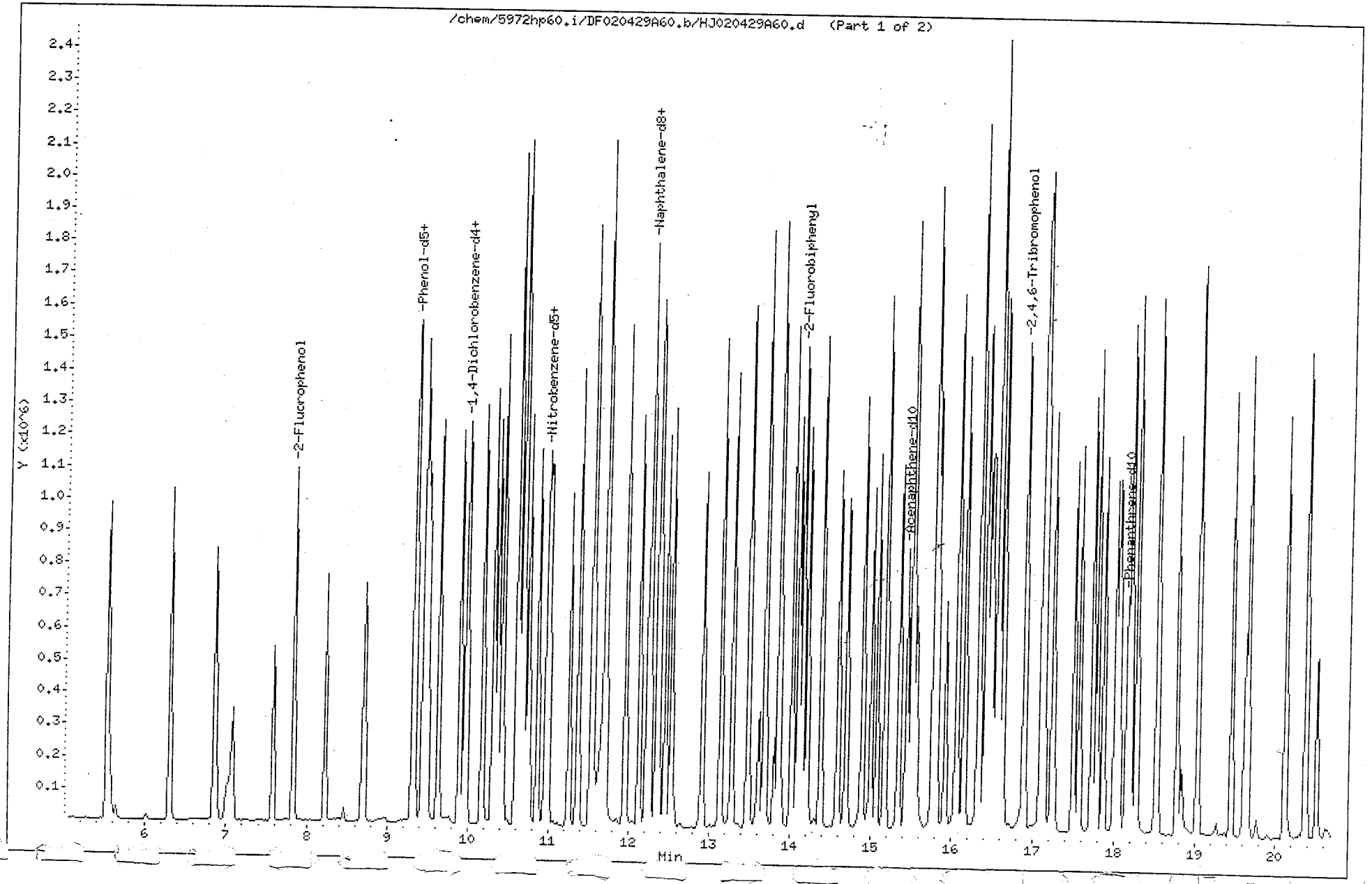
Date : 29-APR-2002 12:16
Client ID: SSTD120
Sample Info: SSTD120:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



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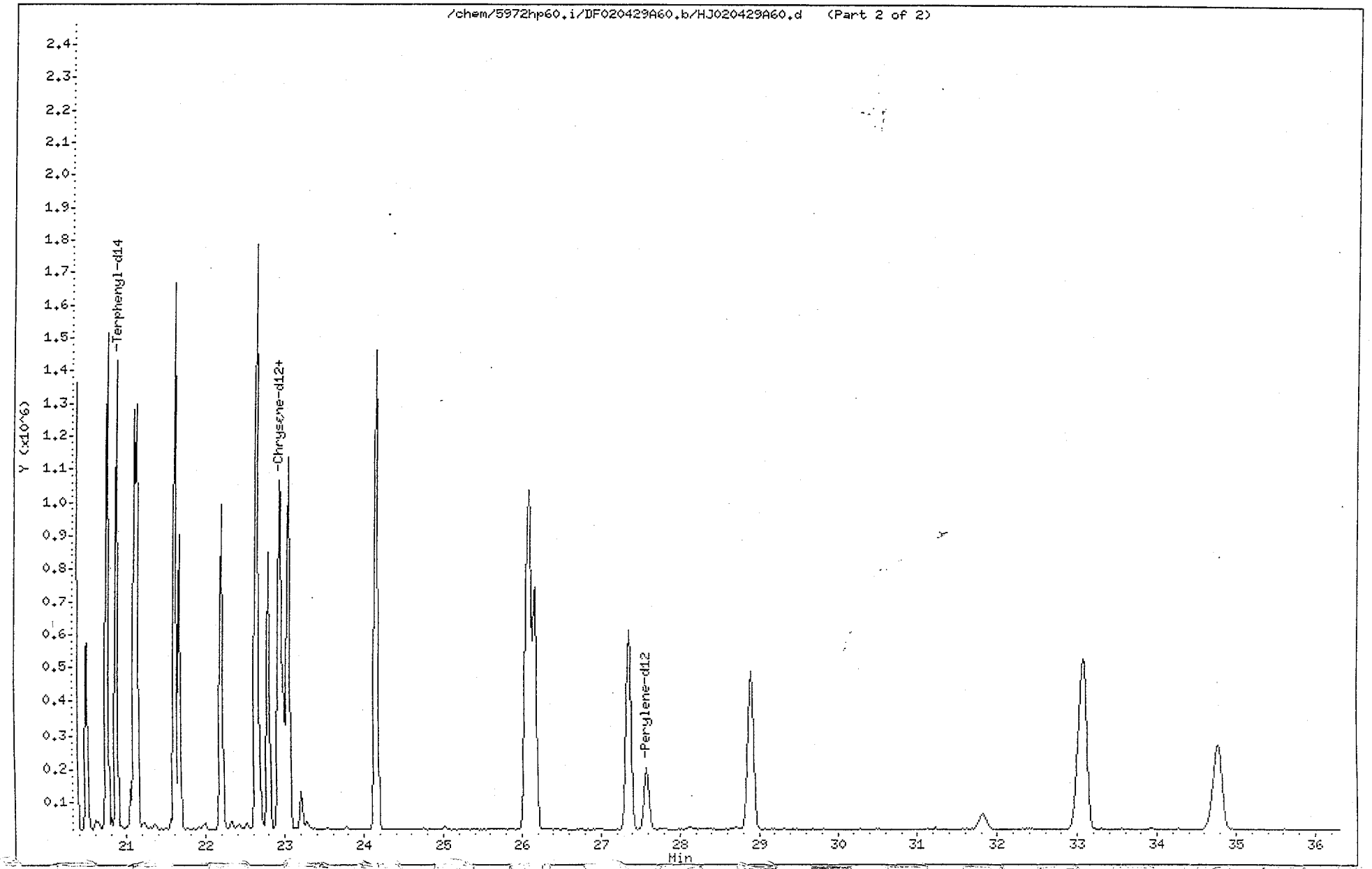
Date : 29-APR-2002 12:16
Client ID: SSTD120
Sample Info: SSTD120:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

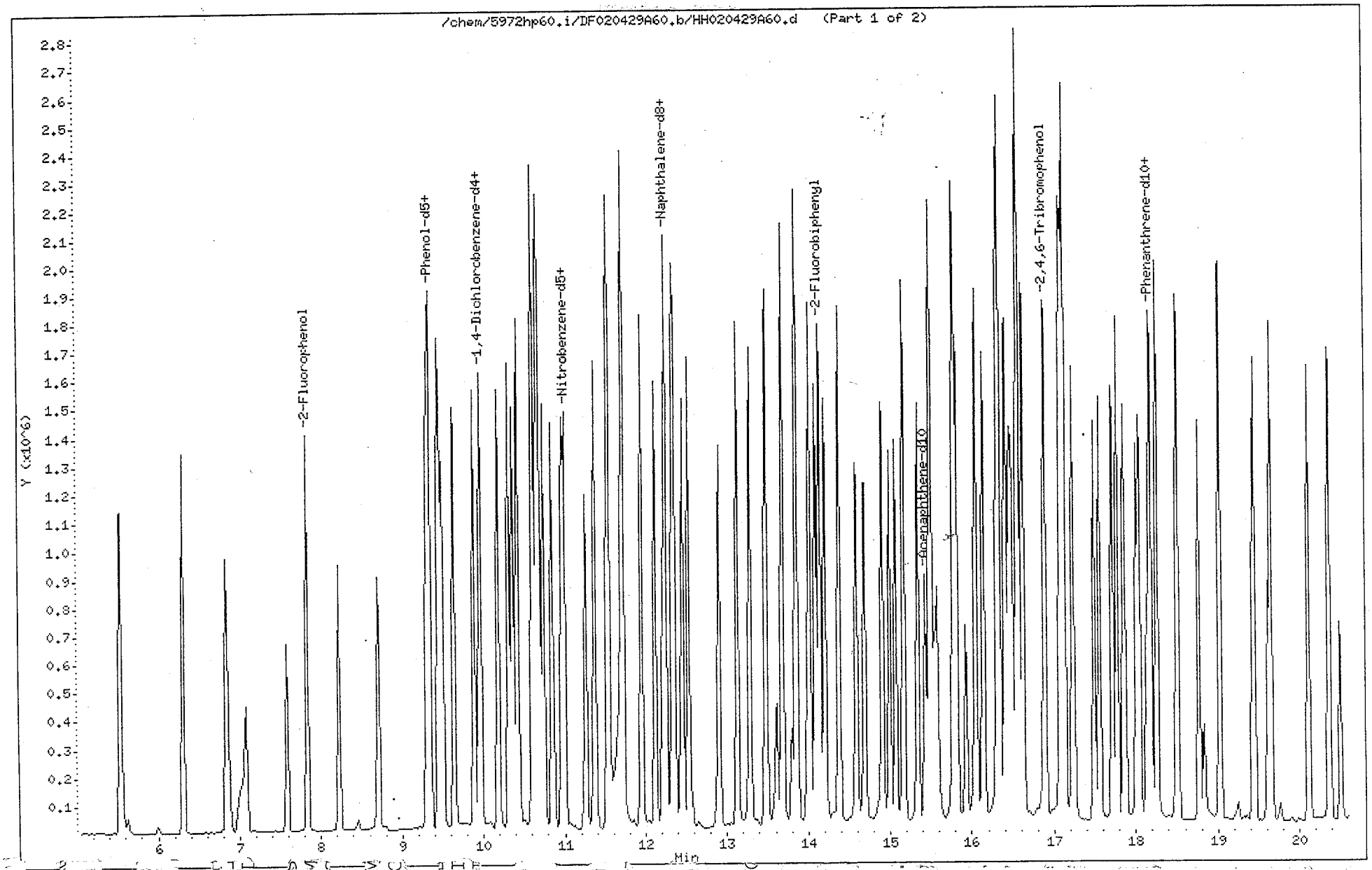
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HH020429A60.d
Date : 29-APR-2002 10:40
Client ID: SSTD160
Sample Info: SSTD160:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HH020429A60.d
Report Date: 29-Apr-2030 11:28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.497	9.497	(0.954)	809493	160.000	150	7399
16 2-Chlorophenol	128	9.649	9.649	(0.969)	824886	160.000	140	8609
17 1,3-Dichlorobenzene	146	9.886	9.886	(0.993)	703431	160.000	140	
18 1,4-Dichlorobenzene	146	9.970	9.970	(1.002)	686518	160.000	140	
19 1,2-Dichlorobenzene	146	10.309	10.309	(1.036)	713945	160.000	140	
20 bis(2-Chloroisopropyl)ether	45	10.427	10.427	(1.048)	1846438	160.000	150	9448
21 N-Nitroso-di-N-propylamine	70	10.698	10.698	(1.075)	397449	160.000	150	8502
22 Hexachloroethane	117	10.850	10.850	(1.090)	391149	160.000	150	8980
23 Nitrobenzene	77	11.002	11.002	(0.900)	870313	160.000	150	8334
24 Isophorone	82	11.375	11.375	(0.931)	1646725	160.000	150	7877
25 2-Nitrophenol	139	11.561	11.561	(0.946)	480437	160.000	140	8616
26 2,4-Dimethylphenol	107	11.527	11.527	(0.943)	735133	160.000	140	8666
27 Bis(2-chloroethoxy)methane	93	11.713	11.713	(0.958)	974250	160.000	140	7673
28 2,4-Dichlorophenol	162	11.950	11.950	(0.978)	716167	160.000	150	9064
29 1,2,4-Trichlorobenzene	180	12.119	12.119	(0.992)	637859	160.000	150	8146
30 Naphthalene	128	12.254	12.254	(1.003)	1937798	160.000	140	
31 Hexachlorobutadiene	225	12.525	12.525	(1.025)	368855	160.000	150	8515
32 4-Chloro-3-methylphenol	107	13.134	13.134	(1.075)	757906	160.000	150	8984
33 Hexachlorocyclopentadiene	237	13.878	13.878	(0.899)	384209	160.000	150	8696
34 2,4,6-Trichlorophenol	196	14.014	14.014	(0.908)	549410	160.000	150	9376
35 2-Chloronaphthalene	162	14.386	14.386	(0.932)	1190086	160.000	150	
36 Dimethylphthalate	163	14.910	14.910	(0.966)	1486993	160.000	140	8066
37 2,6-Dinitrotoluene	165	15.063	15.063	(0.976)	435820	160.000	150	8473
38 Acenaphthylene	152	15.164	15.164	(0.982)	2073445	160.000	140	8658
39 Acenaphthene	154	15.503	15.503	(1.004)	1162303	160.000	150	8805
40 2,4-Dinitrophenol	184	15.520	15.520	(1.005)	261084	160.000	160	
41 4-Nitrophenol	109	15.570	15.570	(1.009)	181047	320.000	320	
42 2,4-Dinitrotoluene	165	15.790	15.790	(1.023)	377058	160.000	140	9064
43 Diethylphthalate	149	16.145	16.145	(1.046)	1602611	160.000	140	9336
44 4-Chlorophenyl-phenylether	204	16.332	16.332	(1.058)	554862	160.000	150	8709
45 Fluorene	166	16.416	16.416	(1.064)	1311290	160.000	140	8813
46 4,6-Dinitro-2-methylphenol	198	16.551	16.551	(0.912)	279546	320.000	290	
47 N-Nitrosodiphenylamine	169	16.568	16.568	(0.913)	1520895	160.000	150	
48 1,2-Diphenylhydrazine	77	16.619	16.619	(1.077)	1903823	160.000	140	7739
49 4-Bromophenyl-phenylether	248	17.228	17.228	(0.950)	351325	160.000	150	9239
50 Hexachlorobenzene	284	17.567	17.567	(0.968)	402329	160.000	160	8509
51 Pentachlorophenol	266	17.871	17.871	(0.985)	341539	320.000	310	9419
52 Phenanthrene	178	18.176	18.176	(1.002)	1704978	160.000	140	
53 Anthracene	178	18.260	18.260	(1.007)	1738202	160.000	140	
54 Di-n-butylphthalate	149	19.038	19.038	(1.049)	2581696	160.000	140	9224
55 Fluoranthene	202	20.375	20.375	(1.123)	1699728	160.000	150	
56 Benzidine	184	20.510	20.510	(0.893)	559283	320.000	280	9625
57 Pyrene	202	20.764	20.764	(0.904)	1570531	160.000	150	
58 Butylbenzylphthalate	149	21.610	21.610	(0.940)	1052740	160.000	150	8706
59 bis(2-ethylhexyl)Phthalate	149	22.642	22.642	(0.985)	1454417	160.000	150	8639
60 3,3'-Dichlorobenzidine	252	22.794	22.794	(0.992)	510776	320.000	310	9025
61 Benzo(a)Anthracene	228	22.946	22.946	(0.999)	1363666	160.000	150	

COMPUCHEM a division of Liberty Analytical Corp DATE 4/29/02 INITIAL TIME OF TUNE 0909 SHIFT/S(A) i (B) FJ (C)

GC/MS SEMIVOLATILE RUN LOG TIME TUNE EXPIRES 2109 LINKER /METHOD ~~Apix~~ / 625

COMPUCHEM .LOGBOOK 4 V(4) 4 (5972hp60)

PREVENTIVE MAINTENANCE Front End / Liner / Septa GM 4/26 Installed clean source FJ 4/26. Installed new RTX-5 30M 0.32mm (-)

	REJECTED	FILE NAME	REQUEUED	DATE	TIME	CLIENT ID#	CASE/SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		DF020429A60	/	4/29/02	0909	DFPP	—	2ul	917	SCD — LCD
2		HG020429A60	/	/ /	0936	SSTD080	—	↓	↓	#52224
3		HH020429A60	/	/ /	1040	SSTD160	—			#52226
4		HI020429A60	/	/ /	1128	SSTD010	—			#52221
5		HJ020429A60	/	/ /	1216	SSTD120	—			#52225
6		HK020429A60	/	/ /	1305	SSTD020	—			#52222
7		HL020429A60	/	/ /	1353	SSTD050	—	↓	↓	#52223
8		WG17039-1A60	/	/ /	1504	SBLFCSA	W1460	1ul	2319	
9		WG17039-2A60	/	/ /	1552	SSALCS	↓	↓	↓	
10		W1460-1A60	/	/ /	1639	MW-2				
11	/	W1460-2A60	SL	/ /	1727	MW-3				
12		W1460-3A60	/	/ /	1814	MW-4				
13		W1460-4A60	/	/ /	1902	DW-1	↓			
14		WG17024-1A60	/	/ /	1950	SBLKRV	QWP87			
15		WG17024-2A60	/	/ ↓ /	2037	SRVLCS	↓	↓	↓	
16				/ /						
17				/ /						
18				/ /						
19				/ /						
20				/ /			FJ 4/29/02			
21				/ /						
22				/ /						
23				/ /						
24				/ /						

	Tune	STANDARDS Analytical	Int. Std.	Column Type
Std. ID #	7055	See Comm 5	800	~~FA~~ RTX.5Ms 0.32 mm
Lot #	52863	↓	52874	

SUPERVISOR APPROVAL [signature]

DATE 4/29/02

The presence of the Chemist's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist together with the chemist's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation. 12/11/01:dce

b. Continuing Calibration Data (Form VII SV)

If more than one instrument is used, forms shall be arranged in order by instrument. If multiple continuing calibrations from the same instrument are used, they shall be in chronological order.

(1) Reconstructed Ion Chromatograms and quantitation reports for all continuing (12-hour) calibrations; Spectra not required

(2) EICPs displaying each manual integration

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date: 05/13/02 Time: 1129

Lab File ID: HG020513A60 Init. Calib. Date(s): 04/29/02 04/29/02

Init. Calib. Times: 0936 1353

GC Column: J&W DB5.625 ID: 0.32 (mm)

COMPOUND	___ RRF OR AMOUNT	RRF80.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
N-Nitrosodimethylamine	0.6930000	0.7536484	0.01	-8.75	20.00	AVRG
Phenol	1.8340000	1.5499283	0.01	15.49	20.00	AVRG
Bis(2-chloroethyl)ether	1.4680000	1.2773884	0.01	12.98	20.00	AVRG
2-Chlorophenol	1.5320000	1.3971863	0.01	8.80	20.00	AVRG
1,3-Dichlorobenzene	1.3200000	1.2512833	0.01	5.20	20.00	AVRG
1,4-Dichlorobenzene	1.3230000	1.2198433	0.01	7.80	20.00	AVRG
1,2-Dichlorobenzene	1.3110000	1.2092086	0.01	7.76	20.00	AVRG
bis(2-Chloroisopropyl)ether	3.1060000	2.6703342	0.01	14.03	20.00	AVRG
N-Nitroso-di-N-propylamine	0.7670000	0.6425138	0.05	16.23	20.00	AVRG
Hexachloroethane	0.6760000	0.6417521	0.01	5.07	20.00	AVRG
Nitrobenzene	0.3730000	0.3577300	0.01	4.09	20.00	AVRG
Isophorone	0.6930000	0.6517372	0.01	5.95	20.00	AVRG
2-Nitrophenol	0.2400000	0.2163784	0.01	9.84	20.00	AVRG
2,4-Dimethylphenol	0.3550000	0.3216849	0.01	9.38	20.00	AVRG
Bis(2-chloroethoxy)methane	0.4930000	0.4513448	0.01	8.45	20.00	AVRG
2,4-Dichlorophenol	0.3220000	0.3009997	0.01	6.52	20.00	AVRG
1,2,4-Trichlorobenzene	0.2850000	0.2787762	0.01	2.18	20.00	AVRG
Naphthalene	0.9630000	0.9194133	0.01	4.53	20.00	AVRG
Hexachlorobutadiene	0.1570000	0.1723003	0.01	-9.74	20.00	AVRG
4-Chloro-3-methylphenol	0.3380000	0.3196573	0.01	5.43	20.00	AVRG
Hexachlorocyclopentadiene	0.2880000	0.3252419	0.05	-12.93	20.00	AVRG
2,4,6-Trichlorophenol	0.4110000	0.4145449	0.01	-0.86	20.00	AVRG
2-Chloronaphthalene	0.9680000	0.9769742	0.01	-0.93	20.00	AVRG
Dimethylphthalate	1.2360000	1.2073080	0.01	2.32	20.00	AVRG
2,6-Dinitrotoluene	0.3170000	0.3126015	0.01	1.39	20.00	AVRG
Acenaphthylene	1.7290000	1.7449906	0.01	-0.92	20.00	AVRG
Acenaphthene	0.9850000	0.9493562	0.01	3.62	20.00	AVRG
2,4-Dinitrophenol	0.1760000	0.1505597	0.05	14.45	20.00	AVRG
4-Nitrophenol	0.1100000	0.1118832	0.05	-1.71	20.00	AVRG
2,4-Dinitrotoluene	0.3400000	0.3292589	0.01	3.16	20.00	AVRG
Diethylphthalate	1.3040000	1.3147918	0.01	-0.83	20.00	AVRG
4-Chlorophenyl-phenylether	0.4620000	0.4817292	0.01	-4.27	20.00	AVRG
Fluorene	1.1140000	1.0828903	0.01	2.79	20.00	AVRG
4,6-Dinitro-2-methylphenol	0.1480000	0.1541738	0.01	-4.17	20.00	AVRG
N-Nitrosodiphenylamine	0.9750000	0.9639540	0.01	1.13	20.00	AVRG
1,2-Diphenylhydrazine	1.6000000	1.7164008	0.01	-7.28	20.00	AVRG
4-Bromophenyl-phenylether	0.1810000	0.1948747	0.01	-7.66	20.00	AVRG
Hexachlorobenzene	0.1980000	0.2218936	0.01	-12.07	20.00	AVRG
Pentachlorophenol	0.1830000	0.1667917	0.05	8.86	20.00	AVRG
Phenanthrene	1.0050000	1.0377902	0.01	-3.26	20.00	AVRG
Anthracene	1.0210000	1.0360649	0.01	-1.48	20.00	AVRG
Di-n-butylphthalate	1.5210000	1.5653500	0.01	-2.92	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date: 05/13/02 Time: 1129

Lab File ID: HG020513A60 Init. Calib. Date(s): 04/29/02 04/29/02

Init. Calib. Times: 0936 1353

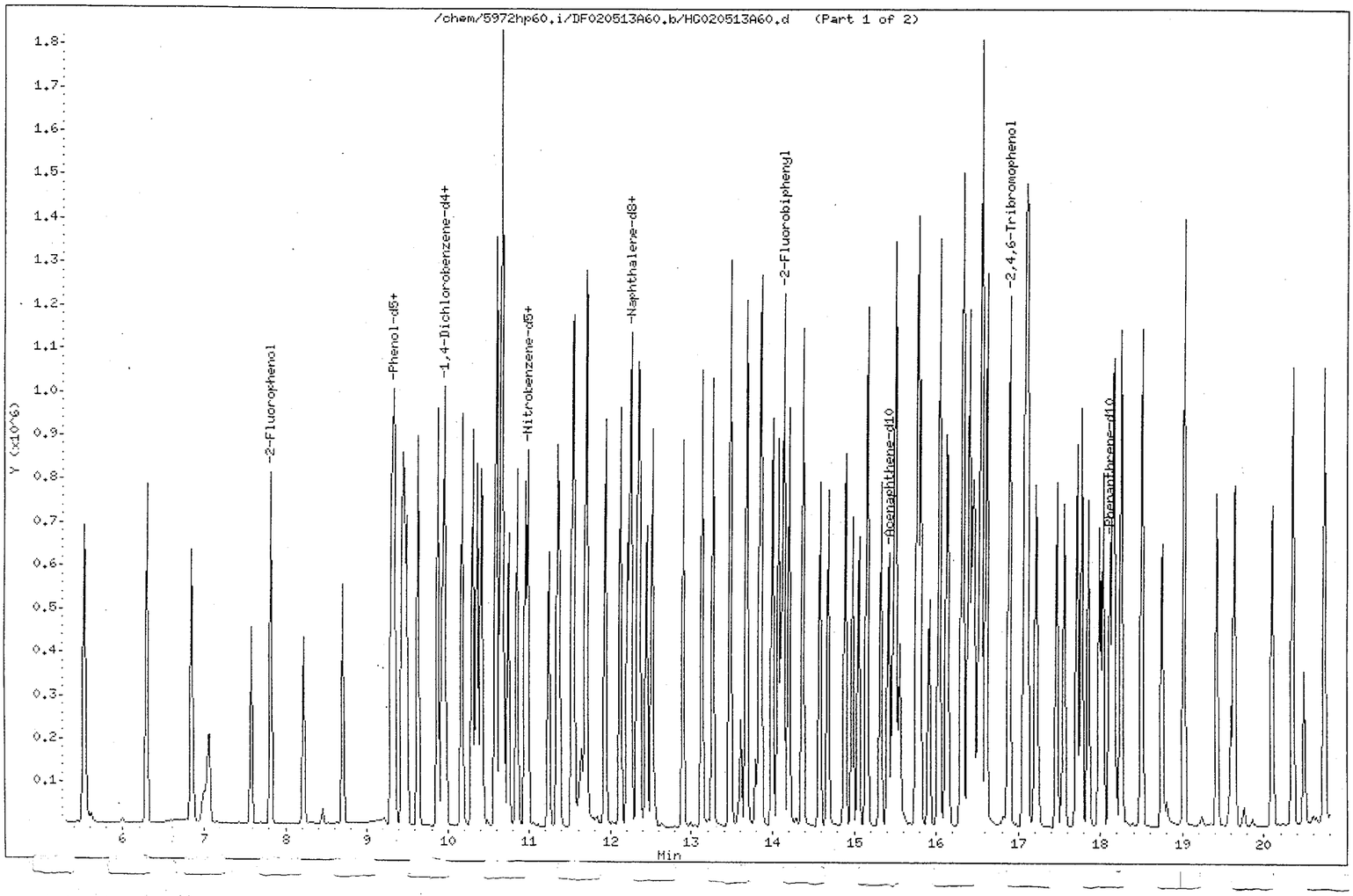
GC Column: J&W DB5.625 ID: 0.32 (mm)

COMPOUND	RRF OR AMOUNT	RRF80.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Fluoranthene	0.9620000	0.9560779	0.01	0.62	20.00	AVRG	
Benzidine	0.2850000	0.2223609	0.01	21.98	20.00	AVRG	<-
Pyrene	1.4240000	1.5284874	0.01	-7.34	20.00	AVRG	
Butylbenzylphthalate	0.9610000	1.0080631	0.01	-4.90	20.00	AVRG	
bis(2-ethylhexyl)Phthalate	1.3180000	1.3696941	0.01	-3.92	20.00	AVRG	
3,3'-Dichlorobenzidine	0.2080000	0.2004959	0.01	3.61	20.00	AVRG	
Benzo(a)Anthracene	1.1770000	1.1868226	0.01	-0.83	20.00	AVRG	
Chrysene	1.0980000	1.1028115	0.01	-0.44	20.00	AVRG	
Di-n-octylphthalate	3.2260000	3.4376281	0.01	-6.56	20.00	AVRG	
Benzo(b)fluoranthene	1.5020000	1.5309848	0.01	-1.93	20.00	AVRG	
Benzo(k)fluoranthene	1.5200000	1.5654880	0.01	-2.99	20.00	AVRG	
Benzo(a)pyrene	1.2920000	1.3077955	0.01	-1.22	20.00	AVRG	
Indeno(1,2,3-c,d)pyrene	0.9860000	1.0115305	0.01	-2.59	20.00	AVRG	
Dibenzo(a,h)anthracene	0.9090000	0.9044832	0.01	0.50	20.00	AVRG	
Benzo(g,h,i)perylene	0.8930000	0.9413697	0.01	-5.42	20.00	AVRG	
2-Fluorophenol	1.1740000	1.1771509	0.01	-0.27	20.00	AVRG	
Phenol-d5	1.6150000	1.3667544	0.01	15.37	20.00	AVRG	
Nitrobenzene-d5	0.3840000	0.3795924	0.01	1.15	20.00	AVRG	
2-Fluorobiphenyl	1.1020000	1.1055622	0.01	-0.32	20.00	AVRG	
2,4,6-Tribromophenol	0.1620000	0.1882202	0.01	-16.18	20.00	AVRG	
Terphenyl-d14	0.8630000	0.9710755	0.01	-12.52	20.00	AVRG	

Data File: /chem/5972hp60.i/DF020513A60.b/HC020513A60.d
Date : 13-MAY-2002 11:29
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

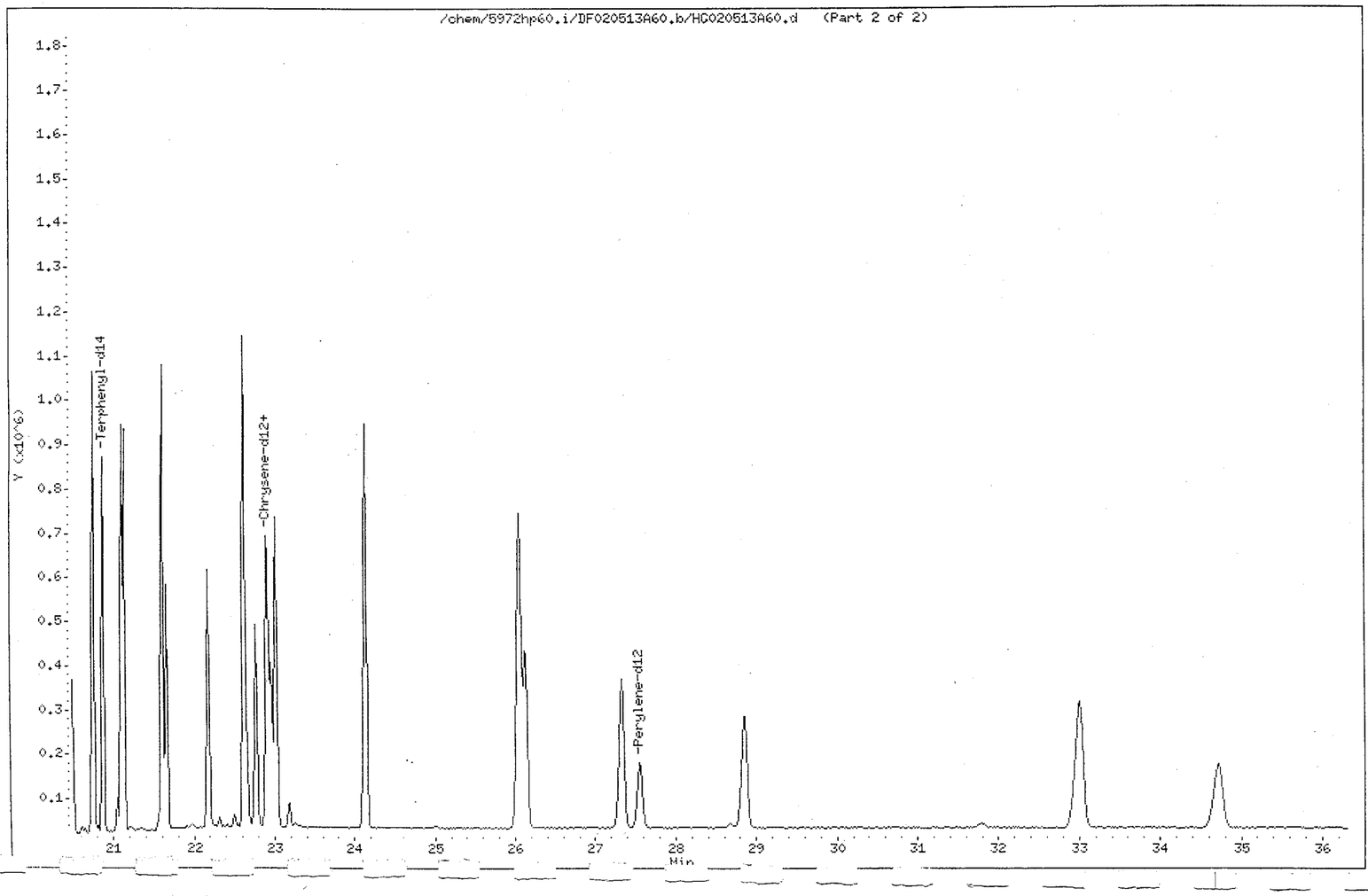
Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020513A60.b/HC020513A60.d
Date : 13-MAY-2002 11:29
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Report Date: 14-May-2030 09:57

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 13-MAY-2002 11:29
Operator : 917 Inst ID: 5972hp60.i
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020513A60.b/625v4.m
Meth Date : 14-May-2030 09:06 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.929	9.929	(1.000)	156234	40.0000		
* 2 Naphthalene-d8	136	12.196	12.196	(1.000)	581479	40.0000		8471
* 3 Acenaphthene-d10	164	15.427	15.427	(1.000)	316406	40.0000		8396
* 4 Phenanthrene-d10	188	18.117	18.117	(1.000)	449204	40.0000		8871
* 5 Chrysene-d12	240	22.956	22.956	(1.000)	260817	40.0000		8182
* 6 Perylene-d12	264	27.541	27.541	(1.000)	181476	40.0000		7434
$ 7 2-Fluorophenol	112	7.814	7.814	(0.787)	367822	80.0000	80.2	8654
$ 8 Phenol-d5	99	9.303	9.303	(0.937)	427067	80.0000	67.7	7659
$ 9 Nitrobenzene-d5	82	10.944	10.944	(0.897)	441450	80.0000	79.0	8332
$ 10 2-Fluorobiphenyl	172	14.125	14.125	(0.916)	699613	80.0000	80.2	7337
$ 11 2,4,6-Tribromophenol	330	16.882	16.882	(1.094)	119108	80.0000	93.2	0(M)
$ 12 Terphenyl-d14	244	20.858	20.858	(0.909)	506546	80.0000	90.0	8583
13 N-Nitrosodimethylamine	42	5.514	5.514	(0.555)	235491	80.0000	87.0	8088
14 Phenol	94	9.337	9.337	(0.940)	484303	80.0000	67.6	7861

Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Report Date: 14-May-2030 09:57

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.489	9.489	(0.956)	399143	80.0000	69.6	7389
16 2-Chlorophenol	128	9.625	9.625	(0.969)	436576	80.0000	72.9	8849
17 1,3-Dichlorobenzene	146	9.878	9.878	(0.995)	390986	80.0000	75.8	
18 1,4-Dichlorobenzene	146	9.963	9.963	(1.003)	381162	80.0000	73.8	
19 1,2-Dichlorobenzene	146	10.301	10.301	(1.037)	377839	80.0000	73.8	
20 bis(2-Chloroisopropyl)ether	45	10.403	10.403	(1.048)	834394	80.0000	68.8	9502
21 N-Nitroso-di-N-propylamine	70	10.657	10.657	(1.073)	200765	80.0000	67.0	8727
22 Hexachloroethane	117	10.843	10.843	(1.092)	200527	80.0000	76.0	8715
23 Nitrobenzene	77	10.978	10.978	(0.900)	416025	80.0000	76.7	8500
24 Isophorone	82	11.350	11.350	(0.931)	757943	80.0000	75.2	7785
25 2-Nitrophenol	139	11.536	11.536	(0.946)	251639	80.0000	72.2	8343
26 2,4-Dimethylphenol	107	11.519	11.519	(0.944)	374106	80.0000	72.5	9486
27 Bis(2-chloroethoxy)methane	93	11.706	11.706	(0.960)	524895	80.0000	73.2	7560
28 2,4-Dichlorophenol	162	11.942	11.942	(0.979)	350050	80.0000	74.6	8451(H)
29 1,2,4-Trichlorobenzene	180	12.112	12.112	(0.993)	324205	80.0000	78.2	7615
30 Naphthalene	128	12.247	12.247	(1.004)	1069239	80.0000	76.4	
31 Hexachlorobutadiene	225	12.518	12.518	(1.026)	200378	80.0000	87.8	8366
32 4-Chloro-3-methylphenol	107	13.127	13.127	(1.076)	371748	80.0000	75.5	8632
33 Hexachlorocyclopentadiene	237	13.854	13.854	(0.898)	205817	80.0000	90.2	9407
34 2,4,6-Trichlorophenol	196	14.006	14.006	(0.908)	262329	80.0000	80.7	8657(H)
35 2-Chloronaphthalene	162	14.362	14.362	(0.931)	618241	80.0000	80.8	
36 Dimethylphthalate	163	14.886	14.886	(0.965)	763999	80.0000	78.1	8155
37 2,6-Dinitrotoluene	165	15.055	15.055	(0.976)	197818	80.0000	79.0	7520
38 Acenaphthylene	152	15.157	15.157	(0.982)	1104251	80.0000	80.7	8483
39 Acenaphthene	154	15.478	15.478	(1.003)	600764	80.0000	77.1	8809
40 2,4-Dinitrophenol	184	15.495	15.495	(1.004)	95276	80.0000	68.6	
41 4-Nitrophenol	109	15.546	15.546	(1.008)	70801	80.0000	81.1	
42 2,4-Dinitrotoluene	165	15.766	15.766	(1.022)	208359	80.0000	77.5	9230
43 Diethylphthalate	149	16.121	16.121	(1.045)	832016	80.0000	80.7	9224
44 4-Chlorophenyl-phenylether	204	16.324	16.324	(1.058)	304844	80.0000	83.4	8544
45 Fluorene	166	16.392	16.392	(1.062)	685266	80.0000	77.8	8490
46 4,6-Dinitro-2-methylphenol	198	16.510	16.510	(0.911)	138511	80.0000	83.3	
47 N-Nitrosodiphenylamine	169	16.544	16.544	(0.913)	866024	80.0000	79.1	
48 1,2-Diphenylhydrazine	77	16.612	16.612	(1.077)	1086159	80.0000	85.8	7268
49 4-Bromophenyl-phenylether	248	17.221	17.221	(0.950)	175077	80.0000	86.2	9061
50 Hexachlorobenzene	284	17.542	17.542	(0.968)	199351	80.0000	89.6	8905
51 Pentachlorophenol	266	17.847	17.847	(0.985)	149847	80.0000	73.0	9034
52 Phenanthrene	178	18.168	18.168	(1.003)	932359	80.0000	82.6	
53 Anthracene	178	18.236	18.236	(1.007)	930809	80.0000	81.2	
54 Di-n-butylphthalate	149	19.014	19.014	(1.049)	1406323	80.0000	82.3	9240
55 Fluoranthene	202	20.351	20.351	(1.123)	858948	80.0000	79.5	
56 Benzidine	184	20.486	20.486	(0.892)	231982	160.000	125	9669
57 Pyrene	202	20.740	20.740	(0.903)	797311	80.0000	85.8	
58 Butylbenzylphthalate	149	21.602	21.602	(0.941)	525840	80.0000	83.9	8296
59 bis(2-ethylhexyl)Phthalate	149	22.617	22.617	(0.985)	714479	80.0000	83.1	8585(H)
60 3,3'-Dichlorobenzidine	252	22.770	22.770	(0.992)	209171	160.000	154	8884
61 Benzo(a)Anthracene	228	22.905	22.905	(0.998)	619087	80.0000	80.7	

ms/14/2

Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Report Date: 14-May-2030 09:57

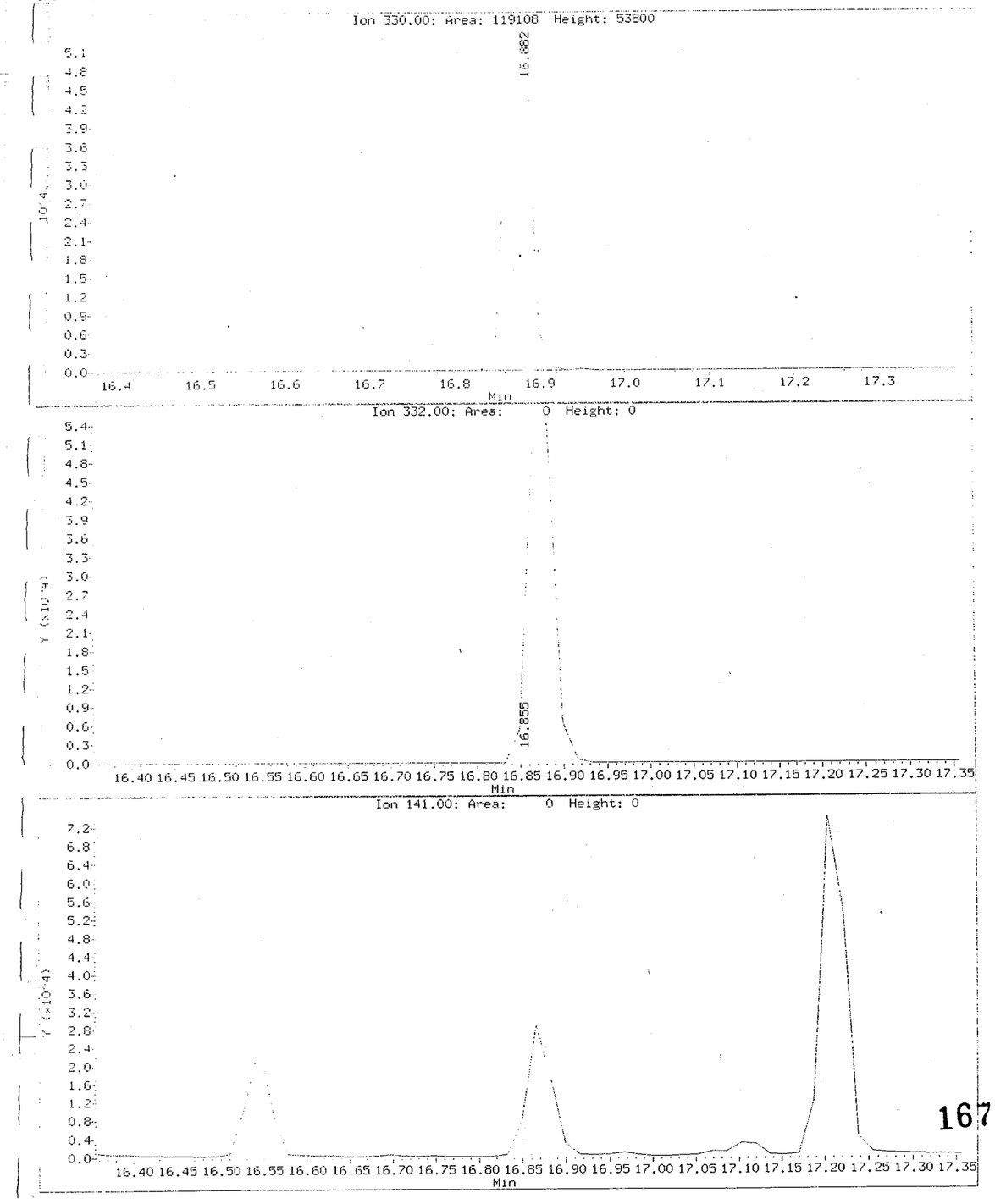
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 Chrysene	228	23.023	23.023	(1.003)	575264	80.0000	80.3	
63 Di-n-octylphthalate	149	24.123	24.123	(0.876)	1247694	80.0000	85.2	8635
64 Benzo(b)fluoranthene	252	26.052	26.052	(0.946)	555674	80.0000	81.5	
65 Benzo(k)fluoranthene	252	26.136	26.136	(0.949)	568197	80.0000	82.4	
66 Benzo(a)pyrene	252	27.321	27.321	(0.992)	474667	80.0000	80.9	7871
67 Indeno(1,2,3-c,d)pyrene	276	33.005	33.005	(1.198)	367137	80.0000	82.1	
68 Dibenzo(a,h)anthracene	278	33.005	33.005	(1.198)	328284	80.0000	79.6	7491
69 Benzo(g,h,i)perylene	276	34.714	34.714	(1.260)	341672	80.0000	84.3	7567

QC Flag Legend

- Compound response manually integrated.
- Operator selected an alternate compound hit.

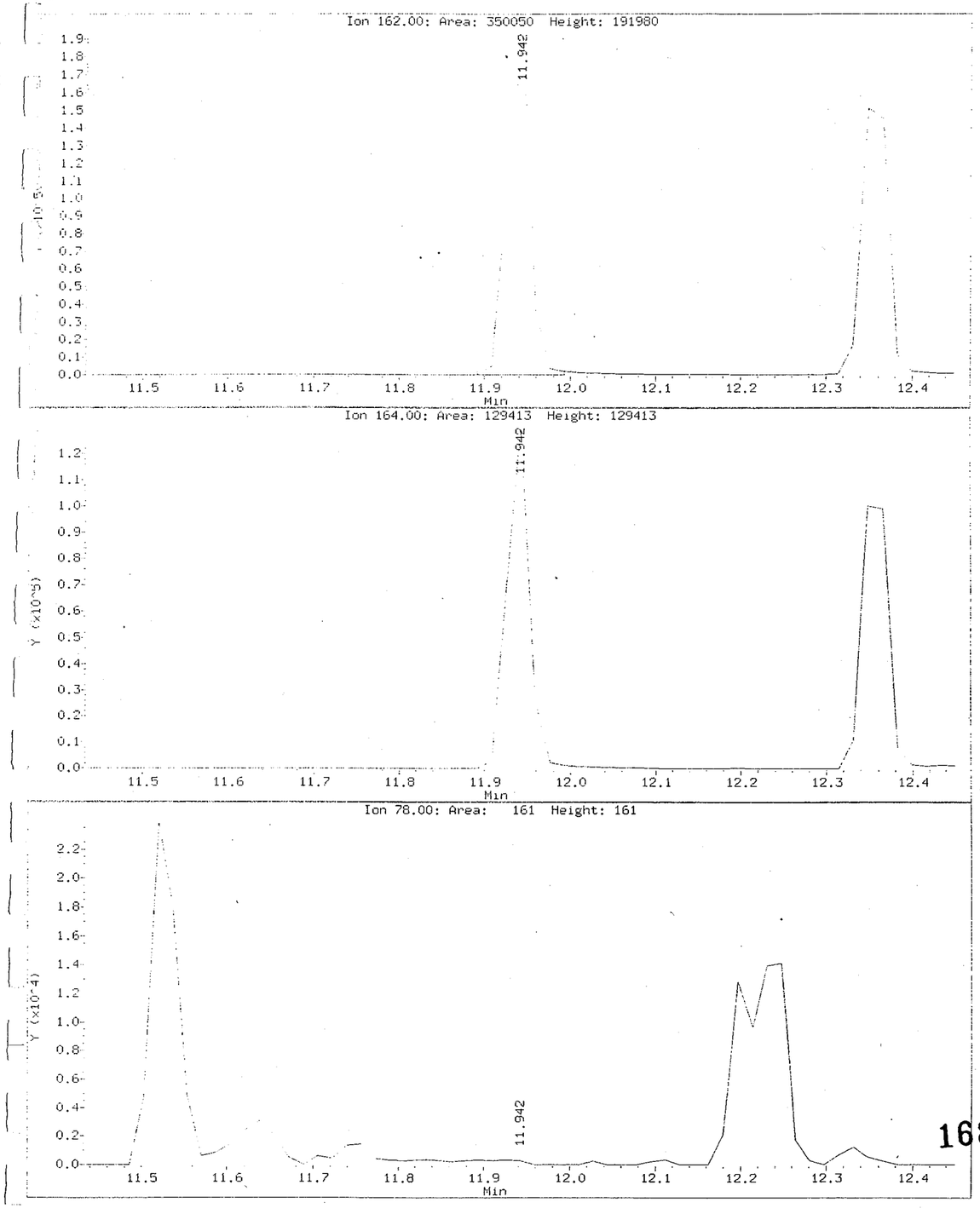
Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Injection Date: 13-MAY-2002 11:29
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2,4,6-Tribromophenol
CAS Number: 118-79-6



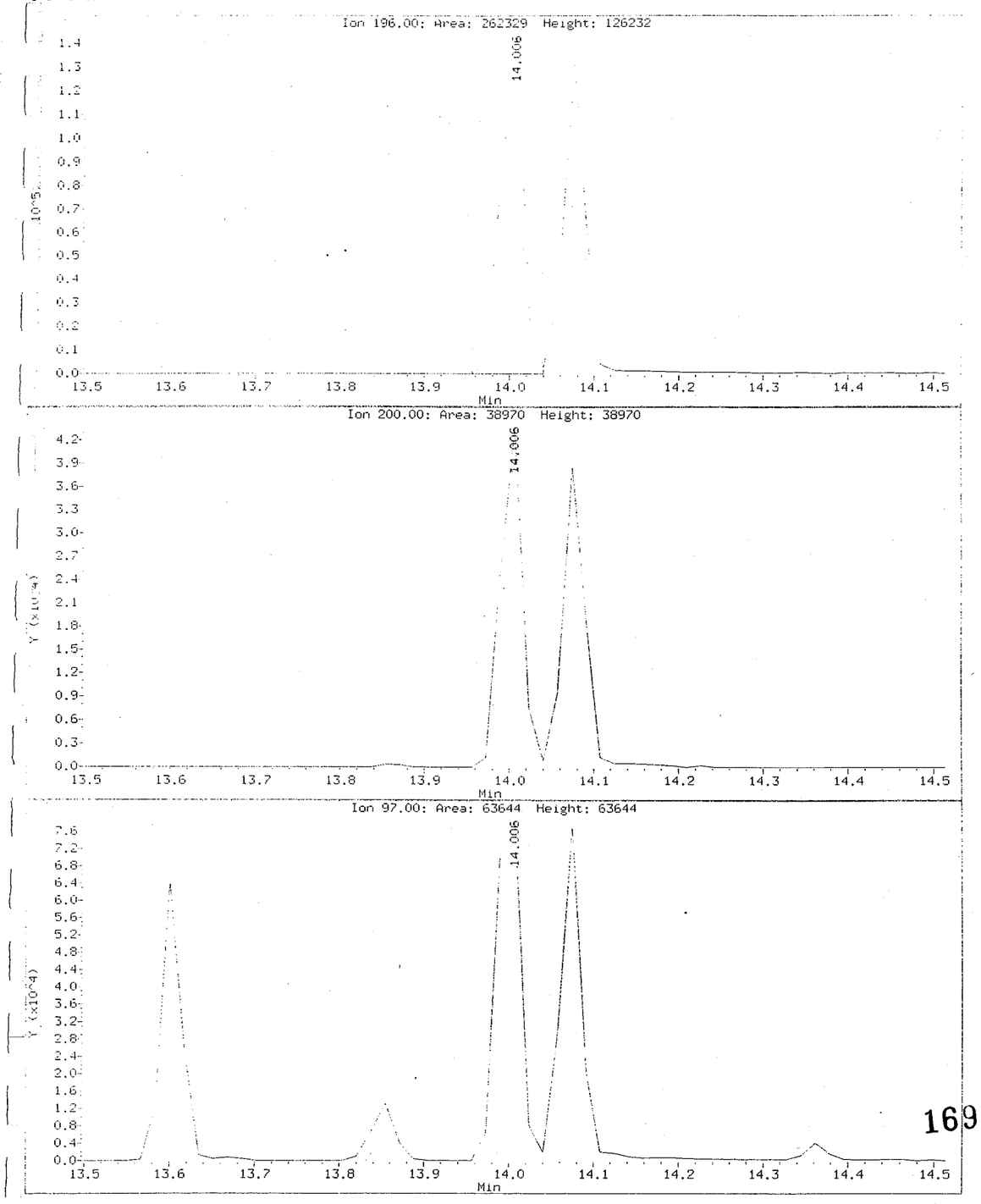
Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Injection Date: 13-MAY-2002 11:29
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2.4-Dichlorophenol
CAS Number: 120-83-2



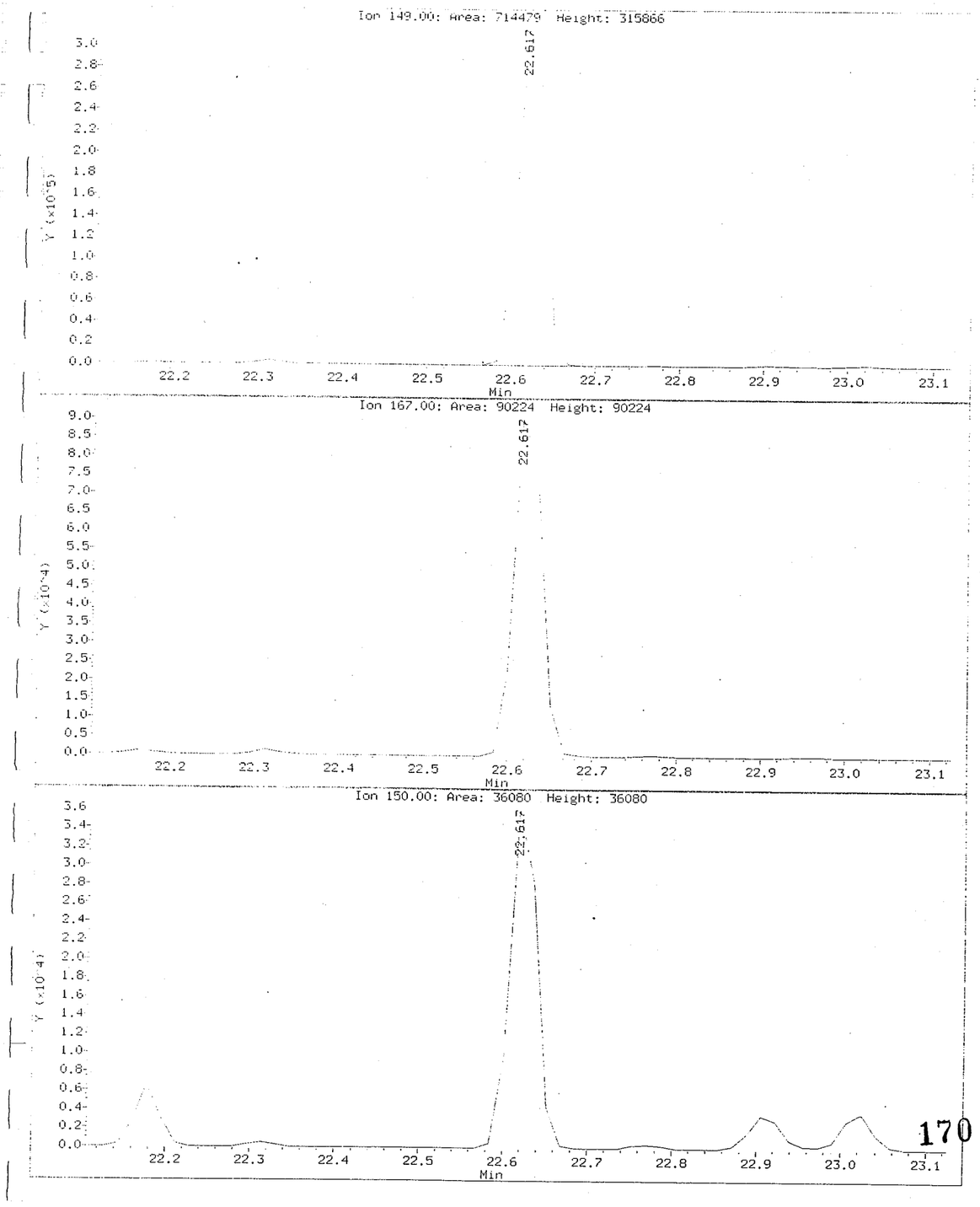
Data File: /chem/5972hp60.i/DF020513A60.b/HG020513A60.d
Injection Date: 13-MAY-2002 11:29
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2



Data File: /chem/5972hp60.i/DF020513A60.b/HS020513A60.d
Injection Date: 13-MAY-2002 11:29
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: bis(2-ethylhexyl)Phthalate
CAS Number: 117-81-7



COMPUCHEM a division of Liberty Analytical Corp DATE 5/13/02 INITIAL TIME OF TUNE 1064 SHIFT/S(A) ✓ (B) ____ (C) ____

GC/MS SEMIVOLATILE RUN LOG TIME TUNE EXPIRES 2264 LINKER /METHOD 625

COMPUCHEM .LOGBOOK 4 V(4) 4 (5972hp60)

PREVENTIVE MAINTENANCE none

171 510

	REJECTED	FILE NAME	REPORTED	DATE	TIME	CLIENT ID#	CASE/SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		DF020513A60	/	5/13/02	1044	DFTPP	—	2 ul	917	SCD=ICD
2		HG020513A60	/	/ /	1129	SSTD080		↓		
3		WG17383-1A60	/	/ /	1233	SBLKVV	Q2552	1 ul		
4		WG17383-2A60	SF	/ /	1320	SVYLCS				
5		Q2552-8RA60	/	/ /	1407	MW-8	↓		↓	
6		WG17399-1A60	/	/ /	1906	SBLKWG	VARIous		2319	
7	/	WG17399-2A60	SF	/ /	1954	SWGLCS	↓			
8		Q2559-2A60	/	/ /	2043	W-2	Q2559			
9		WG17399-3A60	/	/ /	2130	↓ MS				
10		WG17399-4A60	/	/ ↓ /	2218	↓ MSD	↓	↓	↓	
11	-			/ /						
12				/ /						
13				/ /						
14				/ /						
15				/ /						
16				/ /						
17				/ /			FW 5/13/02			
18				/ /						
19				/ /						
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						

	Tune	STANDARDS Analytical	Int. Std.	Column Type
Std. ID #	7055	625	800	J&W DB5-625 0.32 mm
Lot #	52863	52224	52874	

SUPERVISOR APPROVAL [signature]

DATE 5/13/02

The presence of the Chemist's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP I occurred. Any SOP deviations require documentation by the responsible chemist together with the chemist's initials and the initials of lab supervisor and a QA department representative, signifying approval of the deviation. 12/11/01 dc

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date: 05/14/02 Time: 0921

Lab File ID: HG020514A60 Init. Calib. Date(s): 04/29/02 04/29/02

Init. Calib. Times: 0936 1353

GC Column: J&W DB5.625 ID: 0.32 (mm)

COMPOUND	___ RRF OR AMOUNT	RRF80.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
N-Nitrosodimethylamine	0.6930000	0.8149268	0.01	-17.59	20.00	AVRG
Phenol	1.8340000	1.6054835	0.01	12.46	20.00	AVRG
Bis(2-chloroethyl)ether	1.4680000	1.2994812	0.01	11.48	20.00	AVRG
2-Chlorophenol	1.5320000	1.4156394	0.01	7.60	20.00	AVRG
1,3-Dichlorobenzene	1.3200000	1.2519188	0.01	5.16	20.00	AVRG
1,4-Dichlorobenzene	1.3230000	1.2332528	0.01	6.78	20.00	AVRG
1,2-Dichlorobenzene	1.3110000	1.2079196	0.01	7.86	20.00	AVRG
bis(2-Chloroisopropyl)ether	3.1060000	2.6517220	0.01	14.62	20.00	AVRG
N-Nitroso-di-N-propylamine	0.7670000	0.6821123	0.05	11.07	20.00	AVRG
Hexachloroethane	0.6760000	0.6542147	0.01	3.22	20.00	AVRG
Nitrobenzene	0.3730000	0.3736466	0.01	-0.17	20.00	AVRG
Isophorone	0.6930000	0.6859801	0.01	1.01	20.00	AVRG
2-Nitrophenol	0.2400000	0.2213183	0.01	7.78	20.00	AVRG
2,4-Dimethylphenol	0.3550000	0.3353129	0.01	5.54	20.00	AVRG
Bis(2-chloroethoxy)methane	0.4930000	0.4770351	0.01	3.24	20.00	AVRG
2,4-Dichlorophenol	0.3220000	0.3216498	0.01	0.11	20.00	AVRG
1,2,4-Trichlorobenzene	0.2850000	0.2842697	0.01	0.26	20.00	AVRG
Naphthalene	0.9630000	0.9043583	0.01	6.09	20.00	AVRG
Hexachlorobutadiene	0.1570000	0.1776981	0.01	-13.18	20.00	AVRG
4-Chloro-3-methylphenol	0.3380000	0.3485030	0.01	-3.11	20.00	AVRG
Hexachlorocyclopentadiene	0.2880000	0.2583103	0.05	10.31	20.00	AVRG
2,4,6-Trichlorophenol	0.4110000	0.3634760	0.01	11.56	20.00	AVRG
2-Chloronaphthalene	0.9680000	0.8045399	0.01	16.89	20.00	AVRG
Dimethylphthalate	1.2360000	1.0548336	0.01	14.66	20.00	AVRG
2,6-Dinitrotoluene	0.3170000	0.2754603	0.01	13.10	20.00	AVRG
Acenaphthylene	1.7290000	1.4413433	0.01	16.64	20.00	AVRG
Acenaphthene	0.9850000	0.8377263	0.01	14.95	20.00	AVRG
2,4-Dinitrophenol	0.1760000	0.1631648	0.05	7.29	20.00	AVRG
4-Nitrophenol	0.1100000	0.1204700	0.05	-9.52	20.00	AVRG
2,4-Dinitrotoluene	0.3400000	0.2860943	0.01	15.85	20.00	AVRG
Diethylphthalate	1.3040000	1.1416162	0.01	12.45	20.00	AVRG
4-Chlorophenyl-phenylether	0.4620000	0.4146981	0.01	10.24	20.00	AVRG
Fluorene	1.1140000	0.9609628	0.01	13.74	20.00	AVRG
4,6-Dinitro-2-methylphenol	0.1480000	0.1471760	0.01	0.56	20.00	AVRG
N-Nitrosodiphenylamine	0.9750000	0.8627000	0.01	11.52	20.00	AVRG
1,2-Diphenylhydrazine	1.6000000	1.4897924	0.01	6.89	20.00	AVRG
4-Bromophenyl-phenylether	0.1810000	0.1912514	0.01	-5.66	20.00	AVRG
Hexachlorobenzene	0.1980000	0.2261898	0.01	-14.24	20.00	AVRG
Pentachlorophenol	0.1830000	0.1797137	0.05	1.80	20.00	AVRG
Phenanthrene	1.0050000	0.9916553	0.01	1.33	20.00	AVRG
Anthracene	1.0210000	1.0038207	0.01	1.68	20.00	AVRG
Di-n-butylphthalate	1.5210000	1.5353694	0.01	-0.94	20.00	AVRG

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Instrument ID: 5972HP60 Calibration Date: 05/14/02 Time: 0921

Lab File ID: HG020514A60 Init. Calib. Date(s): 04/29/02 04/29/02

Init. Calib. Times: 0936 1353

GC Column: J&W DB5.625 ID: 0.32 (mm)

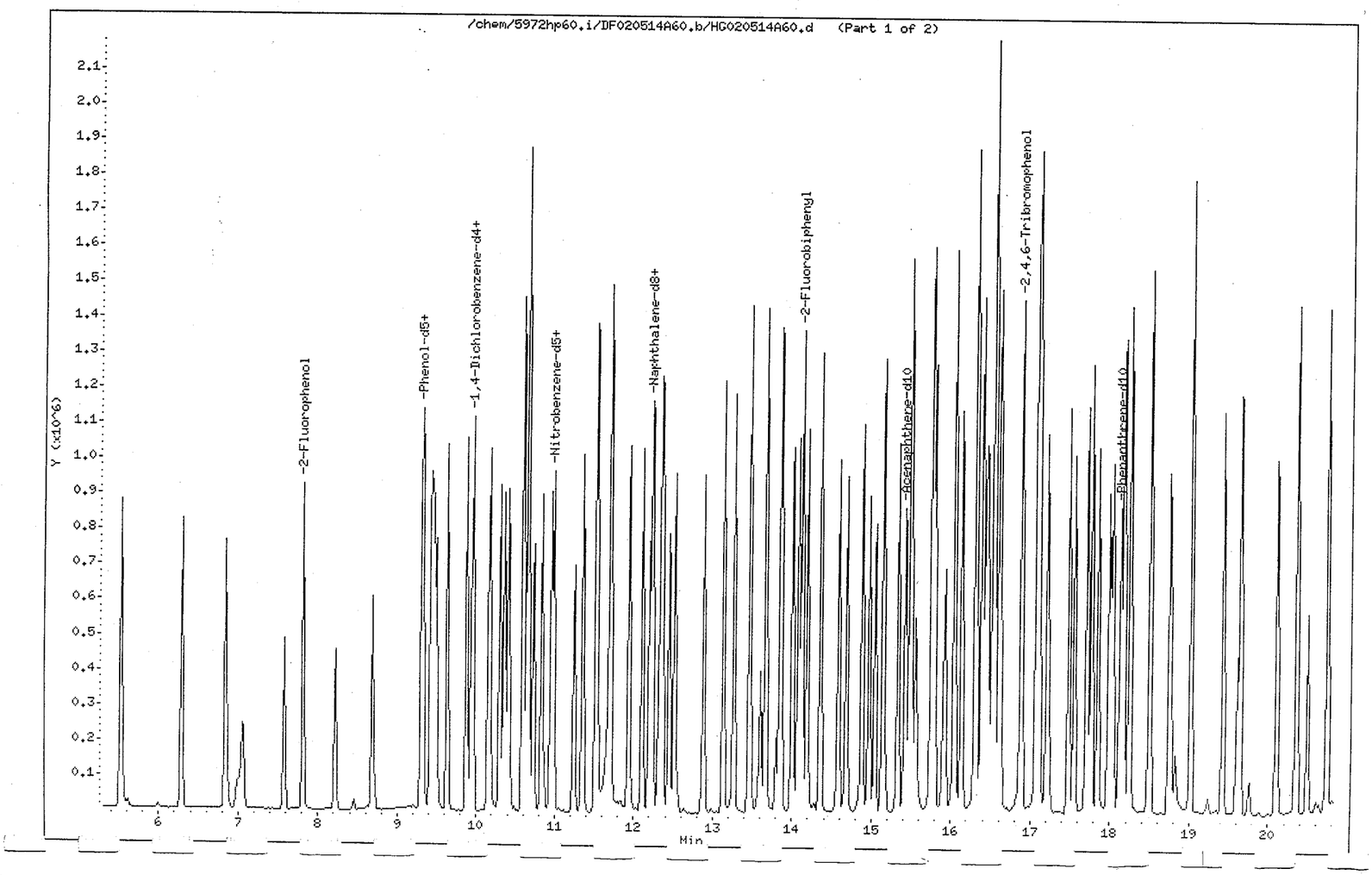
COMPOUND	RRF OR AMOUNT	RRF80.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE	
Fluoranthene	0.9620000	1.0434850	0.01	-8.47	20.00	AVRG	
Benzidine	0.2850000	0.2035846	0.01	28.57	20.00	AVRG	<-
Pyrene	1.4240000	1.2901488	0.01	9.40	20.00	AVRG	
Butylbenzylphthalate	0.9610000	0.8681736	0.01	9.66	20.00	AVRG	
bis(2-ethylhexyl)Phthalate	1.3180000	1.2114944	0.01	8.08	20.00	AVRG	
3,3'-Dichlorobenzidine	0.2080000	0.2115726	0.01	-1.72	20.00	AVRG	
Benzo(a)Anthracene	1.1770000	1.1504936	0.01	2.25	20.00	AVRG	
Chrysene	1.0980000	1.0797618	0.01	1.66	20.00	AVRG	
Di-n-octylphthalate	3.2260000	2.9925252	0.01	7.24	20.00	AVRG	
Benzo(b)fluoranthene	1.5020000	1.5104302	0.01	-0.56	20.00	AVRG	
Benzo(k)fluoranthene	1.5200000	1.4744343	0.01	3.00	20.00	AVRG	
Benzo(a)pyrene	1.2920000	1.2749417	0.01	1.32	20.00	AVRG	
Indeno(1,2,3-c,d)pyrene	0.9860000	1.0283646	0.01	-4.30	20.00	AVRG	
Dibenzo(a,h)anthracene	0.9090000	0.9470017	0.01	-4.18	20.00	AVRG	
Benzo(g,h,i)perylene	0.8930000	0.9462365	0.01	-5.96	20.00	AVRG	
2-Fluorophenol	1.1740000	1.1890062	0.01	-1.28	20.00	AVRG	
Phenol-d5	1.6150000	1.4442407	0.01	10.57	20.00	AVRG	
Nitrobenzene-d5	0.3840000	0.3916634	0.01	-2.00	20.00	AVRG	
2-Fluorobiphenyl	1.1020000	0.8999156	0.01	18.34	20.00	AVRG	
2,4,6-Tribromophenol	0.1620000	0.1846760	0.01	-14.00	20.00	AVRG	
Terphenyl-d14	0.8630000	0.8426019	0.01	2.36	20.00	AVRG	

FORM VII PEST

Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Date : 14-MAY-2002 09:21
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

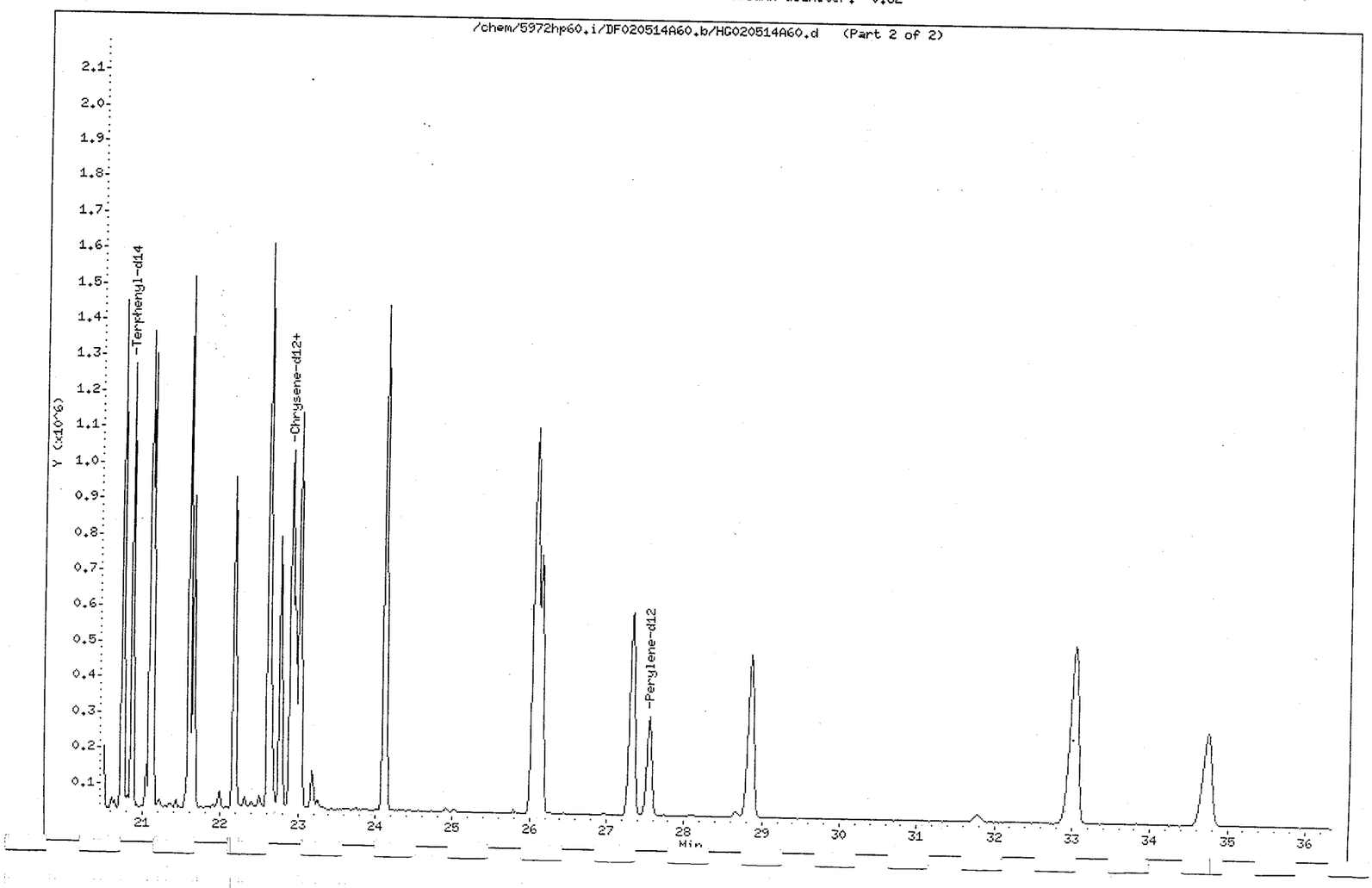
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020514A60.b/HC020514A60.d
Date : 14-MAY-2002 09:21
Client ID: SSTD080
Sample Info: SSTD080:917
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Report Date: 14-May-2030 09:58

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.491	9.491	(0.956)	435807	80.0000	70.8	7411
16 2-Chlorophenol	128	9.626	9.626	(0.969)	474763	80.0000	73.9	8949
17 1,3-Dichlorobenzene	146	9.880	9.880	(0.995)	419856	80.0000	75.8	
18 1,4-Dichlorobenzene	146	9.965	9.965	(1.003)	413596	80.0000	74.6	
19 1,2-Dichlorobenzene	146	10.303	10.303	(1.037)	405100	80.0000	73.7	
20 bis(2-Chloroisopropyl)ether	45	10.404	10.404	(1.048)	889308	80.0000	68.3	9421
21 N-Nitroso-di-N-propylamine	70	10.658	10.658	(1.073)	228760	80.0000	71.1	8766
22 Hexachloroethane	117	10.844	10.844	(1.092)	219404	80.0000	77.5	8674
23 Nitrobenzene	77	10.980	10.980	(0.900)	485849	80.0000	80.2	8440
24 Isophorone	82	11.352	11.352	(0.931)	891973	80.0000	79.1	7903
25 2-Nitrophenol	139	11.538	11.538	(0.946)	287778	80.0000	73.8	8541
26 2,4-Dimethylphenol	107	11.521	11.521	(0.945)	436004	80.0000	75.6	9508
27 Bis(2-chloroethoxy)methane	93	11.690	11.690	(0.958)	620284	80.0000	77.4	7504
28 2,4-Dichlorophenol	162	11.944	11.944	(0.979)	418238	80.0000	79.7	9120(M)
29 1,2,4-Trichlorobenzene	180	12.113	12.113	(0.993)	369633	80.0000	79.8	7564
30 Naphthalene	128	12.248	12.248	(1.004)	1175928	80.0000	75.1	
31 Hexachlorobutadiene	225	12.519	12.519	(1.026)	231059	80.0000	90.6	8290
32 4-Chloro-3-methylphenol	107	13.128	13.128	(1.076)	453155	80.0000	82.4	8803
33 Hexachlorocyclopentadiene	237	13.856	13.856	(0.899)	235672	80.0000	71.6	9222
34 2,4,6-Trichlorophenol	196	14.008	14.008	(0.909)	331621	80.0000	70.8	8589(H)
35 2-Chloronaphthalene	162	14.363	14.363	(0.932)	734030	80.0000	66.5	
36 Dimethylphthalate	163	14.888	14.888	(0.966)	962388	80.0000	68.3	7577
37 2,6-Dinitrotoluene	165	15.057	15.057	(0.977)	251319	80.0000	69.6	7517
38 Acenaphthylene	152	15.158	15.158	(0.984)	1315024	80.0000	66.7	8423
39 Acenaphthene	154	15.480	15.480	(1.004)	764308	80.0000	68.0	8745
40 2,4-Dinitrophenol	184	15.497	15.497	(1.005)	148865	80.0000	74.3	
41 4-Nitrophenol	109	15.547	15.547	(1.009)	109912	80.0000	87.3	
42 2,4-Dinitrotoluene	165	15.767	15.767	(1.023)	261021	80.0000	67.4	9288
43 Diethylphthalate	149	16.123	16.123	(1.046)	1041565	80.0000	70.1	9234
44 4-Chlorophenyl-phenylether	204	16.326	16.326	(1.059)	378354	80.0000	71.8	8281
45 Fluorene	166	16.393	16.393	(1.064)	876744	80.0000	69.0	8749
46 4,6-Dinitro-2-methylphenol	198	16.512	16.512	(0.911)	177234	80.0000	79.5	
47 N-Nitrosodiphenylamine	169	16.546	16.546	(0.913)	1038891	80.0000	70.8	
48 1,2-Diphenylhydrazine	77	16.613	16.613	(1.078)	1359227	80.0000	74.5	7214
49 4-Bromophenyl-phenylether	248	17.205	17.205	(0.950)	230311	80.0000	84.6	8911
50 Hexachlorobenzene	284	17.544	17.544	(0.968)	272385	80.0000	91.3	8723
51 Pentachlorophenol	266	17.848	17.848	(0.985)	216417	80.0000	78.7	9161
52 Phenanthrene	178	18.170	18.170	(1.003)	1194183	80.0000	78.9	
53 Anthracene	178	18.237	18.237	(1.007)	1208833	80.0000	78.7	
54 Di-n-butylphthalate	149	19.016	19.016	(1.049)	1848941	80.0000	80.7	9339
55 Fluoranthene	202	20.352	20.352	(1.123)	1256598	80.0000	86.8	
56 Benzidine	184	20.487	20.487	(0.892)	364739	160.000	114	9675
57 Pyrene	202	20.741	20.741	(0.903)	1155705	80.0000	72.4	
58 Butylbenzylphthalate	149	21.604	21.604	(0.941)	777703	80.0000	72.3	8401
59 bis(2-ethylhexyl)Phthalate	149	22.619	22.619	(0.985)	1085247	80.0000	73.5	8569(H)
60 3,3'-Dichlorobenzidine	252	22.771	22.771	(0.992)	379050	160.000	163	8950
61 Benzo(a)Anthracene	228	22.924	22.924	(0.999)	1030603	80.0000	78.2	

GM
5-14-02

Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Report Date: 14-May-2030 09:58

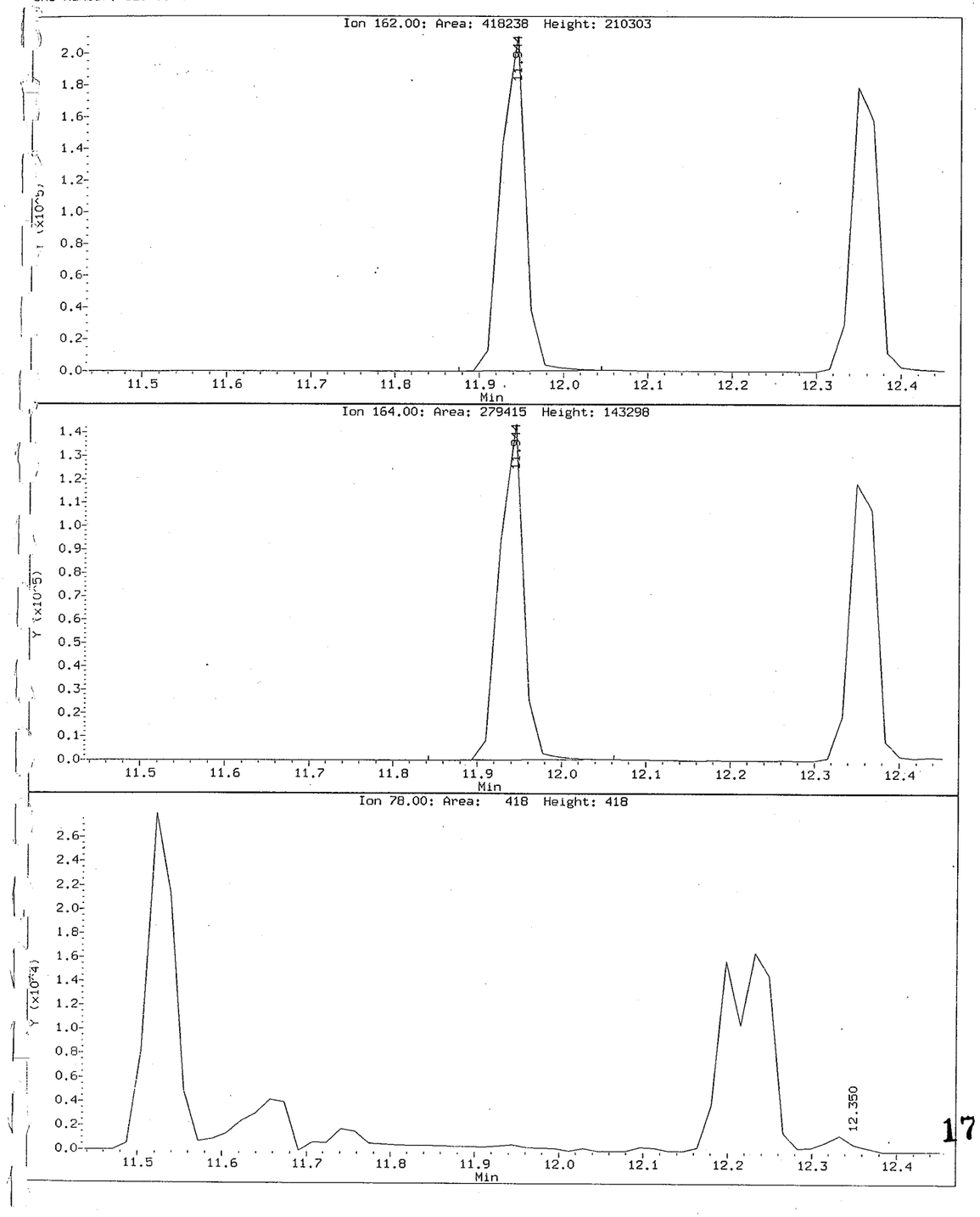
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 Chrysene	228	23.025	23.025	(1.003)	967242	80.0000	78.6	
63 Di-n-octylphthalate	149	24.125	24.125	(0.875)	2045373	80.0000	74.2	8686
64 Benzo(b)fluoranthene	252	26.053	26.053	(0.945)	1032370	80.0000	80.4	
65 Benzo(k)fluoranthene	252	26.138	26.138	(0.948)	1007767	80.0000	77.6	
66 Benzo(a)pyrene	252	27.339	27.339	(0.992)	871415	80.0000	78.9	8268
67 Indeno(1,2,3-c,d)pyrene	276	33.023	33.023	(1.198)	702881	80.0000	83.5	
68 Dibenzo(a,h)anthracene	278	33.040	33.040	(1.199)	647270	80.0000	83.4	7878
69 Benzo(g,h,i)perylene	276	34.732	34.732	(1.260)	646747	80.0000	84.7	7762

QC Flag Legend

1 - Compound response manually integrated.
M - Operator selected an alternate compound hit.

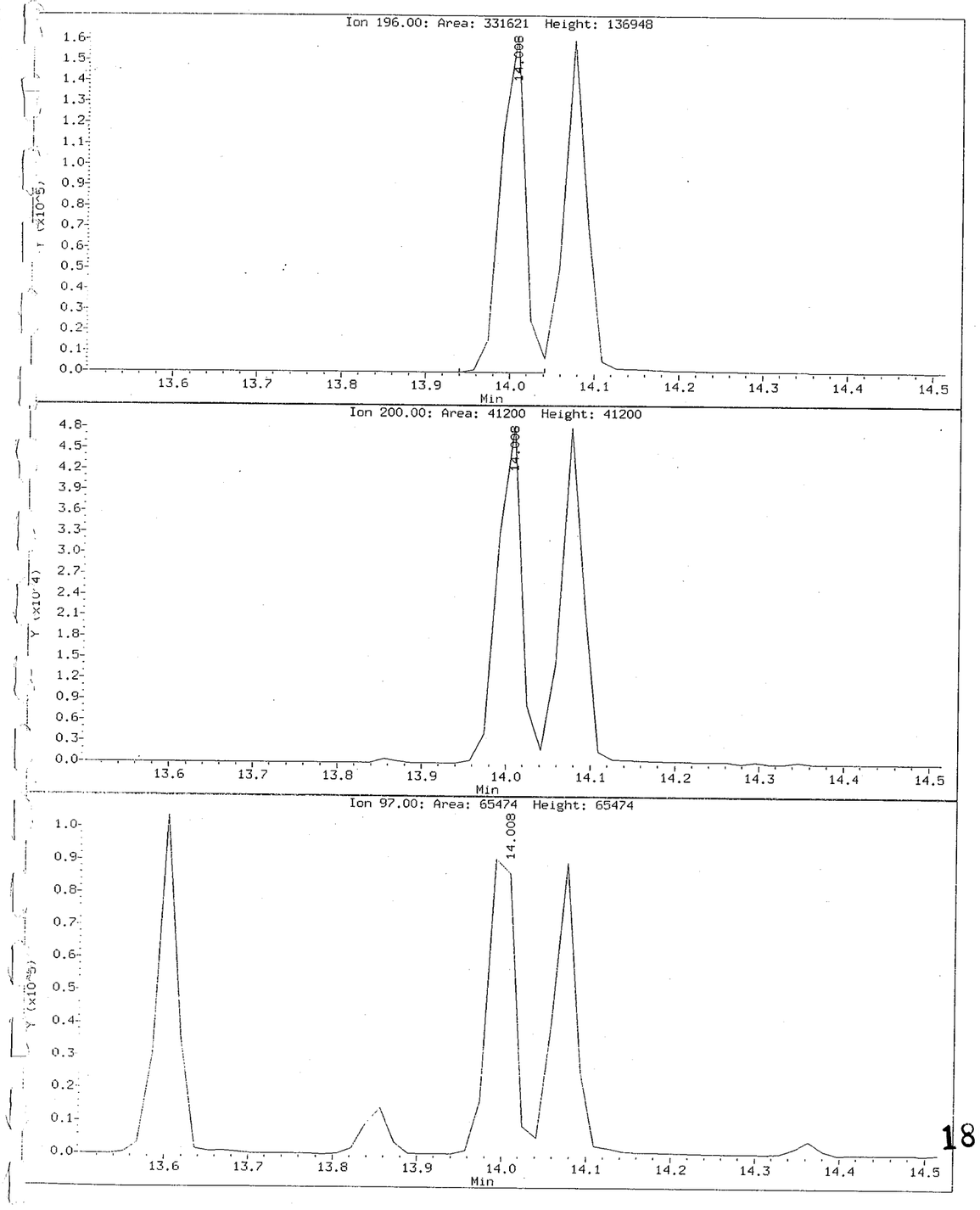
Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Injection Date: 14-MAY-2002 09:21
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2,4-Dichlorophenol
CAS Number: 120-83-2



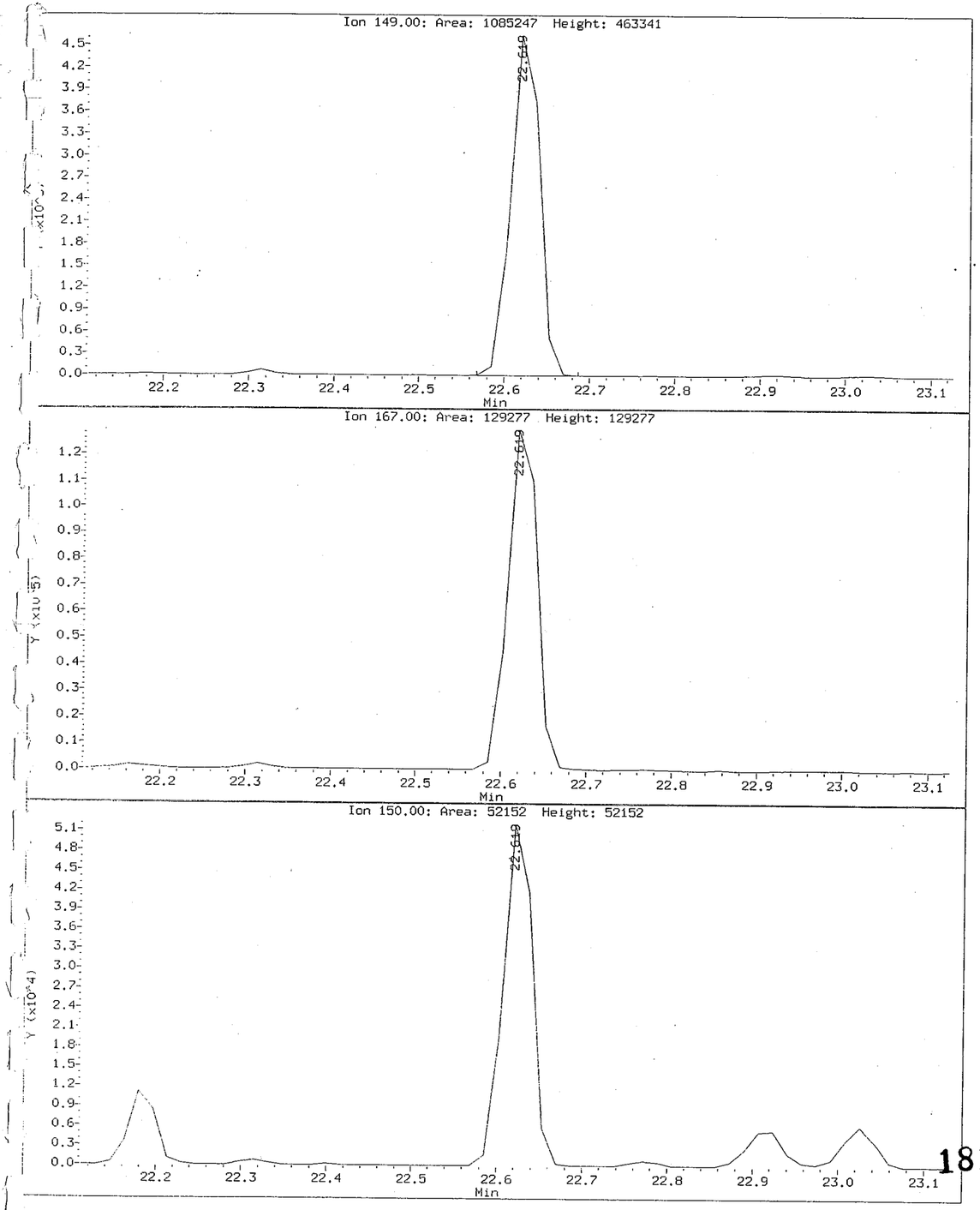
Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Injection Date: 14-MAY-2002 09:21
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2



Data File: /chem/5972hp60.i/DF020514A60.b/HG020514A60.d
Injection Date: 14-MAY-2002 09:21
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: bis(2-ethylhexyl)Phthalate
CAS Number: 117-81-7



COMPUCHEM a division of Liberty Analytical Corp DATE 5/14/02 INITIAL TIME OF TUNE 0750 SHIFT/S(A) ✓ (B)____ (C)____

GC/MS SEMIVOLATILE RUN LOG TIME TUNE EXPIRES 1950 LINKER /METHOD 625

COMPUCHEM .LOGBOOK 4 V(4) 4 (5972hp60)

PREVENTIVE MAINTENANCE None

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511

	REJECTED	FILE NAME	REPORTED	DATE	TIME	CLIENT ID#	CASE/SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		DF020514A60	/	5/14/02	0750	DFTAP	—	2 ul	917	SCD=LCD
2		HG020514A60	/	/ /	0921	SSTD080	—	↓	↓	
3		WG17399-2JA60	/	/ /	1108	SWG/CS	VARIOUS	1 ul	↓	
4	/	Q2558-1A60	SH	/ /	1155	W-1 MW-3	Q2558	↓	↓	
5		Q2558-2A60	/	/ /	1243	W-2 MW-2A	↓	↓	↓	
6		Q2558-3A60	/	/ /	1331	W-3 MW-1	↓	↓	↓	
7		Q2558-4A60	/	/ /	1419	W-4 MW-3	↓	↓	↓	
8	/	Z2337-1A60	DI	/ /	1506	TMW-1	Z2337	↓	↓	
9		Z2337-2A60	/	/ /	1554	TMW-2	↓	↓	↓	
10	/	WG17417-1JA60	IL	/ /	1641	SBLKWH	S2558	↓	↓	
11	/	WG17417-2JA60	SH	/ /	1729	SWHLCS	↓	↓	↓	
12		S2558-1A60	/	/ /	1817	S-1	↓	↓	↓	
13		WG17417-3A60	/	/ /	1904	↓ MS	↓	↓	↓	
14	/	WG17417-4A60	GT	/ /	1952	↓ MSD	↓	↓	↓	
15				/ /						
16				/ /						
17				/ /						
18				/ /						
19				/ /			FN 5/14/02			
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						

	Tune	STANDARDS Analytical	Int. Std.	Column Type
Std. ID #	7055	625	800	J&W DB5-625 0.32 mm
Lot #	52863	52224	52874	

SUPERVISOR APPROVAL [signature]

DATE 5/14/02

The presence of the Chemist's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist together with the chemist's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

12/11/01:dce

Data File: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d

Date : 29-APR-2002 09:09

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0

Operator: 917

Column phase: J&W DB5.625

Column diameter: 0.32

Data File: DF020429A60.d

Spectrum: Avg. Scans 153-155 (8.24), Background Scan 150

Location of Maximum: 198.00

Number of points: 233

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	101	157.00	108	229.00	150	352.00	73
86.00	180	159.00	62	230.00	21	353.00	37
87.00	90	160.00	38	231.00	68	354.00	57
88.00	45	161.00	177	234.00	43	355.00	27
89.00	49	162.00	54	235.00	48	365.00	357
91.00	116	164.00	19	236.00	29	366.00	36
92.00	43	165.00	111	237.00	43	371.00	16
93.00	895	166.00	127	239.00	29	372.00	110
96.00	13	167.00	878	240.00	22	373.00	24
97.00	26	168.00	530	241.00	40	383.00	25
98.00	619	169.00	64	242.00	119	402.00	47
99.00	495	170.00	23	243.00	92	403.00	76
101.00	286	171.00	50	244.00	1635	404.00	17
102.00	17	172.00	81	245.00	195	421.00	60
103.00	139	173.00	79	246.00	290	422.00	45
104.00	208	174.00	143	247.00	48	423.00	451
105.00	174	175.00	281	249.00	97	424.00	64
106.00	78	176.00	95	251.00	19	441.00	1211
107.00	2082	177.00	131	253.00	50	442.00	8181
108.00	300	178.00	50	255.00	7268	443.00	1553
110.00	4582	179.00	648	256.00	1077	444.00	137
111.00	681	180.00	415	257.00	65		
112.00	105	181.00	225	258.00	463		
115.00	22	182.00	19	259.00	54		

Data File: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d
Date : 29-APR-2002 09:09
Client ID: DFTPP
Sample Info: DFTPP:917
Volume Injected (uL): 2.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32

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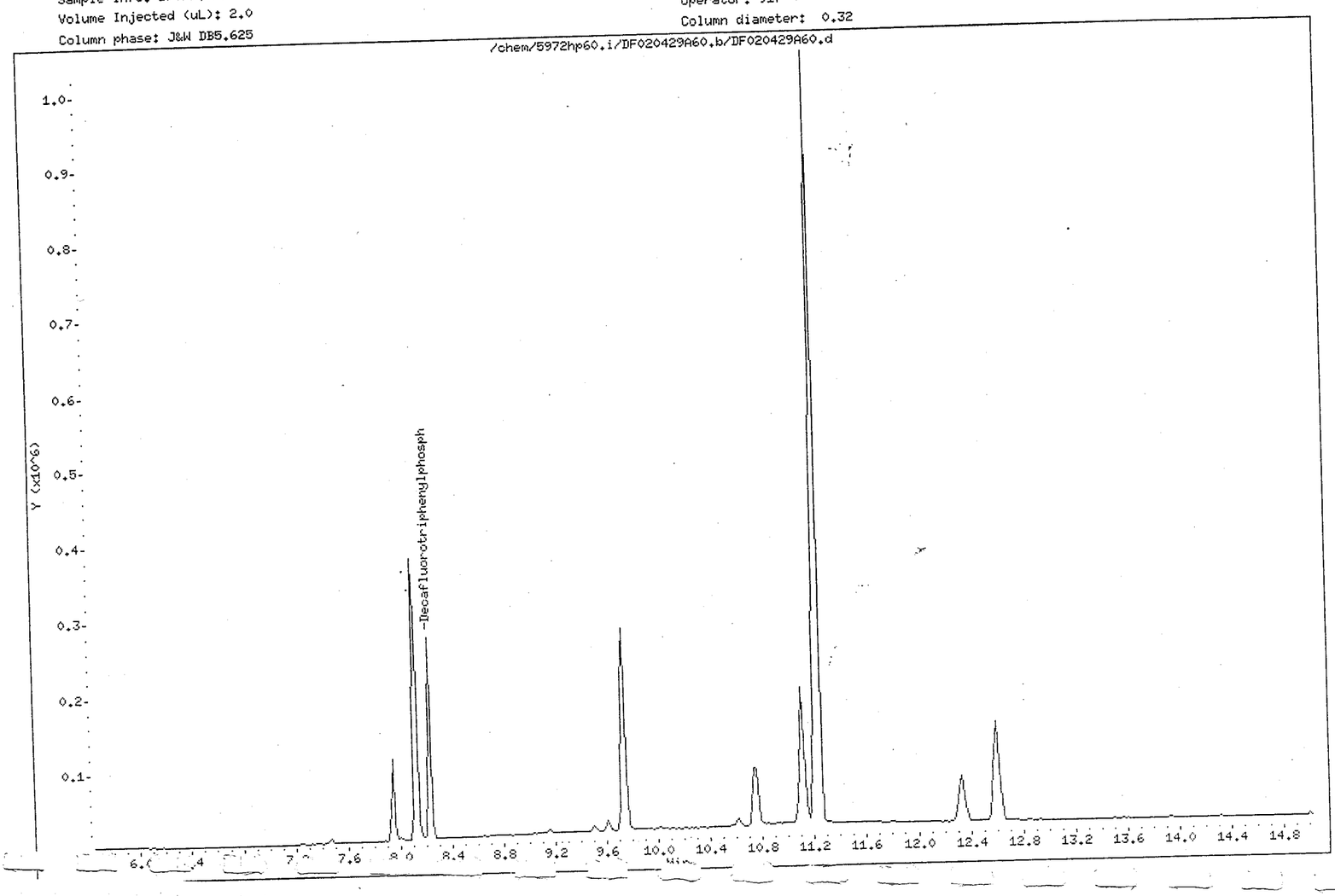


TAILING FACTOR and DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	55.42		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.99		PASS
70	Less than 2% of mass 69	0.04	(0.07)	PASS
127	40 - 60% of mass 198	44.49		PASS
197	0 - 1% of mass 198	0.11		PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 30% of mass 198	17.19		PASS
365	Greater than 0.75% of mass 198	1.96		PASS
441	Present, but less than mass 443	6.65	(77.98)	PASS
442	40 - 110 % of mass 198	44.89		PASS
443	17 - 23% of mass 442	8.52	(18.98)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.2	5.0	PASS
Benzidine	0.9	3.0	PASS

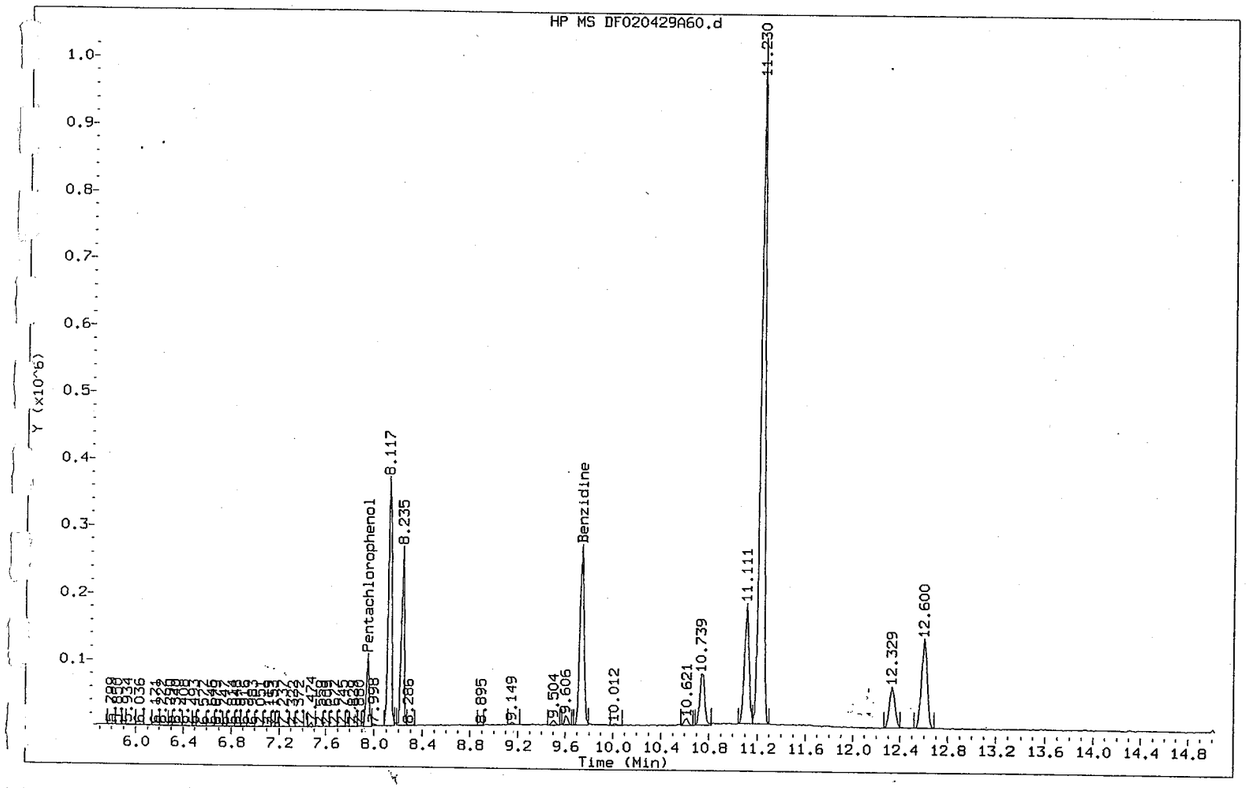
Tuning Sample, /chem/5972hp60.i/DF020429A60.b/DF020429A60.d/DF020429A60.d

*** PASSED ***

TAILING FACTOR and DEGRADATION SAMPLE AND GRAPHIC REPORT

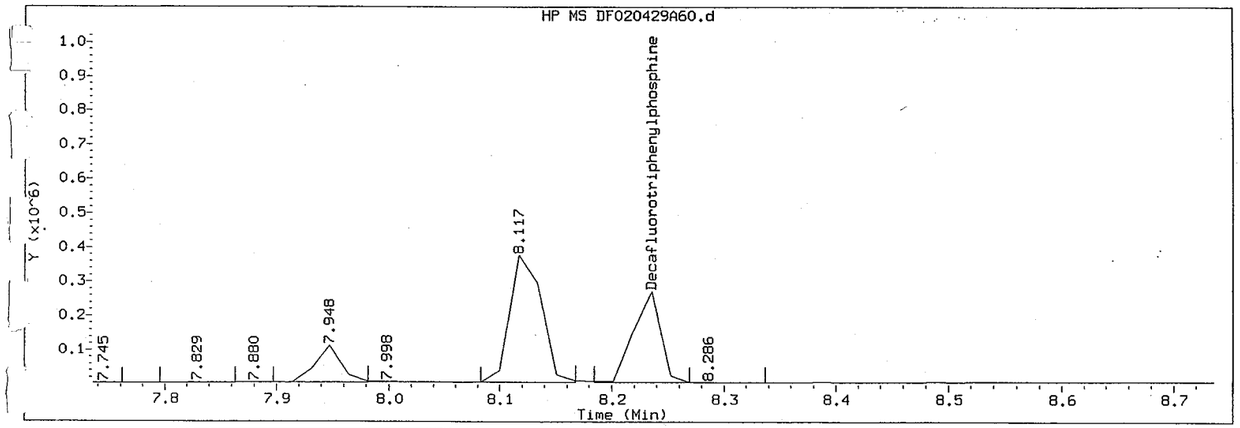
Report Date: 04/29/2030 14:51

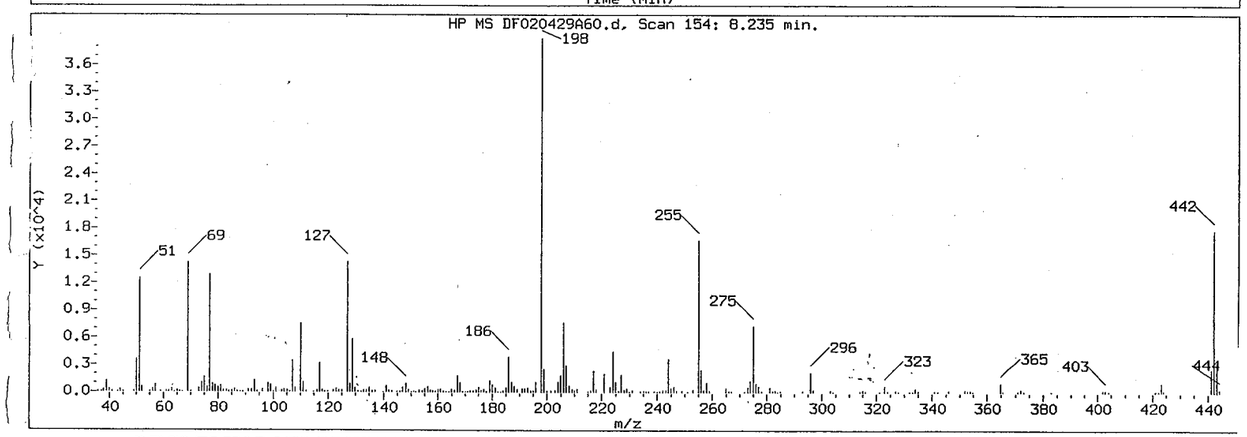
Datafile Analyzed: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d/DF020429A60.d
Method Used: /chem/5972hp60.i/DF020429A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 29-APR-2002 09:09 Operator: 917
Sample Info: DFTPP DFTPP:917
Misc Info:



Report Date: 04/29/2030 14:51

Datafile Analyzed: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d/DF020429A60.d
Method Used: /chem/5972hp60.i/DF020429A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 29-APR-2002 09:09 Operator: 917
Sample Info: DFTPP DFTPP:917
Misc Info:



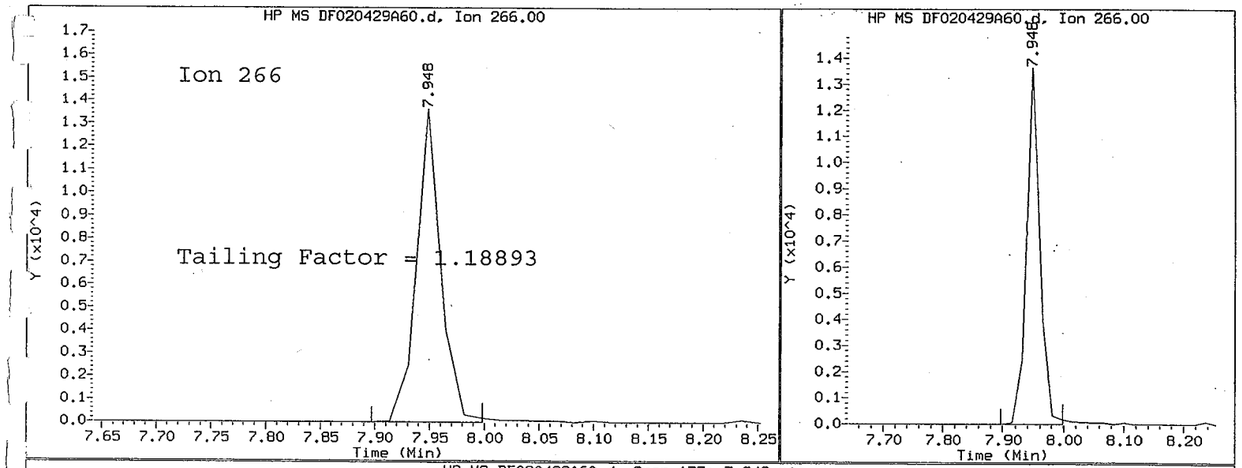


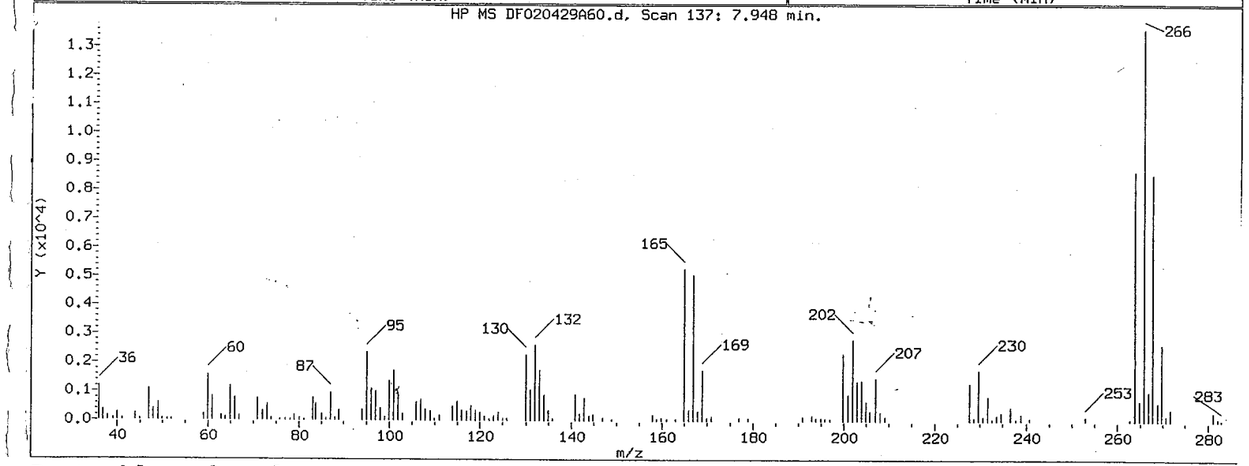
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	55.42		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	55.99		PASS
70	Less than 2% of mass 69	0.04	(0.07)	PASS
127	40 - 60% of mass 198	44.49		PASS
197	0 - 1% of mass 198	0.11		PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 30% of mass 198	17.19		PASS
365	Greater than 0.75% of mass 198	1.96		PASS
441	Present, but less than mass 443	6.65	(77.98)	PASS
442	40 - 110% of mass 198	44.89		PASS
443	17 - 23% of mass 442	8.52	(18.98)	PASS

Report Date: 04/29/2030 14:51

Datafile Analyzed: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d/DF020429A60.d
Method Used: /chem/5972hp60.i/DF020429A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 29-APR-2002 09:09 Operator:
Sample Info: DFTPP DFTPP:917
Misc Info:





Pentachlorophenol
==========
Exp. RT = 8.314
Found RT = 7.948

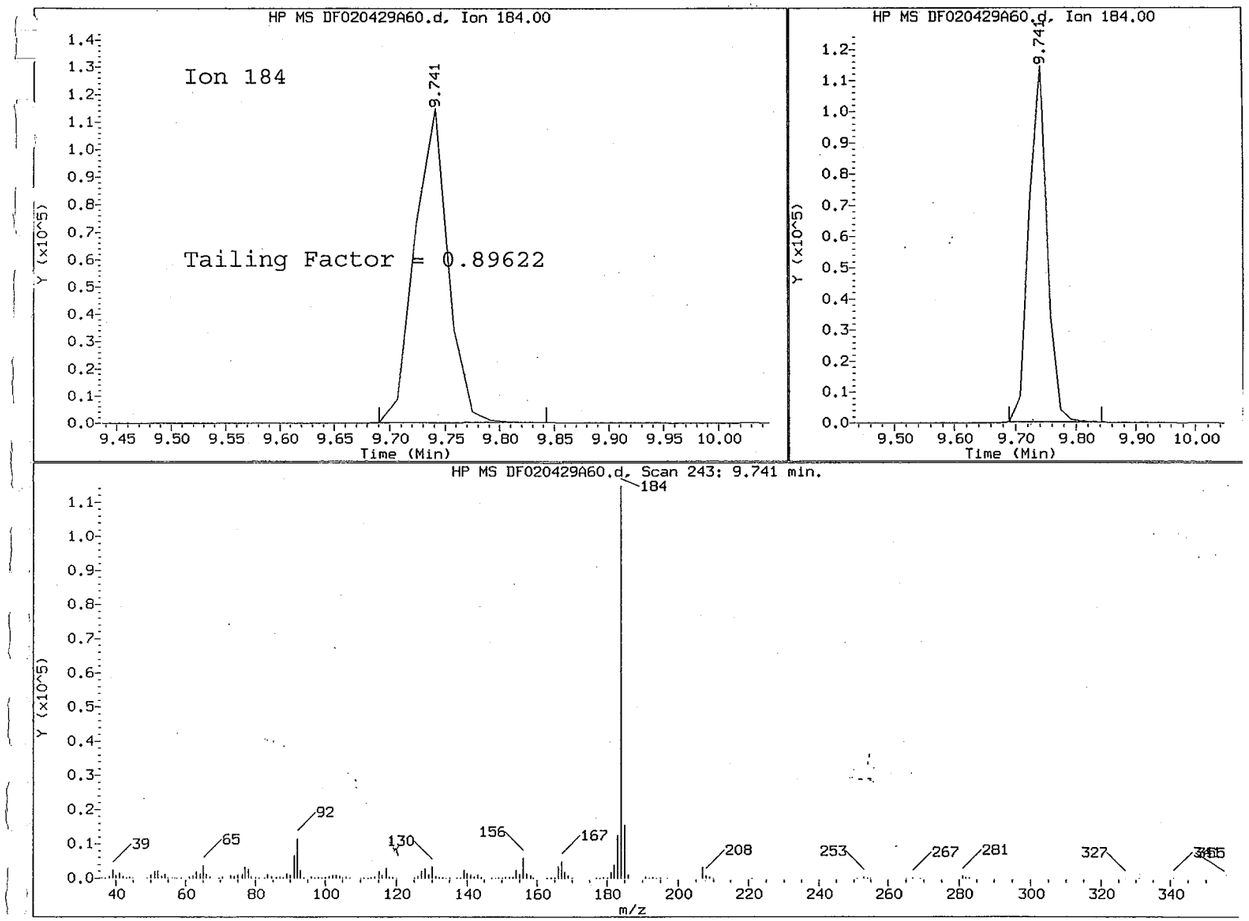
Mass	Area	Ratio
266	20952	100.00

Tailing factor for Pentachlorophenol OK

Tailing Factor = 1.2 Maximum Allowed = 5.0

Report Date: 04/29/2030 14:51

Datafile Analyzed: /chem/5972hp60.i/DF020429A60.b/DF020429A60.d/DF020429A60.d
Method Used: /chem/5972hp60.i/DF020429A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 29-APR-2002 09:09 Operator:
Sample Info: DFTPP DFTPP:917
Misc Info:



Benzidine
=========
Exp. RT = 10.192
Found RT = 9.741

Mass	Area	Ratio
184	238985	100.00

Tailing factor for Benzidine OK

Tailing Factor = 0.9 Maximum Allowed = 3.0

If Tailing Factor < 1.0, then it is assumed that the peak is not tailing and a Tailing Factor of zero is reported.

Data File: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d

Date : 13-MAY-2002 10:44

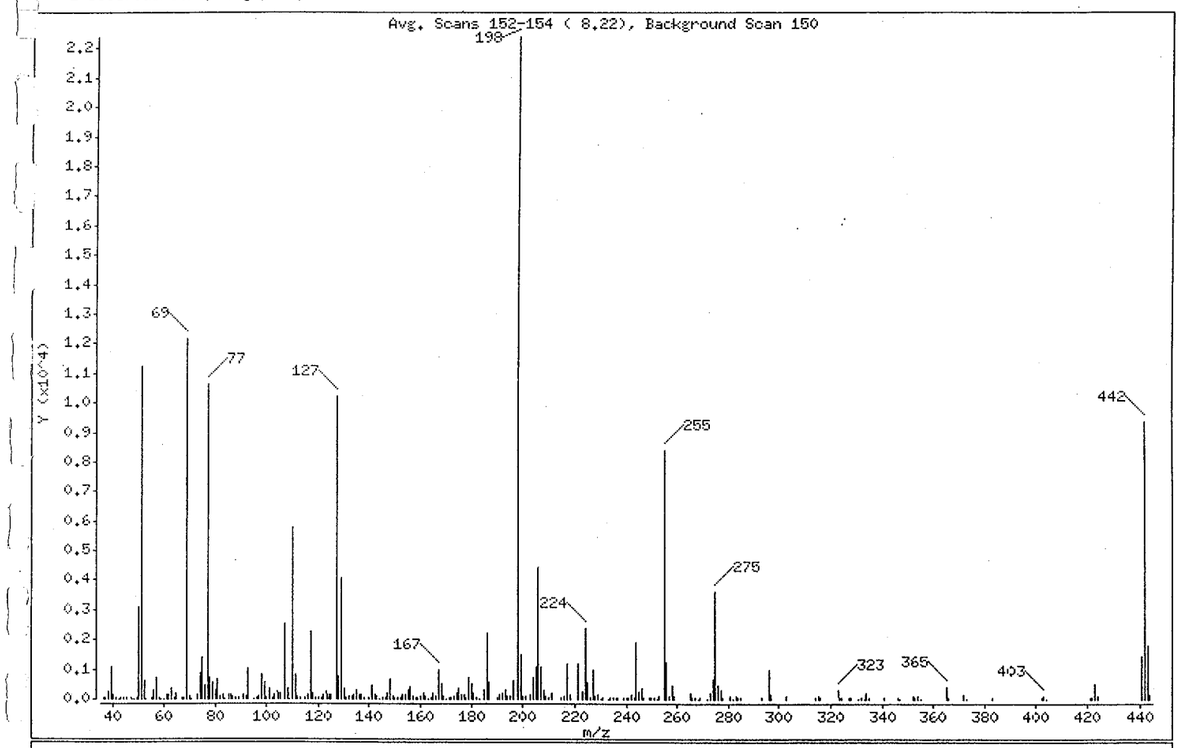
Client ID: DFTPP | Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0 | Operator: 917

Column phase: J&W DB5.625 | Column diameter: 0.32

1 Decaflucrotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	50.31
68	Less than 2.00% of mass 69	0.12 (0.22)
69	Mass 69 relative abundance	54.34
70	Less than 2.00% of mass 69	0.35 (0.65)
127	40.00 - 60.00% of mass 198	45.63
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.66
275	10.00 - 30.00% of mass 198	16.12
365	Greater than 1.00% of mass 198	1.90
441	Present, but less than mass 443	6.44
442	40.00 - 110.00% of mass 198	41.82
443	17.00 - 23.00% of mass 442	7.96 (19.03)

Data File: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d

Date : 13-MAY-2002 10:44

Client ID: DFTPP | Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0 | Operator: 917

Column phase: J&W DB5.625 | Column diameter: 0.32

Data File: DF020513A60.d

Spectrum: Avg. Scans 152-154 (8.22), Background Scan 150

Location of Maximum: 198.00

Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	33	107.00	2513	174.00	194	252.00	23
37.00	73	108.00	377	175.00	339	253.00	107
38.00	237	109.00	18	176.00	133	255.00	8417
39.00	1096	110.00	5762	177.00	178	256.00	1261
40.00	142	111.00	842	178.00	70	257.00	101
41.00	28	112.00	89	179.00	730	258.00	462
42.00	16	113.00	46	180.00	517	259.00	101
43.00	68	115.00	32	181.00	232	265.00	198
44.00	43	116.00	131	182.00	33	266.00	57
45.00	33	117.00	2265	183.00	18	267.00	30
47.00	53	118.00	201	185.00	303	268.00	1
48.00	18	119.00	66	186.00	2237	269.00	55
49.00	72	120.00	54	187.00	574	272.00	18
50.00	3120	121.00	63	190.00	27	273.00	222
51.00	11263	122.00	174	191.00	152	274.00	651
52.00	600	123.00	281	192.00	205	275.00	3608
53.00	24	124.00	144	193.00	286	276.00	453
55.00	44	125.00	166	194.00	92	277.00	284
56.00	319	127.00	10216	195.00	78	278.00	57
57.00	745	128.00	765	196.00	641	281.00	126
58.00	48	129.00	4068	198.00	22384	282.00	24
59.00	25	130.00	355	199.00	1490	283.00	99
60.00	17	131.00	67	200.00	97	284.00	60
61.00	168	132.00	88	201.00	120	285.00	62
62.00	136	133.00	95	203.00	156	293.00	76
63.00	378	134.00	147	204.00	698	296.00	988
64.00	46	135.00	316	205.00	1075	297.00	130
65.00	213	136.00	136	206.00	4425	303.00	115
67.00	34	137.00	152	207.00	1073	314.00	56
68.00	27	138.00	29	208.00	293	315.00	105
69.00	12167	140.00	35	209.00	83	316.00	60
70.00	79	141.00	475	210.00	61	323.00	329
71.00	19	142.00	168	211.00	219	324.00	59
73.00	152	143.00	92	215.00	44	327.00	45
74.00	869	144.00	20	216.00	107	328.00	41

Data File: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d

Date : 13-MAY-2002 10:44

Client ID: DFTPP | Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0 | Operator: 917

Column phase: J&W DB5.625 | Column diameter: 0.32

Data File: DF020513A60.d

Spectrum: Avg. Scans 152-154 (8.22). Background Scan 150

Location of Maximum: 198.00

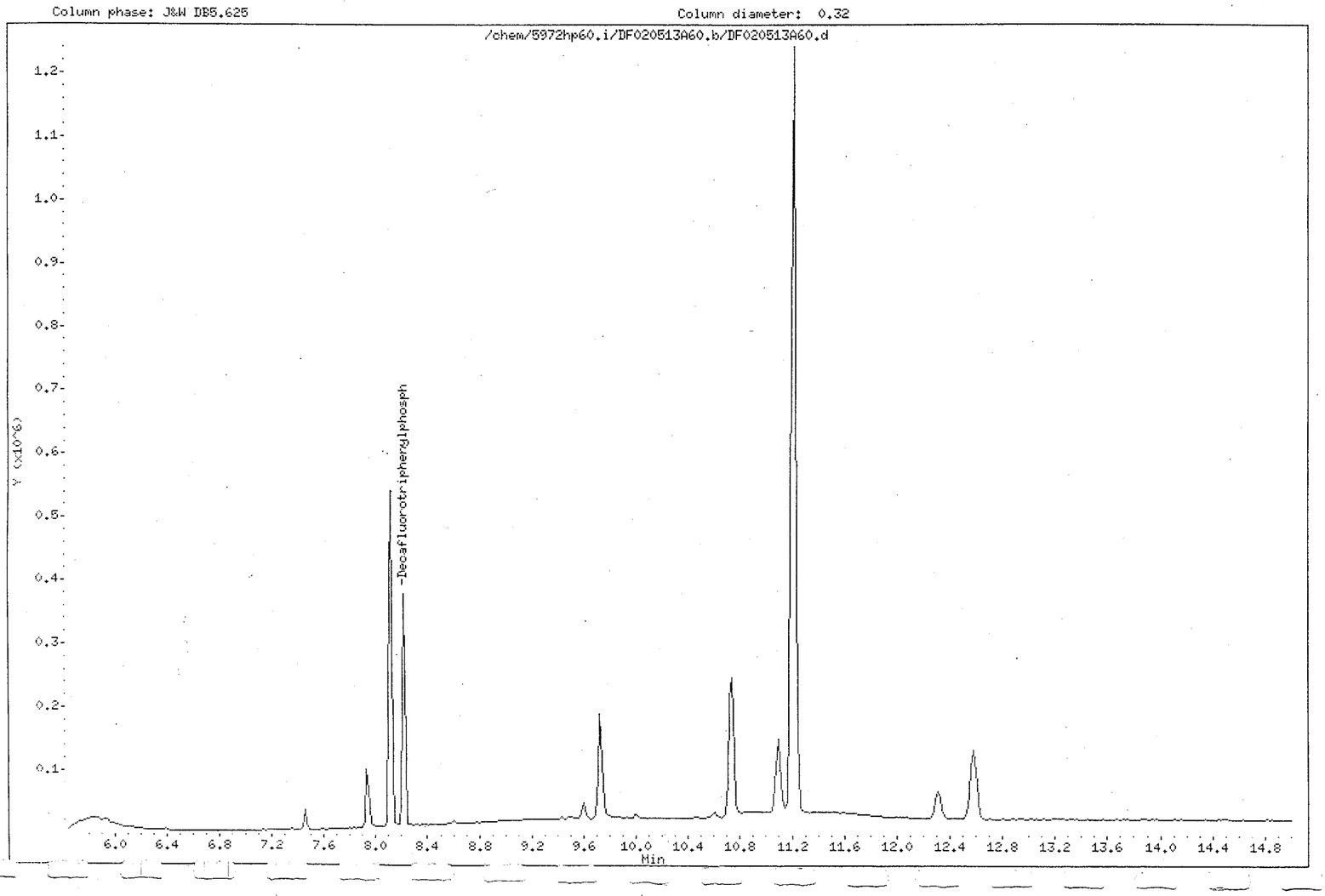
Number of points: 255

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	1417	145.00	34	217.00	1211	331.00	21
76.00	488	146.00	62	218.00	132	332.00	35
77.00	10638	147.00	223	221.00	1171	333.00	21
78.00	708	148.00	675	223.00	249	334.00	194
79.00	556	149.00	118	224.00	2349	335.00	52
80.00	319	150.00	45	225.00	574	341.00	68
81.00	668	151.00	55	226.00	74	346.00	67
82.00	116	152.00	42	227.00	980	347.00	17
83.00	151	153.00	157	228.00	127	352.00	102
84.00	25	154.00	152	229.00	167	353.00	61
85.00	145	155.00	286	230.00	20	354.00	97
86.00	165	156.00	397	231.00	74	355.00	10
87.00	110	157.00	87	233.00	20	365.00	426
88.00	58	158.00	48	234.00	75	366.00	70
89.00	33	159.00	51	235.00	69	372.00	172
91.00	147	160.00	80	236.00	29	373.00	24
92.00	91	161.00	222	237.00	76	383.00	26
93.00	1042	162.00	83	239.00	28	402.00	49
95.00	24	163.00	24	240.00	28	403.00	91
96.00	65	164.00	31	241.00	49	404.00	19
97.00	81	165.00	194	242.00	142	421.00	60
98.00	834	166.00	128	243.00	75	422.00	63
99.00	592	167.00	955	244.00	1929	423.00	502
100.00	61	168.00	524	245.00	260	424.00	118
101.00	375	169.00	97	246.00	378	441.00	1441
102.00	29	170.00	21	247.00	65	442.00	9362
103.00	166	171.00	27	249.00	69	443.00	1782
104.00	264	172.00	59	250.00	34	444.00	180
105.00	194	173.00	107	251.00	57		

Data File: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d
Date : 13-MAY-2002 10:44
Client ID: DFTPP
Sample Info: DFTPP:917
Volume Injected (uL): 2.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



TAILING FACTOR and DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	50.31		PASS
68	Less than 2% of mass 69	0.12	(0.22)	PASS
69	Mass 69 relative abundance	54.34		PASS
70	Less than 2% of mass 69	0.35	(0.65)	PASS
127	40 - 60% of mass 198	45.63		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.66		PASS
275	10 - 30% of mass 198	16.12		PASS
365	Greater than 0.75% of mass 198	1.90		PASS
441	Present, but less than mass 443	6.44	(80.86)	PASS
442	40 - 110 % of mass 198	41.82		PASS
443	17 - 23% of mass 442	7.96	(19.03)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.0	5.0	PASS
Benzidine	1.4	3.0	PASS

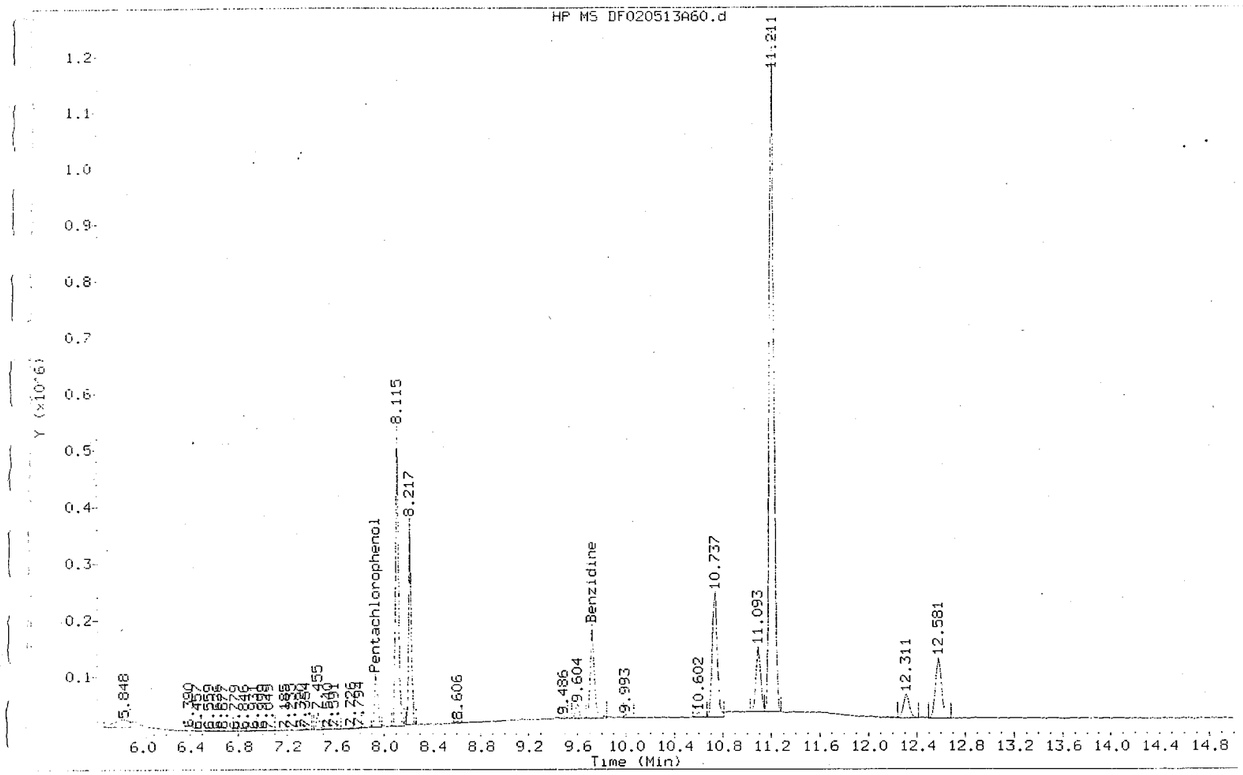
Tuning Sample, /chem/5972hp60.i/DF020513A60.b/DF020513A60.d/DF020513A60.d

*** PASSED ***

TAILING FACTOR and DEGRADATION SAMPLE AND GRAPHIC REPORT

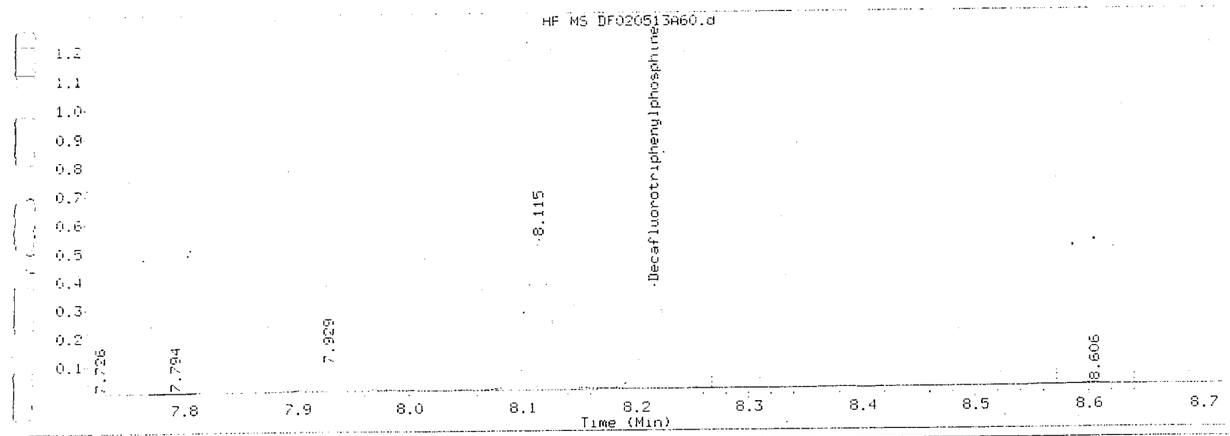
Report Date: 05/13/2030 11:34

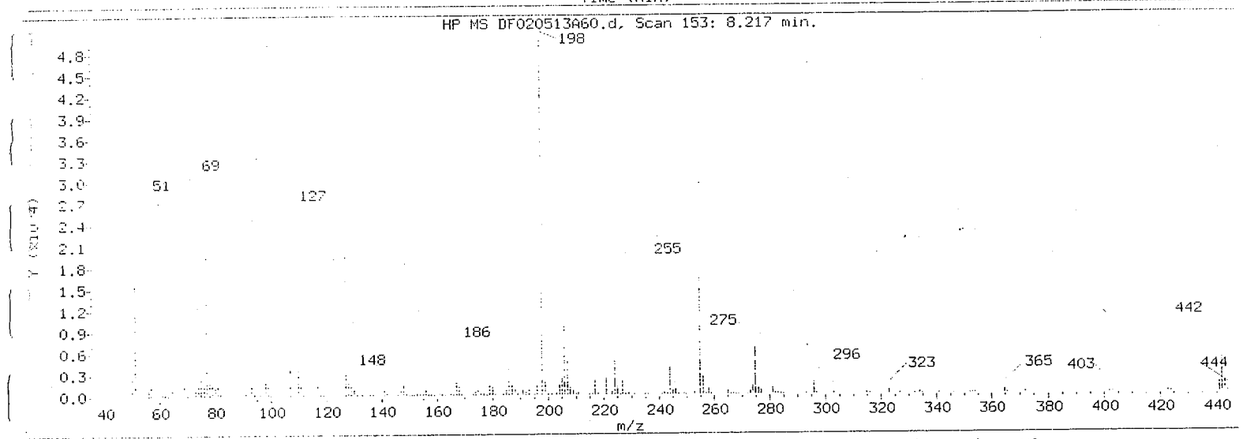
Datafile Analyzed: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d/DF020513A60.d
Method Used: /chem/5972hp60.i/DF020513A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 13-MAY-2002 10:44 Operator: 917
Sample Info: DFTPP DFTPP:917
Misc Info:



eport Date: 05/13/2030 11:34

atafile Analyzed: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d/DF020513A60.d
Method Used: /chem/5972hp60.i/DF020513A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 13-MAY-2002 10:44 Operator: 917
ample Info: DFTPP DFTPP:917
isc Info:



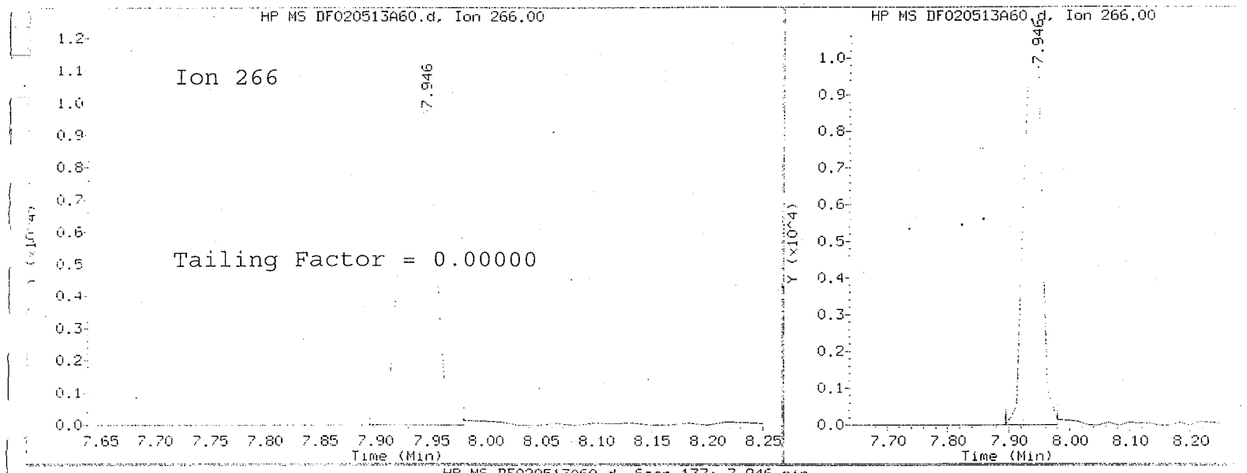


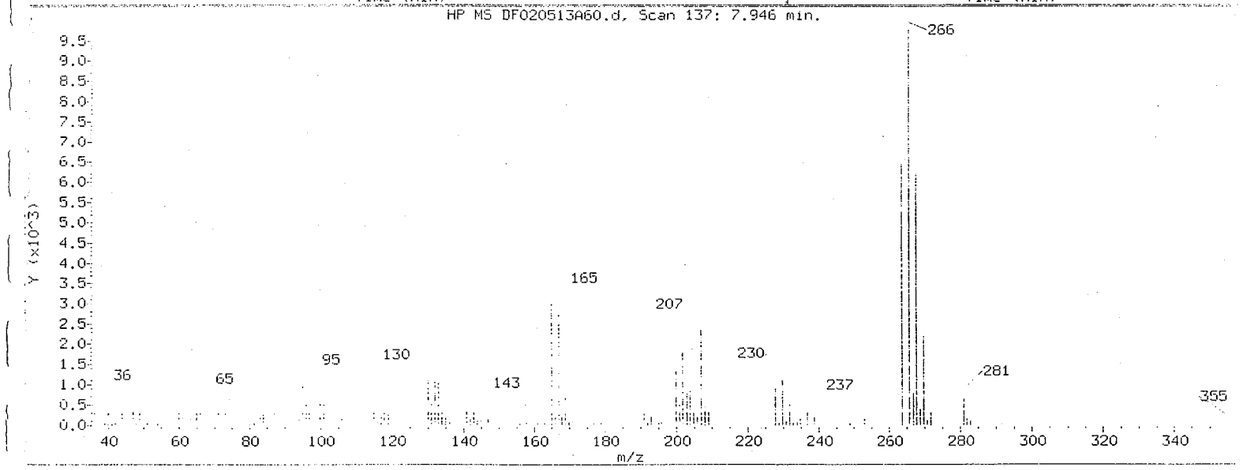
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	50.31		PASS
68	Less than 2% of mass 69	0.12	(0.22)	PASS
69	Mass 69 relative abundance	54.34		PASS
70	Less than 2% of mass 69	0.35	(0.65)	PASS
127	40 - 60% of mass 198	45.63		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.66		PASS
275	10 - 30% of mass 198	16.12		PASS
365	Greater than 0.75% of mass 198	1.90		PASS
441	Present, but less than mass 443	6.44	(80.86)	PASS
442	40 - 110% of mass 198	41.82		PASS
443	17 - 23% of mass 442	7.96	(19.03)	PASS

Report Date: 05/13/2030 11:34

Datafile Analyzed: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d/DF020513A60.d
Method Used: /chem/5972hp60.i/DF020513A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 13-MAY-2002 10:44 Operator:
Sample Info: DFTPP DFTPP:917
Misc Info:





Pentachlorophenol
==========
Exp. RT = 7.944
Found RT = 7.946

Mass	Area	Ratio
266	21089	100.00

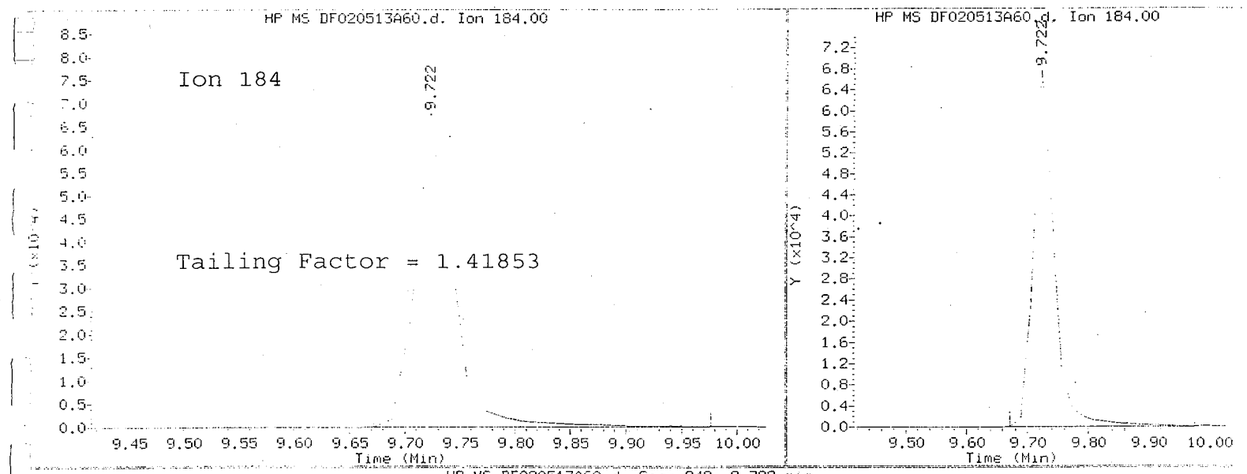
Tailing factor for Pentachlorophenol OK

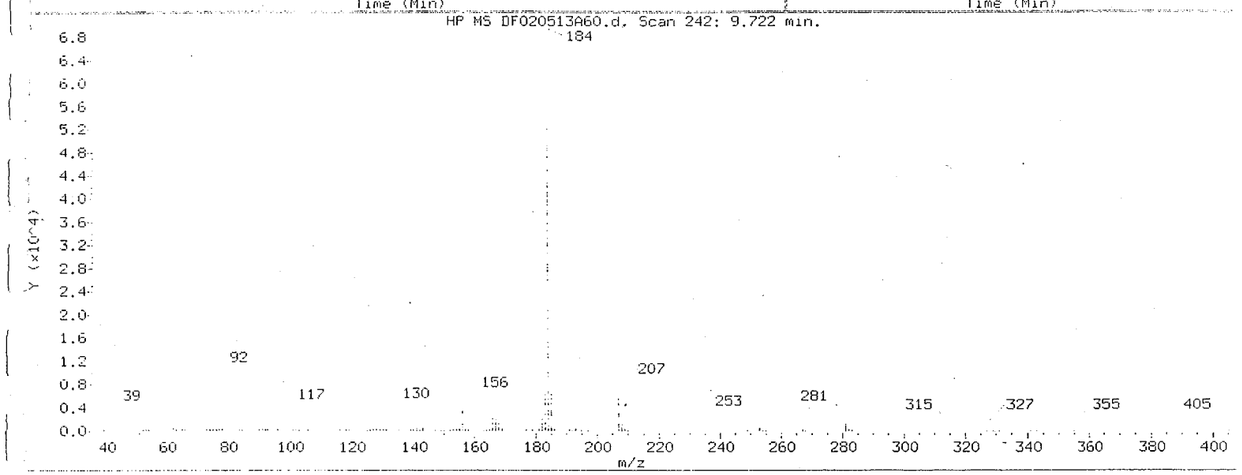
Tailing Factor = 0.0 Maximum Allowed = 5.0

If Tailing Factor < 1.0, then it is assumed that the peak is not tailing and a Tailing Factor of zero is reported.

Report Date: 05/13/2030 11:34

Datafile Analyzed: /chem/5972hp60.i/DF020513A60.b/DF020513A60.d/DF020513A60.d
Method Used: /chem/5972hp60.i/DF020513A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 13-MAY-2002 10:44 Operator:
Sample Info: DFTPP DFTPP:917
Misc Info:





Benzidine
=========
Exp. RT = 9.720
Found RT = 9.722

Mass	Area	Ratio
184	158804	100.00

Tailing factor for Benzidine OK

Tailing Factor = 1.4 Maximum Allowed = 3.0

Data File: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d

Date : 14-MAY-2002 07:50

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:917

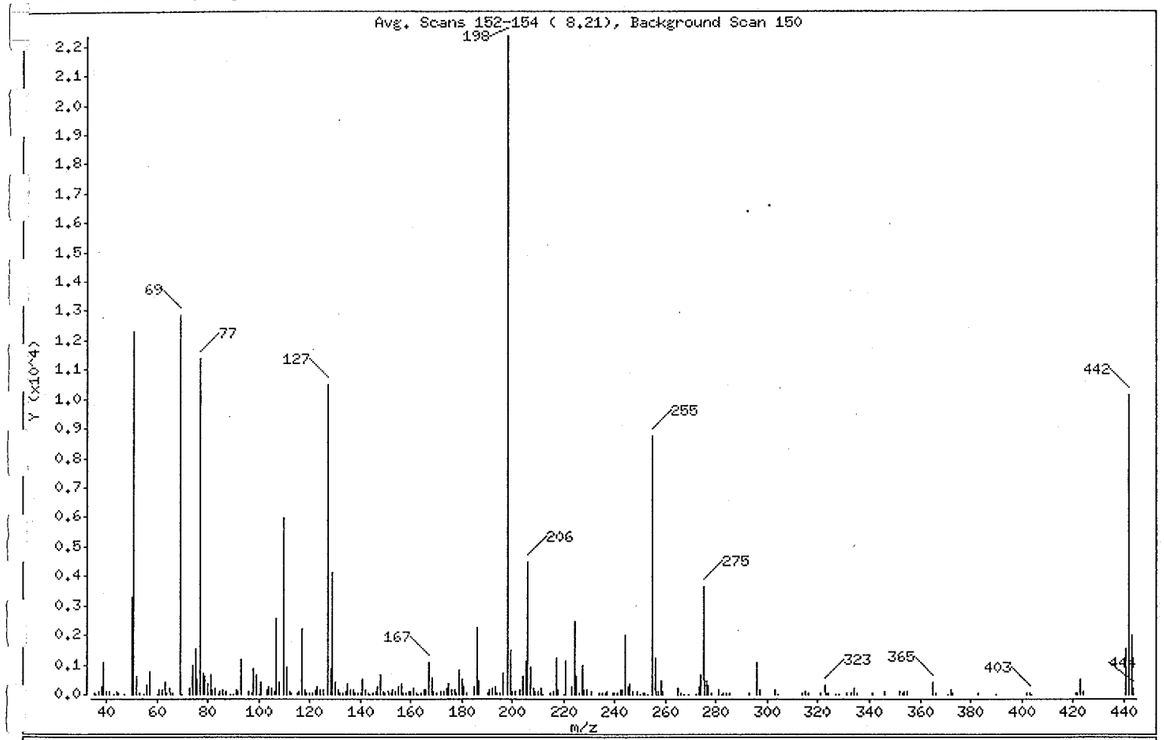
Volume Injected (uL): 2.0

Operator: 917

Column phase: J&W DB5.625

Column diameter: 0.32

1 Decaflucrotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	54.94
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	57.49
70	Less than 2.00% of mass 69	0.06 (0.10)
127	40.00 - 60.00% of mass 198	46.97
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 30.00% of mass 198	16.31
365	Greater than 1.00% of mass 198	1.90
441	Present, but less than mass 443	6.83
442	40.00 - 110.00% of mass 198	45.41
443	17.00 - 23.00% of mass 442	9.03 (19.90)

Data File: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d

Date : 14-MAY-2002 07:50

Client ID: DFTPP | Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0 | Operator: 917

Column phase: J&W DB5.625 | Column diameter: 0.32

Data File: DF020514A60.d

Spectrum: Avg. Scans 152-154 (8.21), Background Scan 150

Location of Maximum: 198.00

Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	63	113.00	53	178.00	53	256.00	1210
36.00	16	115.00	34	179.00	802	257.00	88
37.00	84	116.00	124	180.00	499	258.00	489
38.00	236	117.00	2232	181.00	266	259.00	95
39.00	1090	118.00	178	182.00	56	265.00	195
40.00	111	119.00	59	185.00	249	266.00	60
41.00	81	120.00	51	186.00	2261	267.00	9
43.00	11	121.00	45	187.00	476	269.00	19
44.00	82	122.00	180	190.00	35	272.00	23
45.00	61	123.00	244	191.00	150	273.00	272
47.00	8	124.00	157	192.00	198	274.00	692
50.00	3275	125.00	134	193.00	257	275.00	3646
51.00	12279	127.00	10497	194.00	53	276.00	462
52.00	619	128.00	866	195.00	56	277.00	301
53.00	35	129.00	4136	196.00	718	278.00	50
55.00	16	130.00	403	198.00	22344	281.00	145
56.00	328	131.00	132	199.00	1504	282.00	18
57.00	765	132.00	36	200.00	127	283.00	47
60.00	18	133.00	55	201.00	111	284.00	40
61.00	170	134.00	111	203.00	139	285.00	58
62.00	170	135.00	344	204.00	626	293.00	65
63.00	415	136.00	132	205.00	1129	296.00	1068
64.00	28	137.00	178	206.00	4481	297.00	162
65.00	209	138.00	37	207.00	901	303.00	131
66.00	38	139.00	42	208.00	227	304.00	17
69.00	12848	140.00	66	209.00	119	314.00	53
70.00	13	141.00	507	210.00	84	315.00	107
73.00	197	142.00	168	211.00	196	316.00	75
74.00	962	143.00	75	212.00	18	321.00	27
75.00	1527	144.00	19	215.00	55	323.00	319
76.00	506	145.00	53	216.00	98	324.00	71
77.00	11385	146.00	103	217.00	1232	327.00	25
78.00	717	147.00	282	218.00	163	328.00	24
79.00	603	148.00	660	220.00	17	331.00	26
80.00	380	149.00	126	221.00	1140	333.00	43

Data File: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d

Date : 14-MAY-2002 07:50

Client ID: DFTPP | Instrument: 5972hp60.i

Sample Info: DFTPP:917

Volume Injected (uL): 2.0 | Operator: 917

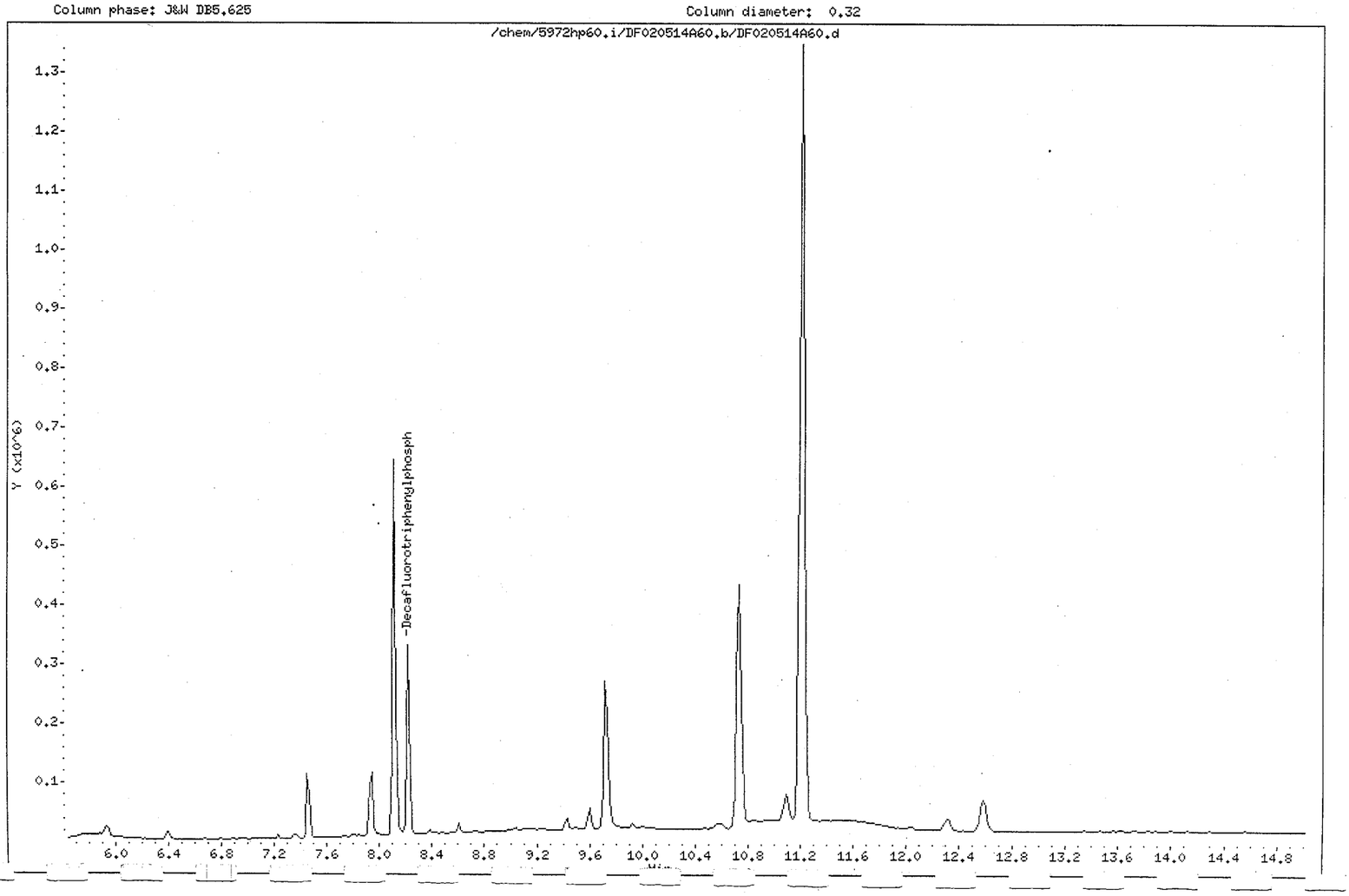
Column phase: J&W DB5.625 | Column diameter: 0.32

Data File: DF020514A60.d
Spectrum: Avg. Scans 152-154 (8.21), Background Scan 150
Location of Maximum: 198.00
Number of points: 247

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	669	150.00	37	223.00	274	334.00	196
82.00	146	151.00	79	224.00	2469	335.00	38
83.00	204	152.00	31	225.00	629	341.00	62
84.00	24	153.00	153	226.00	74	346.00	86
85.00	99	154.00	99	227.00	1001	352.00	102
86.00	174	155.00	281	228.00	139	353.00	52
87.00	128	156.00	342	229.00	177	354.00	110
89.00	15	157.00	65	231.00	92	355.00	83
90.00	18	158.00	35	234.00	67	365.00	425
91.00	171	159.00	123	235.00	74	366.00	44
92.00	96	160.00	84	236.00	56	371.00	22
93.00	1161	161.00	195	237.00	83	372.00	165
96.00	114	162.00	72	239.00	55	373.00	34
97.00	33	163.00	11	240.00	38	383.00	35
98.00	862	164.00	53	241.00	62	390.00	17
99.00	681	165.00	155	242.00	134	402.00	55
100.00	8	166.00	147	243.00	130	403.00	69
101.00	406	167.00	1102	244.00	1983	404.00	24
103.00	129	168.00	566	245.00	255	421.00	54
104.00	273	169.00	102	246.00	340	422.00	52
105.00	190	170.00	59	247.00	79	423.00	507
106.00	87	172.00	103	249.00	127	424.00	103
107.00	2554	173.00	117	250.00	19	441.00	1527
108.00	418	174.00	221	251.00	53	442.00	10148
110.00	5985	175.00	339	252.00	44	443.00	2019
111.00	921	176.00	161	253.00	19	444.00	184
112.00	107	177.00	177	255.00	8733		

Data File: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d
Date : 14-MAY-2002 07:50
Client ID: DFTPP
Sample Info: DFTPP:917
Volume Injected (uL): 2.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i
Operator: 917
Column diameter: 0.32



TAILING FACTOR and DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 80% of mass 198	61.75		PASS
68	Less than 2% of mass 69	0.36	(0.47)	PASS
69	Mass 69 relative abundance	75.50		PASS
70	Less than 2% of mass 69	0.75	(0.99)	PASS
127	25 - 75% of mass 198	51.51		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	7.46		PASS
275	10 - 30% of mass 198	20.19		PASS
365	Greater than 0.75% of mass 198	2.99		PASS
441	Present, but less than mass 443	13.13	(82.53)	PASS
442	40 - 110 % of mass 198	82.84		PASS
443	15 - 24% of mass 442	15.91	(19.20)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	2.4	5.0	PASS
Benzidine	0.0	3.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1043868			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	15137	1.4	20.0	PASS
4,4-DDD + DDE	15137	1.4	20.0	PASS

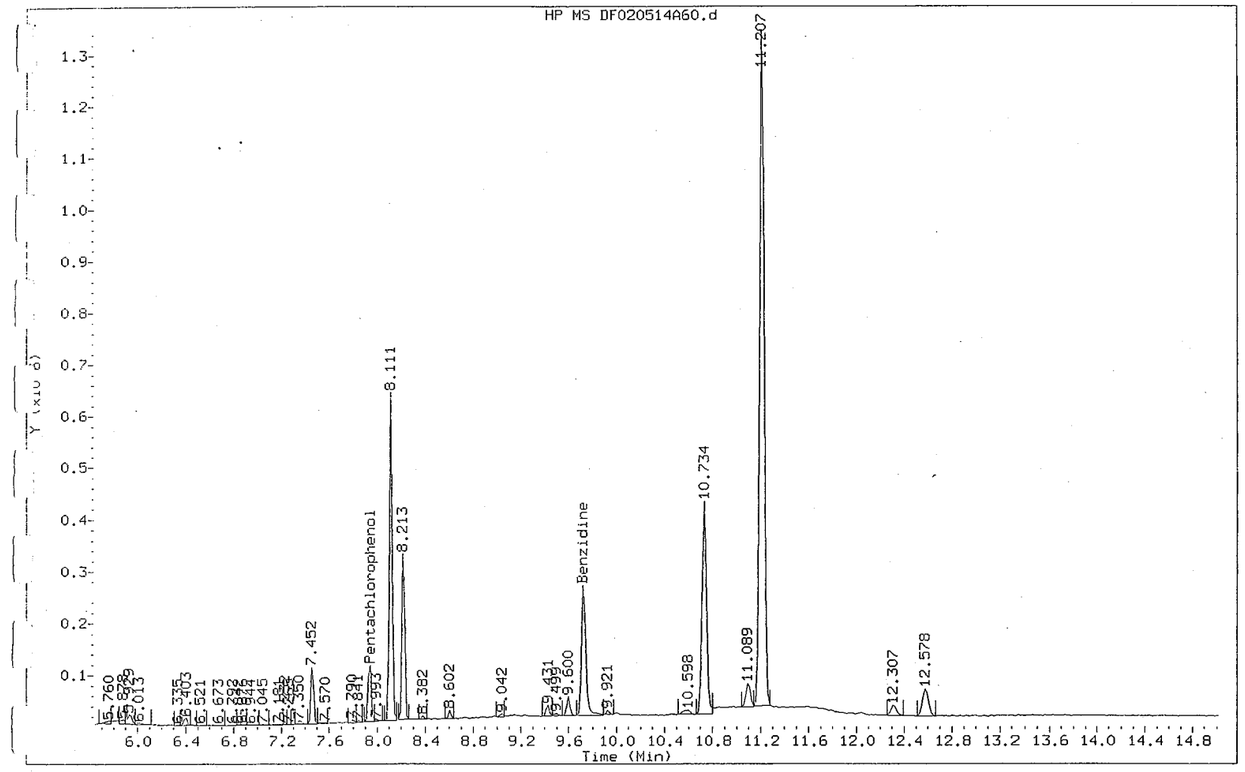
Tuning Sample, /chem/5972hp66.i/DF020514A66.b/DF020514A66.d/DF020514A66.d

*** PASSED ***

TAILING FACTOR and DEGRADATION SAMPLE AND GRAPHIC REPORT

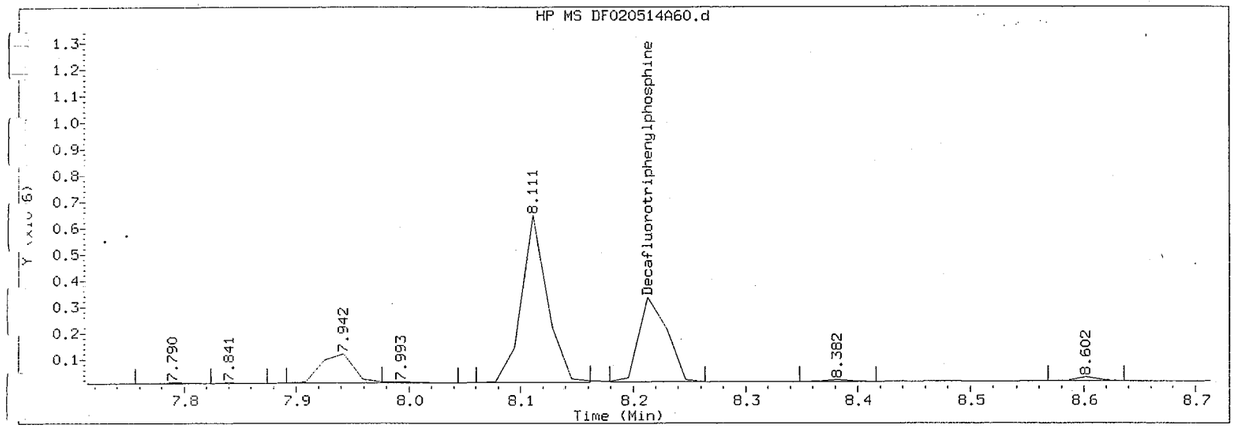
Report Date: 05/14/2030 10:00

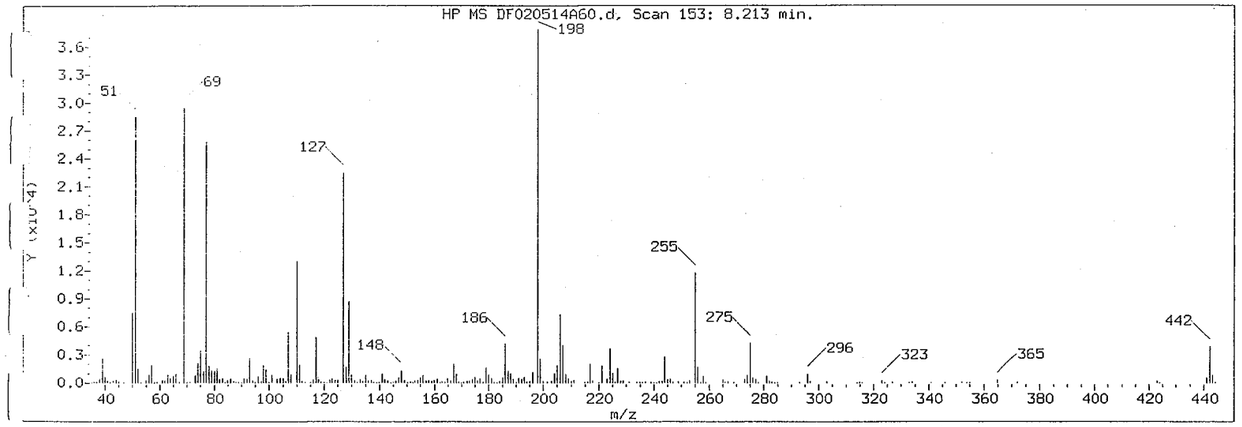
Datafile Analyzed: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d/DF020514A60.d
Method Used: /chem/5972hp60.i/DF020514A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 14-MAY-2002 07:50 Operator: 917
Sample Info: DFTPP DFTPP:917
Misc Info:



Report Date: 05/14/2030 10:00

Datafile Analyzed: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d/DF020514A60.d
Method Used: /chem/5972hp60.i/DF020514A60.b/dftpp625v2.m Inst: 5972hp60
Injection Date: 14-MAY-2002 07:50 Operator: 917
Sample Info: DFTPP DFTPP:917
Misc Info:





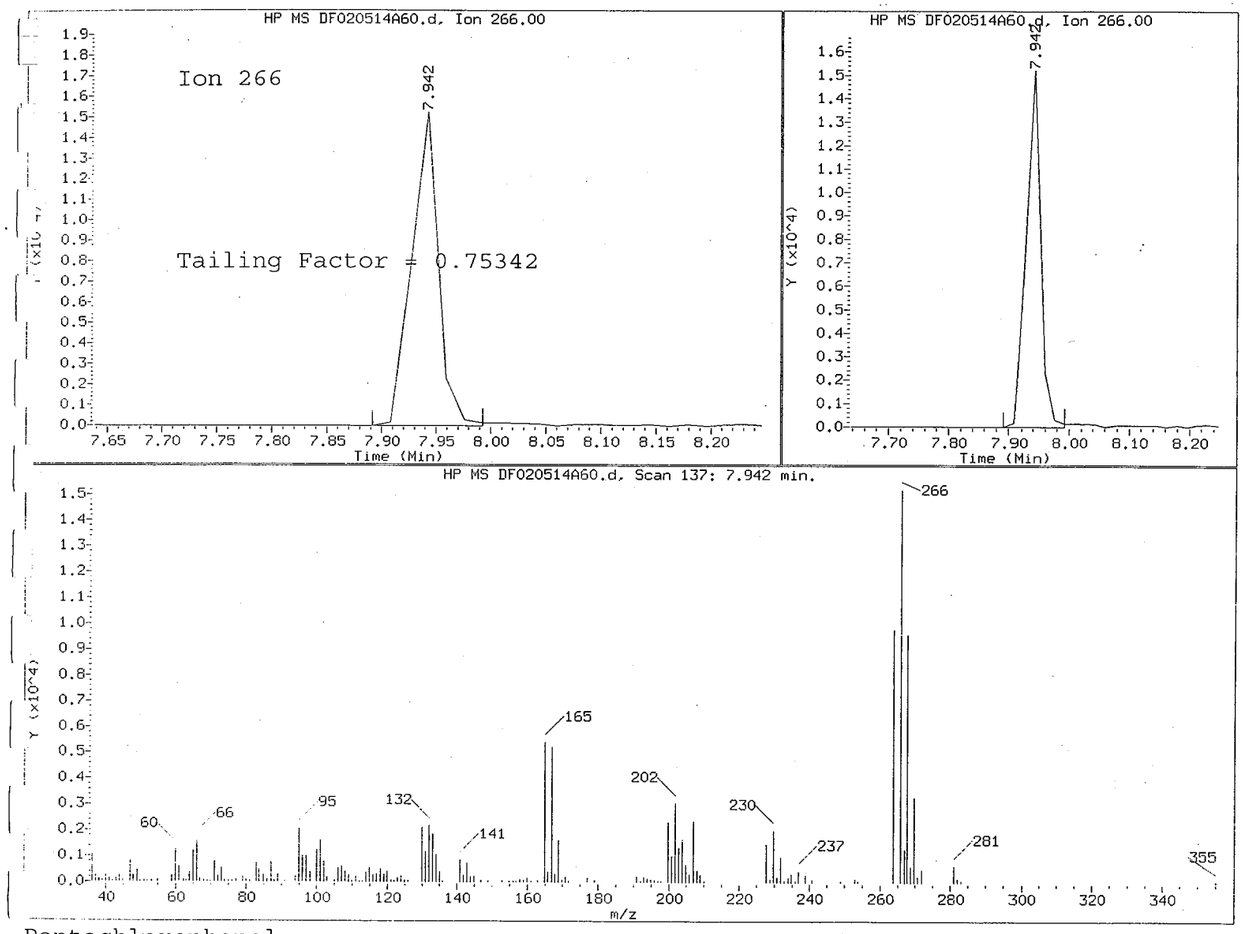
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 60% of mass 198	54.94		PASS
68	Less than 2% of mass 69 .	0.00	(0.00)	PASS
69	Mass 69 relative abundance	57.49		PASS
70	Less than 2% of mass 69	0.06	(0.10)	PASS
127	40 - 60% of mass 198	46.97		PASS
197	0 - 1% of mass 198	0.00		PASS
199	5 - 9% of mass 198	6.73		PASS
275	10 - 30% of mass 198	16.31		PASS
365	Greater than 0.75% of mass 198	1.90		PASS
441	Present, but less than mass 443	6.83	(75.63)	PASS
442	40 - 110% of mass 198	45.41		PASS
443	17 - 23% of mass 442	9.03	(19.90)	PASS

209

Report Date: 05/14/2030 10:00

Datafile Analyzed: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d/DF020514A60.d
Method Used: /chem/5972hp60.i/DF020514A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 14-MAY-2002 07:50 Operator:
Sample Info: DFTPP DFTPP:917
Misc Info:



Pentachlorophenol
==========
Exp. RT = 7.944
Found RT = 7.942

Mass	Area	Ratio
266	25752	100.00

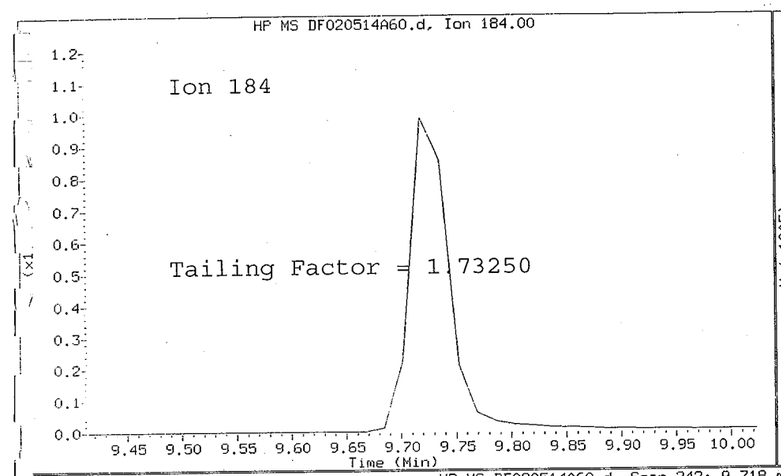
Tailing factor for Pentachlorophenol OK

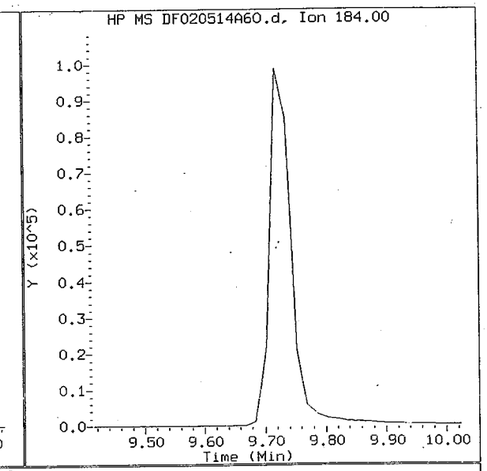
Tailing Factor = 0.8 Maximum Allowed = 5.0

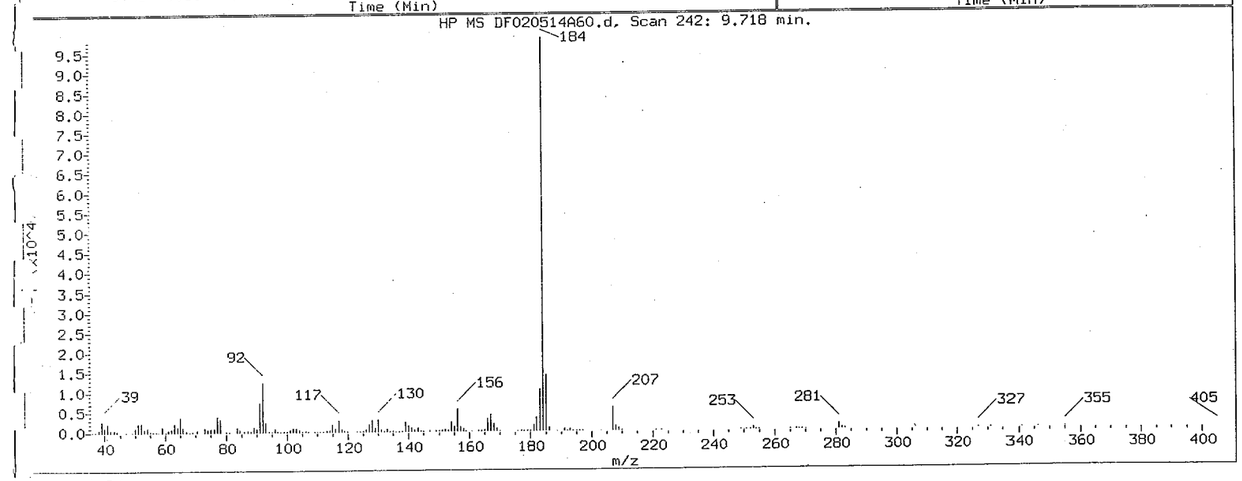
If Tailing Factor < 1.0, then it is assumed that the peak is not tailing and a Tailing Factor of zero is reported.

eport Date: 05/14/2030 10:00

atafile Analyzed: /chem/5972hp60.i/DF020514A60.b/DF020514A60.d/DF020514A60.d
ethod Used: /chem/5972hp60.i/DF020514A60.b/dftpp625v2.m/TailFactor.m Inst: 597
Injection Date: 14-MAY-2002 07:50 Operator:
Sample Info: DFTPP DFTPP:917
isc Info:







Benzidine
=========
Exp. RT = 9.720
Found RT = 9.718

Mass	Area	Ratio
184	251871	100.00

Tailing factor for Benzidine OK

Tailing Factor = 1.7 Maximum Allowed = 3.0

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	10	U
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
39638-32-9	bis(2-Chloroisopropyl)ether	10	U
621-64-7	N-Nitroso-di-N-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	10	U
131-11-3	Dimethylphthalate	10	U
606-20-2	2,6-Dinitrotoluene	10	U
208-96-8	Acenaphthylene	10	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
122-66-7	1,2-Diphenylhydrazine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
92-87-5	Benzidine	20	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
117-81-7	bis(2-ethylhexyl)Phthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-c,d)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKWG

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-1A60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/13/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
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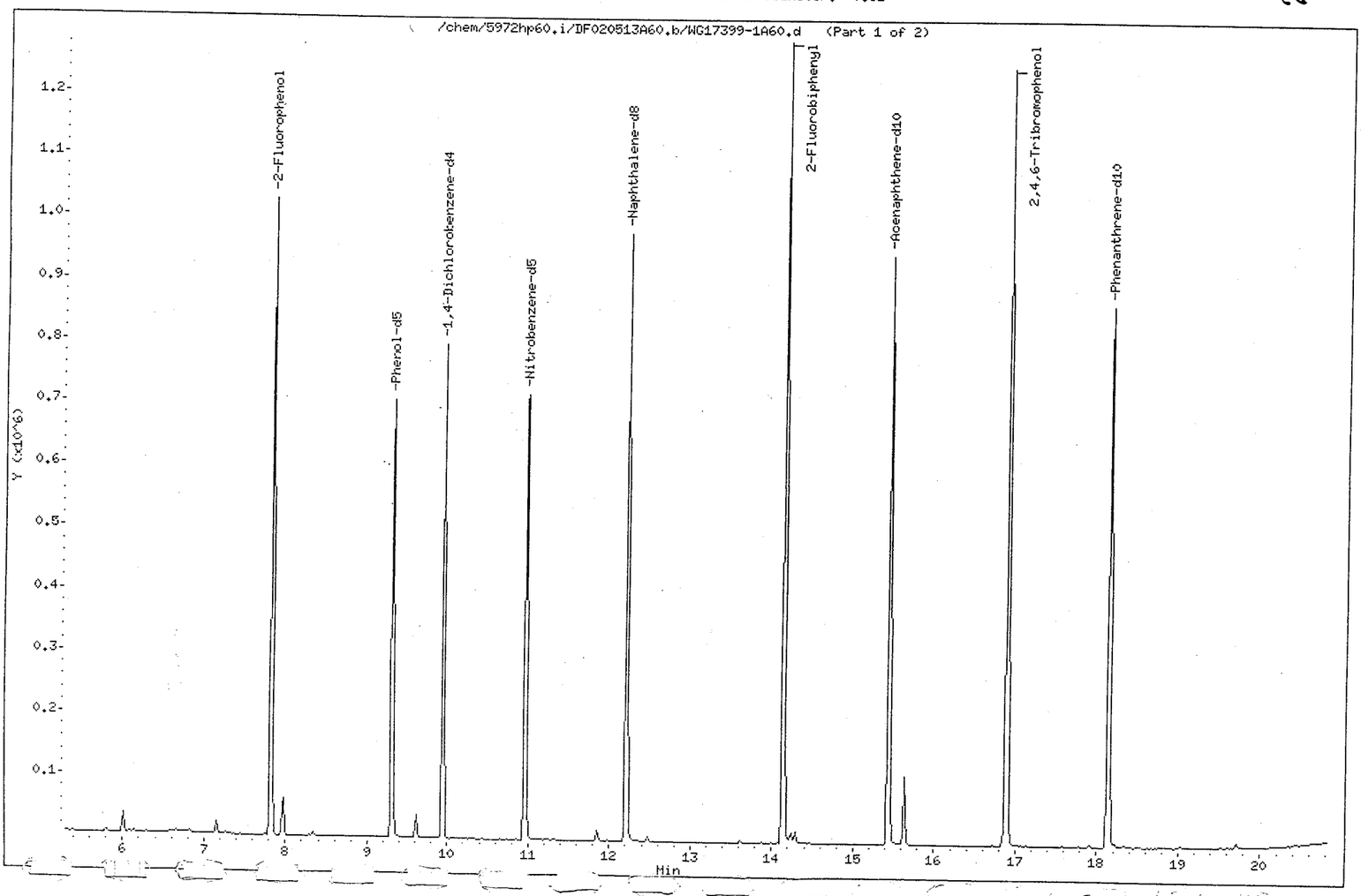
27.				
28.				
29.				
30.				

FORM I SV-TIC

Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Date : 13-MAY-2002 19:06
Client ID: SBLKWG
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 2319
Column diameter: 0.32

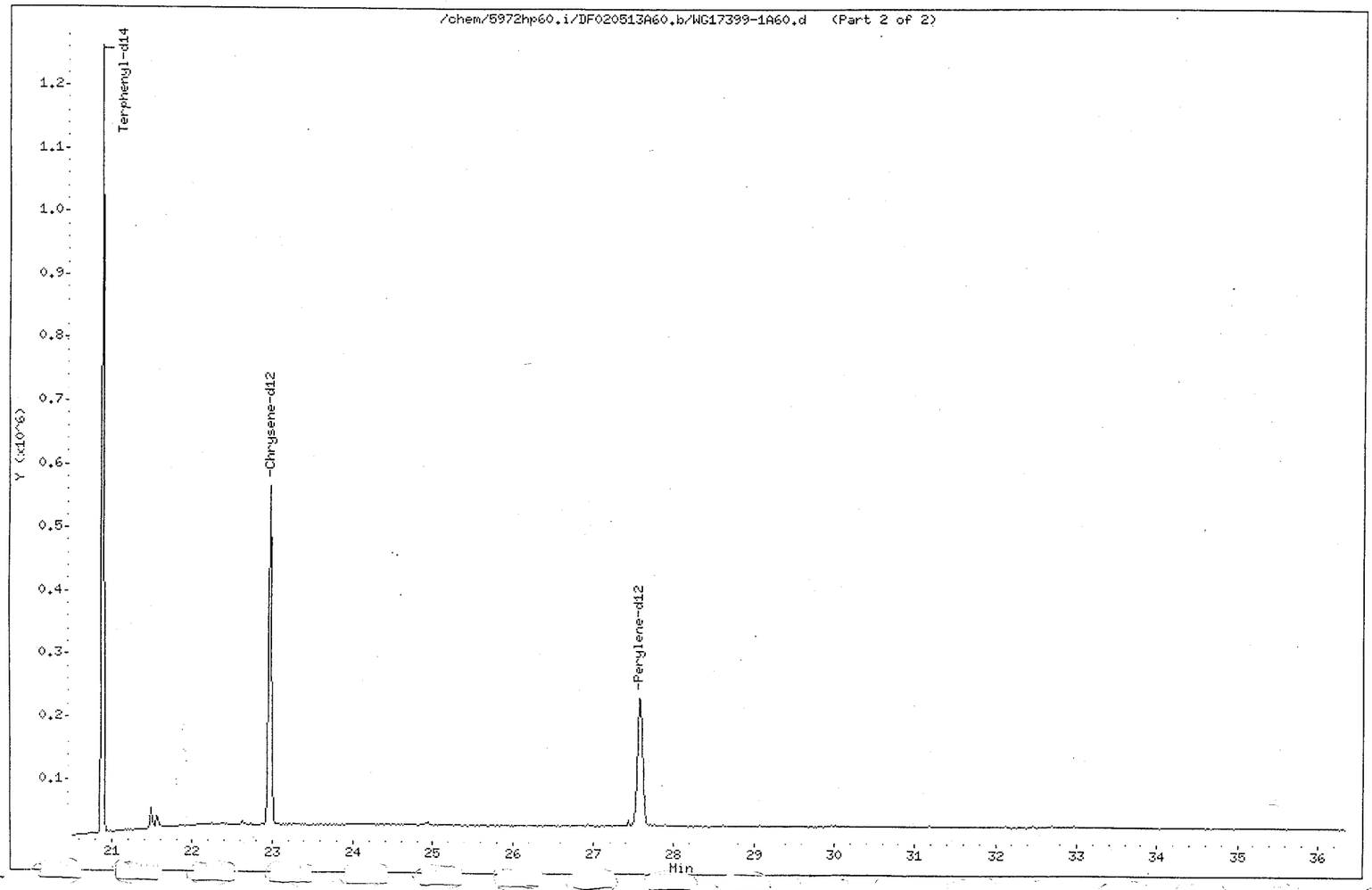


Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Date : 13-MAY-2002 19:06
Client ID: SBLKWG
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 2319
Column diameter: 0.32

217



Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Report Date: 14-May-2030 09:43

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Lab Smp Id: WG17399-1 Client Smp ID: SBLKWG
Inj Date : 13-MAY-2002 19:06
Operator : 2319 Inst ID: 5972hp60.i
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020513A60.b/625v4.m
Meth Date : 14-May-2030 09:06 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
	1 1,4-Dichlorobenzene-d4	152	9.947	9.929	(1.000)	206198	40.0000		
	2 Naphthalene-d8	136	12.214	12.196	(1.000)	766133	40.0000		8597
*	3 Acenaphthene-d10	164	15.429	15.427	(1.000)	438035	40.0000		9046
	4 Phenanthrene-d10	188	18.135	18.117	(1.000)	672807	40.0000		8830
	5 Chrysene-d12	240	22.974	22.956	(1.000)	402701	40.0000		8274
*	6 Perylene-d12	264	27.592	27.541	(1.000)	255504	40.0000		0(M)
$	7 2-Fluorophenol	112	7.832	7.814	(0.787)	486557	80.3739	80.4	8493
$	8 Phenol-d5	99	9.321	9.303	(0.937)	473513	56.8605	56.9	7176
$	9 Nitrobenzene-d5	82	10.962	10.944	(0.898)	510413	69.3533	69.4	8045
$	10 2-Fluorobiphenyl	172	14.143	14.125	(0.917)	801651	66.3928	66.4	8140
$	11 2,4,6-Tribromophenol	330	16.883	16.882	(1.094)	290125	164.049	164	9273(A)
$	12 Terphenyl-d14	244	20.876	20.858	(0.909)	739778	85.1702	85.2	8602
	13 N-Nitrosodimethylamine	42	Compound Not Detected.						
	14 Phenol	94	Compound Not Detected.						
	15 Bis(2-chloroethyl)ether	93	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Report Date: 14-May-2030 09:43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
16 2-Chlorophenol	128	Compound Not Detected.						
17 1,3-Dichlorobenzene	146	Compound Not Detected.						
18 1,4-Dichlorobenzene	146	Compound Not Detected.						
19 1,2-Dichlorobenzene	146	Compound Not Detected.						
20 bis(2-Chloroisopropyl)ether	45	Compound Not Detected.						
21 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
22 Hexachloroethane	117	Compound Not Detected.						
23 Nitrobenzene	77	Compound Not Detected.						
24 Isophorone	82	Compound Not Detected.						
25 2-Nitrophenol	139	Compound Not Detected.						
26 2,4-Dimethylphenol	107	Compound Not Detected.						
27 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
28 2,4-Dichlorophenol	162	Compound Not Detected.						
29 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
30 Naphthalene	128	Compound Not Detected.						
31 Hexachlorobutadiene	225	Compound Not Detected.						
32 4-Chloro-3-methylphenol	107	Compound Not Detected.						
33 Hexachlorocyclopentadiene	237	Compound Not Detected.						
34 2,4,6-Trichlorophenol	196	Compound Not Detected.						
35 2-Chloronaphthalene	162	Compound Not Detected.						
36 Dimethylphthalate	163	Compound Not Detected.						
37 2,6-Dinitrotoluene	165	Compound Not Detected.						
38 Acenaphthylene	152	Compound Not Detected.						
39 Acenaphthene	154	Compound Not Detected.						
40 2,4-Dinitrophenol	184	Compound Not Detected.						
41 4-Nitrophenol	109	Compound Not Detected.						
42 2,4-Dinitrotoluene	165	Compound Not Detected.						
43 Diethylphthalate	149	Compound Not Detected.						
44 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
45 Fluorene	166	Compound Not Detected.						
46 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
47 N-Nitrosodiphenylamine	169	Compound Not Detected.						
48 1,2-Diphenylhydrazine	77	Compound Not Detected.						
49 4-Bromophenyl-phenylether	248	Compound Not Detected.						
50 Hexachlorobenzene	284	Compound Not Detected.						
51 Pentachlorophenol	266	Compound Not Detected.						
52 Phenanthrene	178	Compound Not Detected.						
53 Anthracene	178	Compound Not Detected.						
54 Di-n-butylphthalate	149	Compound Not Detected.						
55 Fluoranthene	202	Compound Not Detected.						
56 Benzidine	184	Compound Not Detected.						
57 Pyrene	202	Compound Not Detected.						
58 Butylbenzylphthalate	149	Compound Not Detected.						
59 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
60 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
61 Benzo(a)Anthracene	228	Compound Not Detected.						
62 Chrysene	228	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Report Date: 14-May-2030 09:43

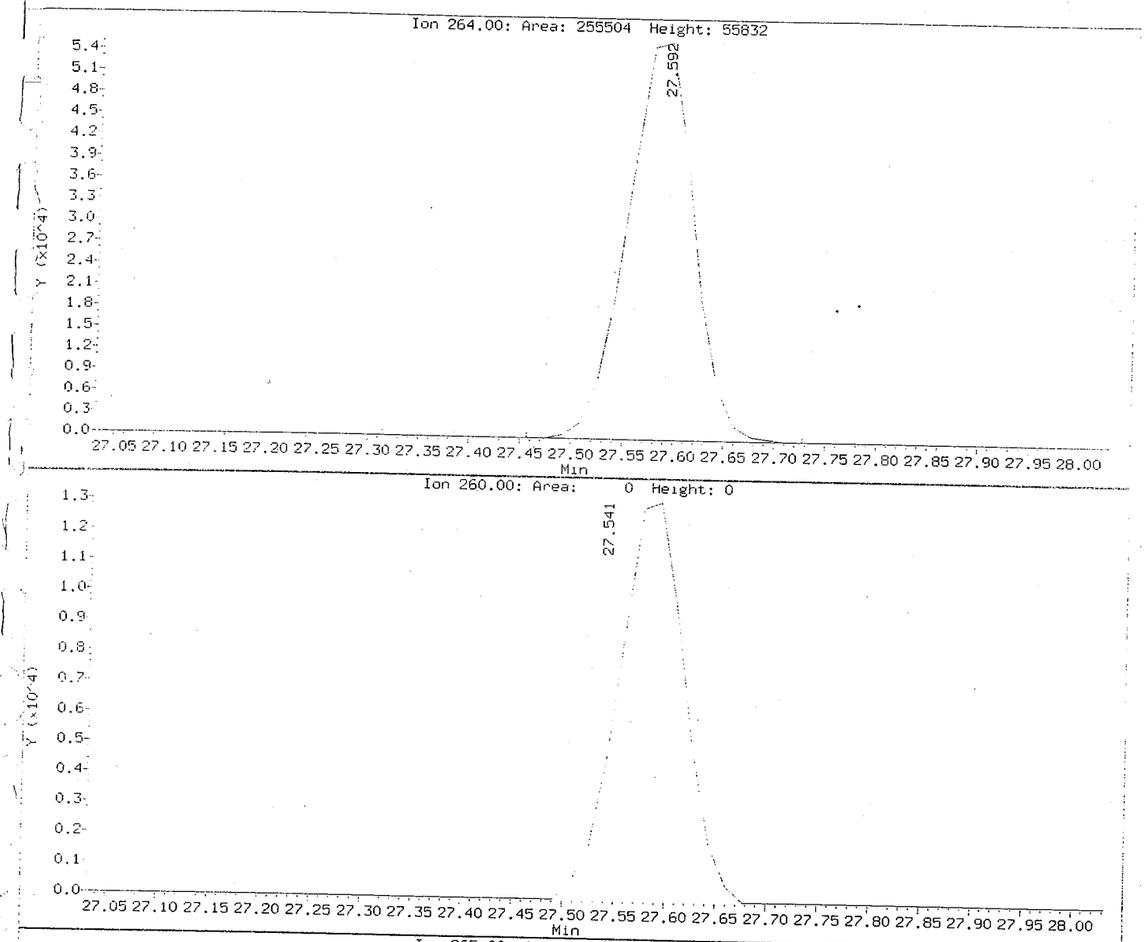
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
63 Di-n-octylphthalate	149	Compound Not Detected.						
64 Benzo(b)fluoranthene	252	Compound Not Detected.						
65 Benzo(k)fluoranthene	252	Compound Not Detected.						
66 Benzo(a)pyrene	252	Compound Not Detected.						
67 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
68 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
69 Benzo(g,h,i)perylene	276	Compound Not Detected.						

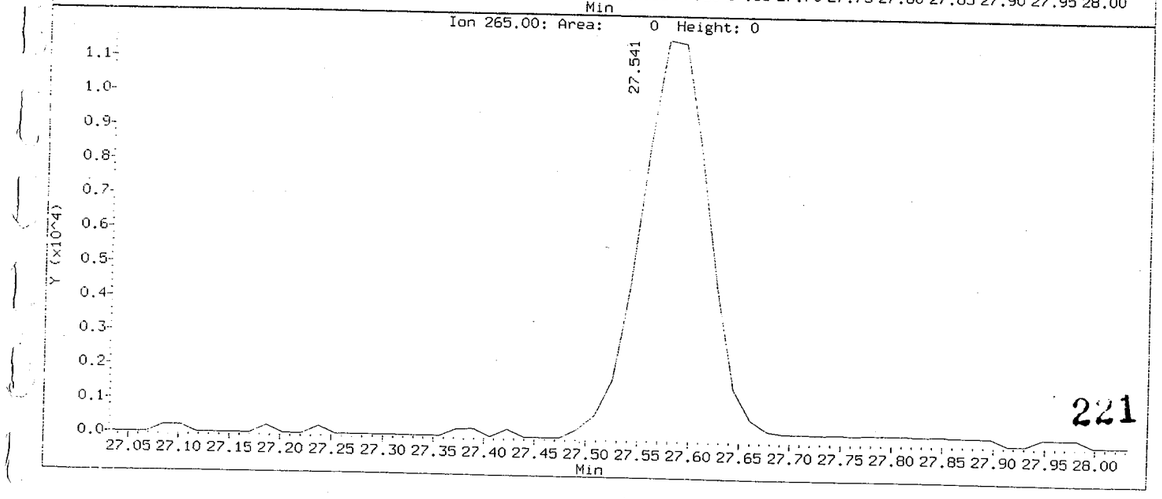
Flag Legend

- Target compound detected but, quantitated amount exceeded maximum amount.
- Compound response manually integrated.

Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Injection Date: 13-MAY-2002 19:06
Instrument: 5972hp60.i
Client Sample ID: SBLKWG

Compound: Perylene-d12
CAS Number: 1520-96-3





Data File: /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Report Date: 14-May-2030 09:43

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020513A60.b/WG17399-1A60.d
Lab Smp Id: WG17399-1 Client Smp ID: SBLKWG
Inj Date : 13-MAY-2002 19:06
Operator : 2319 Inst ID: 5972hp60.i
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020513A60.b/625v4.m
Meth Date : 14-May-2030 09:06 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

CompuChem
a Division of Liberty Analytical Corp.

GC/MS SEMI-VOA WORKSHEET

LAB INSTRUCTIONS:

RECEIPT DATE: 5/10/02 SAMPLE DATE: DUE DATE:

CASE#: SDG: WG17399 **COMPUCHEM #: WG17399-1**

CLIENT ID: SBLKWG

ANALYSIS DESCRIPTION: SVOA-625

Injection Volume :_____1_____µL Dilution Prep (if needed)_____

Extraction Date ___5___/___13___/___02___

DFTPP Filename _____DF020513A60_____

Sample File Name_____**WG17399-1**__A60_____

ANALYST (S): Injection_____2319_____ Work-up _____2319_____

GC/MS DATE REVIEW

CONDITION CODE

[OK]

Extraneous Peak Search Results:

Number of peaks found: ___Ø___

Number of Hits found: ___Ø___

Number of Surrogate Outliers: _____Ø_____

Quality Assurance Notice (s)
Number of Notices Required ___Ø___

Disposition: [✓] Complete

[ ] Reinjection Required

[ ] Re-extraction Required

[ ] Reinject Neat

[ ] Dilute (X)

Comments:

#GC/MS Review_____ Date_5/14/2__ Auditor_____Date___/___/___

Final Reportable Package(s):

_____/___WG17399-1A60__/_____

SV1 – 6/27/01: PTF

ASSIGNED TO: David/Rob/Phillip

EMP ID NUMBER 2503/2314/2455

B/N and Acid Extraction of Water

EXTRACTION WORKSHEET

-036/-037

DATE EXTRACTED: 5/13/02

5-13-4

224

	SAMPLE NUMBER	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL EXTRACTED VOL.	ADJUSTED PH B/N	ADJUSTED PH ACID	COMMENTS
1	Q2558-1		1000	1.0	12.0	1.3	
2	↓ 2		1050	↓	12.0	1.3	
3	↓ 3		1025	↓	12.0	1.3	
4	Q2559-2	QC	500	0.5	13.0	1.3	
5	WG17399-3	SS	500	↓	13.0	1.3	use Q2559-2 for SS - use 500mls for orig & SS w/ 0.5ml surr spk.
6	↓ 4	SS	500	↓	13.0	1.3	
7	ZZ337-1		1050	1.0	12.0	1.3	
8	↓ -2		1050	↓	12.0	1.3	
9							
10							Base added first witness: DH/RC
11							
12							Acid added second witness: P.L.
13							
14							
15							- surrogate 393 lot# 52918 added to Q2559-2, WG17399-3, WG17399-4 at a volume of 0.5 ml.
16							
17							
18							- surrogate 393 lot# 52918 at 1.0ml was added to Q2558-1 before the supply of that lot number was exhausted
19							
20							
21						NB 5/13/02	- surrogate 393 lot # 53058 add at 1.0ml to all others
22							DH 5/13/02
23	WG17399-1	BLK	1000	1.0	12.0	1.3	
24	↓ -2	LCS	1000	↓	12.0	1.3	← 1.0ml validation spike added to LCS

		S-VOL	SURROGATE & SPIKE ADDED BY:
SURROGATE	NO.	393	RC, 5/13/02
	AMT.	1.0 ml	
	LOT	52918/53058	Date
SPIKE	NO.		VALIDATION SPIKE
	AMT.		1.0 mL
	LOT		52900

FINAL VOLUME VERIFIED: [illegible]

SUPERVISOR REVIEWED: [illegible]

WITNESS DH 5/13/02

Initials Date

Analyst initials. Extracted DH/PL/RC KD NB/GTB/DH N2 DH Bottle up NB

Maunfacturer and lot number of reagents/solvents used Na_2SO_4, # 41324201 / CH_2Cl_2, # CE134 / 10N NaOH, # 7095

H_2SO_4 # VA3029

5/22/01:dce

c. Laboratory Control Sample Data

Arranged in chronological order, by extraction date

- Tabulated Results (Form I SV)
- Reconstructed Ion Chromatogram and quantitation report

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-2JA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
62-75-9	N-Nitrosodimethylamine	54	
108-95-2	Phenol	26	
111-44-4	Bis(2-chloroethyl)ether	94	
95-57-8	2-Chlorophenol	45	
541-73-1	1,3-Dichlorobenzene	75	
106-46-7	1,4-Dichlorobenzene	75	
95-50-1	1,2-Dichlorobenzene	77	
39638-32-9	bis(2-Chloroisopropyl)ether	93	
621-64-7	N-Nitroso-di-N-propylamine	120	
67-72-1	Hexachloroethane	77	
98-95-3	Nitrobenzene	89	
78-59-1	Isophorone	87	
88-75-5	2-Nitrophenol	33	
105-67-9	2,4-Dimethylphenol	70	
111-91-1	Bis(2-chloroethoxy)methane	110	
120-83-2	2,4-Dichlorophenol	47	
120-82-1	1,2,4-Trichlorobenzene	86	
91-20-3	Naphthalene	75	
87-68-3	Hexachlorobutadiene	94	
59-50-7	4-Chloro-3-methylphenol	73	
77-47-4	Hexachlorocyclopentadiene	100	
88-06-2	2,4,6-Trichlorophenol	31	
91-58-7	2-Chloronaphthalene	92	
131-11-3	Dimethylphthalate	110	
606-20-2	2,6-Dinitrotoluene	100	
208-96-8	Acenaphthylene	83	
83-32-9	Acenaphthene	78	
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	20	U
121-14-2	2,4-Dinitrotoluene	100	
84-66-2	Diethylphthalate	120	
7005-72-3	4-Chlorophenyl-phenylether	140	
86-73-7	Fluorene	89	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SWGLCS

Lab Name: COMPUCHEM Contract: 625

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: Q2558

Matrix: (soil/water) WATER Lab Sample ID: WG17399-2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: WG17399-2JA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:05/13/02

Concentrated Extract Volume: 1000(uL) Date Analyzed: 05/14/02

Injection Volume: 1.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

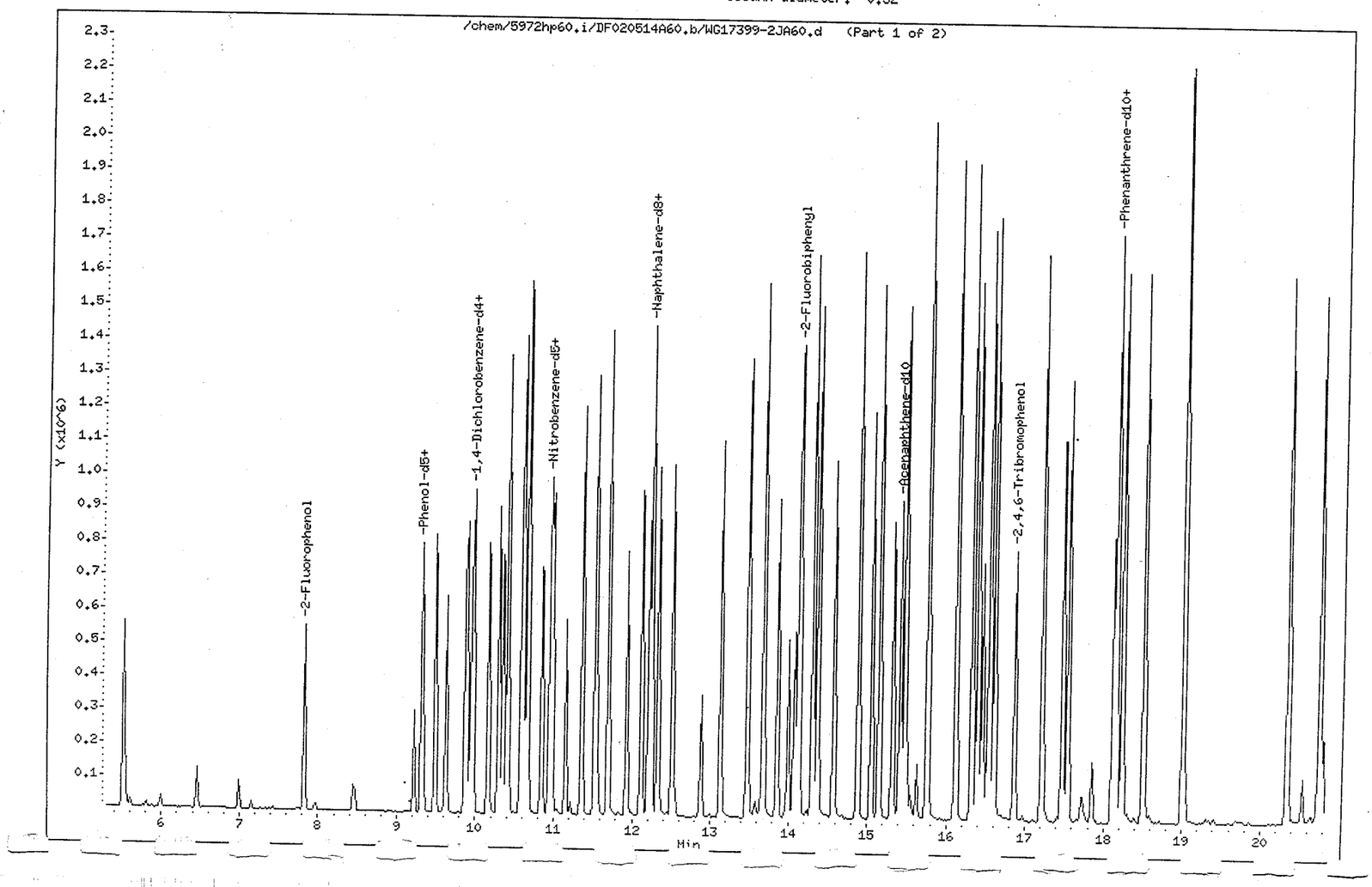
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	21	
86-30-6	N-Nitrosodiphenylamine (1)	59	
122-66-7	1,2-Diphenylhydrazine	90	
101-55-3	4-Bromophenyl-phenylether	140	
118-74-1	Hexachlorobenzene	110	
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	87	
120-12-7	Anthracene	87	
84-74-2	Di-n-butylphthalate	120	
206-44-0	Fluoranthene	93	
92-87-5	Benzidine	20	U
129-00-0	Pyrene	84	
85-68-7	Butylbenzylphthalate	110	
117-81-7	bis(2-ethylhexyl)Phthalate	120	
91-94-1	3,3'-Dichlorobenzidine	130	
56-55-3	Benzo(a)Anthracene	85	
218-01-9	Chrysene	85	
117-84-0	Di-n-octylphthalate	140	
205-99-2	Benzo(b)fluoranthene	100	
207-08-9	Benzo(k)fluoranthene	89	
50-32-8	Benzo(a)pyrene	92	
193-39-5	Indeno(1,2,3-c,d)pyrene	110	
53-70-3	Dibenzo(a,h)anthracene	92	
191-24-2	Benzo(g,h,i)perylene	96	

(1) - Cannot be separated from Diphenylamine

Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Date : 14-MAY-2002 11:08
Client ID: SWGLCS
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32

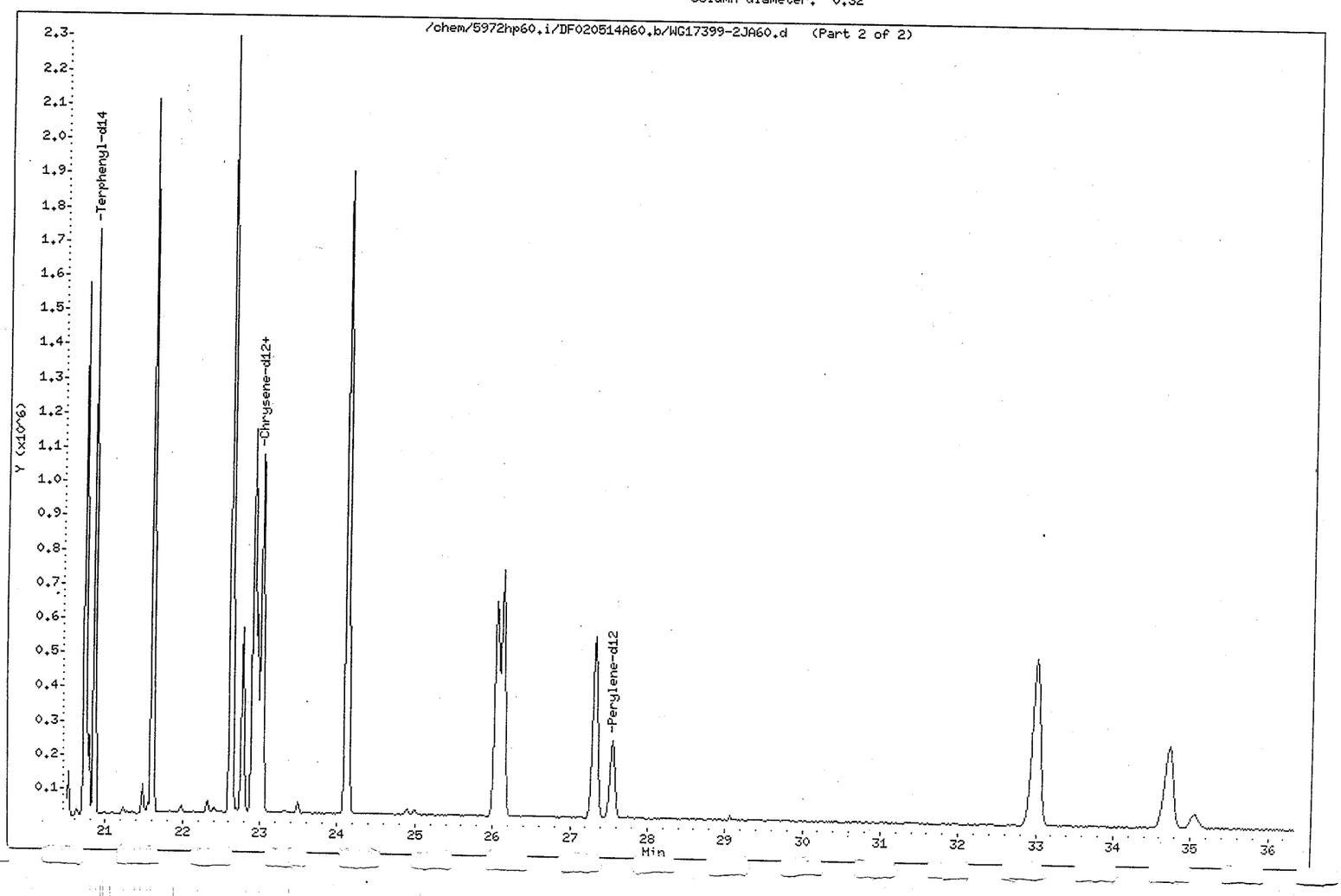


Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Date : 14-MAY-2002 11:08
Client ID: SWGLCS
Sample Info:
Volume Injected (uL): 1.0
Column phase: J&W DB5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32

229



Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Report Date: 15-May-2030 09:47

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Lab Smp Id: WG17399-2 Client Smp ID: SWGLCS
Inj Date : 14-MAY-2002 11:08
Operator : 917 Inst ID: 5972hp60.i
Smp Info :
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020514A60.b/625v4.m
Meth Date : 15-May-2030 09:24 byrd Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.936	9.931	(1.000)	165302	40.0000		
	2 Naphthalene-d8	136	12.203	12.198	(1.000)	677001	40.0000		8434
	3 Acenaphthene-d10	164	15.417	15.412	(1.000)	395130	40.0000		8653
*	4 Phenanthrene-d10	188	18.107	18.119	(1.000)	618203	40.0000		8868
*	5 Chrysene-d12	240	22.962	22.957	(1.000)	415214	40.0000		8557
*	6 Perylene-d12	264	27.547	27.559	(1.000)	262168	40.0000		7234
$	7 2-Fluorophenol	112	7.821	7.816	(0.787)	257927	53.1477	53.1	8422
$	8 Phenol-d5	99	9.310	9.305	(0.937)	406791	60.9335	60.9	7987
	9 Nitrobenzene-d5	82	10.951	10.946	(0.897)	606009	93.1836	93.2	8235
	10 2-Fluorobiphenyl	172	14.131	14.126	(0.917)	1017382	93.4089	93.4	7846
$	11 2,4,6-Tribromophenol	330	16.872	16.867	(1.094)	184005	115.342	115	9489
$	12 Terphenyl-d14	244	20.865	20.860	(0.909)	941964	105.180	105	8348
	13 N-Nitrosodimethylamine	42	5.503	5.515	(0.554)	155725	54.3918	54.4	8184
	14 Phenol	94	9.327	9.339	(0.939)	197031	25.9917	26.0	8383

Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Report Date: 15-May-2030 09:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.479	9.491	(0.954)	568910	93.7695	93.8	7794
16 2-Chlorophenol	128	9.631	9.626	(0.969)	286681	45.2703	45.3	8485
17 1,3-Dichlorobenzene	146	9.885	9.880	(0.995)	406913	74.5700	74.6	
18 1,4-Dichlorobenzene	146	9.970	9.965	(1.003)	410904	75.1577	75.2	
19 1,2-Dichlorobenzene	146	10.291	10.303	(1.036)	415126	76.6097	76.6	
20 bis(2-Chloroisopropyl)ether	45	10.409	10.404	(1.048)	1188255	92.5741	92.6	9204
21 N-Nitroso-di-N-propylamine	70	10.663	10.658	(1.073)	378927	119.538	120	8740
22 Hexachloroethane	117	10.832	10.844	(1.090)	215365	77.1347	77.1	8771
23 Nitrobenzene	77	10.985	10.980	(0.900)	562253	89.0759	89.1	8370
24 Isophorone	82	11.357	11.352	(0.931)	1020629	86.9548	87.0	7778
25 2-Nitrophenol	139	11.543	11.538	(0.946)	133700	32.9390	32.9	8269
26 2,4-Dimethylphenol	107	11.526	11.521	(0.945)	418741	69.6976	69.7	9417
27 Bis(2-chloroethoxy)methane	93	11.695	11.690	(0.958)	893584	107.043	107	7941
28 2,4-Dichlorophenol	162	11.932	11.944	(0.978)	256698	46.9966	47.0	8818
29 1,2,4-Trichlorobenzene	180	12.118	12.113	(0.993)	414213	85.8470	85.8	7193
30 Naphthalene	128	12.237	12.248	(1.003)	1220274	74.8496	74.8	
31 Hexachlorobutadiene	225	12.507	12.519	(1.025)	250889	94.4227	94.4	9467
32 4-Chloro-3-methylphenol	107	13.133	13.128	(1.076)	415391	72.4959	72.5	8504
33 Hexachlorocyclopentadiene	237	13.861	13.856	(0.899)	293203	102.861	103	8684
34 2,4,6-Trichlorophenol	196	13.996	14.008	(0.908)	125706	30.9734	31.0	8927(R)
35 2-Chloronaphthalene	162	14.368	14.363	(0.932)	879169	91.9842	92.0	
36 Dimethylphthalate	163	14.876	14.888	(0.965)	1321341	108.192	108	8748
37 2,6-Dinitrotoluene	165	15.045	15.057	(0.976)	312423	99.8869	99.9	8625
38 Acenaphthylene	152	15.146	15.158	(0.982)	1414659	82.8083	82.8	8676
39 Acenaphthene	154	15.485	15.480	(1.004)	760908	78.2142	78.2	8681
40 2,4-Dinitrophenol	184	15.502	15.497	(1.005)	11944	6.88300	6.88	(a)
41 4-Nitrophenol	109	15.536	15.547	(1.008)	8900	8.16371	8.16	(a)
42 2,4-Dinitrotoluene	165	15.772	15.767	(1.023)	348652	103.899	104	8477
43 Diethylphthalate	149	16.128	16.123	(1.046)	1555661	120.809	121	9221(R)
44 4-Chlorophenyl-phenylether	204	16.314	16.326	(1.058)	642231	140.713	141	8886
45 Fluorene	166	16.381	16.393	(1.063)	977960	88.8764	88.9	8245
46 4,6-Dinitro-2-methylphenol	198	16.517	16.512	(0.912)	48097	21.0060	21.0	(M)
47 N-Nitrosodiphenylamine	169	16.534	16.546	(0.913)	886535	58.8397	58.8	
48 1,2-Diphenylhydrazine	77	16.601	16.613	(1.077)	1417391	89.6453	89.6	8174
49 4-Bromophenyl-phenylether	248	17.210	17.205	(0.950)	379569	135.764	136	9445(R)
50 Hexachlorobenzene	284	17.549	17.544	(0.969)	348662	113.884	114	8266
51 Pentachlorophenol	266	17.853	17.848	(0.986)	40334	14.2778	14.3	9279(a)
52 Phenanthrene	178	18.158	18.170	(1.003)	1344734	86.5567	86.6	
53 Anthracene	178	18.242	18.237	(1.007)	1369913	86.8383	86.8	
54 Di-n-butylphthalate	149	19.021	19.016	(1.050)	2861284	121.685	122	9190(R)
55 Fluoranthene	202	20.340	20.352	(1.123)	1376576	92.5874	92.6	
56 Benzidine	184	20.492	20.487	(0.892)	3487	1.17903	1.18	0(aM)
57 Pyrene	202	20.746	20.741	(0.903)	1238558	83.7506	83.8	
58 Butylbenzylphthalate	149	21.592	21.604	(0.940)	1133154	113.619	114	8788
59 bis(2-ethylhexyl)Phthalate	149	22.624	22.619	(0.985)	1593913	116.479	116	8499(H)
60 3,3'-Dichlorobenzidine	252	22.776	22.771	(0.992)	273092	126.530	127	8995
61 Benzo(a)Anthracene	228	22.912	22.924	(0.998)	1039180	85.0576	85.1	

Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Report Date: 15-May-2030 09:47

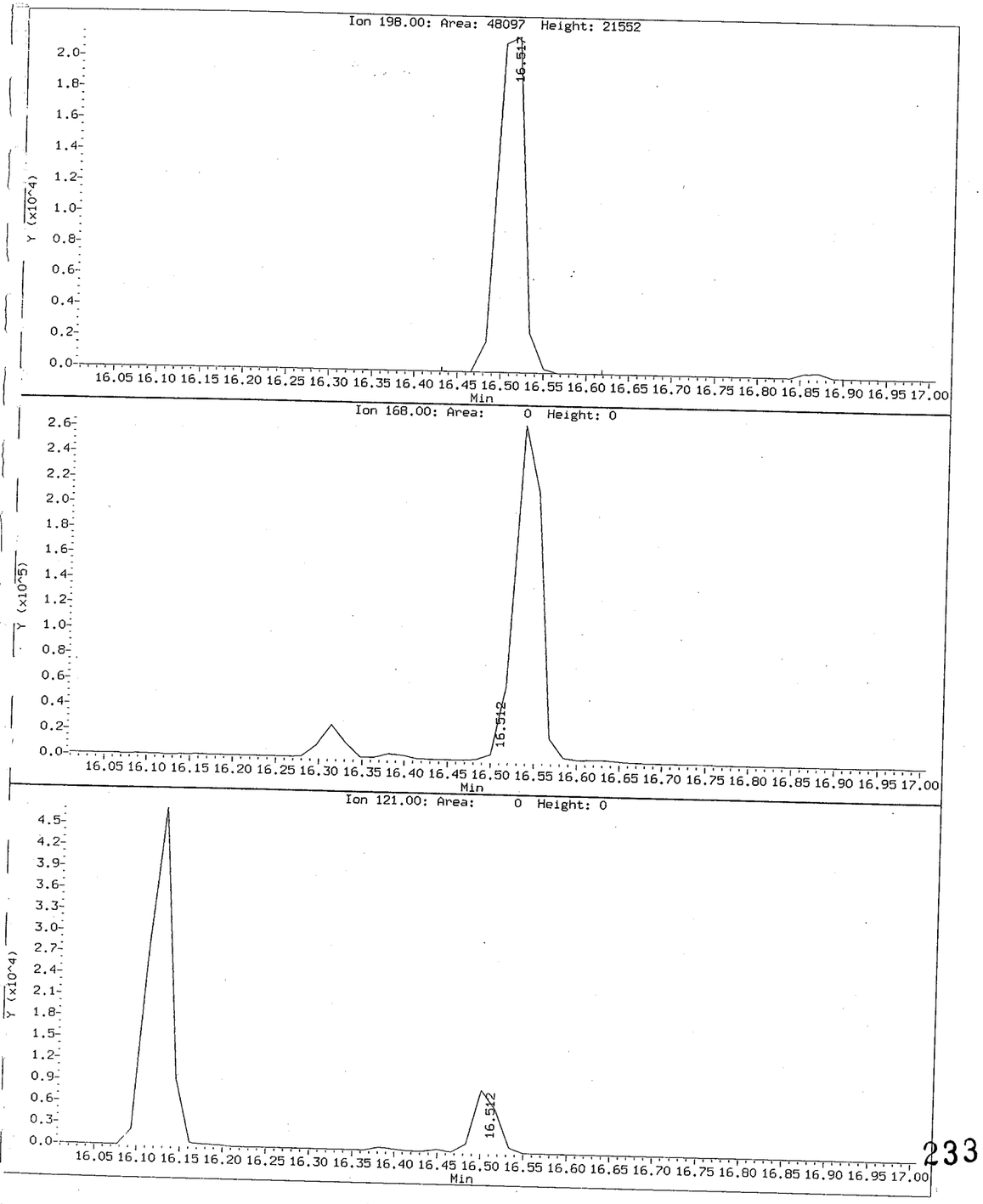
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
62 Chrysene	228	23.030	23.025	(1.003)	965621	84.6811	84.7	
63 Di-n-octylphthalate	149	24.130	24.125	(0.876)	2890856	136.716	137	8579
64 Benzo(b)fluoranthene	252	26.041	26.053	(0.945)	1009160	102.483	102	
65 Benzo(k)fluoranthene	252	26.126	26.138	(0.948)	890492	89.3800	89.4	
66 Benzo(a)pyrene	252	27.327	27.339	(0.992)	778165	91.8577	91.9	8064
67 Indeno(1,2,3-c,d)pyrene	276	33.011	33.023	(1.198)	679590	105.191	105	
68 Dibenzo(a,h)anthracene	278	33.011	33.040	(1.198)	549326	92.2243	92.2	7529
69 Benzo(g,h,i)perylene	276	34.720	34.732	(1.260)	564058	96.3319	96.3	7718

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

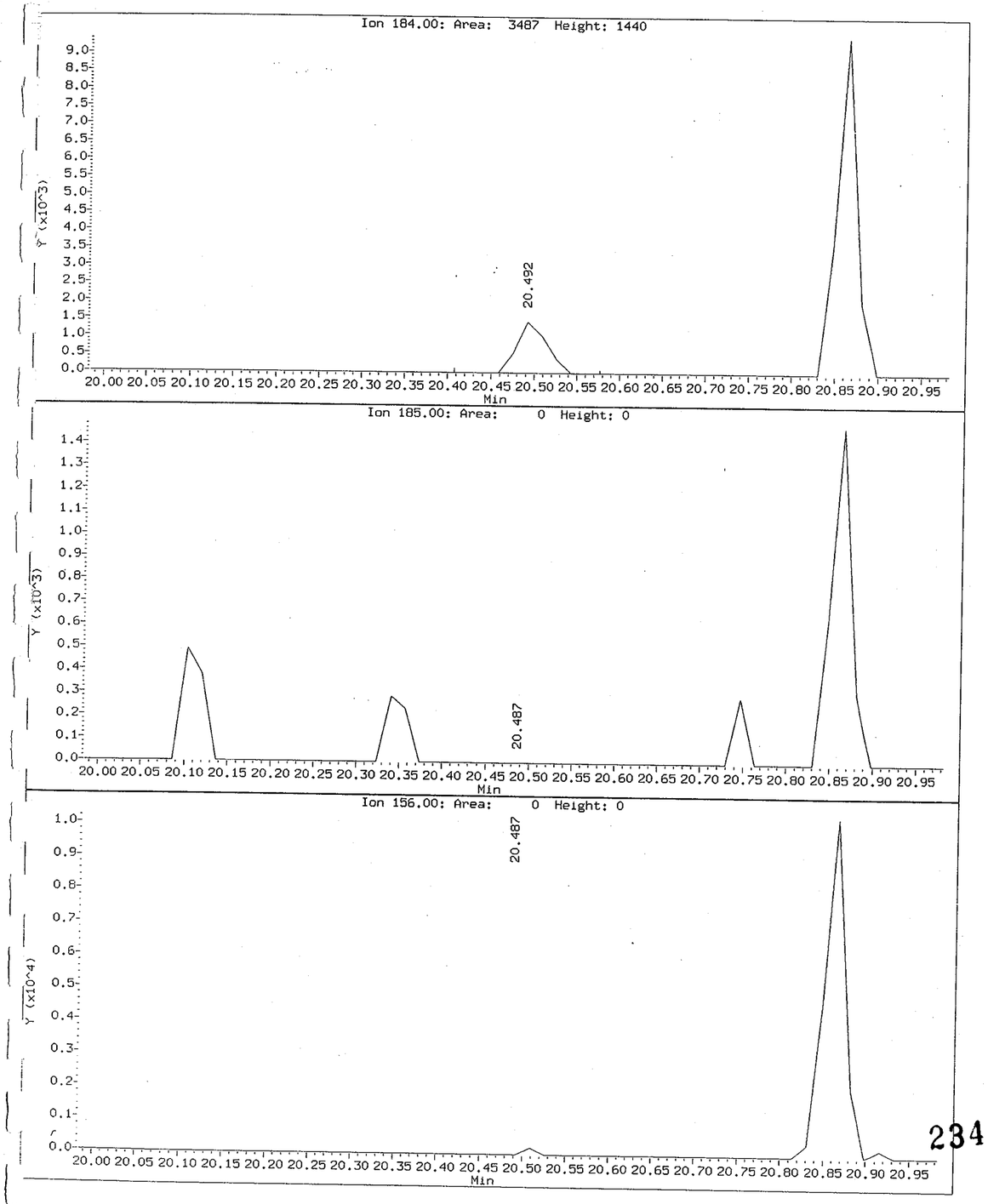
Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Injection Date: 14-MAY-2002 11:08
Instrument: 5972hp60.i
Client Sample ID: SWGLCS

Compound: 4,6-Dinitro-2-methylphenol
CAS Number: 534-52-1



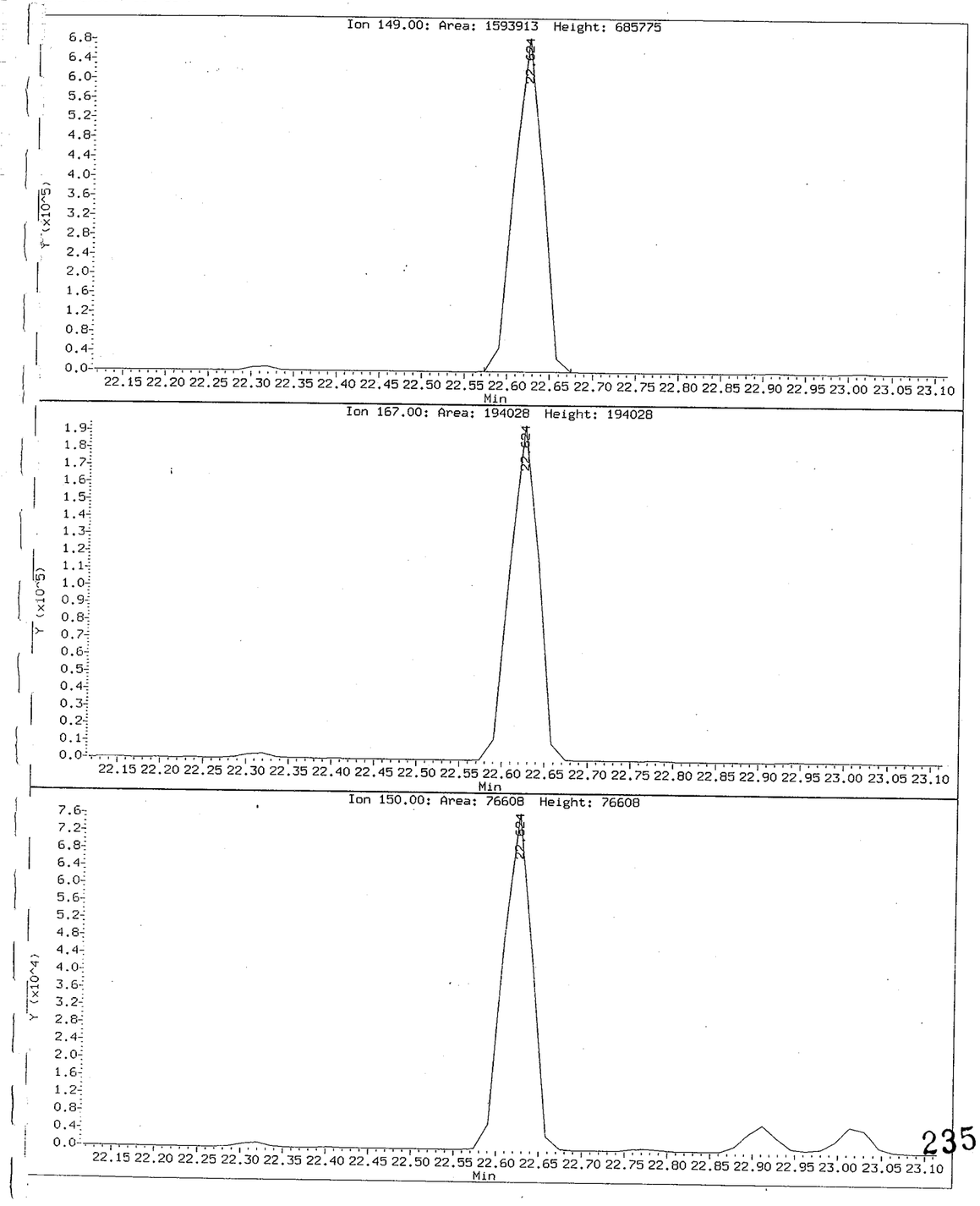
Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Injection Date: 14-MAY-2002 11:08
Instrument: 5972hp60.i
Client Sample ID: SWGLCS

Compound: Benzidine
CAS Number: 92-87-5



Data File: /chem/5972hp60.i/DF020514A60.b/WG17399-2JA60.d
Injection Date: 14-MAY-2002 11:08
Instrument: 5972hp60.i
Client Sample ID: SWGLCS

Compound: bis(2-ethylhexyl)Phthalate
CAS Number: 117-81-7



CompuChem
a Division of Liberty Analytical Corp.

GC/MS SEMI-VOA WORKSHEET

LAB INSTRUCTIONS:

RECEIPT DATE: 5/10/02 SAMPLE DATE: DUE DATE:

CASE#: SDG: WG17399 **COMPUCHEM #: WG17399-2** J

CLIENT ID: SWGLCS

ANALYSIS DESCRIPTION: SVOA-625

Injection Volume : 1 µL Dilution Prep (if needed)

Extraction Date 5 / 13 / 02

DFTPP Filename DF020514A60

Sample File Name **WG17399-2** J A60

ANALYST (S): Injection 917 Work-up 917

GC/MS DATE REVIEW

CONDITION CODE

JA

Extraneous Peak Search Results:

Number of peaks found: N/A

Number of Hits found: NL

Number of Surrogate Outliers: 0

Quality Assurance Notice (s)
Number of Notices Required 0

Comments:

Disposition: [✓] Complete

[ ] Reinjection Required

[ ] Re-extraction Required

[ ] Reinject Neat

[ ] Dilute (X)

#GC/MS Review [signature] Date 5/15/2 Auditor Date / /

Final Reportable Package(s):

/ WG17399-2 J A60 /

SV1 – 6/27/01: PTF

ASSIGNED TO: David/Rob/Phillip

EMP ID NUMBER 2503/2514/2455

B/N and Acid Extration of Water-Method 625

EXTRACTION WORKSHEET

-036/-037

DATE EXTRACTED: 5/13/02

5-13-4

237

	SAMPLE NUMBER	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL EXTRACTED VOL.	ADJUSTED PH B/N	ADJUSTED PH ACID	COMMENTS
1	Q2558-1		1000	1.0	12.0	1.3	
2	↓ 2		1050	↓	12.0	1.3	
3	↓ 3		1025	↓	12.0	1.3	
4	Q2559-2	QC	500	0.5	13.0	1.3	
5	WG17399-3	SS	500	↓	13.0	1.3	use 500mls for SS – use 500mls for orig & SS w/ 0.5ml surr tsp.
6	↓ 4	SS	500	↓	13.0	1.3	
7	Z2337-1		1050	1.0	12.0	1.3	
8	↓ -2		1050	↓	12.0	1.3	
9							
10							Base added first witness: [illegible]
11							
12							Acid added second witness: P.L.
13							
14							
15							– surrogate 393 lot# 52918 added to
16							Q2559-2, WG17399-3, WG17399-4
17							at a volume of 0.5 ml.
18							– surrogate 393 lot# 52918 at 1.0ml
19							was added to Q2558-1 before the
20							supply of that lot number was exhausted
21						NB 5/13/02	– surrogate 393 lot # 53058 add at
22							1.0ml to all others. DH 5/13/02
23	WG17399-1	BLK	1000	1.0	12.0	1.3	
24	↓ -2	LCS	1000	↓	12.0	1.3	← 1.0ml validation spike added to LCS

		S-VOL	SURROGATE & SPIKE ADDED BY:
SURROGATE	NO.	393	RC 5/13/02
	AMT.	1.0 ml	
	LOT	52918/53058	Date
SPIKE	NO.		VALIDATION SPIKE
	AMT.		1.0 mL
	LOT		52900

FINAL VOLUME VERIFIED: [illegible]

SUPERVISOR REVIEWED: [illegible]

WITNESS DH 5/13/02

Initials Date

Analyst initials. Extracted DH/PL/RC KD NB/GB/DH N2 DH Bottle up NB

Maunfacturer and lot number of reagents/solvents used Na_2SO_4, # 41324201 / CH_2Cl_2, # CE134 / 10N NaOH, # 70950

H_2SO_4, # VC2720

5/22/01:dce

d. Matrix Spike Data

- Tabulated Results (Form I SV)

- Reconstructed Ion Chromatogram and quantitation report

e. Matrix Spike Duplicate Data

- Tabulated Results (Form I SV)

- Reconstructed Ion Chromatogram and quantitation report

APPENDIX B

NEW WELL, MW-2A CONSTRUCTION/BORING LOG
OLD WELL, MW-2 ABANDONMENT RECORD/FORM

WELL CONSTRUCTION RECORD

North Carolina – Department of Environmental and Natural Resources – Division of Water Quality – Groundwater Section

WELL CONTRACTOR (INDIVIDUAL) NAME (print) DANNY SUMMERS CERTIFICATION # 2579

WELL CONTRACTOR COMPANY NAME GEOLOGIC EXPLORATION, INC. PHONE # (704) 872-7686

STATE WELL CONSTRUCTION PERMIT# (if applicable) _____ ASSOCIATED WQ PERMIT# (if applicable) _____

1. WELL USE (Check Applicable Box): Residential ☐ Municipal/Public ☐ Industrial ☐ Agricultural ☐ Monitoring ☒ Recovery ☐ Heat Pump Water Injection ☐ Other ☐ If Other, list Use _____

2. WELL LOCATION:
Nearest Town: ASHEVILLE County BUNCOMBE
205 SMOKEY PARK HWY
(Street Name, Numbers, Community, Subdivision, Lot No., Zip Code)

Topographic/Land setting
☐ Ridge ☐ Slope ☐ Valley ☒ Flat
(check appropriate box)
Latitude/longitude of well location
(degrees/minutes/seconds)
Latitude/longitude source: ☐ GPS ☐ Topographic map
(check box)

3. OWNER: ASHEVILLE CHEVROLET
Address 205 SMOKEY PARK HWY
(Street or Route No.)
ASHEVILLE NC
City or Town State Zip Code
( )
Area Code – Phone Number

4. DATE DRILLED 5-6-02
5. TOTAL DEPTH: 40.0 FEET
6. DOES WELL REPLACE EXISTING WELL? YES ☐ NO ☒
7. STATIC WATER LEVEL Below Top of Casing: _____ FT.
(Use "+" if Above Top of Casing)
8. TOP OF CASING IS 0.0 FT. Above Land Surface*
*Top of casing terminated at/or below land surface requires a variance in accordance with 15A NCAC 2C .0118.
9. YIELD (gpm): N/A METHOD OF TEST N/A
10. WATER ZONES (depth): N/A
11. DISINFECTION: Type N/A Amount _____

DEPTH From	DEPTH To	DRILLING LOG Formation Description
0.0	20.0	BROWN/RED SILT
20.0	25.0	BROWN/RED SILT WITH COBBLES
25.0	40.0	BROWN SILT

12. CASING:

From	To	Ft	Diameter	Wall Thickness or Weight/Ft.	Material
0.0	20.0	Ft	2 INCH	SCH 40	PVC
		Ft.			
		Ft.			

13. Grout:

From	To	Ft.	Material	Method
0.0	16.0	Ft.	Portland Bentonite	Slurry
		Ft.		

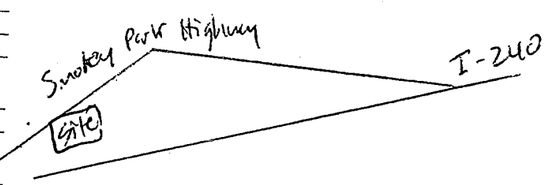
14. SCREEN:

From	To	Ft.	Diameter	Slot Size	Material
20.0	40.0	Ft.	2.0 in.	.010 in	PVC
		Ft.	in.	in	

15. SAND/GRAVEL PACK:

From	To	Ft.	Size	Material
18.0	40.0	Ft.	20-40	FINE SILICA SAND
		Ft.		

LOCATION SKETCH
Show direction and distance in miles from at least two State Roads or County Roads, inculed the road numbers and common road names.



16. REMARKS: MW-2A BENTONITE SEAL FROM 16.0 TO 18.0 FEET

I DO HEARBY CERTIFY THAT THIS WELL WAS CONSTRUCTED IN ACCORDANCE WITH 15A NCAC 2C, WELL CONSTRUCTION STANDARDS, AND THAT A COPY OF THIS RECORD HAS BEEN PROVIDED TO THE WELL OWNER

David R Summers
SIGNATURE OF PERSON CONSTRUCTING THE WELL

5-16-02
DATE

Submit the original to the Division of Water Quality, Groundwater Section, 1636 Mail Service Center – Raleigh, NC 27699-1636 Phone No. (919) 733-3221, within 30 days.

GW-1 REV. 07/2001

North Carolina
Department of Natural Resources and Community Development
Division of Environmental Management
Groundwater Section
P. O. Box 27687 – Raleigh, NC 27611

WELL ABANDOMENT RECORD

CONTRACTOR: GEOLOGIC EXPLORATION, INC. REG. NO. 2579

1. WELL LOCATON: (Show a sketch of the location on back of form)
Nearest Town: ASHEVILLE County: BUNCOMBE
205 SMOKEY PARK HWY
(Road, Community, Subdivision, Lot No.) Quadrangle No.

2. OWNER: ASHEVILLE CHEVROLET

3. ADDRESS: 205 SMOKEY PARK HWY, ASHEVILE,NC

4. TOPOGRAPHY: draw, slope hilltop, valley, flat

5. USE OF WELL: MONITORING DATE: 05-06-02

6. TOTAL DEPTH: 22.0 FEET DIAMETER: 2 INCH

7. CASING REMOVED:

feet	diameter
N/A	N/A

8. SEALING MATERIAL:

Neat cement		Sand cement	
bags of cement	-	bags of cement	-
gals. of water	-	yds. of sand	-
		gals. of water	-

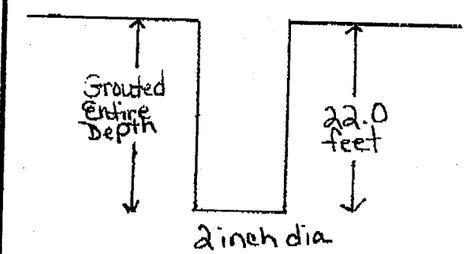
Other

Type material PORTLAND BENTONITE SLURRY

Amount 4.5 GALLONS

9. EXPLAIN METHOD EMPLACEMENT OF MATERIAL
MW-2
VIA TREMIE PIPE

WELL DIAGRAM: Draw a detailed sketch of the well showing total depth, depth and dia- meter of screens remaining in the well, gravel interval, intervals of casing perforations, and depths and types of fill materials used.



I do hearby certify that this well abandonment record is true and exact.

Signature of Contractor or Agent David R Simmons Date 5-21-02

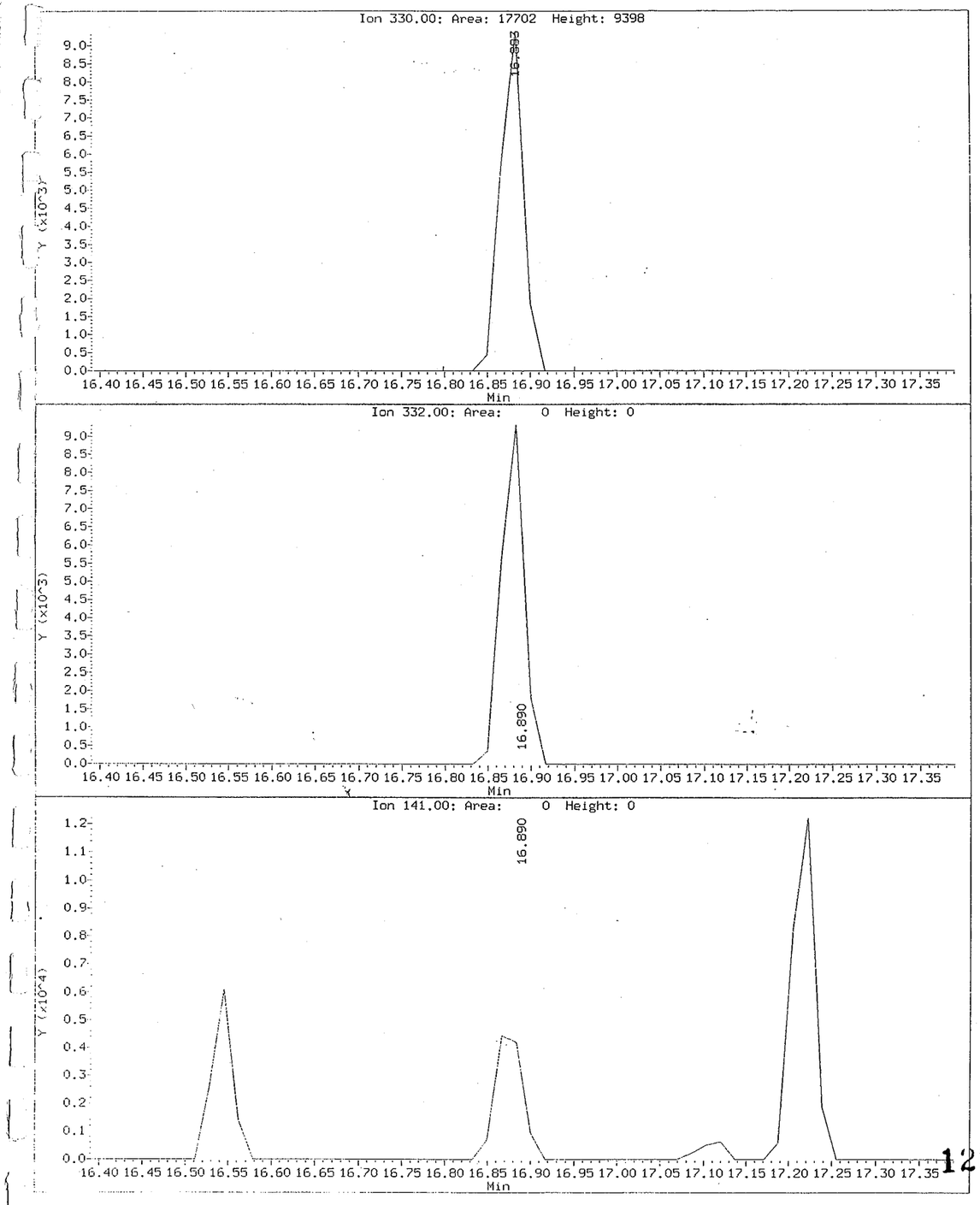
WELL LOCATION: Draw a location sketch on the reverse of this sheet, showing the direction and distance of the well to at least two (2) nearby reference points such as roads, intersections and streams. Identify roads with State Highway road identification numbers.

Submit original to the Division of Environmental Management, one copy to the Driller, and one copy to the owner.

GW-30 REVISED 5/15/89

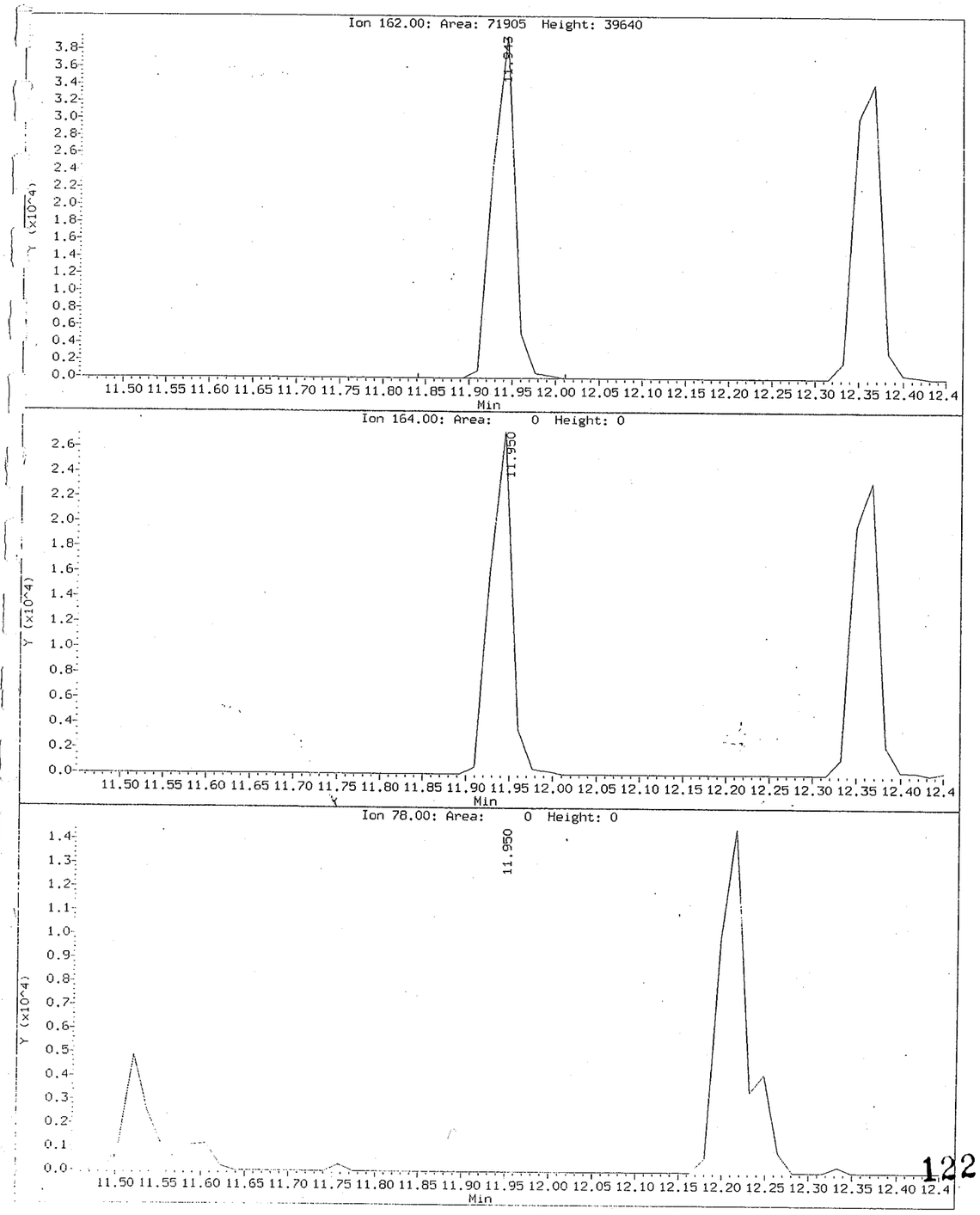
Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Injection Date: 29-APR-2002 11:28
Instrument: 5972hp60.i
Client Sample ID: SSTD010

Compound: 2,4,6-Tribromophenol
CAS Number: 118-79-6



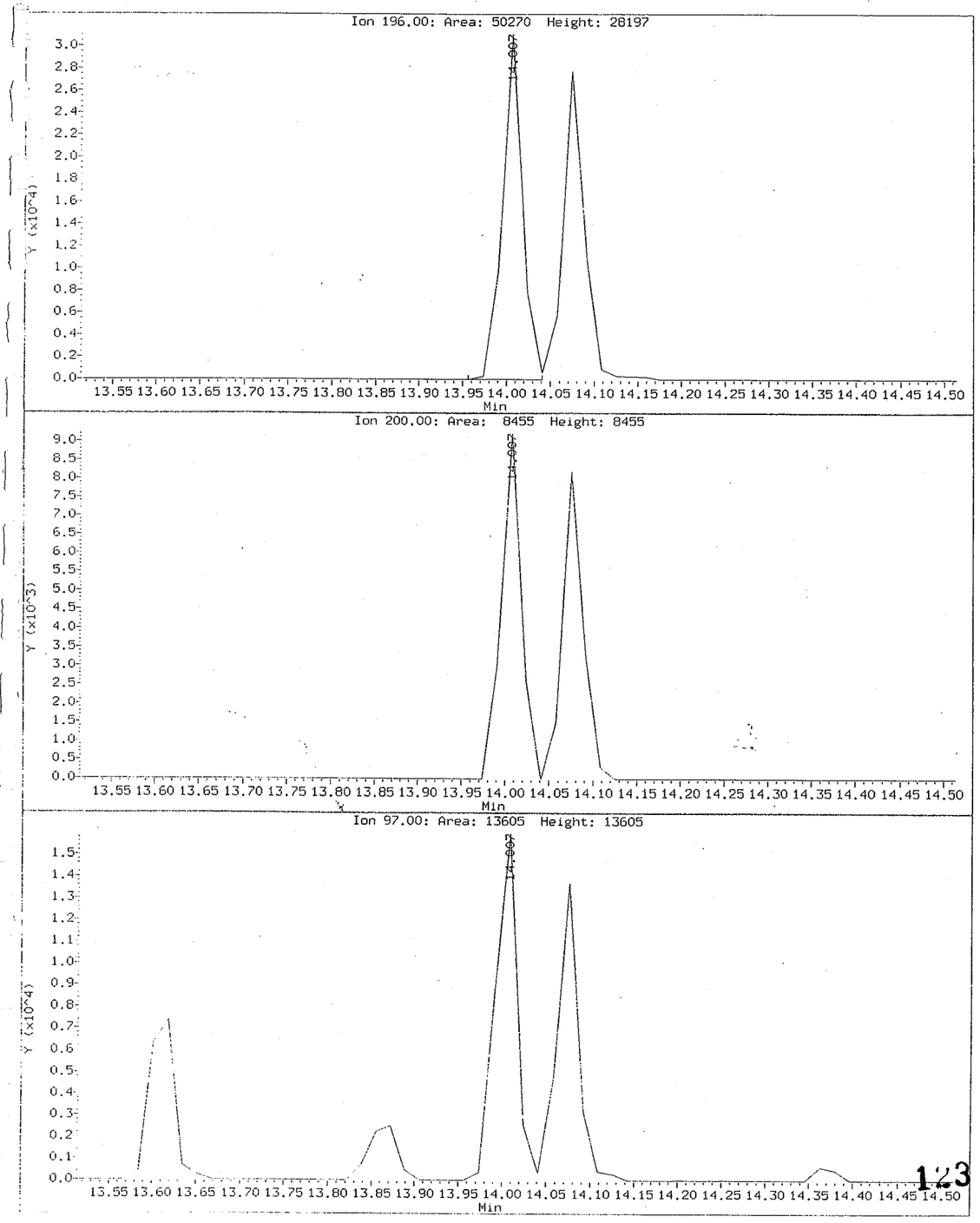
Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Injection Date: 29-APR-2002 11:28
Instrument: 5972hp60.i
Client Sample ID: SSTD010

Compound: 2,4-Dichlorophenol
CAS Number: 120-83-2



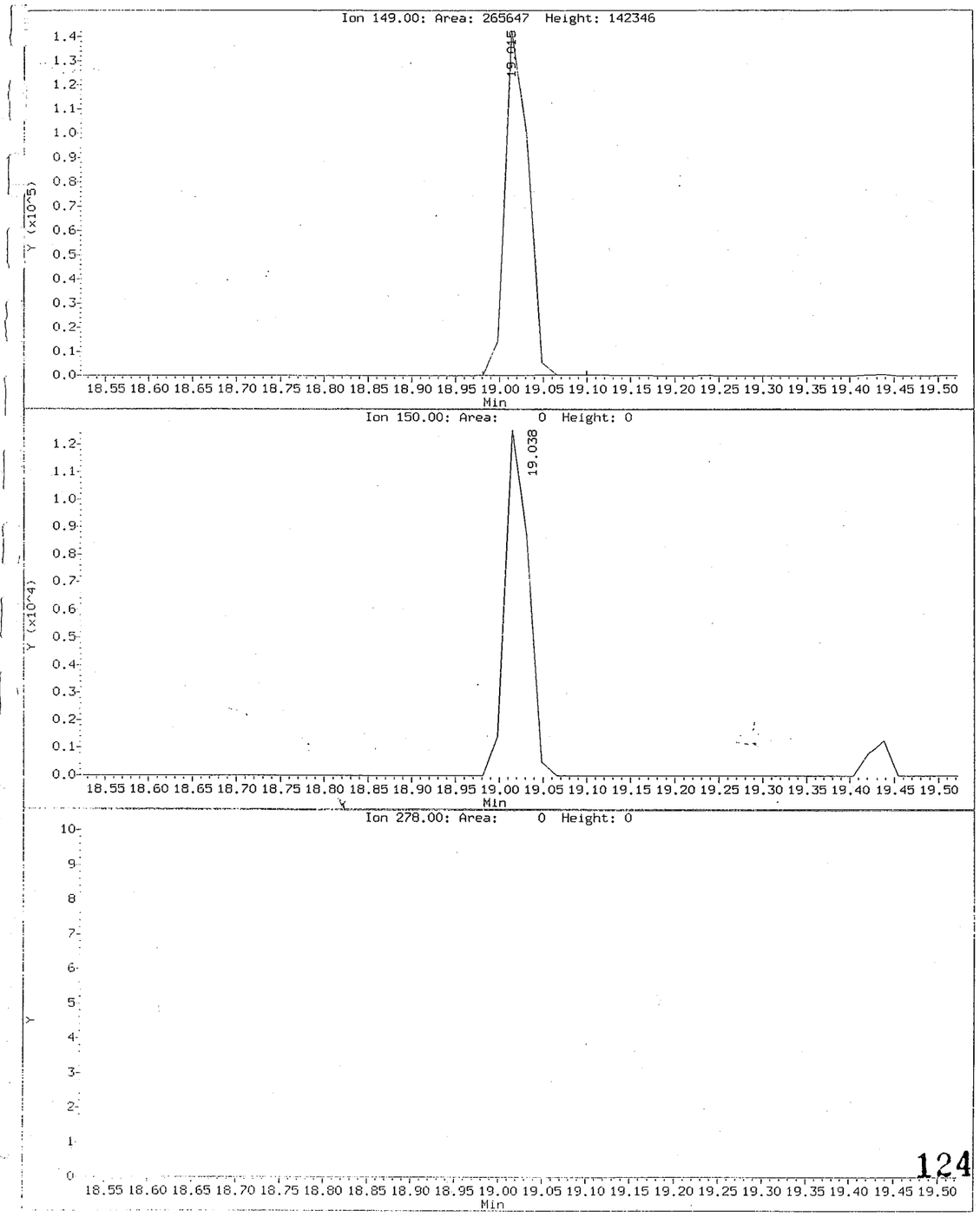
Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Injection Date: 29-APR-2002 11:28
Instrument: 5972hp60.i
Client Sample ID: SSTD010

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2



Data File: /chem/5972hp60.i/DF020429A60.b/HI020429A60.d
Injection Date: 29-APR-2002 11:28
Instrument: 5972hp60.i
Client Sample ID: SSTD010

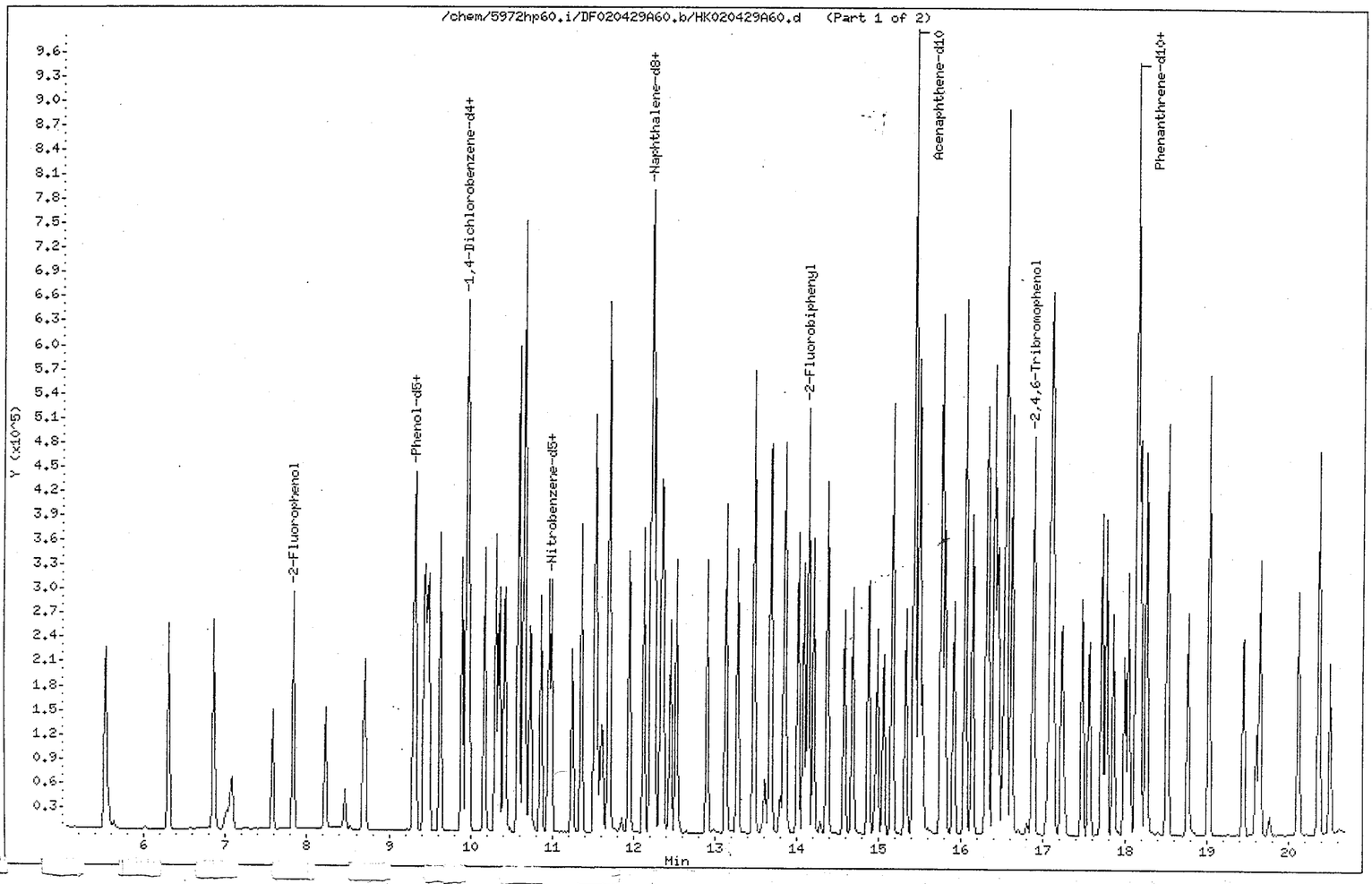
Compound: Di-n-butylphthalate
CAS Number: 84-74-2



Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Date : 29-APR-2002 13:05
Client ID: SSTD020
Sample Info: SSTD020;917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

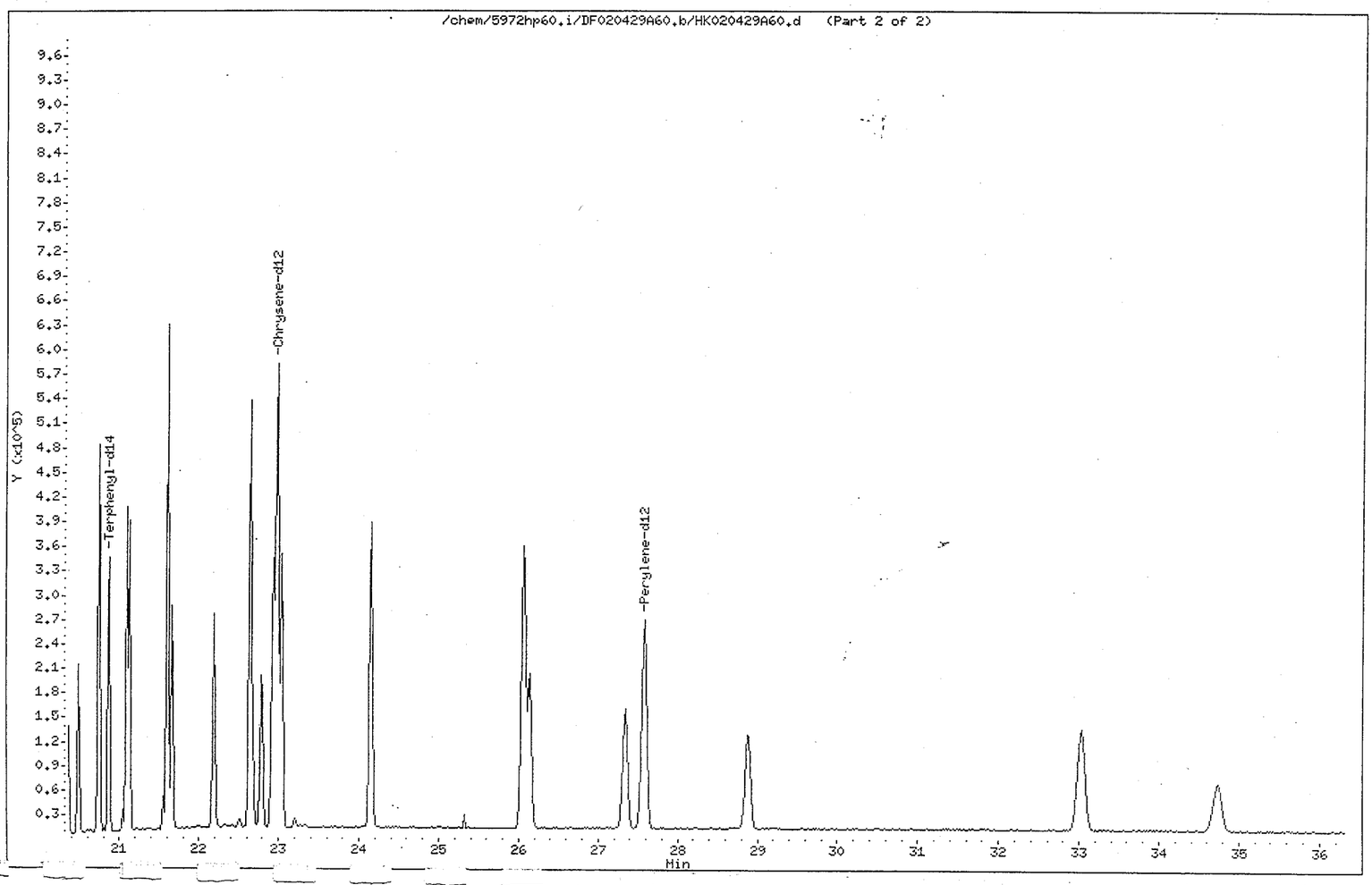
Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Date : 29-APR-2002 13:05
Client ID: SSTD020
Sample Info: SSTD020:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i
Operator: 917
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Report Date: 29-Apr-2030 13:52

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 29-APR-2002 13:05
Operator : 917 Inst ID: 5972hp60.i
Smp Info : SSTD020:917
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020429A60.b/625v4.m
Meth Date : 29-Apr-2030 13:49 mikhael Quant Type: ISTD
Cal Date : 29-APR-2002 13:05 Cal File: HK020429A60.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.952	9.951	(1.000)	194321	40.0000		
* 2 Naphthalene-d8	136	12.219	12.218	(1.000)	766099	40.0000		8213
* 3 Acenaphthene-d10	164	15.433	15.433	(1.000)	437319	40.0000		8557
* 4 Phenanthrene-d10	188	18.123	18.140	(1.000)	663754	40.0000		8844
* 5 Chrysene-d12	240	22.978	22.978	(1.000)	434075	40.0000		8403
* 6 Perylene-d12	264	27.580	27.580	(1.000)	314960	40.0000		7403
$ 7 2-Fluorophenol	112	7.820	7.820	(0.786)	127331	20.0000	22	8192
$ 8 Phenol-d5	99	9.309	9.309	(0.935)	183144	20.0000	23	8157
$ 9 Nitrobenzene-d5	82	10.950	10.950	(0.896)	159176	20.0000	22	8006
$ 10 2-Fluorobiphenyl	172	14.130	14.130	(0.916)	291085	20.0000	24	7357
$ 11 2,4,6-Tribromophenol	330	16.888	16.888	(1.094)	36333	20.0000	21	8352
$ 12 Terphenyl-d14	244	20.881	20.880	(0.909)	208156	20.0000	22	8086
13 N-Nitrosodimethylamine	42	5.519	5.519	(0.555)	70087	20.0000	21	7828
14 Phenol	94	9.326	9.325	(0.937)	215793	20.0000	24	7723

Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Report Date: 29-Apr-2030 13:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.495	9.495	(0.954)	168488	20.0000	24	7188
16 2-Chlorophenol	128	9.630	9.630	(0.968)	173209	20.0000	23	8343
17 1,3-Dichlorobenzene	146	9.884	9.884	(0.993)	148599	20.0000	23	
18 1,4-Dichlorobenzene	146	9.969	9.968	(1.002)	152036	20.0000	24	
19 1,2-Dichlorobenzene	146	10.307	10.307	(1.036)	148696	20.0000	23	
20 bis(2-Chloroisopropyl)ether	45	10.425	10.425	(1.048)	330106	20.0000	22	8861
21 N-Nitroso-di-N-propylamine	70	10.662	10.662	(1.071)	91589	20.0000	25	8762
22 Hexachloroethane	117	10.848	10.848	(1.090)	74111	20.0000	23	8477
23 Nitrobenzene	77	10.984	10.983	(0.899)	156963	20.0000	22	8100
24 Isophorone	82	11.356	11.356	(0.929)	295508	20.0000	22	7348
25 2-Nitrophenol	139	11.542	11.542	(0.945)	110924	20.0000	24	7972
26 2,4-Dimethylphenol	107	11.525	11.525	(0.943)	164298	20.0000	24	8709
27 Bis(2-chloroethoxy)methane	93	11.694	11.711	(0.957)	265859	20.0000	28	7511
28 2,4-Dichlorophenol	162	11.948	11.948	(0.978)	142381	20.0000	23	8649(M)
29 1,2,4-Trichlorobenzene	180	12.117	12.117	(0.992)	126299	20.0000	23	7432
30 Naphthalene	128	12.253	12.252	(1.003)	450835	20.0000	24	
31 Hexachlorobutadiene	225	12.523	12.523	(1.025)	67623	20.0000	22	9087
32 4-Chloro-3-methylphenol	107	13.132	13.132	(1.075)	146638	20.0000	23	7919
33 Hexachlorocyclopentadiene	237	13.877	13.876	(0.899)	61281	20.0000	19	8289
34 2,4,6-Trichlorophenol	196	14.012	14.079	(0.908)	102311	20.0000	23	8335(H)
35 2-Chloronaphthalene	162	14.367	14.384	(0.931)	250521	20.0000	24	
36 Dimethylphthalate	163	14.892	14.891	(0.965)	317538	20.0000	23	7626
37 2,6-Dinitrotoluene	165	15.061	15.061	(0.976)	74237	20.0000	21	7438
38 Acenaphthylene	152	15.162	15.162	(0.982)	439493	20.0000	23	8301
39 Acenaphthene	154	15.484	15.500	(1.003)	253631	20.0000	24	8673
40 2,4-Dinitrophenol	184	15.501	15.517	(1.004)	34069	20.0000	18	(a)
41 4-Nitrophenol	109	15.535	15.551	(1.007)	21887	40.0000	36	
42 2,4-Dinitrotoluene	165	15.771	15.788	(1.022)	92926	20.0000	25	8842
43 Diethylphthalate	149	16.127	16.143	(1.045)	327173	20.0000	23	9032
44 4-Chlorophenyl-phenylether	204	16.330	16.329	(1.058)	124950	20.0000	25	8283
45 Fluorene	166	16.397	16.397	(1.062)	290300	20.0000	24	8356
46 4,6-Dinitro-2-methylphenol	198	16.516	16.532	(0.911)	50051	40.0000	41	
47 N-Nitrosodiphenylamine	169	16.550	16.549	(0.913)	412769	20.0000	26	
48 1,2-Diphenylhydrazine	77	16.617	16.617	(1.077)	403565	20.0000	23	7105
49 4-Bromophenyl-phenylether	248	17.226	17.226	(0.951)	64221	20.0000	21	9084
50 Hexachlorobenzene	284	17.565	17.564	(0.969)	67808	20.0000	21	8338
51 Pentachlorophenol	266	17.852	17.869	(0.985)	53517	40.0000	35	8920
52 Phenanthrene	178	18.174	18.173	(1.003)	380242	20.0000	23	
53 Anthracene	178	18.241	18.258	(1.007)	379665	20.0000	22	
54 Di-n-butylphthalate	149	19.020	19.019	(1.049)	559669	20.0000	22	9060
55 Fluoranthene	202	20.356	20.356	(1.123)	345083	20.0000	22	
56 Benzidine	184	20.491	20.508	(0.892)	141555	40.0000	46	9600
57 Pyrene	202	20.745	20.762	(0.903)	360377	20.0000	23	
58 Butylbenzylphthalate	149	21.608	21.608	(0.940)	230232	20.0000	22	8375
59 bis(2-ethylhexyl)Phthalate	149	22.640	22.335	(0.985)	315771	20.0000	27	8228
60 3,3'-Dichlorobenzidine	252	22.792	22.792	(0.992)	92363	40.0000	41	8915
61 Benzo(a)Anthracene	228	22.928	22.927	(0.998)	276414	20.0000	22	

GM
4-29-02

Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Report Date: 29-Apr-2030 13:52

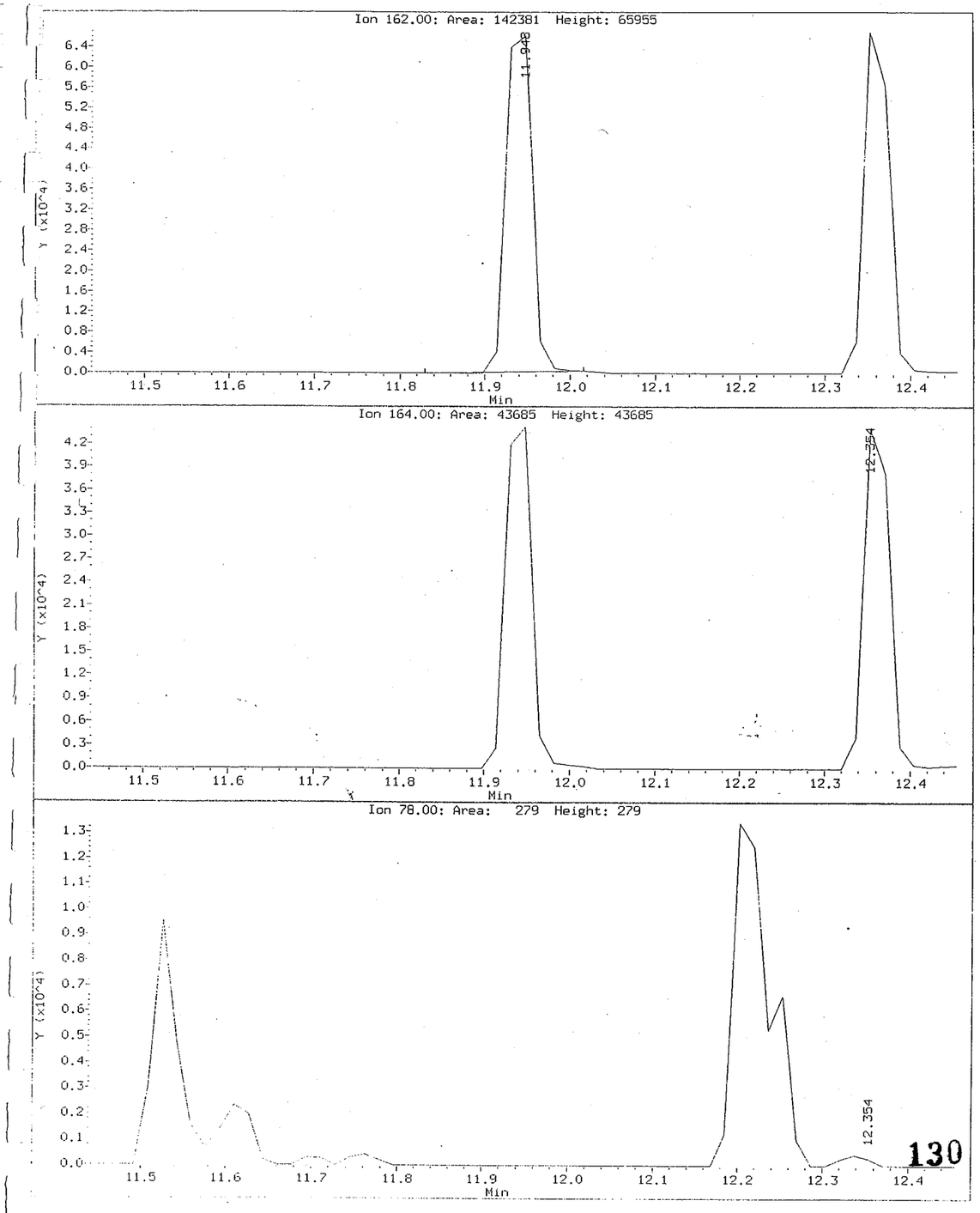
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 Chrysene	228	23.029	23.046	(1.002)	258077	20.0000	22	
63 Di-n-octylphthalate	149	24.146	24.145	(0.875)	512421	20.0000	20	8444
64 Benzo(b)fluoranthene	252	26.057	26.074	(0.945)	269806	20.0000	23	
65 Benzo(k)fluoranthene	252	26.142	26.159	(0.948)	227967	20.0000	19	
66 Benzo(a)pyrene	252	27.343	27.360	(0.991)	203742	20.0000	20	7715
67 Indeno(1,2,3-c,d)pyrene	276	33.027	33.044	(1.198)	148160	20.0000	19	
68 Dibenzo(a,h)anthracene	278	33.027	33.061	(1.198)	135146	20.0000	19	7352
69 Benzo(g,h,i)perylene	276	34.736	34.770	(1.259)	131936	20.0000	19	7357

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

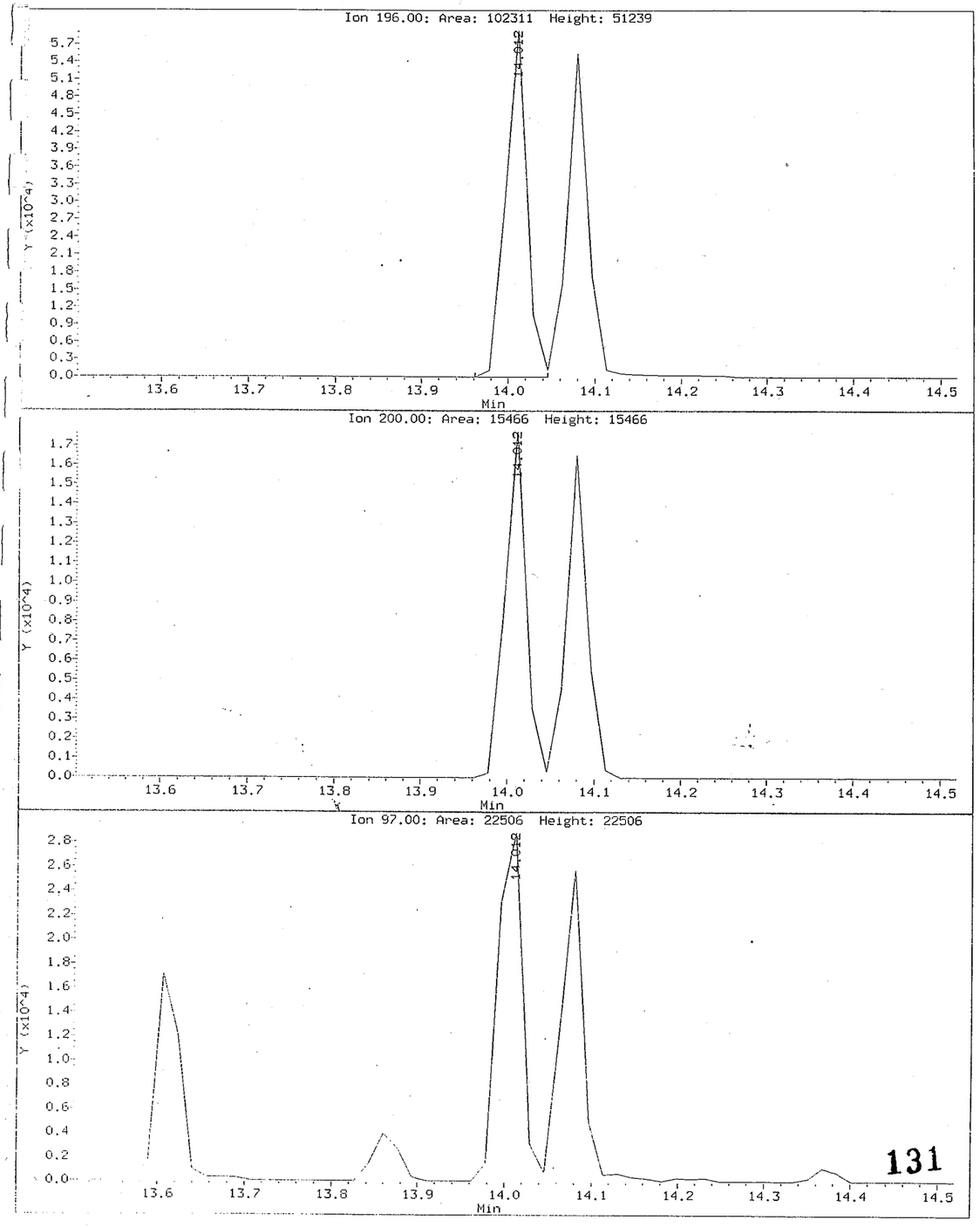
Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Injection Date: 29-APR-2002 13:05
Instrument: 5972hp60.i
Client Sample ID: SSTD020

Compound: 2,4-Dichlorophenol
CAS Number: 120-83-2



Data File: /chem/5972hp60.i/DF020429A60.b/HK020429A60.d
Injection Date: 29-APR-2002 13:05
nstrument: 5972hp60.i
lient Sample ID: SSTD020

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2

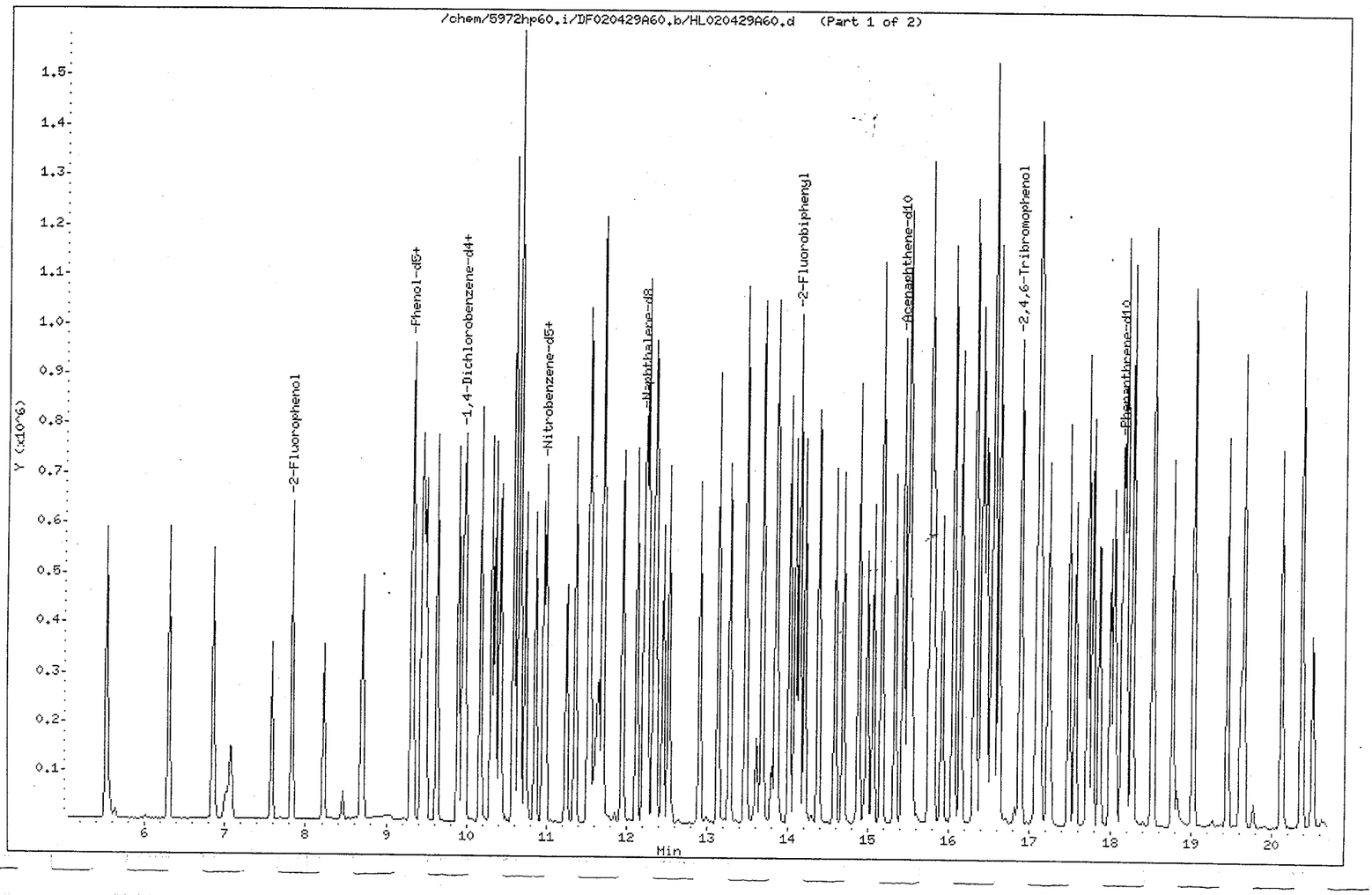


Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Date : 29-APR-2002 13:53
Client ID: SSTD050
Sample Info: SSTD050:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32

132

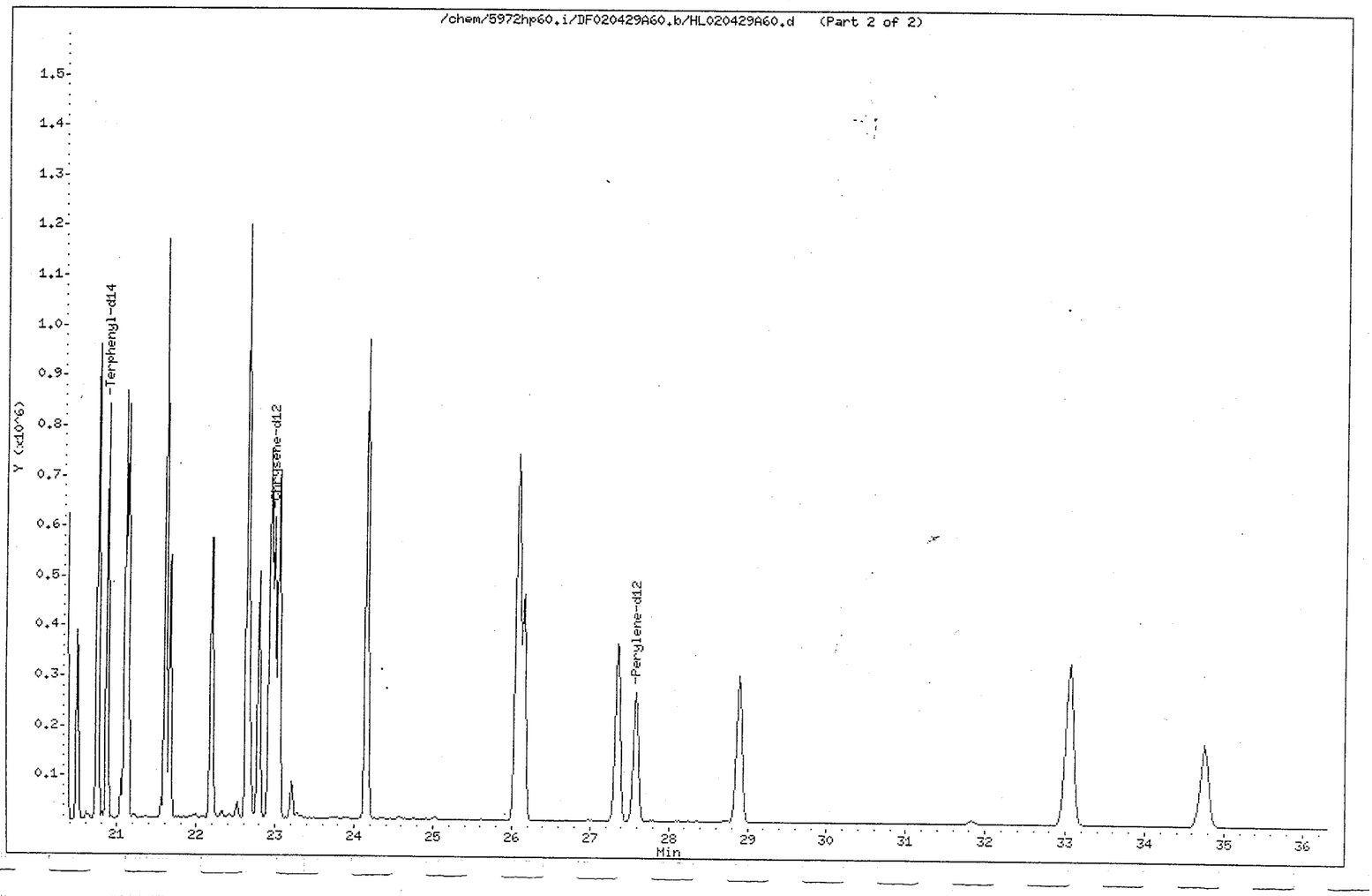


Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Date : 29-APR-2002 13:53
Client ID: SSTD050
Sample Info: SSTD050:917
Volume Injected (uL): 1.0
Column phase: J&W DB-5.625

Instrument: 5972hp60.i

Operator: 917
Column diameter: 0.32

133



Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Report Date: 29-Apr-2030 13:52

CompuChem

Semivolatile Report Method 625

Data file : /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 29-APR-2002 13:53
Operator : 917 Inst ID: 5972hp60.i
Smp Info : SSTD050:917
Misc Info :
Comment :
Method : /chem/5972hp60.i/DF020429A60.b/625v4.m
Meth Date : 29-Apr-2030 13:49 mikhael Quant Type: ISTD
Cal Date : 29-APR-2002 13:53 Cal File: HL020429A60.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50
Processing Host: einstein

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.951	9.952	(1.000)	189246	40.0000		
* 2 Naphthalene-d8	136	12.218	12.219	(1.000)	739877	40.0000		8289
* 3 Acenaphthene-d10	164	15.433	15.433	(1.000)	423888	40.0000		8537
* 4 Phenanthrene-d10	188	18.140	18.123	(1.000)	639727	40.0000		8708
* 5 Chrysene-d12	240	22.978	22.978	(1.000)	432077	40.0000		8290
* 6 Perylene-d12	264	27.580	27.580	(1.000)	315979	40.0000		7431
$ 7 2-Fluorophenol	112	7.820	7.820	(0.786)	277432	50.0000	50	8348
$ 8 Phenol-d5	99	9.309	9.309	(0.935)	388909	50.0000	51	8045
$ 9 Nitrobenzene-d5	82	10.950	10.950	(0.896)	363464	50.0000	51	8112
$ 10 2-Fluorobiphenyl	172	14.130	14.130	(0.916)	614485	50.0000	53	7421
$ 11 2,4,6-Tribromophenol	330	16.888	16.888	(1.094)	89004	50.0000	52	8952
$ 12 Terphenyl-d14	244	20.880	20.881	(0.909)	457598	50.0000	49	8288
13 N-Nitrosodimethylamine	42	5.519	5.519	(0.555)	163738	50.0000	50	7796
14 Phenol	94	9.325	9.326	(0.937)	444345	50.0000	51	8292

Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Report Date: 29-Apr-2030 13:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Bis(2-chloroethyl)ether	93	9.495	9.495	(0.954)	372327	50.0000	54	7006
16 2-Chlorophenol	128	9.630	9.630	(0.968)	376079	50.0000	52	8541
17 1,3-Dichlorobenzene	146	9.884	9.884	(0.993)	322314	50.0000	52	
18 1,4-Dichlorobenzene	146	9.968	9.969	(1.002)	319536	50.0000	51	
19 1,2-Dichlorobenzene	146	10.307	10.307	(1.036)	318701	50.0000	51	
20 bis(2-Chloroisopropyl)ether	45	10.425	10.425	(1.048)	750951	50.0000	51	9384
21 N-Nitroso-di-N-propylamine	70	10.662	10.662	(1.071)	185969	50.0000	51	8637
22 Hexachloroethane	117	10.848	10.848	(1.090)	164427	50.0000	51	8580
23 Nitrobenzene	77	10.983	10.984	(0.899)	356850	50.0000	52	8278
24 Isophorone	82	11.356	11.356	(0.929)	663459	50.0000	52	7520
25 2-Nitrophenol	139	11.542	11.542	(0.945)	238605	50.0000	54	8037
26 2,4-Dimethylphenol	107	11.525	11.525	(0.943)	341270	50.0000	52	9085
27 Bis(2-chloroethoxy)methane	93	11.711	11.694	(0.958)	526646	50.0000	58	7513
28 2,4-Dichlorophenol	162	11.948	11.948	(0.978)	314971	50.0000	53	8077
29 1,2,4-Trichlorobenzene	180	12.117	12.117	(0.992)	273065	50.0000	52	7684
30 Naphthalene	128	12.252	12.253	(1.003)	924334	50.0000	52	
31 Hexachlorobutadiene	225	12.523	12.523	(1.025)	147893	50.0000	51	8619
32 4-Chloro-3-methylphenol	107	13.132	13.132	(1.075)	327991	50.0000	52	8230
33 Hexachlorocyclopentadiene	237	13.876	13.877	(0.899)	149631	50.0000	49	8424
34 2,4,6-Trichlorophenol	196	14.012	14.012	(0.908)	228895	50.0000	53	8714(H)
35 2-Chloronaphthalene	162	14.384	14.367	(0.932)	550367	50.0000	54	
36 Dimethylphthalate	163	14.891	14.892	(0.965)	687960	50.0000	53	7845
37 2,6-Dinitrotoluene	165	15.061	15.061	(0.976)	175357	50.0000	52	7510
38 Acenaphthylene	152	15.162	15.162	(0.982)	972613	50.0000	53	8473
39 Acenaphthene	154	15.500	15.484	(1.004)	558305	50.0000	53	8900
40 2,4-Dinitrophenol	184	15.517	15.501	(1.005)	117218	50.0000	63	
41 4-Nitrophenol	109	15.551	15.535	(1.008)	63404	100.000	110	
42 2,4-Dinitrotoluene	165	15.788	15.771	(1.023)	196291	50.0000	55	8143
43 Diethylphthalate	149	16.143	16.127	(1.046)	748345	50.0000	54	8782
44 4-Chlorophenyl-phenylether	204	16.329	16.330	(1.058)	257412	50.0000	53	8480
45 Fluorene	166	16.397	16.397	(1.062)	639457	50.0000	54	8264
46 4,6-Dinitro-2-methylphenol	198	16.532	16.516	(0.911)	127555	100.000	110	
47 N-Nitrosodiphenylamine	169	16.549	16.550	(0.912)	785430	50.0000	50	
48 1,2-Diphenylhydrazine	77	16.617	16.617	(1.077)	915095	50.0000	54	7699
49 4-Bromophenyl-phenylether	248	17.226	17.226	(0.950)	146183	50.0000	51	9132
50 Hexachlorobenzene	284	17.564	17.565	(0.968)	162898	50.0000	51	8576
51 Pentachlorophenol	266	17.869	17.852	(0.985)	136103	100.000	93	9305
52 Phenanthrene	178	18.173	18.174	(1.002)	852998	50.0000	53	
53 Anthracene	178	18.258	18.241	(1.007)	884605	50.0000	54	
54 Di-n-butylphthalate	149	19.019	19.020	(1.048)	1343481	50.0000	55	9134
55 Fluoranthene	202	20.356	20.356	(1.122)	832550	50.0000	54	
56 Benzidine	184	20.508	20.491	(0.892)	301472	100.000	98	9676
57 Pyrene	202	20.762	20.745	(0.904)	783420	50.0000	51	
58 Butylbenzylphthalate	149	21.608	21.608	(0.940)	531998	50.0000	51	8329
59 bis(2-ethylhexyl)Phthalate	149	22.640	22.640	(0.985)	746966	50.0000	52	8261(H)
60 3,3'-Dichlorobenzidine	252	22.792	22.792	(0.992)	233747	100.000	100	8979
61 Benzo(a)Anthracene	228	22.927	22.928	(0.998)	658076	50.0000	52	

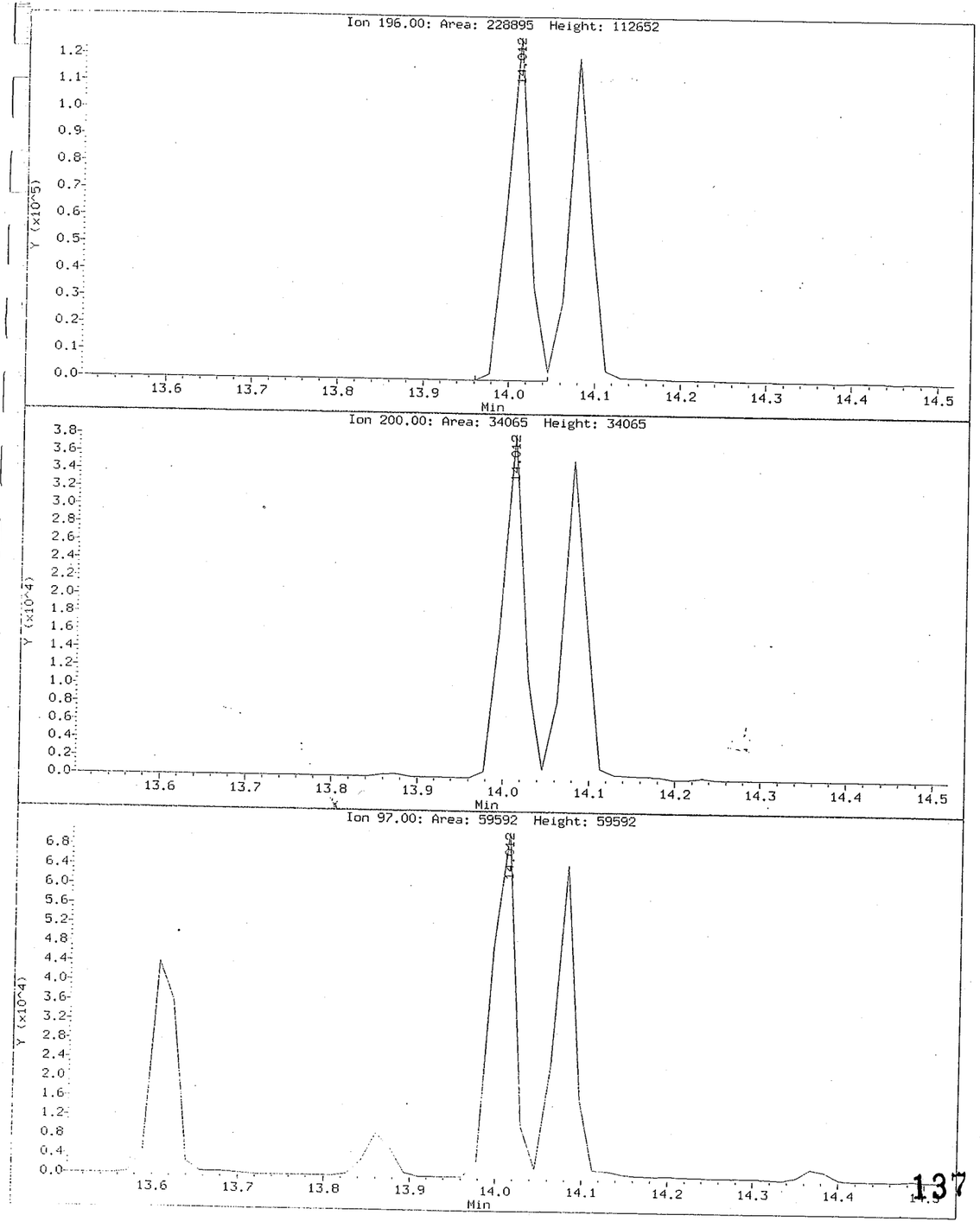
GM
4-29-02

Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Report Date: 29-Apr-2030 13:52

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 Chrysene	228	23.046	23.029	(1.003)	610886	50.0000	51	
63 Di-n-octylphthalate	149	24.145	24.146	(0.875)	1319180	50.0000	52	8441
64 Benzo(b)fluoranthene	252	26.074	26.057	(0.945)	566537	50.0000	48	
65 Benzo(k)fluoranthene	252	26.159	26.142	(0.948)	637964	50.0000	53	
66 Benzo(a)pyrene	252	27.360	27.343	(0.992)	516193	50.0000	51	7876
67 Indeno(1,2,3-c,d)pyrene	276	33.044	33.027	(1.198)	394542	50.0000	51	
68 Dibenzo(a,h)anthracene	278	33.061	33.027	(1.199)	366514	50.0000	51	7485
69 Benzo(g,h,i)perylene	276	34.770	34.736	(1.261)	355613	50.0000	50	7473

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/5972hp60.i/DF020429A60.b/HL020429A60.d
Injection Date: 29-APR-2002 13:53
Instrument: 5972hp60.i
Client Sample ID: SSTD050

Compound: 2,4,6-Trichlorophenol
CAS Number: 88-06-2