United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 616
Main Post

NJDEP UST Registration No. 081533-90
NJDEP Closure Approval Letter Dated October 7, 1994
Spill Case No. 94-12-8-1040-10

VOLUME 3 OF 3
APPENDIX G (CONTINUED)

February 1997

SMITH
TECHNOLOGY CORPORATION

SMITH

APPENDIX G

GROUNDWATER ANALYTICAL DATA PACKAGE (CONTINUED)

Bldg 616 MW Anal
12/18/95

001

ANALYTICAL INC.

Asbestos - Lead - Environmental - Materials

New Jersey

Corporate Office &
Main Laboratory
108 Haddon Avenue
Westmont NJ 08108
(609) 858-4800

3 Cooper Street
Westmont NJ 08108
(609) 858-4800

1056 Stelton Road
Piscataway NJ 08854
(908) 981-0550

New York

350 Fifth Avenue
Empire State Bldg
Suite 1524
New York NY 10118
(212) 290-0051

208 Stonehinge Lane
Carle Place NY 11514
(516) 997-7251

California

1720 S Amphlett Blvd
Suite 130
San Mateo Ca 4402
(415) 570-5401

Georgia

1600 Rosewell Street SE
Suite One
Smyrna GA 30080
(770) 333-6066

Michigan

212 S Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

North Carolina

620-G Guilford College Rd
Greensboro, NC 27409
(910) 297-1487

Texas

2501 Central Parkway
Suite C-13
Houston, TX 77092
(713) 686-3635

Washington

Harbor Marina Corp Ctr
1001 SW Klickitat Way
Suite 107
Seattle WA 98134
(206) 233-9007

ANALYTICAL DATA REPORT
FOR
E-SYSTEMS
P.O. Box 360
Fort Monmouth, NJ 07703

PROJECT **MW Sampling, Bldg 616**

EMSL Project: # 95129584

Field Sample No & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
2002.1 MW1, 2933760	**95-58316**	**Aqueous**	**12/18/95 @ 1015**	**12/18/95**
2002.2, Trip Blank	**95-58312**	**Aqueous**	**12/18/95 @ 0700**	**12/18/95**
2002.3, Field Blank	**95-58313**	**Aqueous**	**12/18/95 @ 1450**	**12/18/95**

Laboratory Name: EMSL ANALYTICAL, INC

Certification No:
NJDEP No 04653
PADER No 68-367
NY-ELAP No 10896

Supervisor/Manager Signature: Paul Laraia

Printed Name: Paul V Laraia

Date: 1-23-96

TABLE OF CONTENTS

SAMPLE DATA SUMMARY PACKAGE

Date of Report	01/11/96
Project Number	95129584
Lab ID	95-0058316
Date Collected	12/18/95 10.15
Collected By	Client
Date Received	12/18/95 16 00

ttention Barbara O'Toole
E-Systems
P O Box 360
Fort Monmouth NJ 07703

Client Project: MW Sampling Bldg 616

Client Designation: MW1-2933760

	Conc	Unit
RGANIC		
Semi-Volatiles		
BN by 625 with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO

2002 1
9558316B
29337160

003

Lab Name EMSL ANALYTICAL Contract

Project No Site Location MW 1 Group Bldg 616

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 2002 1 9558316B 29337(6)(2) 006

Lab Name EMSL ANALYTICAL Contract

Project No Site Location MW1 Group Bldg 616

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO 007
20021
9558316B
253276D

Lab Name EMSL ANALYTICAL Contract

Project No Site Location MW21 Group Bldg 616

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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	NONE FOUND			
2				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 26021 29337601

006

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1 Bldg 616

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1 1-Dichloroethene	50	U
75-09-2	Methylene chloride	1 0	B
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2 2-Dichloropropane	50	U
156-59-2	cis-1 2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromomethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 20021 29337.60

005

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1

Bldg 616

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1 2 2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1 3 5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1 3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methy-tertiary butyl ether	50	U
75-65-0	tertiary-Butyl alcohol	2 0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 2002.1 29337601 016

Bldg 616

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/95

GC Column DB-624 X 75M ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume (uL) Soil Aliquot Volume (uL)

Number TICs found 2 Concentration Units (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1	Column Bleed	19 61	1	J
2	Column Bleed	23 00	5	J
3				
4				
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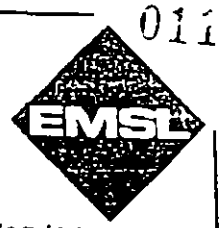

Date of Report	01/17/96
Project Number:	95129581
Lab ID	95-0058312
Date Collected	12/18/95 07:00
Collected By	Client
Date Received	12/18/95 16 00

Attention Barbara O'Toole
E-Systems
P.O., Box 360
Fort Monmouth NJ 07703

Client Project MW Sampling Bldg 290

Client Designation. Trip Blank

	Conc	Unit
ORGANIC		
Volatiles		
Volatiles by 524 2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 012

Trip Blank

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# NJDEP MW# TB

Matrix (soil/water) WATER Lab Sample ID 9558312V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0783 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1 1-Dichloroethene	50	U
75-09-2	Methylene chloride	1 4	B
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2 2-Dichloropropane	50	U
156-59-2	cis-1 2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1 2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1 2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1 2-Dibromomethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1 1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 913

Trip Blank

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 290 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

IE

FMETL# 014

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9558312V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0783.D

Level: (low/med) LOW Date Received:

% Moisture: , not dec. NA Date Analyzed: 12/29/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.61	2	J
2.	Column Bleed	19.62	2	J
3.	Column Bleed	23.00	1	J
4.				
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Date of Report 01/17/96
Project Number 95129581
Lab ID 95-0058313
Date Collected 12/18/95 14 50
Colledted By Client
Date Received 12/18/95 16 00

Attention Barbara O'Toole
E-Systems
P O Box 360
Fort Monmouth NJ 07703

Client Project MW Sampling Bldg 290

Client Designation Field Blank

	Conc	Unit
ORGANIC		
Semi-Volatiles		
TCL BNA's with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524 2 w/Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

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

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

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
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
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9558313B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9558313B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9479.D

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

% Moisture: _____ decanted: (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	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-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO 016

9558313B
Field Blank

Lab Name EMSL ANALYTICAL Contract

Project No.: Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558313B

Sample wt/vol. 1000.0 (g/mL) ML Lab File ID B9479 D

Level: (low/med) Date Received

% Moisture. decanted (Y/N) N Date Extracted: 12/23/95

Concentrated Extract Volume. 1000 (uL) Date Analyzed. 12/26/95

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 Hydrocarbon	27 84	6	J
2				
3				
4				
5				
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8.				
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 019

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9558313V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0784.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 020

Lab Name: EMSL ANALYTICAL Contract: U S ARMY

Project No: FT MONMOUTH NJ Bldg#: 290 NJDEP MW#: FB

Matrix (soil/water): WATER Lab Sample ID: 9558313V

Sample wt/vol: 25 0 (g/mL) ML Lab File ID: C0784 D

Level (low/med): LOW Date Received:

% Moisture not dec: NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0 53 (mm) Dilution Factor: 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1,2,2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methy-tertiary butyl ether	50	U
75-65-0	tertiary-Butyl alcohol	2 0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL#

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# NJDEP MW# FB

Matrix (soil/water) WATER Lab Sample ID 9558313V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0784 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/95

GC Column DB-624 X 75M ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume (uL) Soil Aliquot Volume (uL)

Number TICs found 2 Concentration Units (ug/L or ug/Kg) ug/L

	CAS Number	Compound Name	RT	Est Conc	Q
1	109-99-9	Furan, tetrahydro-	10 60	2	J
2		Column Bleed	19 61	1	J
3					
4					
5					
6					
7					
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10					
11					
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30					

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details The document shall be bound and paginated. contain a table of contents. and all pages shall be legible Incomplete packages will be returned or held without review until the data package is completed

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report

		Check If Complete
1	Cover Page, Title Page listing Lab Certification #, facility name, address & date of report	X
2	Table of Contents	X
3	Summary Sheets listing analytical results for all targeted and non-targeted compounds	X
4	Summary Table cross-referencing field ID #'s vs Lab ID #'s	X
5	Document bound, paginated and legible	X
6	Chain of Custody	X
7	Methodology Summary	X
8	Laboratory Chronicle and Holding Time Check	X
9.	Results submitted on a dry weight basis (if applicable)	X
10	Method Detection Limits	X
11	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEPA CLP	X
12	Non-Conformance Summary	X

Paul Jones

Laboratory Manager or Environmental Consultant's Signature

1-23-96

Date

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A Checklist which must be attached to the Summary

The following information must be reported in the Closure Plan Implementation Summary for all laboratory analyses performed in the compliance with the site assessment requirements

Page #		
1	1	Name and address of the facility
1	2	Name of the laboratory performing the sample analysis
1	3	NJDEP certification number assigned to the laboratory pursuant to N J A C 7 18
1	4	Laboratory sample identification number
1	5	Customer sample identification number corresponding to the laboratory sample identification
1	6.	Sample Location (also on the site diagram)
1	7	Matrix of the sample analyzed (i e , water or sediments, including soil, sediment, and sludges) All sediment results must be reported on a dry weight basis
29-30	8	The reference for the method used (e g , EPA Method 625, 40 CFR Part 136)
1	9	The signature of the person completing the report form
1	10	The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed
31	11	A list of all parameters (constituents and conditions) for which the analyses were performed
3-21	12	Sample results and corresponding units for each parameter

CHAIN OF CUSTODY

EM

3 Cooper Street
Westmont New Jersey 08108
609 858 9573
609 858 4571 (Fax)

Chain of Custody / Analysis Request Form

EMSL Project # Q5129584
PO # IJO#95-0091/SAI

Custody and Sample Information - Print ALL information Put N/A in blanks not applicable Press firmly

1 Report to	2 Bill to	Project
US ARMY FT.MONMOUTH Charles Appleby SELFM-PW-EV Env.Lab Cert#13461		Bldg 616 MW SAMPLING Tel # 908-532-6224 FAX #

3 Sampled by (Signature)	4 # of Samples in Shipment	5 Date of Sample Shipment	6 Date Results Needed
Baxter/Palilonis			

Item No	Sample Number	Station Location / Sample ID	COMP	GRAB	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: Date	Time	Number of Containers	Vot 524.2 + Labpaky	Em Xylene +	BN+25 +15							Laboratory Number
1	20021	MW1-2933760		X	X					X	X			X		12/18	1015		X		X							58316
2	.2	TB		X	X					X	X					↓	700		X									
3	.3	FB		X	X					X	X			X	X	↓	1450		X		X							
4																												
5																												
6																												
7																												
8																												
9																												

Released by (Signature)	Date/Time Released	Delivery Method	Received by (Signature)	Company/Agency Affiliation	Date/Time Received	Condition Noted
[signature]	12/18/95 / 16:02		[signature]	EMSL	12-18-95 / 1600	
	/				/	
	/				/	

Please indicate turnaround time (standard) 10D 5D 72HR 48HR 24HR (Must call for quick turn)

Comments NA Page 1 of 1
* A drawing depicting sample location on reverse side.

Please indicate reporting requirements
1) Results only 2) Results & QC 3) Reduced Deliverables

EMSL ANALYTICAL, INC

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 58316 PROJECT NO 95129584

SAMPLE/CONTAINERS PARAMETERS B/N

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
12/23/95		B/N extraction	Charles Bortolone	Charles Bortolone

INTERNAL CHAIN OF CUSTODY(ORGANICS)

SAMPLE No(S)	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
9556580	VOA 8240	12/20/95	M. CIAMPI	[signature]
56178	BNA625	12/21/95	S. VanEtten	[signature]
56570-85	8021/8240	12/18, 12/19, 12/20	S. Kossler	[signature]
95 56875-E07	VOA + CS	12/15 - 12/26	M. CIAMPI	[signature]
95 56784	VOA + CS	12/14 - 12/26	M. CIAMPI	[signature]
95 56785-88	VOA + NAPH + CS	12/14 - 12/26	M. CIAMPI	[signature]
95 58182	TCLP	12/22 - 12/26	M. CIAMPI	[signature]
9558375	TCLP	12/22 - 12/26	M. CIAMPI	[signature]
9557221	TCLP	12/21 - 12/26	M. CIAMPI	[signature]
9557087-99	TCLP	12/21 - 12/26	M CIAMPI	[signature]
9558050-51	BTEX 8240	12/22 - 12/26	M CIAMPI	[signature]
9558378-83	BTEX	12/22 - 12/26	M CIAMPI	[signature]
9558366	BENZENE + QC	12/22 - 12/26	M CIAMPI	[signature]
9557838	BENZENE + QC	12/22 - 12/26	M. CIAMPI	[signature]
9156789-96	VOA + CS	12/14 - ~~12/26~~ 12/27	M CIAMPI	[signature]
9557835	VOA + AC/AC + 2CEVE + DCBS	12/26/95	M CIAMPI	[signature]
9557836	VOA + AC/AC + 2CEVE + DCBS	12/26/95	M. CIAMPI	[signature]
9557564	VOA + AC/AC + 2CEVE + DCBS	12/20 - 12/26/95	M CIAMPI	[signature]
9558188-91, 95-96	BNA625+	12/26/95	S VanEtten	[signature]
58311 + 13	TCLBNA+	11	S VanEtten	[signature]
58314-7	BN625+	11	S. VanEtten	[signature]
9556808-812	VOA + MTBE + TBA + CS	12/14 - 12/28/95	M. CIAMPI	[signature]

INTERNAL CHAIN OF CUSTODY(ORGANICS)

[illegible]MPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
59189-96	602+MTBE	12/28/95	S. VanEtta	SV
[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	
58920	"	1-4-96	S VanEtta	SV
59846	BN625+	1-3-96	S.VanEtta	SV
9600201	GASOLINE	01/04/96	M. CIAMPI	[signature]
9558432	VOA +LS +TICR	01/09/96	M. CIAMPI	[signature]
9558920	BTEX 8240	01/04/96	M CIAMPI	[signature]
9558823	VOA +QC	[illegible] 12/29/95	M. CIAMPI	[signature]
9558371-59346	5242	12/29/95/1/4/95	S Kessle	[signature]
96-275	PAH	1-10-95	S. VanEtta	SV
59202/4	BNA625	1-10-96	S.VanEtta	SV
59223	BNA625	1-10-96	S.VanEtta	SV
96-271+4	TCLP BNA	1-11-96	S.VanEtta	SV
96-465	" "	1-11-96	S VanEtta	SV
9558751,52,54	TCL VOA +TR/AC TLS, SCOTT	12/29/95 - 01/05/96	M. CIAMPI	[signature]
9559334-339	VOA +LS +TICR	01/04/96	M. CIAMPI	[signature]
9558873-882	VOA +LS	12/26 - 12/28/95	M. CIAMPI	[signature]
9559168, 70	VOA	12/29/95 - 01/04/96	M. CIAMPI	[signature]
9559271-274	VOA +LS +TICR	01/04/96	M. CIAMPI	[signature]
9600271, 274	TCLP	01/11/96	M. CIAMPI	[signature]
483-07	BTEX/MTBE	1/11-12/96	S. VanEtta	SV

020

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091 0910
BLDG #: 1616 MW#: 1 NJDEPE WELL ID # 29337160
LABORATORY EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR. EMSL Analytical Services Inc
SAMPLERS NAMES Tom Baxter, Susan Palilonis

DATE: 12-18-95
WEATHER CONDITIONS Cold, Sunny

ELEVATION OF CASING SURVEY MARK. ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 16.18 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 4.27 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING. 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL. 5 PPM
DEPTH OF WELL. ____.____FT HEIGHT OF WATER. ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 23 GAL
(11.91 X 0 65 X 3 =2322)
PURGE METHOD (FLOW OF <0 5 GPM TO >5 0 GPM) Pump
PURGE RATE (0 5 GPM) 2 GPM

PURGE START TIME 0925
pH: 4.02 s u TEMP 10.8 Deg C
Dissolved Oxygen. 5.2 PPM Specific Conductivity: 137 us/cm

PURGE END TIME 1000
pH 3.48 s u TEMP: 11.1 Deg C
Dissolved Oxygen. 4.5 PPM Specific Conductivity 124 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING 9.98 FT
SAMPLING METHOD DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED . 23 GAL.
pH 3.49 s u TEMP. 11.4 Deg.C
Dissolved Oxygen. 4.2 PPM Specific Conductivity: 121 us/cm

1015

COMMENTS _____

METHODOLOGY SUMMARY

METHODOLOGY SUMMARY

EPA Method 524.2 - Aqueous

This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer

An HP5890/5970 GC/MS was used with a capiullary column (DB-624 0 53 mn ID)

Method detection limits are as stated

Semivolatiles by GC/MS - Aqueous

EPA Method 625 - This is a gas chromatograph/mass spectrometer (GC/MS) method applicable to the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography Reference is Federal Register, Vol 40, No 136, July, 1988

An HP5890/5970B GC/MS is used with a DB-5 fused silica capillary column

If tentatively identified compounds are requested, a computer program analyzes the non-priority pollutant/HSL/TCL compounds with standard mass spectra found in the latest version of the NIH/NBS/EPA mass spectral library

Method detection limits are as stated

LABORATORY CHRONICLE

Lab ID 95-58316, 95-58312, 95-58313 Client ESystems

	I DATE	II	Hold Time
Date Sampled	12/18/95		
Receipt/Refrigeration	12/18/95		
Extractions			
1. Semivolatile Organics	**12/23/95**		**7 days**
Analyses			
1. Volatile Organics	**12/29/95**		**14 days**
2. Semivolatile Organics	**12/26/95**		**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B Panton
(Printed Name) Peter B Panton
(Date) 01/25/96

NOTE If fractions are re-extracted and re-analyzed because the initial endeavors failed to meet the required Quality Control Criteria, the dates of re-extraction and/or re-analysis will be entered in Column II Additionally

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2	GC/MS Tune Specifications		
	a BFB Meet Criteria		X
	b DFTPP Meet Criteria		X
3	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series		X
4,	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series		X
5	GC/MS Calibration - Initial Requirements		
	a Calibration Check Compounds		X
	b System Performance Check Compounds		X
6	Blank Contamination - If yes, list compounds and concentrations in each blank		X
	a VOA Fraction **Methylene Chloride 0.90 ppb.**		
	b B/N Fraction **46360 MS/MSD: Di-n-butylphthalate 5 ppb.**		
	c Acid Fraction		
7	Surrogate Recoveries Meet Criteria		X
	If not met, list those compounds and their recoveries which fall outside the acceptable range		
	a VOA Fraction		
	b B/N Fraction		
	c Acid Fraction		
	If not met, were the calculations checked and the results qualified as "estimated"?		
8	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)		X
	a VOA Fraction		
	b B/N Fraction		
	c Acid Fraction		
9	Internal Standard Area/Retention Time Shift Meet Criteria **58311-58317 IS #6 outside QC limits.**	X	

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont

		No	Yes
10	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample		
11	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample		

12 Definitions
U=Not Detected J=Detected, but below report detection limit
B=Compound found in blank E=Estimated concentration. NA=Not Applicable

Additional Comments

Laboratory Manager Paul Tomaro Date 1-23-96

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name EMSL ANALYTICAL Contract

Lab Code Case No SAS No SDG No

Lab File ID. C0610 D BFB Injection Date 12/18/95

Instrument ID. 5972-INSTRUMENT 1 BFB Injection Time 1640

GC Column DB-62 ID 0 53 (mm) Heated Purge (Y / N)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15 0 - 40.0% of mass 95	18 5
75	30 0 - 60 0% of mass 95	44 8
95	Base peak, 100% relative abundance	100 0
96	5.0 - 9 0% of mass 95	7.3
173	Less than 2 0% of mass 174	0.0 (0 0)1
174	Greater than 50 0% of mass 95	63 6
175	5 0 - 9 0% of mass 174	4 7 (7 4)1
176	95.0 - 101 0% of mass 174	62 9 (98 9)1
177	5 0 - 9 0% of mass 176	4 2 (6 7)2

1-Value is % mass 174 2-Value is % mass 176

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

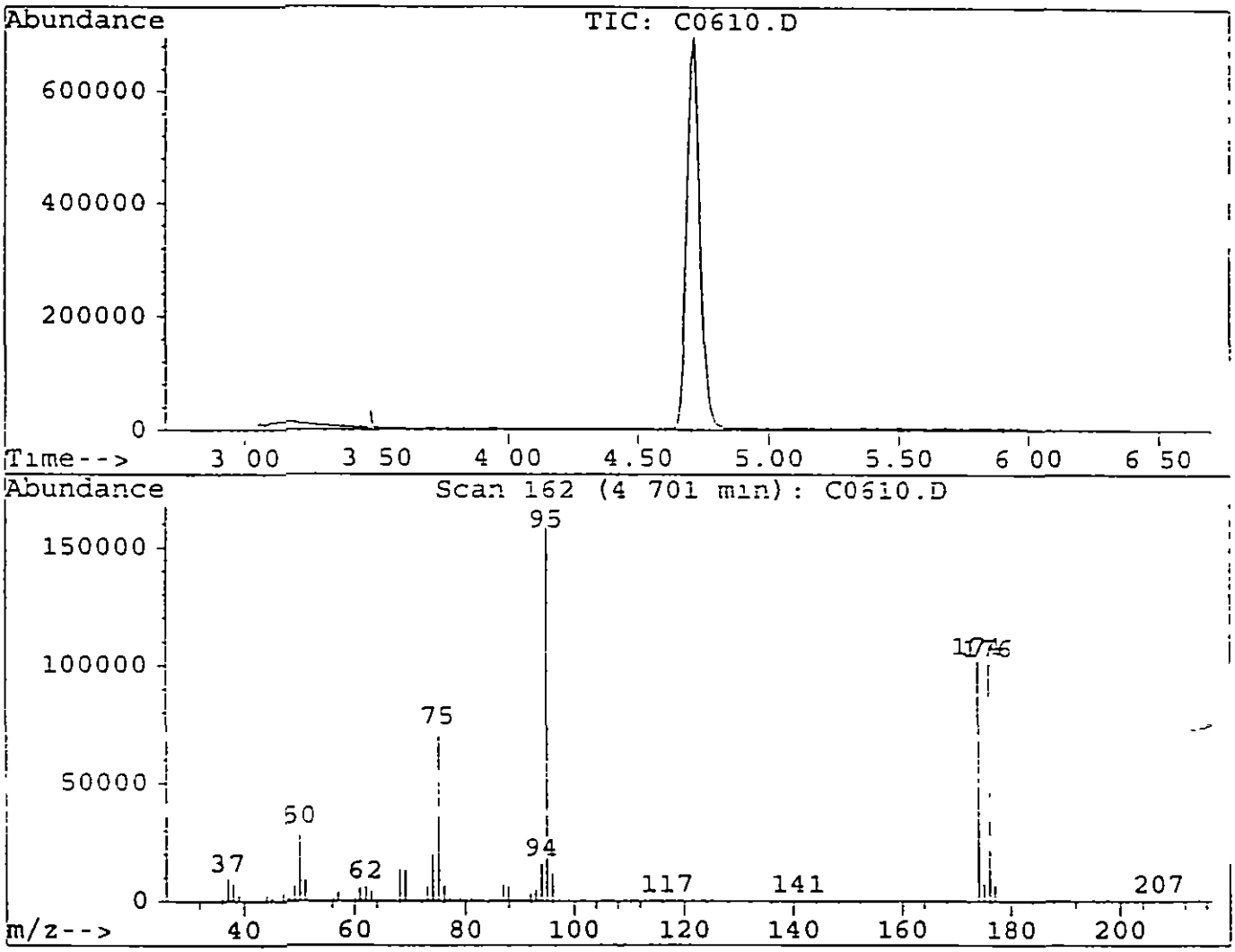
	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0 5 PPB STANDARD	C0611 D	12/18/95	1653
02		10 PPB STANDARD	C0612 D	12/18/95	1727
03		20 PPB STANDARD	C0613 D	12/18/95	1801
04		30 PPB STANDARD	C0614 D	12/18/95	1836
05		40 PPB STANDARD	C0615 D	12/18/95	1910
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File D \HPCHEM\1\DATA\C0610.D
Acq On 18 Dec 95 4 40 pm
Sample BFB TUNE
Misc 50 NG INJECTION

Vial 1
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method : C.\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics



Peak Apex is scan: 162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	29648	PASS
75	95	30	80	44.8	71608	PASS
95	95	100	100	100.0	159872	PASS
96	95	5	9	7.3	11653	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	63.6	101680	PASS
175	174	5	9	7.4	7494	PASS
176	174	95	101	98 9	100576	PASS
177	176	5	9	6.7	6725	PASS

:an 162 (4 701 min): C0610.D
BFB TUNE

m/z	abund	m/z	abund	m/z	abund.	m/z	abund
36 10	1951	51.05	8686	72.05	774	87.00	6910
37.10	9477	55.05	543	73.05	6276	87.95	5903
38.10	7601	56.10	2264	74.05	20048	90.95	540
39.10	2622	57.10	3783	75.05	71608	92.05	3239
40.00	562	60.10	1637	76.05	6530	93.05	4789
44.00	2493	61.00	5859	77.10	1173	94.05	15988
45.00	1687	62.00	6282	78.00	918	95.05	159872
47.05	3137	63.00	4298	79.00	1963	96.05	11653
48.05	1090	68.05	13513	80.00	687	116.95	676
49.05	6503	69.05	13174	81.00	2275	118.90	565
50.05	29648	70.05	980	82.00	509	140.90	664

Scan 162 (4.701 min): C0610.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.90	660						
173.95	101680						
174.95	7494						
175.95	100576						
176.95	6725						
207.00	554						

Response Factor Report 5972 - In

Method C:\HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update Tue Dec 19 13:49:27 1995
Response via Initial Calibration

Calibration Files
0.5 =C0611.D 10 =C0612.D 20 =C0613.D
30 =C0614.D 40 =C0615.D

		Compound	0.5	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.188	0.216	0.206	0.209	0.206	0.205	5.14
3)	M	Chloromethane	0.200	0.212	0.202	0.199	0.195	0.202	3.20
4)	M	Vinyl chloride	0.192	0.229	0.219	0.216	0.215	0.214	6.39
5)	M	Bromomethane	0.132	0.119	0.119	0.119	0.117	0.121	5.05
6)	M	Chloroethane	0.132	0.148	0.137	0.126	0.108	0.130	11.36
7)	M	Trichlorofluoromethan	0.355	0.395	0.385	0.374	0.373	0.376	3.98
8)	M	1,1-Dichloroethene	0.215	0.244	0.238	0.238	0.238	0.234	4.85
9)	M	Methylene chloride		0.252	0.217	0.209	0.201	0.220	10.33
10)	M	trans-1,2-Dichloroeth	0.242	0.275	0.274	0.272	0.273	0.267	5.30
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.463	0.514	0.505	0.504	0.500	0.497	3.94
13)	M	2,2-Dichloropropane	0.385	0.424	0.414	0.407	0.403	0.407	3.60
14)	M	cis-1,2-Dichloroethen	0.233	0.261	0.256	0.260	0.259	0.254	4.70
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.092	0.099	0.099	0.102	0.101	0.098	3.88
17)	M	Chloroform	0.416	0.446	0.443	0.445	0.443	0.439	2.92
18)	M	1,1,1-Trichloroethane	0.417	0.459	0.452	0.453	0.452	0.447	3.75
19)	M	Carbon tetrachloride	0.347	0.420	0.418	0.417	0.419	0.404	7.88
20)	M	1,1-Dichloropropene	0.379	0.432	0.425	0.421	0.420	0.416	5.07
21)	M	Benzene	0.858	0.870	0.854	0.855	0.846	0.857	1.00
22)	M	1,2-Dichloroethane	0.148	0.167	0.164	0.168	0.165	0.163	5.22
23)	M	Trichloroethene	0.319	0.358	0.356	0.355	0.354	0.348	4.74
24)	M	1,2-Dichloropropane	0.265	0.293	0.291	0.291	0.284	0.285	4.02
25)	M	Dibromomethane	0.102	0.115	0.114	0.117	0.115	0.113	5.20
26)	M	Bromodichloromethane	0.296	0.350	0.349	0.356	0.352	0.341	7.39
27)	M	cis-1,3-Dichloroprope	0.275	0.321	0.323	0.326	0.319	0.313	6.85
28)	M	Toluene	0.643	0.626	0.619	0.619	0.613	0.624	1.84
29)	M	trans-1,3-Dichloropro	0.176	0.213	0.214	0.217	0.211	0.206	8.35
30)	M	1,1,2-Trichloroethane	0.095	0.112	0.113	0.115	0.113	0.110	7.81
31)	M	Tetrachloroethene	0.384	0.419	0.414	0.415	0.416	0.410	3.50
32)	M	1,3-Dichloropropane	0.201	0.216	0.216	0.221	0.213	0.213	3.54
33)	M	Dibromochloromethane	0.185	0.218	0.220	0.228	0.225	0.215	7.98
34)	M	1,2-Dibromoethane	0.136	0.158	0.161	0.164	0.161	0.156	7.38
35)	M	Chlorobenzene	0.610	0.678	0.670	0.677	0.662	0.660	4.33
36)	M	1,1,1,2-Tetrachloroet	0.235	0.270	0.271	0.275	0.272	0.265	6.34
37)	M	Ethylbenzene	1.163	1.285	1.258	1.256	1.241	1.241	3.71
38)	M	Xylene (para & meta)	0.447	0.496	0.479	0.476	0.468	0.473	3.77
39)	M	Xylene (Ortho)	0.400	0.438	0.429	0.431	0.424	0.424	3.45
40)	M	Styrene	0.545	0.654	0.645	0.650	0.637	0.626	7.34
41)	M	Bromoform		0.115	0.119	0.123	0.121	0.119	3.09
42)	M	Isopropylbenzene	1.121	1.253	1.227	1.229	1.217	1.210	4.23
43)	S	4-Bromofluorobenzene	0.478	0.470	0.471	0.472	0.467	0.472	0.90

#) = Out of Range

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0611.D 10 =C0612.D 20 =C0613.D
30 =C0614.D 40 =C0615.D

		Compound	0.5	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.248	0.284	0.281	0.287	0.282	0.276	5.82
45)	M	1,1,2,2-Tetrachloroet	0.124	0.145	0.145	0.148	0.144	0.141	6.83
46)	M	1,2,3-Trichloropropan	0.138	0.131	0.138	0.132	0.136	0.135	2.43
47)	M	n-Propylbenzene	1.571	1.739	1.693	1.687	1.669	1.672	3.70
48)	M	2-Chlorotoluene	0.913	1.006	0.985	0.977	0.953	0.967	3.67
49)	M	4-Chlorotoluene	0.963	1.084	1.051	1.048	1.029	1.035	4.32
50)	M	1,3,5-Trimethylbenzen	0.944	1.065	1.037	1.039	1.028	1.023	4.51
51)	M	tert-Butylbenzene	0.997	1.086	1.192	1.068	1.045	1.078	6.70
52)	M	1,2,4-Trimethylbenzen	0.917	1.036	1.011	1.011	0.992	0.993	4.60
53)	M	sec-Butylbenzene	1.506	1.697	1.648	1.638	1.615	1.621	4.35
54)	M	1,3-Dichlorobenzene	0.515	0.574	0.562	0.563	0.552	0.553	4.14
55)	M	4-Isopropyltoluene	1.161	1.354	1.304	1.297	1.272	1.277	5.60
56)	M	1,4-Dichlorobenzene	0.502	0.555	0.544	0.544	0.532	0.536	3.80
57)	S	1,2-Dichlorobenzene-d	0.281	0.280	0.278	0.280	0.268	0.278	1.91
58)	M	1,2-Dichlorobenzene	0.400	0.433	0.425	0.429	0.417	0.421	3.04
59)	M	n-Butylbenzene	1.197	1.397	1.349	1.340	1.317	1.320	5.65
60)	M	1,2-Dibromo-3-chlorop		0.026	0.026	0.028	0.027	0.027	3.34
61)	M	1,2,4-Trichlorobenzen	0.307	0.351	0.347	0.355	0.346	0.341	5.76
62)	M	Hexachlorobutadiene	0.278	0.329	0.323	0.329	0.322	0.316	6.81
63)	M	Naphthalene	0.339	0.336	0.339	0.345	0.332	0.338	1.40
64)	M	1,2,3-Trichlorobenzen	0.216	0.257	0.254	0.262	0.250	0.248	7.38
65)		Methyl-tert butyl eth		0.266	0.264	0.271	0.263	0.266	1.38
66)		tert-Butyl Alcohol		0.004	0.004	0.004	0.004	0.004	5.17

#) = Out of Range

Quantitation Report

040

Data File : D:\HPCHEM\1\DATA\C0611.D
Acq On : 18 Dec 95 4:53 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time Dec 19 12.50 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1 00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Dec 18 17:39:51 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.07	96	1410703	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.31	95	674726	4 43	ug/L		88.60%
57) 1,2-Dichlorobenzene-d4	22.11	152	396261	4.15	ug/L		82.99%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.44	85	26510	0 35	ug/L		94
3) Chloromethane	3.84	50	28198	0.49	ug/L		95
4) Vinyl chloride	4.05	62	27080	0.42	ug/L		85
5) Bromomethane	4 79	94	18626	0 42	ug/L	#	80
6) Chloroethane	5 00	64	18626	0.52	ug/L		99
7) Trichlorofluoromethane	5.56	101	50085	0.45	ug/L		88
8) 1,1-Dichloroethene	6.67	96	30283	0.45	ug/L		94
9) Methylene chloride	7.68	84	308737	4.62	ug/L		98
10) trans-1,2-Dichloroethene	8.23	96	34130	0 45	ug/L		97
12) 1,1-Dichloroethane	9.01	63	65371	0.46	ug/L		95
13) 2,2-Dichloropropane	10.06	77	54250	0.45	ug/L		98
14) cis-1,2-Dichloroethene	10.07	96	32804	0.44	ug/L		96
16) Bromochloromethane	10.51	128	12987	0.40	ug/L		95
17) Chloroform	10.65	83	58675	0.44	ug/L		89
18) 1,1,1-Trichloroethane	10.95	97	58842	0 46	ug/L		94
19) Carbon tetrachloride	11.24	117	48969	0.40	ug/L		96
20) 1,1-Dichloropropene	11.24	75	53433	0 45	ug/L		96
21) Benzene	11.60	78	121095	0 49	ug/L		97
22) 1,2-Dichloroethane	11.63	62	20829	0 38	ug/L		96
23) Trichloroethene	12.69	95	45011	0 44	ug/L		90
24) 1,2-Dichloropropane	13.07	63	37391	0.44	ug/L		87
25) Dibromomethane	13.28	93	14440	0.39	ug/L	#	83
26) Bromodichloromethane	13.55	83	41730	0.38	ug/L		99
27) cis-1,3-Dichloropropene	14.29	75	38735	0.39	ug/L		98
28) Toluene	14.87	92	90694	0.52	ug/L		99
29) trans-1,3-Dichloropropene	15.23	75	24799	0.36	ug/L		89
30) 1,1,2-Trichloroethane	15.54	83	13334	0.36	ug/L		93
31) Tetrachloroethene	15.82	166	54196	0.44	ug/L		96
32) 1,3-Dichloropropane	15.84	76	28304	0.41	ug/L		99
33) Dibromochloromethane	16.24	129	26111	0.36	ug/L		96
34) 1,2-Dibromoethane	16.45	107	19123	0.36	ug/L	m	95
35) Chlorobenzene	17.29	112	86019	0.43	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.44	131	33132	0.40	ug/L		92
37) Ethylbenzene	17.48	91	164092	0.46	ug/L	m	65
38) Xylene (para & meta)	17.67	106	126091	0.94	ug/L		93
39) Xylene (Ortho)	18.38	106	56402	0.46	ug/L		92
40) Styrene	18.41	104	76878	0.41	ug/L		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0611.D
Acq On : 18 Dec 95 4:53 pm
Sample : 0.5 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time: Dec 19 12:50 1995

Vial: 2
Operator SRK
Inst : 5972 - I
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Dec 18 17:39:51 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.75	173	12260	0.31 ug/L	97
42) Isopropylbenzene	19.03	105	158171	0.46 ug/L	95
44) Bromobenzene	19.60	156	34990	0.39 ug/L	97
45) 1,1,2,2-Tetrachloroethane	19.56	83	17548	0.39 ug/L	93
46) 1,2,3-Trichloropropane	19.64	75	19419	0.42 ug/L m	24
47) n-Propylbenzene	19.78	91	221664	0.47 ug/L	98
48) 2-Chlorotoluene	19.94	91	128781	0.47 ug/L m	98
49) 4-Chlorotoluene	20.13	91	135904	0.44 ug/L	99
50) 1,3,5-Trimethylbenzene	20.09	105	133193	0.45 ug/L	96
51) tert-Butylbenzene	20.68	119	140621	0.42 ug/L m	99
52) 1,2,4-Trimethylbenzene	20 77	105	129296	0 43 ug/L	99
53) sec-Butylbenzene	21.08	105	212499	0.47 ug/L	98
54) 1,3-Dichlorobenzene	21.30	146	72600	0.41 ug/L m	98
55) 4-Isopropyltoluene	21 34	119	163775	0 45 ug/L	97
56) 1,4-Dichlorobenzene	21.46	146	70849	0.41 ug/L	99
58) 1,2-Dichlorobenzene	22 14	146	56487	0.41 ug/L	99
59) n-Butylbenzene	22.10	91	168895	0.46 ug/L	99
60) 1,2-Dibromo-3-chloropropan	23 57	75	2913	0.31 ug/L	90
61) 1,2,4-Trichlorobenzene	25.12	180	43246	0.38 ug/L	94
62) Hexachlorobutadiene	25.44	225	39266	0.40 ug/L	100
63) Naphthalene	25.58	128	47805	0.44 ug/L	100
64) 1,2,3-Trichlorobenzene	26 07	180	30509	0 37 ug/L	93
65) Methyl-tert butyl ether	8.28	73	49934	0.58 ug/L	95

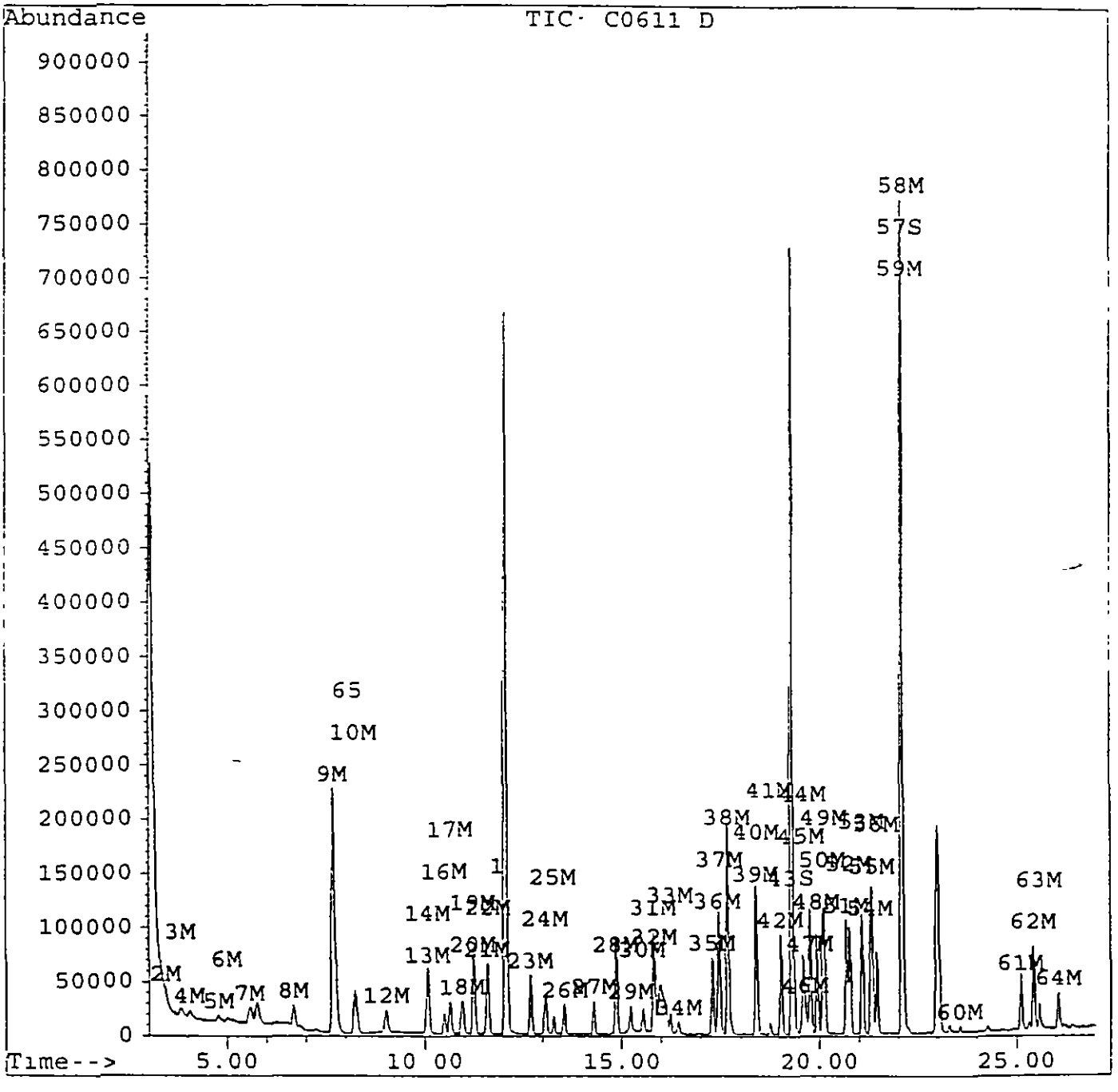
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : D \HPCHEM\1\DATA\C0611 D
Acq On : 18 Dec 95 4 53 pm
Sample : 0 5 PPB STANDARD
Misc : 25 ML 524 2 INITIAL CALIBRATION
Quant Time. Dec 19 12:50 1995

Vial 2
Operator: SRK
Inst 5972 - In
Multiplr. 1 00

Method : C:\HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update : Mon Dec 18 17:39:51 1995
Response via : Multiple Level Calibration



Quantitation Report

043

Data File d \hpchem\1\data\c0612.d
Acq On 18 Dec 95 5 27 pm
Sample 10 PPB STANDARD
Misc : 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 12 55 1995

Vial: 3
Operator: SRK
Inst . 5972 - In
Multiplr: 1.00

Method C \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Last Update Tue Dec 19 13:49:27 1995
Response via Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12 07	96	1438450	5 00	ug/L	0 00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	676254	4 35	ug/L	87 09%
57) 1,2-Dichlorobenzene-d4	22.12	152	403346	4 14	ug/L	82.84%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.44	85	622804	8 00	ug/L	99
3) Chloromethane	3.85	50	610433	10 32	ug/L	99
4) Vinyl chloride	4.07	62	659628	10 02	ug/L	99
5) Bromomethane	4 74	94	343472	7 51	ug/L	99
6) Chloroethane	4 99	64	425615	11 64	ug/L	100
7) Trichlorofluoromethane	5 58	101	1136662	10 00	ug/L	98
8) 1,1-Dichloroethene	6 68	96	702241	10.31	ug/L	99
9) Methylene chloride	7.69	84	725538	10.66	ug/L	97
10) trans-1,2-Dichloroethene	8 23	96	792522	10 19	ug/L	100
12) 1,1-Dichloroethane	9.02	63	1478477	10 12	ug/L	98
13) 2,2-Dichloropropane	10.07	77	1220112	9 99	ug/L	99
14) cis-1,2-Dichloroethene	10.08	96	749877	9 81	ug/L	96
16) Bromochloromethane	10.51	128	284264	8 58	ug/L	96
17) Chloroform	10 65	83	1283724	9 51	ug/L	99
18) 1,1,1-Trichloroethane	10.96	97	1320582	10 11	ug/L	99
19) Carbon tetrachloride	11.26	117	1207310	9.77	ug/L	99
20) 1,1-Dichloropropene	11 25	75	1242676	10.20	ug/L	99
21) Benzene	11 60	78	2501575	10 00	ug/L	100
22) 1,2-Dichloroethane	11.63	62	481648	8 59	ug/L	97
23) Trichloroethene	12.70	95	1031083	9 94	ug/L	97
24) 1,2-Dichloropropane	13.07	63	842803	9.70	ug/L	99
25) Dibromomethane	13.28	93	330109	8.66	ug/L	96
26) Bromodichloromethane	13.55	83	1008179	8 96	ug/L	99
27) cis-1,3-Dichloropropene	14.29	75	923180	9 11	ug/L	99
28) Toluene	14.87	92	1799577	10.20	ug/L	99
29) trans-1,3-Dichloropropene	15.23	75	613382	8.77	ug/L	100
30) 1,1,2-Trichloroethane	15.55	83	323232	8.60	ug/L	99
31) Tetrachloroethene	15.82	166	1204667	9 62	ug/L	97
32) 1,3-Dichloropropane	15.84	76	620713	8.73	ug/L	99
33) Dibromochloromethane	16.24	129	626620	8.38	ug/L	100
34) 1,2-Dibromoethane	16.44	107	453960	8.29	ug/L	98
35) Chlorobenzene	17.29	112	1951331	9.59	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17 43	131	777407	9 20	ug/L	99
37) Ethylbenzene	17.48	91	3696407	10 19	ug/L	100
38) Xylene (para & meta)	17.68	106	2853533	20.79	ug/L	94
39) Xylene (Ortho)	18.38	106	1260630	10.01	ug/L	100
40) Styrene	18.40	104	1882088	9.74	ug/L	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0612.d
Acq On : 18 Dec 95 5:27 pm
Sample : 10 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time : Dec 19 12:55 1995

Vial : 3
Operator: SRK
Inst : 5972 - In
Multiplr : 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.75	173	329927	8.05	ug/L		98
42)	Isopropylbenzene	19.03	105	3605914	10.29	ug/L	m	0
44)	Bromobenzene	19.60	156	817692	9.00	ug/L		96
45)	1,1,2,2-Tetrachloroethane	19.56	83	417968	9.09	ug/L		99
46)	1,2,3-Trichloropropane	19.64	75	377473	7.99	ug/L	m	99
47)	n-Propylbenzene	19.78	91	5001751	10.45	ug/L		100
48)	2-Chlorotoluene	19.95	91	2893424	10.34	ug/L	m	99
49)	4-Chlorotoluene	20.14	91	3118209	10.00	ug/L		99
50)	1,3,5-Trimethylbenzene	20.09	105	3065048	10.08	ug/L		98
51)	tert-Butylbenzene	20.68	119	3125169	9.15	ug/L	m	99
52)	1,2,4-Trimethylbenzene	20.78	105	2979989	9.81	ug/L		99
53)	sec-Butylbenzene	21.08	105	4881376	10.53	ug/L		100
54)	1,3-Dichlorobenzene	21.30	146	1650878	9.18	ug/L		100
55)	4-Isopropyltoluene	21.34	119	3894952	10.45	ug/L		99
56)	1,4-Dichlorobenzene	21.47	146	1597802	9.07	ug/L		99
58)	1,2-Dichlorobenzene	22.15	146	1244718	8.76	ug/L		96
59)	n-Butylbenzene	22.09	91	4019796	10.62	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.57	75	74841	7.70	ug/L		97
61)	1,2,4-Trichlorobenzene	25.12	180	1009467	8.77	ug/L		99
62)	Hexachlorobutadiene	25.44	225	947757	9.47	ug/L		99
63)	Napnthalene	25.58	128	966149	8.68	ug/L		100
64)	1,2,3-Trichlorobenzene	26.06	180	739730	8.82	ug/L		99
65)	Methyl-tert butyl ether	8.27	73	764807	8.69	ug/L		99
66)	tert-Butyl Alcohol	8.03	59	22206	17.13	ug/L	m	100

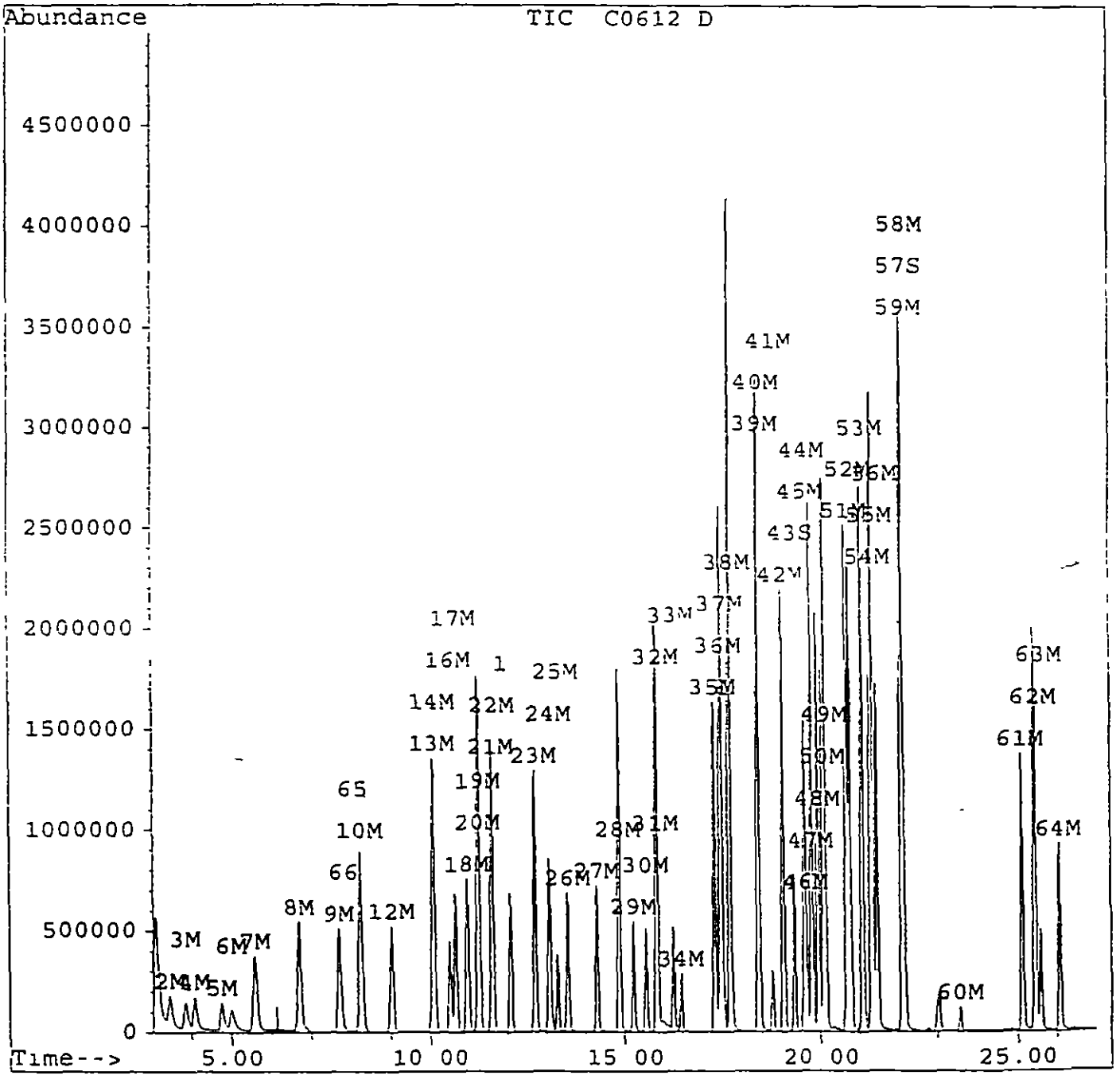
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d \hpchem\1\data\c0612 d
Acq On 18 Dec 95 5 27 pm
Sample 10 PPB STANDARD
Misc : 25 ML 524.2 INITIAL CALIBRATION
Quant Time. Dec 19 12.55 1995

Vial: 3
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method : C.\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13:49 27 1995
Response via : Multiple Level Calibration



Quantitation Report

046

Data File d \npchem\1\data\c0613 d
Acq On 18 Dec 95 6·01 pm
Sample 20 PPB STANDARD
Misc 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 12 59 1995

Vial 4
Operator SRK
Inst 5972 - In
Multiplr· 1 00

Method C·\HPCHEM\1\METHODS\VOA524 M
Title . 524.2 Purgable Organics
Last Update · Tue Dec 19 13:49.27 1995
Response via . Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.08	96	1407214	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	662993	4.36	ug/L	87 28%
57) 1,2-Dichlorobenzene-d4	22 12	152	390880	4 10	ug/L	82 06%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.45	85	1157405	15.20	ug/L	100
3) Chloromethane	3.85	50	1135619	19.62	ug/L	99
4) Vinyl chloride	4 07	62	1232853	19.15	ug/L	100
5) Bromomethane	4 73	94	668805	14.96	ug/L	96
6) Chloroethane	4 97	64	770953	21.55	ug/L	99
7) Trichlorofluoromethane	5 56	101	2167619	19 49	ug/L	99
8) 1,1-Dichloroethene	6 68	96	1337170	20 07	ug/L	99
9) Methylene chloride	7.69	84	1220128	18.32	ug/L	95
10) trans-1,2-Dichloroethene	8.23	96	1540653	20 24	ug/L	97
12) 1,1-Dichloroethane	9.01	63	2840312	19.87	ug/L	99
13) 2,2-Dichloropropane	10.08	77	2329892	19 51	ug/L	100
14) cis-1,2-Dichloroethene	10 09	96	1442121	19.28	ug/L	100
16) Bromochloromethane	10 51	128	555971	17 15	ug/L	96
17) Chloroform	10 65	83	2494279	18 89	ug/L	100
18) 1,1,1-Trichloroethane	10.96	97	2543034	19 89	ug/L	99
19) Carbon tetrachloride	11 26	117	2351013	19 45	ug/L	99
20) 1,1-Dichloropropene	11 25	75	2393919	20 08	ug/L	99
21) Benzene	11 60	78	4808098	19 64	ug/L	99
22) 1,2-Dichloroethane	11 63	62	925848	16 88	ug/L	98
23) Trichloroethene	12.70	95	2002780	19 73	ug/L	99
24) 1,2-Dichloropropane	13.08	63	1635263	19 24	ug/L	99
25) Dibromomethane	13.28	93	641361	17.21	ug/L	96
26) Bromodichloromethane	13.55	83	1966352	17.87	ug/L	100
27) cis-1,3-Dichloropropene	14.29	75	1817611	18.33	ug/L	98
28) Toluene	14.87	92	3486596	20.19	ug/L	100
29) trans-1,3-Dichloropropene	15 23	75	1205130	17.61	ug/L	99
30) 1,1,2-Trichloroethane	15.55	83	637883	17.36	ug/L	98
31) Tetrachloroethene	15.82	166	2329861	19 02	ug/L	97
32) 1,3-Dichloropropane	15.84	76	1217712	17.50	ug/L	100
33) Dibromochloromethane	16.24	129	1240668	16.96	ug/L	100
34) 1,2-Dibromoethane	16.45	107	903843	16.87	ug/L	99
35) Chlorobenzene	17.29	112	3773745	18.96	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.44	131	1525321	18.44	ug/L	99
37) Ethylbenzene	17 48	91	7083623	19 96	ug/L	100
38) Xylene (para & meta)	17.68	106	5388703	40.14	ug/L	96
39) Xylene (Ortho)	18 39	106	2413775	19 59	ug/L	98
40) Styrene	18.41	104	3633015	19.21	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0613 d
Acq On 19 Dec 95 6 01 pm
Sample 20 PPB STANDARD
Misc 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 12 59 1995

Vial: 4
Operator SRK
Inst 5972 - I-
Multiplr. 1 00

Method C.\HPCHEM\1\METHODS\VOA524.M
Title 524.2 Purgable Organics
Last Update . Tue Dec 19 13·49.27 1995
Response via · Multiple Level Calibration

	Compound	R T	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18 75	173	668039	16.66 ug/L	100
42)	Isopropylbenzene	19 04	105	6904404	20.13 ug/L m	0
44)	Bromobenzene	19.60	156	1579998	17 78 ug/L	98
45)	1,1,2,2-Tetrachloroethane	19 56	83	813627	18 08 ug/L	99
46)	1,2,3-Trichloropropane	19 64	75	778215	16.84 ug/L m	1
47)	n-Propylbenzene	19.78	91	9531856	20 36 ug/L	100
48)	2-Chlorotoluene	19.94	91	5543384	20.25 ug/L m	99
49)	4-Chlorotoluene	20 14	91	5917632	19 40 ug/L	100
50)	1,3,5-Trimethylbenzene	20 09	105	5839813	19.63 ug/L	98
51)	tert-Butylbenzene	20.68	119	6709069	20 08 ug/L	99
52)	1,2,4-Trimethylbenzene	20 78	105	5692640	19 15 ug/L	99
53)	sec-Butylbenzene	21 09	105	9273631	20 44 ug/L	99
54)	1,3-Dichlorobenzene	21 30	146	3164433	17 99 ug/L	98
55)	4-Isopropyltoluene	21 34	119	7337427	20 12 ug/L	99
56)	1,4-Dichlorobenzene	21.47	146	3059938	17 75 ug/L	99
58)	1,2-Dichlorobenzene	22 15	146	2392863	17 21 ug/L	97
59)	n-Butylbenzene	22.10	91	7591468	20 51 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23 57	75	145800	15 34 ug/L	97
61)	1,2,4-Trichlorobenzene	25 12	180	1950474	17 31 ug/L	99
62)	Hexachlorobutadiene	25 44	225	1819360	18 59 ug/L	99
63)	Naphthalene	25 58	128	1910502	17 55 ug/L	100
64)	1,2,3-Trichlorobenzene	26 07	180	1430512	17 43 ug/L	98
65)	Methyl-tert butyl ether	8 27	73	1486618	17 26 ug/L	100
66)	tert-Butyl Alcohol	8 04	59	44313	34 94 ug/L m	100

(#) = qualifier out of range (m) = manual integration

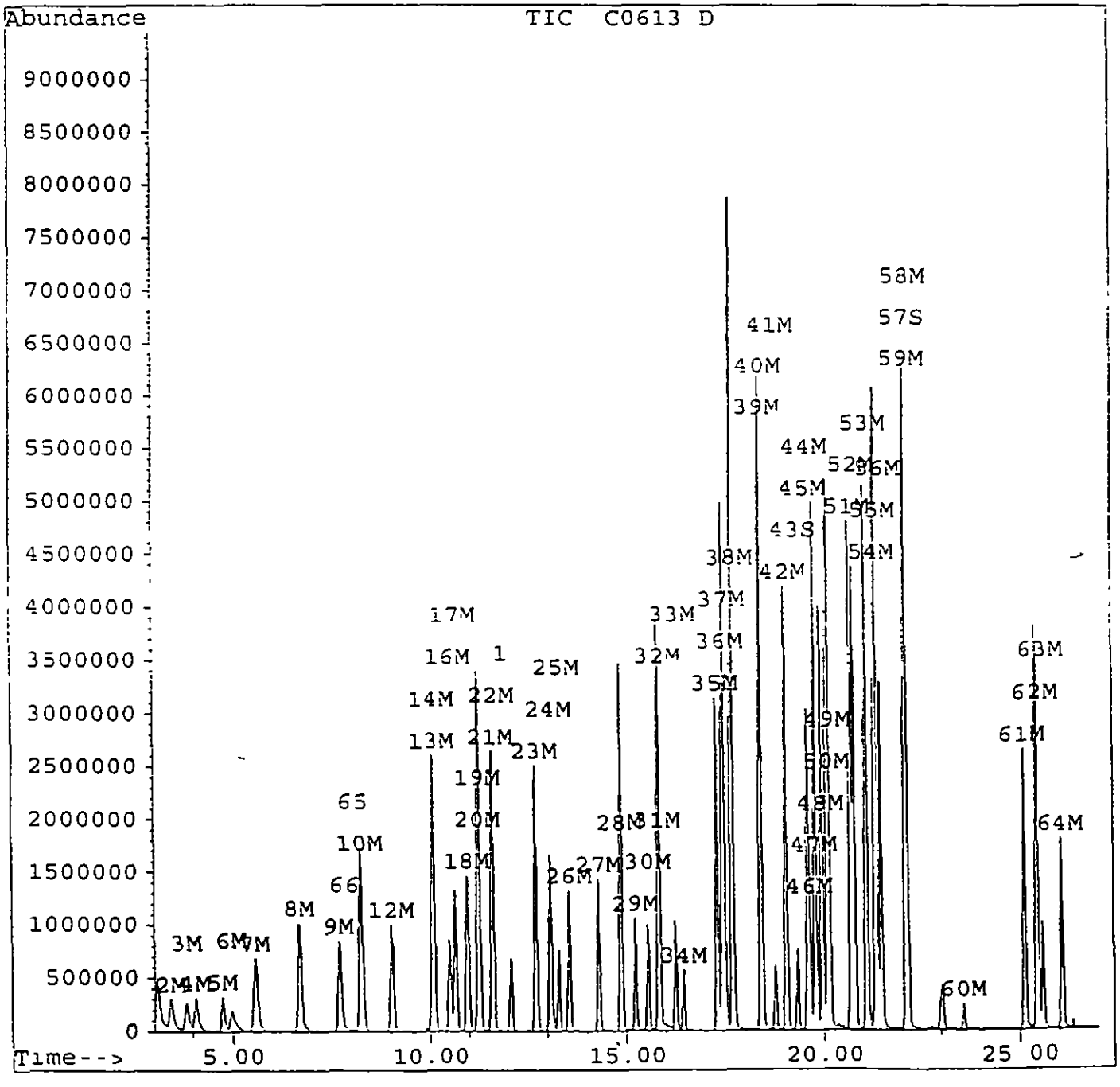
Quantitation Report

046

Data File : d:\hpchem\1\data\c0613 d
Acq On : 18 Dec 95 6 01 pm
Sample : 20 PPB STANDARD
Misc : 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 12 59 1995

Vial: 4
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method : C \HPCHEM\1\METHODS\VOA524.M
Title : 524 2 Purgable Organics
Last Update : Tue Dec 19 13:49.27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File d \hpchem\1\data\c0614 d
Acq On 18 Dec 95 6 36 pm
Sample 30 PPB STANDARD
Misc 25 ML 524.2 INITIAL CALIBRATION
Quant Time Dec 19 13 03 1995

Vial 5
Operator. SRK
Inst 5972 - In
Multiplr. 1.00

Method c·\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13 49.27 1995
Response via . Multiple Level Calibration

Internal Standards	R.T	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12 08	96	1332396	5 00	ug/L	0 00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.32	95	629223	4 37	ug/L	87 48%
57) 1,2-Dichlorobenzene-d4	22 12	152	373341	4.14	ug/L	82 78%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.44	85	1674231	23.22	ug/L	99
3) Chloromethane	3.84	50	1589959	29.01	ug/L	99
4) Vinyl chloride	4 07	62	1728649	28.36	ug/L	98
5) Bromomethane	4 73	94	948463	22.40	ug/L	98
6) Chloroethane	4 95	64	1004742	29 66	ug/L	99
7) Trichlorofluoromethane	5 55	101	2993479	28 43	ug/L	99
8) 1,1-Dichloroethene	6.68	96	1901722	30 15	ug/L	98
9) Methylene chloride	7 69	84	1669396	26 47	ug/L	99
10) trans-1,2-Dichloroethene	8 23	96	2174013	30 17	ug/L	98
12) 1,1-Dichloroethane	9 02	63	4028967	29 77	ug/L	99
13) 2,2-Dichloropropane	10 07	77	3257364	28 80	ug/L	99
14) cis-1,2-Dichloroethene	10.08	96	2077736	29 34	ug/L	98
16) Bromochloromethane	10 52	128	812023	26 45	ug/L	98
17) Chloroform	10 66	83	3559313	28 47	ug/L	99
18) 1,1,1-Trichloroethane	10 97	97	3620306	29 91	ug/L	99
19) Carbon tetrachloride	11 26	117	3331686	29 12	ug/L	99
20) 1,1-Dichloropropene	11 26	75	3369064	29 84	ug/L	99
21) Benzene	11 61	78	6834627	29 48	ug/L	100
22) 1,2-Dichloroethane	11 63	62	1346517	25 93	ug/L	98
23) Trichloroethene	12 71	95	2836186	29.51	ug/L	99
24) 1,2-Dichloropropane	13.08	63	2324715	28.89	ug/L	100
25) Dibromomethane	13 29	93	934117	26.47	ug/L	97
26) Bromodichloromethane	13.55	83	2842039	27.28	ug/L	99
27) cis-1,3-Dichloropropene	14.30	75	2604057	27.73	ug/L	99
28) Toluene	14.88	92	4950191	30.28	ug/L	98
29) trans-1,3-Dichloropropene	15.23	75	1737974	26.82	ug/L	99
30) 1,1,2-Trichloroethane	15.55	83	922443	26.51	ug/L	99
31) Tetrachloroethene	15.83	166	3320481	28.62	ug/L	98
32) 1,3-Dichloropropane	15.84	76	1763212	26.76	ug/L	99
33) Dibromochloromethane	16.25	129	1818986	26.26	ug/L	99
34) 1,2-Dibromoethane	16.44	107	1309782	25 83	ug/L	98
35) Chlorobenzene	17.30	112	5411175	28.71	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.43	131	2199322	28.09	ug/L	99
37) Ethylbenzene	17 49	91	10037171	29 87	ug/L	100
38) Xylene (para & meta)	17.69	106	7617139	59 92	ug/L	95
39) Xylene (Ortho)	18.39	106	3446421	29.54	ug/L	97
40) Styrene	18.41	104	5197567	29.03	ug/L	99

(#) = qualifier out of range (m) = manual integration

050

Data File . d·\hpchem\1\data\c0614 d
Acq On 18 Dec 95 6 36 pm
Sample 30 PPB STANDARD
Misc 25 ML 524.2 INITIAL CALIBRATION
Quant Time Dec 19 13:03 1995

Vial 5
Operator SRK
Inst 5972 - In
Multiplr: 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration

	Compound	R T	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18 75	173	984215	25 92 ug/L	98
42)	Isopropylbenzene	19.04	105	9827464	30 26 ug/L m	0
44)	Bromobenzene	19.61	156	2296884	27 30 ug/L	100
45)	1,1,2,2-Tetrachloroethane	19.57	83	1187143	27.86 ug/L	100
46)	1,2,3-Trichloropropane	19 65	75	1054548	24 10 ug/L m	1
47)	n-Propylbenzene	19.78	91	13486064	30.42 ug/L	100
48)	2-Chlorotoluene	19.95	91	7806544	30 12 ug/L m	100
49)	4-Chlorotoluene	20.15	91	8376804	29.01 ug/L	99
50)	1,3,5-Trimethylbenzene	20.09	105	8309199	29 50 ug/L	99
51)	tert-Butylbenzene	20.69	119	8540352	26 99 ug/L m	99
52)	1,2,4-Trimethylbenzene	20.77	105	8085353	28.72 ug/L	100
53)	sec-Butylbenzene	21 09	105	13095526	30 48 ug/L	100
54)	1,3-Dichlorobenzene	21.31	146	4501828	27.04 ug/L	99
55)	4-Isopropyltoluene	21 35	119	10368606	30.03 ug/L	100
56)	1,4-Dichlorobenzene	21.47	146	4349999	26 65 ug/L	99
58)	1,2-Dichlorobenzene	22 16	146	3428548	26.04 ug/L	98
59)	n-Butylbenzene	22.10	91	10709424	30 55 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23 58	75	222530	24.72 ug/L	100
61)	1,2,4-Trichlorobenzene	25.12	180	2838531	26 61 ug/L	99
62)	Hexachlorobutadiene	25 45	225	2630469	28 39 ug/L m	81
63)	Naphthalene	25 59	128	2755342	26 74 ug/L m	0
64)	1,2,3-Trichlorobenzene	26.07	180	2097630	26 99 ug/L	100
65)	Methyl-tert butyl ether	8 27	73	2169381	26 60 ug/L	100
66)	tert-Butyl Alcohol	8 06	59	69142	57 57 ug/L m	100

(#) = qualifier out of range (m) = manual integration

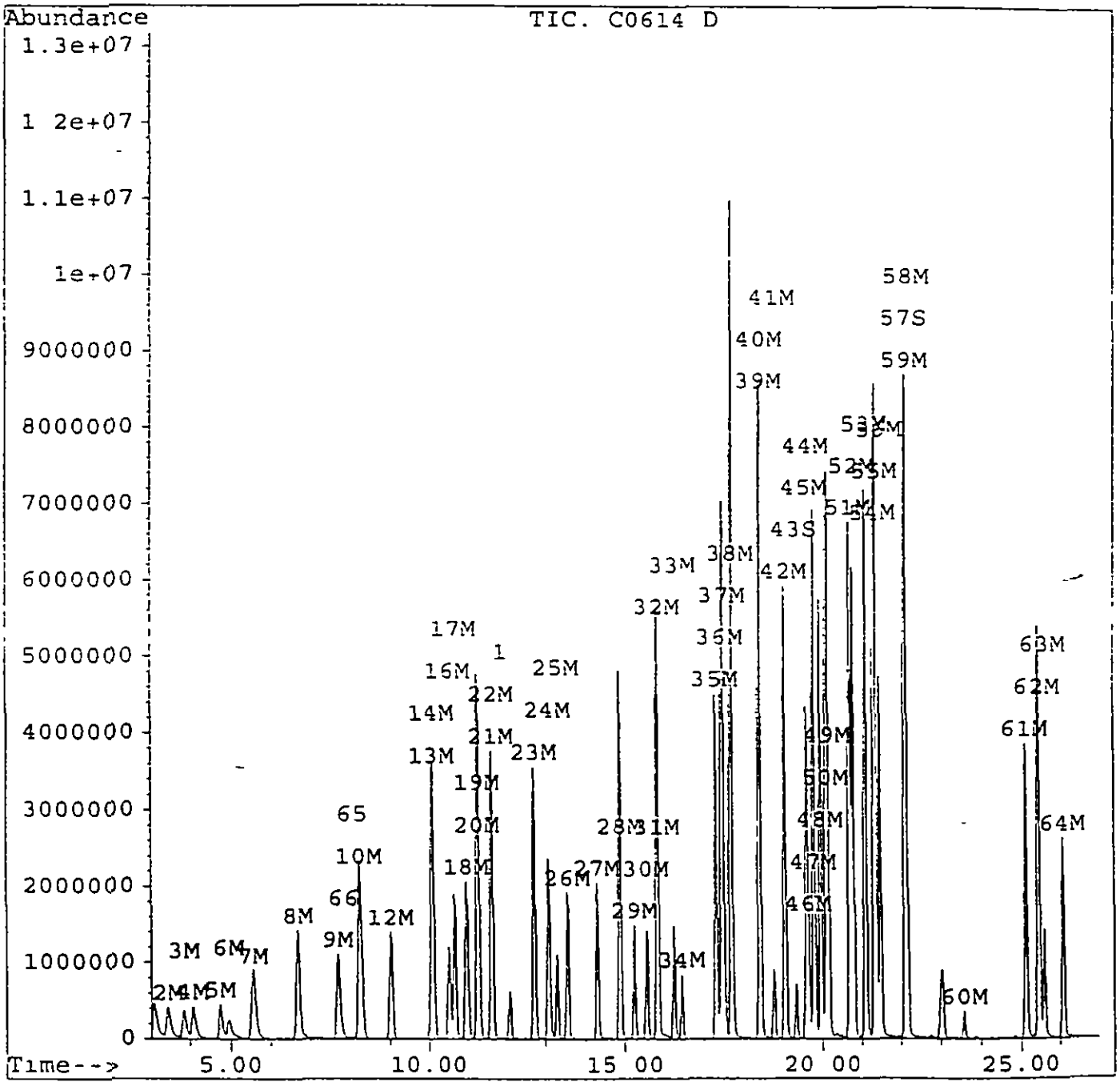
Quantitation Report

051

Data File d.\hpchem\1\data\c0614 d
Acq On 18 Dec 95 6 36 pm
Sample 30 PPB STANDARD
Misc 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 13 03 1995

Vial 5
Operator SRK
Inst 5972 - In
Multiplr. 1.00

Method c \HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update Tue Dec 19 13:49:27 1995
Response via : Multiple Level Calibration



Quantitation Report

052

Data File d \hpchem\1\data\c0615 d
Acq On 18 Dec 95 7 10 pm
Sample 40 PPB STANDARD
Misc 25 ML 524.2 INITIAL CALIBRATION
Quant Time Dec 19 13.31 1995

Vial 6
Operator SRK
Inst 5972 - In
Multiplr 1.00

Method c \HPCHEM\1\METHODS\VOA524.M
Title : 524 2 Purgable Organics
Last Update . Tue Dec 19 13 49 27 1995
Response via : Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.08	96	1328775	5 00 ug/L	0 00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.33	95	620145	4.32 ug/L	86 46%
57) 1,2-Dichlorobenzene-d4	22 13	152	356451	3 96 ug/L	79 25%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3 45	85	2193367	30.50 ug/L	99
3) Chloromethane	3 85	50	2072353	37.92 ug/L	99
4) Vinyl chloride	4.07	62	2286904	37.62 ug/L	99
5) Bromomethane	4.73	94	1244374	29 47 ug/L m	84
6) Chloroethane	4 93	64	1148775	34 01 ug/L	99
7) Trichlorofluoromethane	5 54	101	3961033	37 72 ug/L	99
8) 1,1-Dichloroethene	6 67	96	2527689	40 18 ug/L	98
9) Methylene chloride	7 69	84	2133222	33 92 ug/L	98
10) trans-1,2-Dichloroethene	8.23	96	2898883	40 34 ug/L	98
12) 1,1-Dichloroethane	9.02	63	5317393	39 39 ug/L	99
13) 2,2-Dichloropropane	10.07	77	4286098	38.00 ug/L	99
14) cis-1,2-Dichloroethene	10.09	96	2752262	38 97 ug/L	98
16) Bromochloromethane	10.52	128	1075806	35 14 ug/L	96
17) Chloroform	10 66	83	4712224	37 79 ug/L	100
18) 1,1,1-Trichloroethane	10 97	97	4809583	39 84 ug/L	99
19) Carbon tetrachloride	11 27	117	4454103	39 03 ug/L	99
20) 1,1-Dichloropropene	11.26	75	4466516	39 67 ug/L	99
21) Benzene	11 61	78	8993183	38 90 ug/L	100
22) 1,2-Dichloroethane	11 64	62	1749723	33 79 ug/L	96
23) Trichloroethene	12 71	95	3767691	39.30 ug/L	99
24) 1,2-Dichloropropane	13.08	63	3024057	37.68 ug/L	99
25) Dibromomethane	13.29	93	1227344	34.87 ug/L	95
26) Bromodichloromethane	13.56	83	3743643	36 03 ug/L	98
27) cis-1,3-Dichloropropene	14.30	75	3392954	36 23 ug/L	99
28) Toluene	14.88	92	6516098	39 96 ug/L	100
29) trans-1,3-Dichloropropene	15.24	75	2247586	34.77 ug/L	99
30) 1,1,2-Trichloroethane	15.56	83	1201692	34.63 ug/L	98
31) Tetrachloroethene	15.83	166	4420107	38 21 ug/L	98
32) 1,3-Dichloropropane	15.85	76	2266167	34.49 ug/L	100
33) Dibromochloromethane	16.25	129	2386589	34.55 ug/L	99
34) 1,2-Dibromoethane	16.45	107	1712137	33.85 ug/L	99
35) Chlorobenzene	17.30	112	7040420	37.46 ug/L m	0
36) 1,1,1,2-Tetrachloroethane	17.44	131	2894177	37.06 ug/L	99
37) Ethylbenzene	17 49	91	13196176	39 38 ug/L	99
38) Xylene (para & meta)	17.69	106	9951484	78 50 ug/L	96
39) Xylene (Ortho)	18.39	106	4510500	38.76 ug/L	96
40) Styrene	18.41	104	6772604	37.92 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0615 d
Acq On 18 Dec 95 7 10 pm
Sample 40 PPB STANDARD
Misc 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 13:31 1995

Vial 6
Operator SRK
Inst . 5972 - In
Multiplr· 1 00

Method · c:\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update . Tue Dec 19 13.49·27 1995
Response via · Multiple Level Calibration

	Compound	R T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18.75	173	1291562	34 11 ug/L		99
42)	Isopropylbenzene	19.04	105	12938843	39.95 ug/L		97
44)	Bromobenzene	19.61	156	2999030	35 74 ug/L		100
45)	1,1,2,2-Tetrachloroethane	19 57	83	1533825	36.09 ug/L		99
46)	1,2,3-Trichloropropane	19.65	75	1448800	33 20 ug/L	m	1
47)	n-Propylbenzene	19 79	91	17739162	40.12 ug/L		99
48)	2-Chlorotoluene	19.96	91	10134696	39.21 ug/L	m	100
49)	4-Chlorotoluene	20.15	91	10939409	37.99 ug/L		100
50)	1,3,5-Trimethylbenzene	20.10	105	10924965	38 89 ug/L		99
51)	tert-Butylbenzene	20.69	119	11106671	35.20 ug/L	m	100
52)	1,2,4-Trimethylbenzene	20 79	105	10547838	37 57 ug/L		99
53)	sec-Butylbenzene	21.09	105	17163941	40.06 ug/L		99
54)	1,3-Dichlorobenzene	21 31	146	5867148	35 33 ug/L		99
55)	4-Isopropyltoluene	21 35	119	13520952	39 26 ug/L		99
56)	1,4-Dichlorobenzene	21.48	146	5658632	34 77 ug/L		100
58)	1,2-Dichlorobenzene	22 16	146	4429755	33.73 ug/L		97
59)	n-Butylbenzene	22.11	91	14000701	40 05 ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.58	75	283978	31.64 ug/L		98
61)	1,2,4-Trichlorobenzene	25.13	180	3682422	34 62 ug/L		99
62)	Hexachlorobutadiene	25.45	225	3421695	37.03 ug/L	m	83
63)	Naphthalene	25 59	128	3527603	34 33 ug/L		100
64)	1,2,3-Trichlorobenzene	26.07	180	2654417	34 24 ug/L		100
65)	Methyl-tert butyl ether	8 28	73	2797003	34 39 ug/L		98
66)	tert-Butyl Alcohol	8 08	59	84092	70 21 ug/L	m	100

(#) = qualifier out of range (m) = manual integration

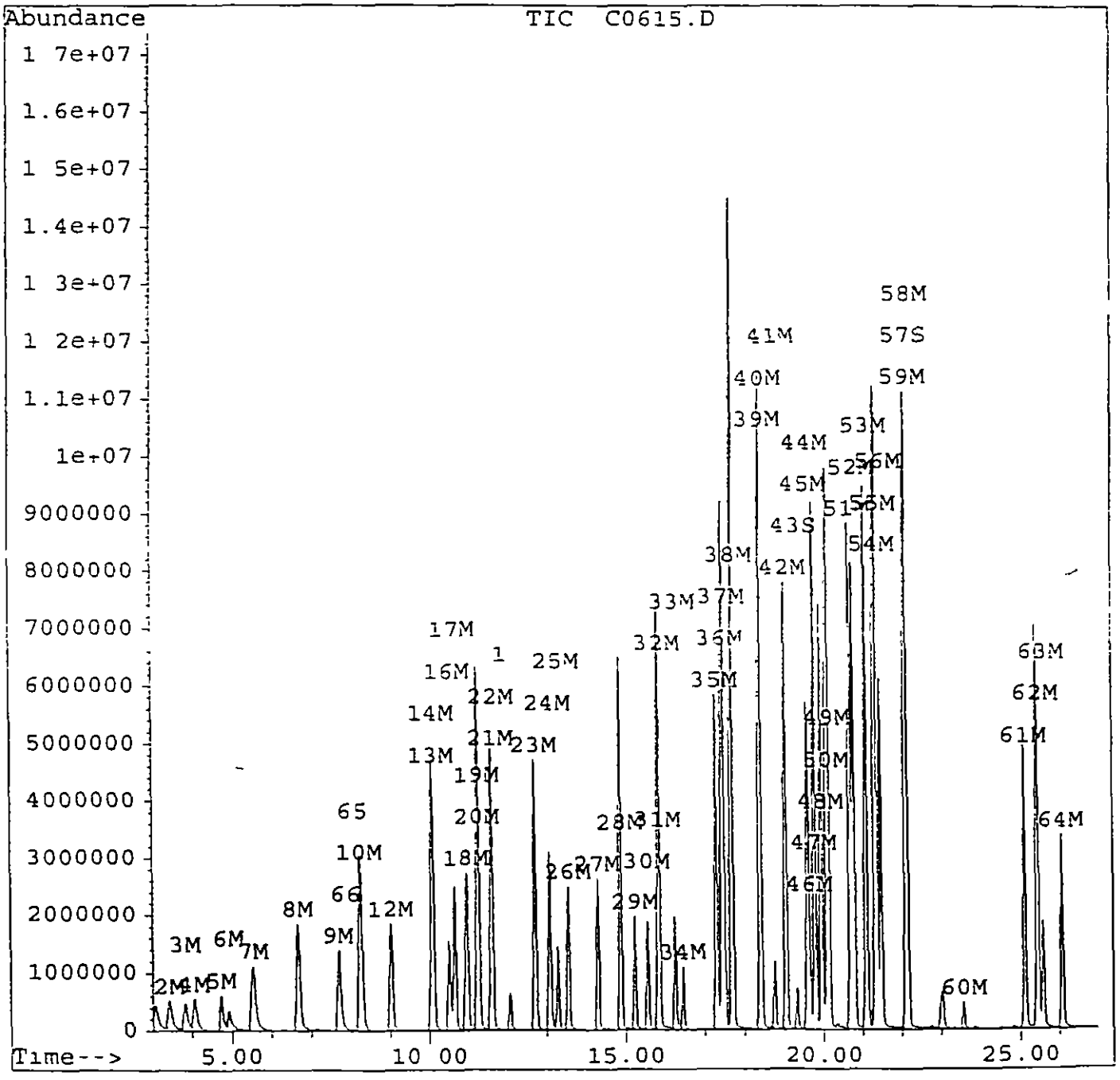
Quantitation Report

054

Data File d \hpchem\1\data\c0615.d
Acq On 18 Dec 95 7 10 pm
Sample 40 PPB STANDARD
Misc · 25 ML 524 2 INITIAL CALIBRATION
Quant Time Dec 19 13 31 1995

Vial· 6
Operator. SRK
Inst · 5972 - I
Multiplr: 1.00

Method · c \HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 19 13·49.27 1995
Response via : Multiple Level Calibration



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID C0695 D BFB Injection Date 12/26/95

Instrument ID 5972-INSTRUMENT 1 BFB Injection Time 1653

GC Column DB-624 X 75M ID 0 53 (mm) Heated Purge (Y/N)

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8 0 - 40 0% of mass 95	18 1
75	30 0 - 66 0% of mass 95	42 1
95	Base peak 100% relative abundance	100 0
96	5 0 - 9 0% of mass 95	6 8
173	Less than 2 0% of mass 174	0 0 (0 0)1
174	50 0 - 120 0% of mass 95	64 9
175	4 0 - 9 0% of mass 174	4 7 (7 2)1
176	93 0 - 101 0% of mass 174	63 9 (98 5)1
177	5 0 - 9 0% of mass 176	4 0 (6 3)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS

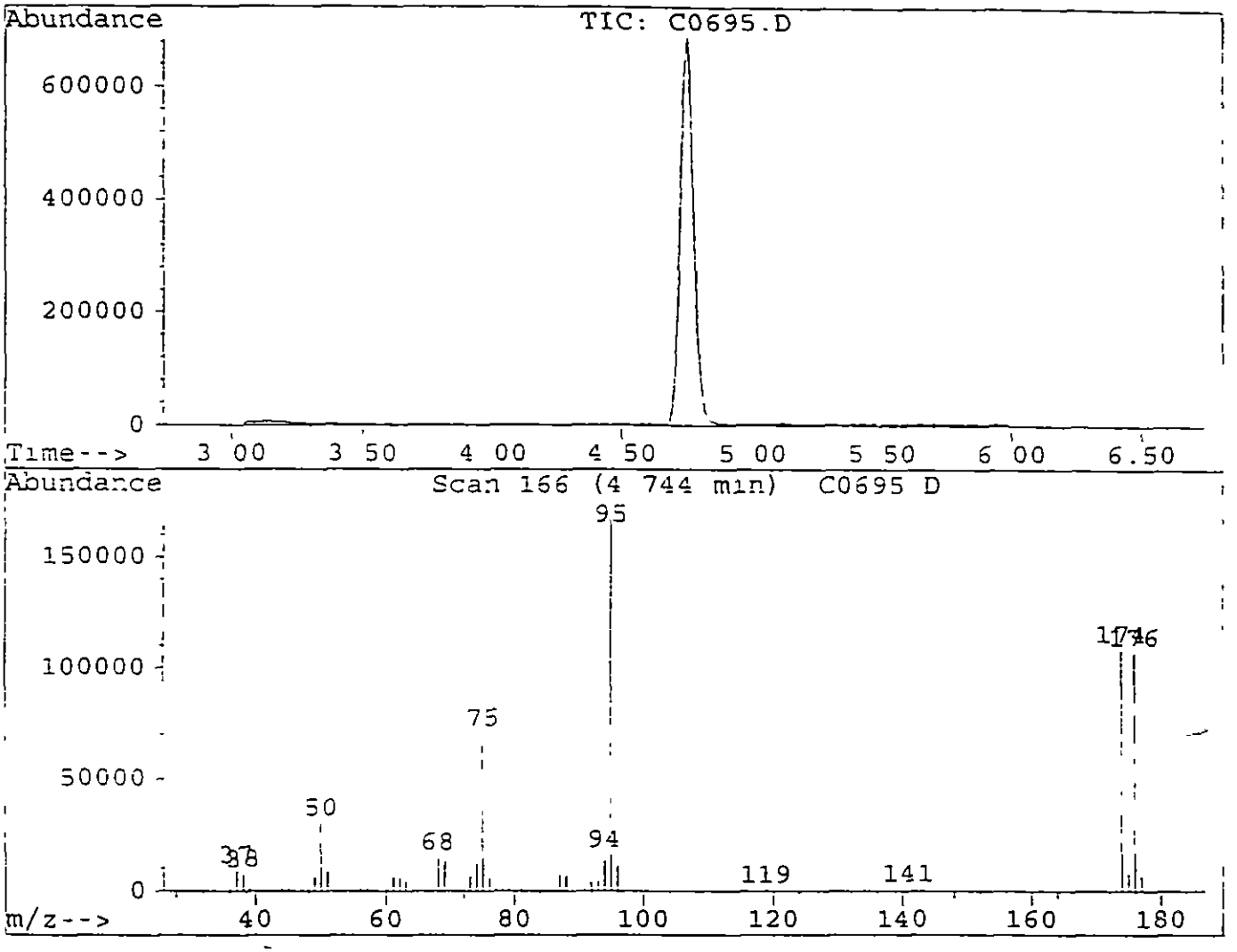
	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0696 D	12/26/95	1706
02	VBLK01	M BLANK	C0697 D	12/26/95	1741
03	9557856V	9557856V	C0698 D	12/26/95	1815
04	9557857V	9557857V	C0699 D	12/26/95	1850
05	9558188V	9558188V	C0700 D	12/26/95	1924
06	9558189V	9558189V	C0701 D	12/26/95	1958
07	9558190V	9558190V	C0702 D	12/26/95	2032
08	9558191V	9558191V	C0703 D	12/26/95	2107
09	9558192V	9558192V	C0704 D	12/26/95	2141
10	9558196V	9558196V	C0705 D	12/26/95	2215
11	9558197V	9558197V	C0706 D	12/26/95	2250
12	9558195V	9558195V	C0707 D	12/26/95	2324
13	9557856MS	57856MS	C0708 D	12/26/95	2358
14	9557856MSD	57856MSD	C0709 D	12/27/95	0032
15	10 QCS	10 QCS	C0710 D	12/27/95	0107
16	1 STND	1 STND	C0711 D	12/27/95	0141
17					
18					
19					
20					
21					
22					

CLPBFB

Data File D \HPCHEM\1\DATA\C0695 D
Acq On 26 Dec 95 4 53 pm
Sample BFB TUNE
Misc 25 NG INJECTION

Vial 1
Operator SRK
Inst 5972 - In
Multiplr 1.00

Method C \HPCHEM\1\METHODS\VOA524.M
Title 524 2 Purgable Organics



Peak Apex is scan: 166

Target Mass	Rel to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	30208	PASS
75	95	30	80	42.1	70408	PASS
95	95	100	100	100.0	167168	PASS
96	95	5	9	6.8	11321	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	64 9	108464	PASS
175	174	5	9	7 2	7852	PASS
176	174	95	101	98.5	106816	PASS
177	176	5	9	6.3	6723	PASS

Scan 166 (4 744 min) C0695 D
BFB TUNE

m/z	abund	m/z	abund	m/z	abund	m/z	abund
36 10	2075	51 05	8964	72 05	879	87 00	6983
37.10	9106	55 05	634	73 05	6510	88.05	6954
38.10	7359	56.10	1741	74 05	20264	91 05	593
39.10	2709	57.10	3765	75.05	70408	91 95	3884
40.00	840	60 00	1615	76 05	6088	93.05	4447
44.00	2129	61.10	6353	77 00	1019	94.05	15855
45.00	1351	62.10	5874	78.00	686	95 05	167168
47.05	3168	63.00	4585	79.00	1970	96.05	11321
48.05	964	68.05	14864	79.90	859	118.80	530
49.05	6323	69.05	13479	81.00	2637	140.90	1017
50.05	30208	70.05	981	82.00	642	143 00	873

Scan 166 (4 744 min) · C0695.D
BFB TUNE

m/z	abund.	m/z	abund	m/z	abund	m/z	abund
173.95	108464						
174.95	7852						
175.95	106816						
176.95	6723						

7A

VOLATILE CONTINUING CALIBRATION CHECK

056

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID 5972-INSTRUMENT 1 Calibration Date 12/26/95 Time 1706

Lab File ID C0696 D Init Calib Date(s) 12/18/95

Heated Purge (Y N) N Init Calib Times

GC Column DB-624 X 7 ID 0 53 (mm)

COMPOUND	RRF	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0 205	0 176		14 1	30 0
Chloromethane	0 202	0 173		14 4	30 0
Vinyl chloride	0 214	0 205		4 2	30 0
Bromomethane	0 121	0 132		-9 1	30 0
Chloroethane	0 130	0 137		-5 4	30 0
Trichlorofluoromethane	0 376	0 368		2 1	30 0
1 1-Dichloroethene	0 234	0 234		0 0	30 0
Methylene chloride	0 220	0 238		-8 2	30 0
trans-1 2-Dichloroethene	0 267	0 270		-1 1	30 0
1 1-Dichloroethane	0 497	0 500		-0 6	30 0
2 2-Dichloropropane	0 407	0 412		-1 2	30 0
cis-1 2-Dichloroethene	0 254	0 258		-1 6	30 0
Bromochloromethane	0 098	0 101		-3 1	30 0
Chloroform	0 439	0 439		0 0	30 0
1 1 1-Trichloroethane	0 447	0 444		0 7	30 0
Carbon tetrachloride	0 404	0 411		-1 7	30 0
1 1-Dichloropropene	0 416	0 422		-1 4	30 0
Benzene	0 857	0 869		-1 4	30 0
1 2-Dichloroethane	0 163	0 167		-2 5	30 0
Trichloroethene	0 348	0 355		-2 0	30 0
1 2-Dichloropropane	0 285	0 289		-1 4	30 0
Dibromomethane	0 113	0 118		-4 4	30 0
Bromodichloromethane	0 341	0 351		-2 9	30 0
cis-1 3-Dichloropropene	0 313	0 323		-3 2	30 0
Toluene	0 624	0 619		0 8	30 0
trans-1,3-Dichloropropene	0 206	0 213		-3 4	30 0
1 1 2-Trichloroethane	0 110	0 115		-4 5	30 0
Tetrachloroethene	0 410	0 419		-2 2	30 0
1,3-Dichloropropane	0 213	0 218		-2 3	30 0
Dibromochloromethane	0 215	0 226		-5 1	30 0
1,2-Dibromoethane	0 000	0 000			30 0
Chlorobenzene	0 660	0 682		-3 3	30 0
1,1,1,2-Tetrachloroethane	0 265	0 274		-3 4	30 0
Ethylbenzene	1 241	1 268		-2 2	30 0
Xylene (para & meta)	0 473	0 484		-2 3	30 0
Xylene (Ortho)	0 424	0 436		-2 8	30 0

VOLATILE CONTINUING CALIBRATION CHECK

059

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID 5972-INSTRUMENT 1 Calibration Date 12/26/95 Time 1706

Lab File ID C0696 D Init Calib Date(s) 12/18/95

Heated Purge (Y/N) N Init Calib Times

GC Column DB-624 X 7 ID 0 53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0 626	0 654		-4 5	30 0
Bromoform	0 119	0 120		-0 8	30 0
Isopropylbenzene	1 210	1 237		-2 2	30 0
Bromobenzene	0 276	0 286		-3 6	30 0
1,1,2,2-Tetrachloroethane	0 141	0 147		-4 3	30 0
1,2,3-Trichloropropane	0 135	0 133		1 5	30 0
n-Propylbenzene	1 672	1 715		-2 6	30 0
2-Chlorotoluene	0 967	0 981		-1 4	30 0
4-Chlorotoluene	1 035	1 077		-4 1	30 0
1,3 5-Trimethylbenzene	1 023	1 058		-3 4	30 0
tert-Butylbenzene	1 078	1 204		-11 7	30 0
1 2 4-Trimethylbenzene	0 993	1 033		-4 0	30 0
sec-Butylbenzene	1 621	1 682		-3 8	30 0
1 3-Dichlorobenzene	0 553	0 578		-4 5	30 0
4-Isopropyltoluene	1 277	1 334		-4 5	30 0
1 4-Dichlorobenzene	0 536	0 558		-4 1	30 0
1,2-Dichlorobenzene	0 421	0 442		-5 0	30 0
n-Butylbenzene	1 320	1 378		-4 4	30 0
1 2-Dibromo-3-chloropropane	0 027	0 027		0 0	30 0
1 2 4-Trichlorobenzene	0 341	0 351		-2 9	30 0
Hexachlorobutadiene	0 316	0 324		-2 5	30 0
Naphthalene	0 338	0 311		8 0	30 0
1,2,3-Trichlorobenzene	0 248	0 258		-4 0	30 0
4-Bromofluorobenzene	0 472	0 486		-3 0	30 0
1,2-Dichlorobenzene-d4	0 278	0 290		-4 3	30 0

Evaluate Continuing Calibration Report

000

Data File D \HPCHEM\1\DATA\C0696 D
Acq On 26 Dec 95 5 06 pm
Sample 10 PPB CHK STANDARD
Misc

Vial 2
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method : C \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Last Update Tue Dec 26 17 40 31 1995
Response via Multiple Level Calibration

Min RRF : 0.001 Min Rel. Area : 50% Max R.T Dev 0.30min
Max RRF Dev : 30% Max Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1 000	1.000	0 0	98	0 00
2	M	Dichlorodifluoromethane	0 205	0.176	14 3	79	0.00
3	M	Chloromethane	0.202	0 173	14 0	80	0 00
4	M	Vinyl chloride	0 214	0 205	4 6	87	0 00
5	M	Bromomethane	0.121	0 132	-9 2	108	0.00
6	M	Chloroethane	0.130	0 137	-5 5	91	0.00
7	M	Trichlorofluoromethane	0.376	0 368	2 3	91	0.00
8	M	1,1-Dichloroethene	0.234	0 234	0 1	94	0 00
9	M	Methylene chloride	0 220	0 238	-8 3	92	0.00
10	M	trans-1,2-Dichloroethene	0 267	0 270	-1 1	96	0 00
11		Hexane	0 000	0 000#	0 0	0#	-8 89#
12	M	1,1-Dichloroethane	0 497	0 500	-0 5	95	0 00
13	M	2,2-Dichloropropane	0 407	0 412	-1 2	95	0 00
14	M	cis-1,2-Dichloroethene	0 254	0 258	-1 6	96	0 00
15		2-Butanone	0 000	0.000#	0 0	0#	-11 21#
16	M	Bromochloromethane	0 098	0.101	-2 7	100	0 00
17	M	Chloroform	0 439	0 439	-0 1	96	0 00
18	M	1,1,1-Trichloroethane	0 447	0 444	0 7	94	0 00
19	M	Carbon tetrachloride	0 404	0 411	-1 7	95	0 00
20	M	1,1-Dichloropropene	0 416	0 422	-1 7	95	0 00
21	M	Benzene	0 857	0 869	-1.5	98	0 00
22	M	1,2-Dichloroethane	0 163	0 167	-3 0	98	0 00
23	M	Trichloroethene	0 348	0 355	-1 9	97	0 00
24	M	1,2-Dichloropropane	0 285	0 289	-1 5	96	0 00
25	M	Dibromomethane	0 113	0 118	-4 5	100	0 00
26	M	Bromodichloromethane	0 341	0 351	-3.1	98	0.00
27	M	cis-1,3-Dichloropropene	0 313	0 323	-3 2	98	0 00
28	M	Toluene	0.624	0.619	0 8	97	0 00
29	M	trans-1,3-Dichloropropene	0.206	0.213	-3 3	98	0.00
30	M	1,1,2-Trichloroethane	0.110	0 115	-4.7	100	0 00
31	M	Tetrachloroethene	0.410	0 419	-2.4	98	0.00
32	M	1,3-Dichloropropane	0.213	0.218	-2.4	99	0.00
33	M	Dibromochloromethane	0.215	0.226	-4.9	101	0.00
34	M	1,2-Dibromoethane	0.156	0.162	-3 8	100	0.00
35	M	Chlorobenzene	0.660	0.682	-3.5	98	0.00
36	M	1,1,1,2-Tetrachloroethane	0.265	0.274	-3.4	99	0.00
37	M	Ethylbenzene	1.241	1 268	-2 2	96	0.00
38	M	Xylene (para & meta)	0.473	0 484	-2 4	95	0.00
39	M	Xylene (Ortho)	0 424	0.436	-2 8	97	0.00
40	M	Styrene	0 626	0.654	-4 4	97	0.00
41	M	Bromoform	0.119	0 120	-0.5	102	0.00
42	M	Isopropylbenzene	1.210	1.237	-2.2	96	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

061

Data File D \HPCHEM\1\DATA\C0696 D
Acq On 26 Dec 95 5 06 pm
Sample 10 PPB CHK STANDARD
Misc

Vial 2
Operator SRK
Inst 5972 - In
Multiplr 1.00

Method C \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update · Tue Dec 26 17 40 31 1995
Response via Multiple Level Calibration

Min RRF : 0 001 Min. Rel. Area 50% Max. R.T Dev 0.30min
Max RRF Dev 30% Max Rel Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
3	S	4-Bromofluorobenzene	0.472	0.486	-3 0	101	0.00
44	M	Bromobenzene	0 276	0.286	-3 6	98	0.00
45	M	1,1,2,2-Tetrachloroethane	0.141	0 147	-3 8	99	0 00
6	M	1,2,3-Trichloropropane	0 135	0.133	1 4	99	0 00
7	M	n-Propylbenzene	1.672	1.715	-2.6	96	0.00
48	M	2-Chlorotoluene	0 967	0.981	-1 5	95	0.00
9	M	4-Chlorotoluene	1 035	1.077	-4 0	97	0 00
0	M	1,3,5-Trimethylbenzene	1 023	1 058	-3.4	97	0.00
51	M	tert-Butylbenzene	1 078	1 204	-11 7	108	0 00
2	M	1,2,4-Trimethylbenzene	0 993	1 033	-3 9	97	0 00
3	M	sec-Butylbenzene	1 621	1 682	-3 8	97	0 00
54	M	1,3-Dichlorobenzene	0 553	0.578	-4 6	98	0 00
55	M	4-Isopropyltoluene	1 277	1 334	-4 4	96	0.00
6	M	1,4-Dichlorobenzene	0.536	0.558	-4.2	98	0 00
7	S	1,2-Dichlorobenzene-d4	0.278	0.290	-4 4	101	0 00
58	M	1,2-Dichlorobenzene	0 421	0 442	-5 2	100	0.00
9	M	n-Butylbenzene	1 320	1.378	-4 4	96	0.00
0	M	1,2-Dibromo-3-chloropropane	0.027	0 027	-2 4	102	0 00
61	M	1,2,4-Trichlorobenzene	0 341	0 351	-2 9	98	0 00
2	M	Hexachlorobutadiene	0 316	0 324	-2 4	96	0 00
3	M	Naphthalene	0 338	0.311	8 1	90	0 00
64	M	1,2,3-Trichlorobenzene	0 248	0 258	-3 9	98	0 00
65		Methyl-tert butyl ether	0 266	0 266	-0 0	98	0.00
6		tert-Butyl Alcohol	0 004	0 004	-6 8	108	0 00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File d \hpchem\1\data\c0696 d
Acq On 26 Dec 95 5 06 pm
Sample 10 PPB CHK STANDARD
Misc
Quant Time Dec 26 17.39 1995

Vial 2
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method C.\HPCHEM\1\METHODS\VOA524.M
Title 524.2 Purgable Organics
Last Update Tue Dec 26 17 40 31 1995
Response via Multiple Level Calibration

Internal Standards	R T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12 14	96	1403167	5.00 ug/L	0 06
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.38	95	681508	5 15 ug/L	102.97%
57) 1,2-Dichlorobenzene-d4	22.17	152	406430	5 22 ug/L	104 38%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.48	85	493270	8 57 ug/L	100
3) Chloromethane	3.88	50	486572	8 60 ug/L	99
4) Vinyl chloride	4 11	62	574012	9 54 ug/L	99
5) Bromomethane	4 80	94	371292	10 92 ug/L	98
6) Chloroethane	5 04	64	385254	10 55 ug/L	99
7) Trichlorofluoromethane	5 63	101	1032052	9 77 ug/L	98
8) 1,1-Dichloroethene	6 75	96	657202	9 99 ug/L	98
9) Methylene chloride	7 76	84	667534	10 83 ug/L	98
10) trans-1,2-Dichloroethene	8 28	96	757969	10 11 ug/L	99
12) 1,1-Dichloroethane	9 09	63	1402366	10 05 ug/L	100
13) 2,2-Dichloropropane	10.13	77	1155122	10 12 ug/L	99
14) cis-1,2-Dichloroethene	10 14	96	723498	10 16 ug/L	98
16) Bromochloromethane	10.57	128	283928	10 27 ug/L	97
17) Chloroform	10 71	83	1231987	10 01 ug/L	99
18) 1,1,1-Trichloroethane	11 02	97	1244672	9 93 ug/L	100
19) Carbon tetrachloride	11 32	117	1152683	10 17 ug/L	99
20) 1,1-Dichloropropene	11 31	75	1135490	10 17 ug/L	99
21) Benzene	11 66	78	2439835	10 15 ug/L	99
22) 1,2-Dichloroethane	11 69	62	469768	10 30 ug/L	97
23) Trichloroethene	12 77	95	996628	10 19 ug/L	99
24) 1,2-Dichloropropane	13 14	63	811439	10.15 ug/L	99
25) Dibromomethane	13.34	93	330426	10 45 ug/L	94
26) Bromodichloromethane	13 60	83	985527	10 31 ug/L	98
27) cis-1,3-Dichloropropene	14 35	75	905453	10.32 ug/L	99
28) Toluene	14 93	92	1737580	9 92 ug/L	100
29) trans-1,3-Dichloropropene	15.29	75	598212	10 33 ug/L	100
30) 1,1,2-Trichloroethane	15.61	83	322323	10 47 ug/L	97
31) Tetrachloroethene	15.88	166	1177161	10 24 ug/L	98
32) 1,3-Dichloropropane	15.90	76	613056	10 24 ug/L	99
33) Dibromochloromethane	16.30	129	632972	10.49 ug/L	99
34) 1,2-Dibromoethane	16.50	107	453900	10.38 ug/L	98
35) Chlorobenzene	17.35	112	1915273	10 35 ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.49	131	767856	10.34 ug/L	98
37) Ethylbenzene	17.53	91	3559197	10 22 ug/L	99
38) Xylene (para & meta)	17 74	106	2718543	20 47 ug/L	95
39) Xylene (Ortho)	18.45	106	1224575	10.28 ug/L	96
40) Styrene	18.47	104	1834733	10.44 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0696.d
Acq On : 26 Dec 95 5:06 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 26 17:39 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.81	173	336954	10.05	ug/L		97
42)	Isopropylbenzene	19.10	105	3470125	10.22	ug/L	m	0
44)	Bromobenzene	19.66	156	803870	10.36	ug/L		100
45)	1,1,2,2-Tetrachloroethane	19.61	83	411922	10.38	ug/L		100
46)	1,2,3-Trichloropropane	19.71	75	373657	9.86	ug/L	m	1
47)	n-Propylbenzene	19.83	91	4813508	10.26	ug/L	m	81
48)	2-Chlorotoluene	20.00	91	2752454	10.15	ug/L	m	99
49)	4-Chlorotoluene	20.19	91	3021831	10.40	ug/L		100
50)	1,3,5-Trimethylbenzene	20.15	105	2968321	10.34	ug/L		99
51)	tert-Butylbenzene	20.74	119	3378863	11.17	ug/L		99
52)	1,2,4-Trimethylbenzene	20.83	105	2897883	10.39	ug/L		100
53)	sec-Butylbenzene	21.14	105	4719391	10.38	ug/L		98
54)	1,3-Dichlorobenzene	21.36	146	1623019	10.46	ug/L		99
55)	4-Isopropyltoluene	21.40	119	3743600	10.44	ug/L		99
56)	1,4-Dichlorobenzene	21.52	146	1566399	10.42	ug/L		99
58)	1,2-Dichlorobenzene	22.20	146	1241775	10.52	ug/L	m	0
59)	n-Butylbenzene	22.15	91	3866192	10.44	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.62	75	76499	10.24	ug/L		99
61)	1,2,4-Trichlorobenzene	25.17	180	984670	10.29	ug/L		99
62)	Hexachlorobutadiene	25.49	225	909531	10.24	ug/L		100
63)	Naphthalene	25.63	128	872343	9.19	ug/L		100
64)	1,2,3-Trichlorobenzene	26.13	180	722817	10.39	ug/L		99
65)	Methyl-tert butyl ether	8.32	73	746983	10.00	ug/L		99
66)	tert-Butyl Alcohol	8.09	59	24090	21.36	ug/L	m	100

(#) = qualifier out of range (m) = manual integration

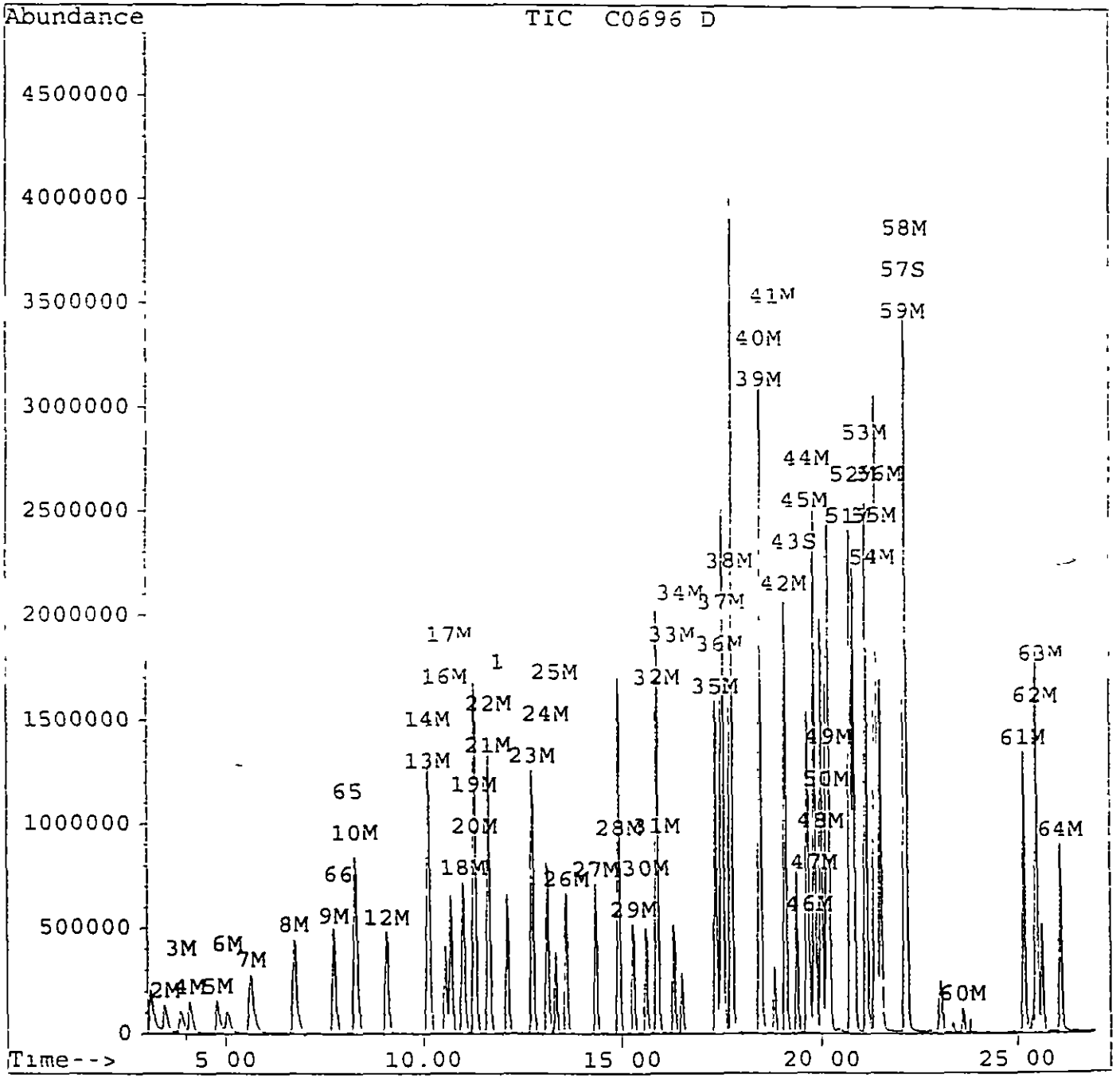
Quantitation Report

064

Data File : d \hpchem\1\data\c0696 d
Acq On 26 Dec 95 5 06 pm
Sample 10 PPB CHK STANDARD
Misc
Quant Time Dec 26 17 39 1995

Vial 2
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method C \HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40.31 1995
Response via : Multiple Level Calibration



Quantitation Report

065

Data File d \hpchem\1\data\c0710 d
Acq On 27 Dec 95 1.07 am
Sample 10 QCS
Misc 25 ML
Quant Time Dec 27 14 32 1995

Vial 16
Operator SRK
Inst 5972 - I
Multiplr 1.00

Method c:\HPCHEM\1\METHODS\VOA524.M
Title . 524 2 Purgable Organics
Last Update Tue Dec 26 17:40 31 1995
Response via Multiple Level Calibration

Internal Standards	R T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.13	96	1346351	5.00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 37	95	630557	4 96 ug/L	99.29%
57) 1,2-Dichlorobenzene-d4	22 17	152	376006	5 03 ug/L	100 64%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.47	85	697975	12.63 ug/L	99
3) Chloromethane	3.89	50	474412	8.74 ug/L	100
4) Vinyl chloride	4.11	62	613036	10 62 ug/L	99
5) Bromomethane	4 79	94	409447	12 55 ug/L	97
6) Chloroethane	5 04	64	371470	10 60 ug/L	100
7) Trichlorofluoromethane	5.64	101	1142891	11 27 ug/L	100
8) 1,1-Dichloroethene	6.75	96	733451	11 62 ug/L	94
9) Methylene chloride	7 75	84	658917	11 14 ug/L	97
10) trans-1,2-Dichloroethene	8 29	96	792597	11 02 ug/L	98
12) 1,1-Dichloroethane	9 08	63	1445364	10.80 ug/L	99
13) 2,2-Dichloropropane	10 13	77	1000156	9 13 ug/L	99
14) cis-1,2-Dichloroethene	10 15	96	742214	10 87 ug/L	97
16) Bromochloromethane	10 57	128	283743	10 70 ug/L	98
17) Chloroform	10 71	83	1242003	10.51 ug/L	100
18) 1,1,1-Trichloroethane	11 02	97	1267712	10.54 ug/L	99
19) Carbon tetrachloride	11 32	117	1188851	10 93 ug/L	99
20) 1,1-Dichloropropene	11 31	75	1273460	11 38 ug/L	98
21) Benzene	11 67	78	2324175	10 08 ug/L	98
22) 1,2-Dichloroethane	11 69	62	470311	10 75 ug/L	100
23) Trichloroethene	12.76	95	1016714	10 83 ug/L	99
24) 1,2-Dichloropropane	13.14	63	804755	10 50 ug/L	99
25) Dibromomethane	13.34	93	315172	10.39 ug/L	98
26) Bromodichloromethane	13.61	83	978994	10 67 ug/L	98
27) cis-1,3-Dichloropropene	14.35	75	927183	11 01 ug/L	100
28) Toluene	14.93	92	1638728	9 75 ug/L	99
29) trans-1,3-Dichloropropene	15.29	75	587053	10 56 ug/L	100
30) 1,1,2-Trichloroethane	15.60	83	317654	10.75 ug/L	97
31) Tetrachloroethene	15.88	166	1181411	10.71 ug/L	99
32) 1,3-Dichloropropane	15.90	76	606123	10.55 ug/L	99
33) Dibromochloromethane	16.30	129	609925	10.53 ug/L	95
34) 1,2-Dibromoethane	16.51	107	439984	10 49 ug/L	99
35) Chlorobenzene	17 35	112	1845640	10 39 ug/L	98
36) 1,1,1,2-Tetrachloroethane	17 49	131	764607	10.73 ug/L	96
37) Ethylbenzene	17 53	91	3377097	10.11 ug/L	99
38) Xylene (para & meta)	17 73	106	2607690	20 47 ug/L	98
39) Xylene (Ortho)	18 44	106	1183670	10.36 ug/L	99
40) Styrene	18.47	104	1756129	10.41 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0710 d
Acq On 27 Dec 95 1 07 am
Sample 10 QCS
Misc 25 ML
Quant Time Dec 27 14 32 1995

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr 1.00

Method c:\HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update Tue Dec 26 17:40 31 1995
Response via : Multiple Level Calibration

	Compound	R T.	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18.81	173	321494	9 99 ug/L	98
42)	Isopropylbenzene	19 09	105	3659960	11.24 ug/L m	0
44)	Bromobenzene	19.66	156	757636	10.18 ug/L	99
45)	1,1,2,2-Tetrachloroethane	19.62	83	399660	10 50 ug/L	100
46)	1,2,3-Trichloropropane	19 70	75	384258	10.57 ug/L #	2
47)	n-Propylbenzene	19.84	91	4658830	10 35 ug/L	94
48)	2-Chlorotoluene	20.00	91	2514798	9 66 ug/L	93
49)	4-Chlorotoluene	20 20	91	2843147	10 20 ug/L	98
50)	1,3,5-Trimethylbenzene	20.15	105	2780359	10.10 ug/L	100
51)	tert-Butylbenzene	20.74	119	3290800	11 34 ug/L	98
52)	1,2,4-Trimethylbenzene	20 83	105	2655809	9 93 ug/L	100
53)	sec-Butylbenzene	21 15	105	4617600	10.58 ug/L	99
54)	1,3-Dichlorobenzene	21 36	146	1566352	10 52 ug/L	99
55)	4-Isopropyltoluene	21 40	119	3609010	10 49 ug/L	99
56)	1,4-Dichlorobenzene	21 52	146	1516321	10.52 ug/L	98
58)	1,2-Dichlorobenzene	22.21	146	1196636	10.56 ug/L	97
59)	n-Butylbenzene	22 16	91	3604256	10 14 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23 63	75	72502	10 12 ug/L	99
61)	1,2,4-Trichlorobenzene	25.17	180	917640	9.99 ug/L	99
62)	Hexachlorobutadiene	25 50	225	893852	10.49 ug/L	100
63)	Naphthalene	25 64	128	906990	9 96 ug/L	100
64)	1,2,3-Trichlorobenzene	26.13	180	678490	10 16 ug/L	98

(#) = qualifier out of range (m) = manual integration

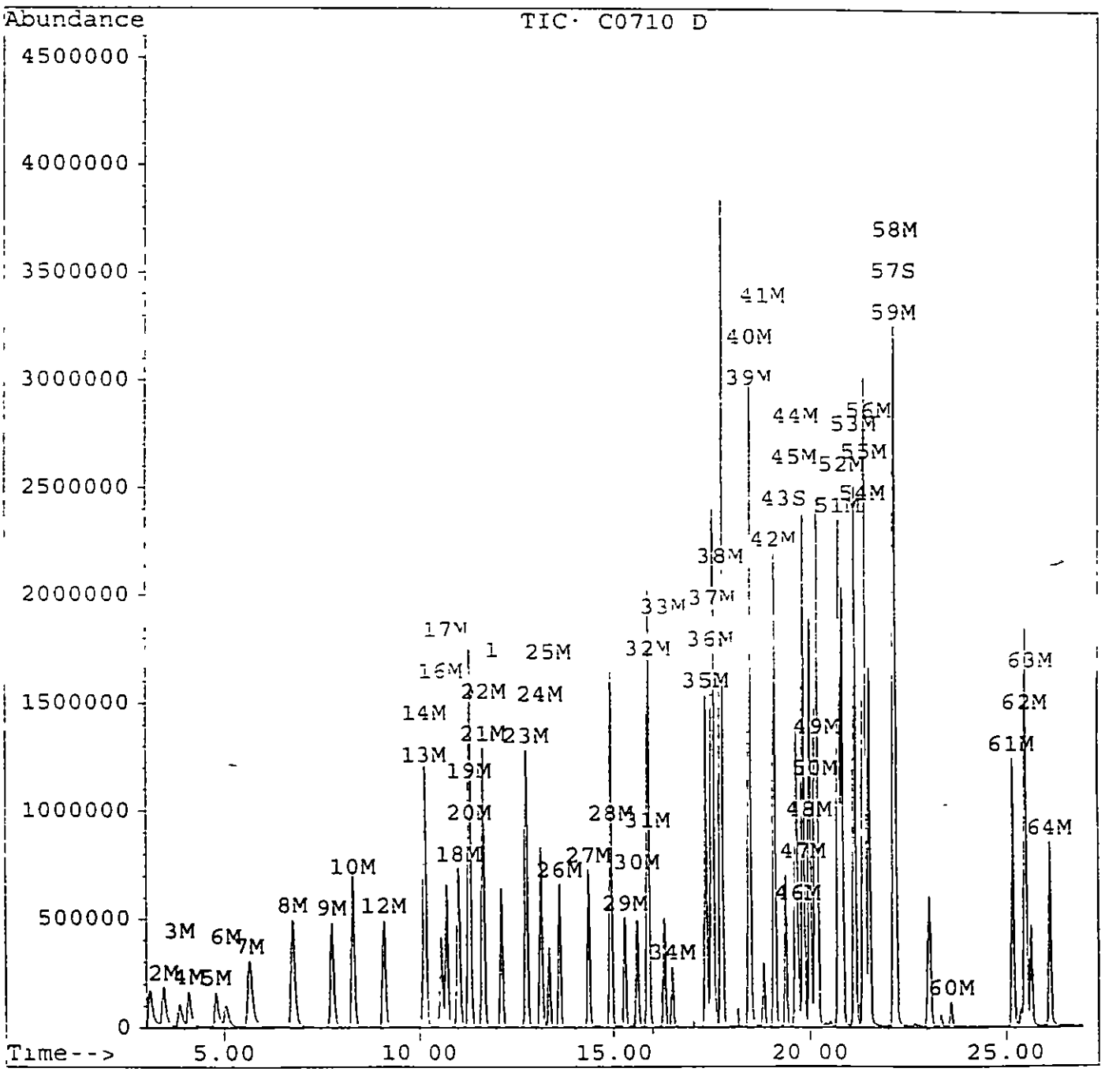
Quantitation Report

067

Data File d \hpcnem\1\data\c0710 d
Acq On 27 Dec 95 1 07 am
Sample 10 QCS
Misc 25 ML
Quant Time Dec 27 14 32 1995

Vial 16
Operator SRK
Inst 5972 - In
Multiplr 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17 40.31 1995
Response via : Multiple Level Calibration



Quantitation Report

006

Data File d \npchem\1\data\c0711 d
Acq On 27 Dec 95 1·41 am
Sample 1 STND
Misc 25 ML
Quant Time Dec 27 2·09 1995

Vial. 17
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17 40 31 1995
Response via : Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12 14	96	1286016	5 00 ug/L	0 00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 38	95	615296	5 07 ug/L	101 43%
57) 1,2-Dichlorobenzene-d4	22 17	152	375132	5 26 ug/L	105 12%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.48	85	58817	1.11 ug/L	96
3) Chloromethane	3 87	50	47430	0 92 ug/L	96
4) Vinyl chloride	4 11	62	55981	1 02 ug/L	95
5) Bromomethane	4 81	94	42701	1 37 ug/L	91
6) Chloroethane	5 07	64	38809	1 16 ug/L	95
7) Trichlorofluoromethane	5.64	101	100026	1 03 ug/L	95
8) 1,1-Dichloroethene	6 76	96	63986	1 06 ug/L =	87
9) Methylene chloride	7 75	84	177797	3 15 ug/L	99
10) trans-1,2-Dichloroethene	8 28	96	71755	1 04 ug/L	96
12) 1,1-Dichloroethane	9.08	63	136476	1 07 ug/L	94
13) 2,2-Dichloropropane	10 14	77	94898	0 91 ug/L	100
14) cis-1,2-Dichloroethene	10.14	96	73425	1 13 ug/L	93
16) Bromochloromethane	10 57	128	28778	1 14 ug/L	91
17) Chloroform	10 72	83	123482	1.09 ug/L	98
18) 1,1,1-Trichloroethane	11.03	97	119544	1 04 ug/L	98
19) Carbon tetrachloride	11 32	117	110881	1 07 ug/L	99
20) 1,1-Dichloropropene	11 31	75	115092	1 08 ug/L	98
21) Benzene	11 66	78	246277	1 12 ug/L	100
22) 1,2-Dichloroethane	11 69	62	46307	1 11 ug/L	91
23) Trichloroethene	12.77	95	98588	1.10 ug/L	98
24) 1,2-Dichloropropane	13.14	63	81397	1 11 ug/L	98
25) Dibromomethane	13.34	93	32772	1.13 ug/L	93
26) Bromodichloromethane	13.61	83	96933	1 11 ug/L	94
27) cis-1,3-Dichloropropene	14.35	75	86538	1 08 ug/L	98
28) Toluene	14 92	92	176365	1.10 ug/L	96
29) trans-1,3-Dichloropropene	15 29	75	58753	1.11 ug/L	94
30) 1,1,2-Trichloroethane	15.61	83	32109	1.14 ug/L	98
31) Tetrachloroethene	15 88	166	114827	1 09 ug/L	96
32) 1,3-Dichloropropane	15 90	76	62646	1 14 ug/L	96
33) Dibromochloromethane	16.30	129	59804	1 08 ug/L	94
34) 1,2-Dibromoethane	16.50	107	44592	1 11 ug/L	91
35) Chlorobenzene	17 36	112	191225	1 13 ug/L	98
36) 1,1,1,2-Tetrachloroethane	17 49	131	76472	1 12 ug/L	94
37) Ethylbenzene	17 53	91	352270	1 10 ug/L	100
38) Xylene (para & meta)	17.74	106	270164	2 22 ug/L	100
39) Xylene (Ortho)	18.44	106	124211	1 14 ug/L	91
40) Styrene	18.46	104	176351	1 09 ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0711 d
Acq On 27 Dec 95 1 41 am
Sample 1 STND
Misc 25 ML
Quant Time Dec 27 2 09 1995

Vial 17
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method c·\HPCHEM\1\METHODS\VOA524.M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17.40.31 1995
Response via Multiple Level Calibration

Compound	R T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18 82	173	30664	1 00 ug/L	98
42) Isopropylbenzene	19.10	105	345163	1 11 ug/L	99
44) Bromobenzene	19.66	156	82706	1.16 ug/L	96
45) 1,1,2,2-Tetrachloroethane	19.62	83	41214	1 13 ug/L	98
46) 1,2,3-Trichloropropane	19 71	75	43515	1 25 ug/L #	1
47) n-Propylbenzene	19 83	91	477540	1 11 ug/L	93
48) 2-Chlorotoluene	20.00	91	283866	1 14 ug/L	92
49) 4-Chlorotoluene	20.19	91	313563	1.18 ug/L	99
50) 1,3,5-Trimetnylbenzene	20.15	105	296756	1.13 ug/L	99
51) tert-Butylbenzene	20 75	119	342119	1 23 ug/L	97
52) 1,2,4-Trimetnylbenzene	20 83	105	309306	1 21 ug/L	97
53) sec-Butylbenzene	21 14	105	469641	1 13 ug/L	98
54) 1,3-Dichlorobenzene	21 36	146	167641	1 18 ug/L	99
55) 4-Isopropyltoluene	21 40	119	374661	1 14 ug/L	99
56) 1,4-Dichlorobenzene	21 52	146	159716	1 16 ug/L	97
58) 1,2-Dichlorobenzene	22 20	146	130322	1 20 ug/L	96
59) n-Butylbenzene	22 16	91	394240	1 16 ug/L	99
60) 1,2-Dibromo-3-chloropropan	23 63	75	7870	1 15 ug/L	84
61) 1,2,4-Trichlorobenzene	25 18	180	102936	1 17 ug/L	97
62) Hexachlorobutadiene	25 50	225	89378	1 10 ug/L	99
63) Naphthalene	25 64	128	122191	1 41 ug/L	100
64) 1,2,3-Trichlorobenzene	26 14	180	77999	1 22 ug/L	92
65) Methyl-tert butyl ether	8 32	73	75918	1 11 ug/L	98

(#) = qualifier out of range (m) = manual integration

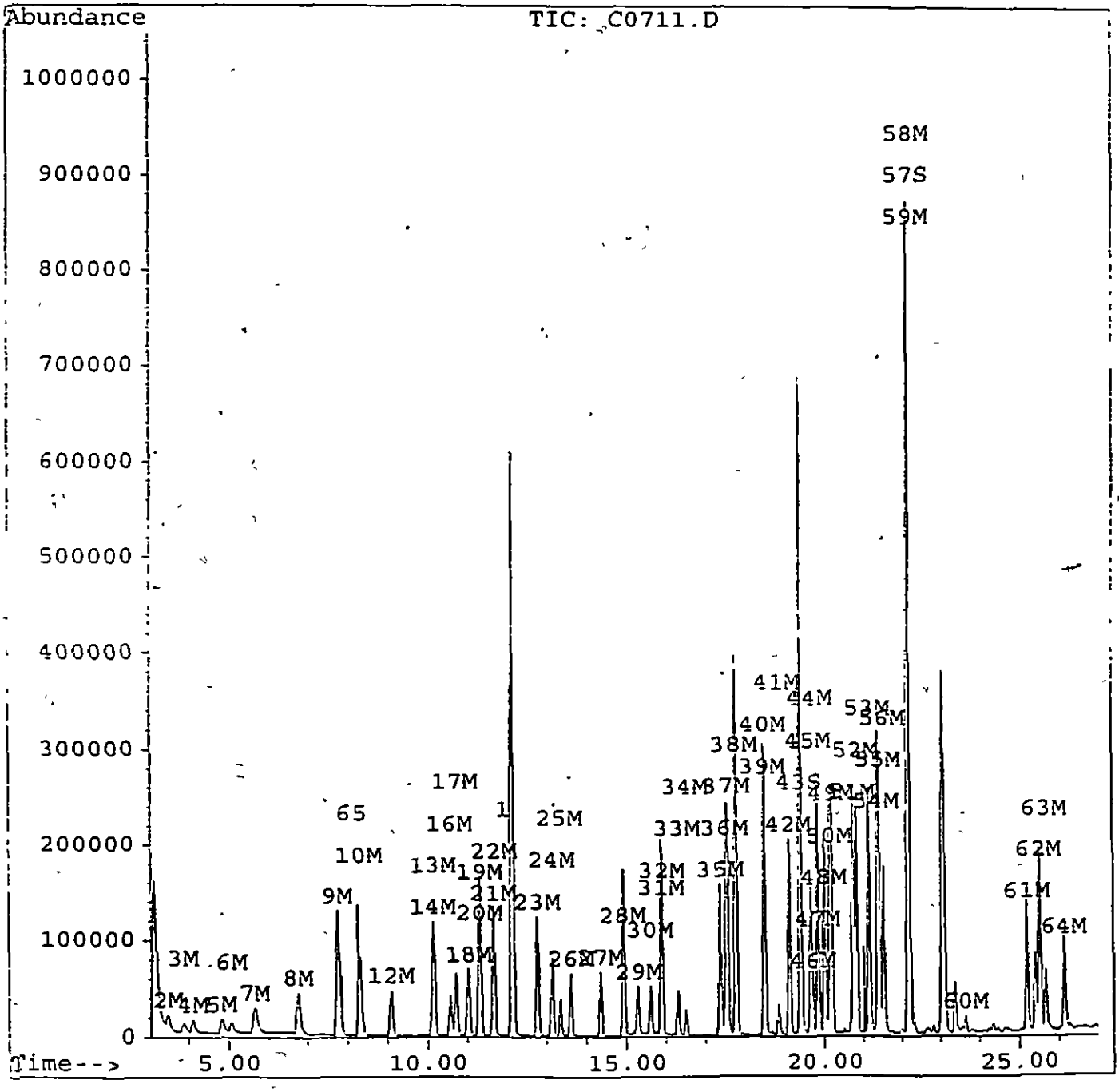
Quantitation Report

070

Data File : d.\hpchem\1\data\c0711 d
Acq On : 27 Dec 95 1:41 am
Sample : 1 STND
Misc : 25 ML
Quant Time: Dec 27 2:09 1995

Vial: 17
Operator: SRK
Inst : 5972 -, In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Lab File ID: C0776 D BFB Injection Date: 12/29/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 0733

GC Column: DB-624 X 75M ID: 0 53 (mm) Heated Purge (Y/N):

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8 0 - 40 0% of mass 95	18 2
75	30 0 - 66 0% of mass 95	43 6
95	Base peak, 100% relative abundance	100 0
96	5 0 - 9 0% of mass 95	6 0
173	Less than 2 0% of mass 174	0 0 (0 0)1
174	50 0 - 120 0% of mass 95	63 4
175	4 0 - 9 0% of mass 174	4 5 (7 1)1
176	93 0 - 101 0% of mass 174	61 9 (97 7)1
177	5 0 - 9 0% of mass 176	4 2 (6 7)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS

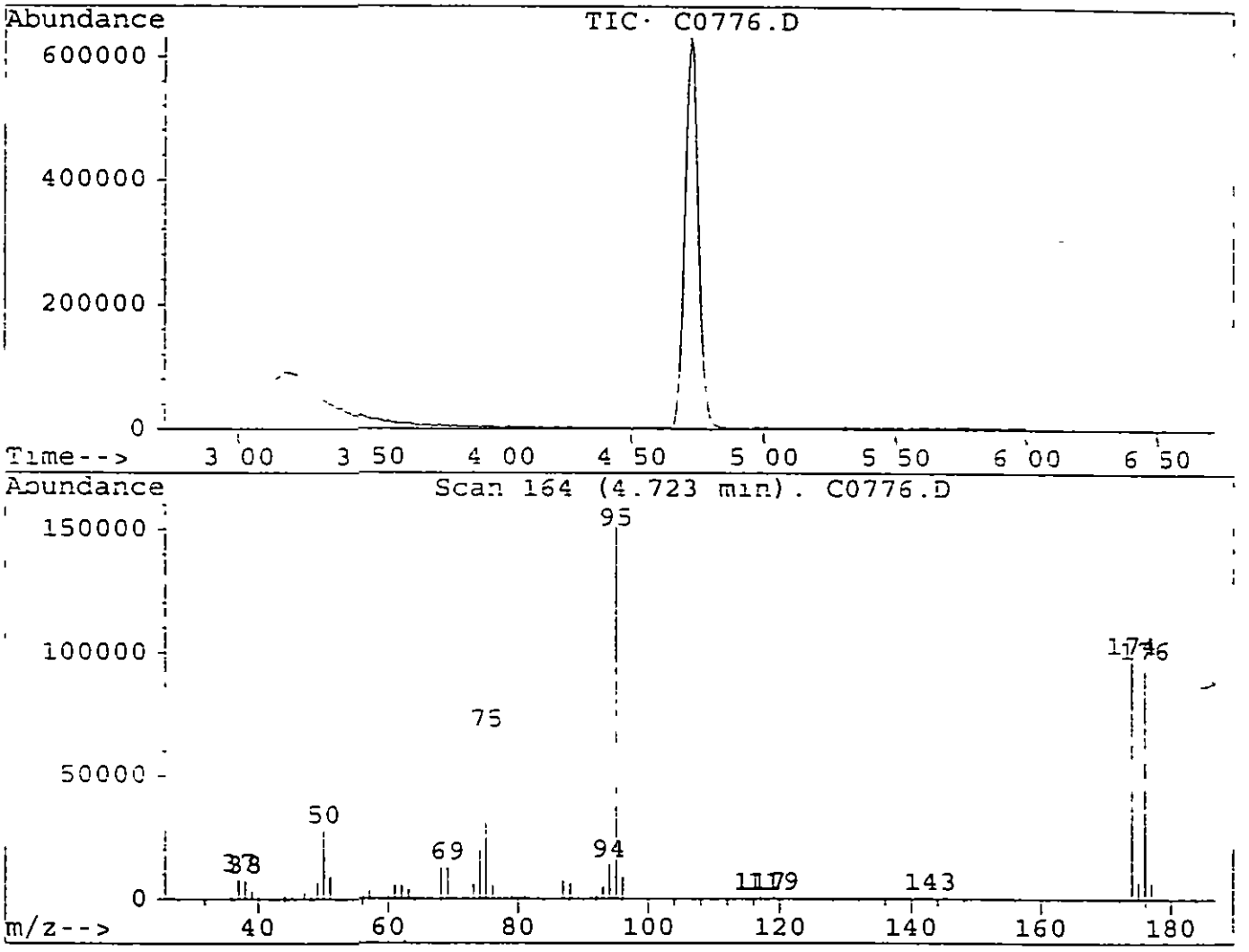
	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0777 D	12/29/95	0746
02	VBLK01	M BLANK	C0778 D	12/29/95	0821
03	9558500V	9558500V	C0779 D	12/29/95	0856
04	9558501V	9558501V	C0780 D	12/29/95	0931
05	9558191V	9558191V	C0781 D	12/29/95	1005
06	9558192V	9558192V	C0782 D	12/29/95	1040
07	9558312V	9558312V	C0783 D	12/29/95	1114
08	9558313V	9558313V	C0784 D	12/29/95	1149
09	9558311V	9558311V	C0785 D	12/29/95	1223
10	9558314V	9558314V	C0786 D	12/29/95	1257
11	9558315V	9558315V	C0787 D	12/29/95	1332
12	9558316V	9558316V	C0788 D	12/29/95	1406
13	9558317V	9558317V	C0789 D	12/29/96	1440
14	9559346V	9559346V	C0790 D	12/29/95	1514
15	9558196V	9558196V	C0791 D	12/29/95	1549
16	1 STND	1 STND	C0792 D	12/29/95	1623
17					
18					
19					
20					
21					
22					

CLPBFB

Data File D \HPCHEM\1\DATA\C0776 D
Acq On 29 Dec 95 7 33 am
Sample BFB TUNE
Misc 25 NG INJECTION

Vial 1
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method : C \HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics



Peak Apex is scan. 164

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.2	27864	PASS
75	95	30	80	43.6	66584	PASS
95	95	100	100	100.0	152832	PASS
96	95	5	9	6.0	9121	PASS
173	174	0	2	0 0	0	PASS
174	95	50	100	63.4	96824	PASS
175	174	5	9	7.1	6856	PASS
176	174	95	101	97.7	94624	PASS
177	176	5	9	6.7	6361	PASS

Scan 164 (4 723 min). C0776 D
BFB TUNE

m/z	abund	m/z	abund	m/z	abund	m/z	abund
36 00	2026	51 05	9257	71 95	757	88.05	6414
37 10	8219	52 05	587	73.05	5943	91.15	512
38 10	7476	56 10	2305	74.05	19512	92.05	2739
39.10	3027	57 10	3201	75.05	66584	93 05	4872
40.00	1005	60 00	1430	76.05	5474	94.05	13820
44 00	2200	61 00	5803	77.00	1174	95.05	152832
45 10	1467	62.00	5570	78.00	797	96.05	9121
47 05	2516	63.10	4215	79.00	2387	116.95	556
48.05	1132	68 05	12727	80.00	663	119 00	543
49.05	6670	69.05	12898	81.00	2496	141 00	547
50 05	27864	70 05	1269	87.00	7325	143.00	608

Scan 164 (4 723 min): C0776.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund	m/z	abund
173.95	96824						
174.95	6856						
175.95	94624						
176 95	6361						

7A

VOLATILE CONTINUING CALIBRATION CHECK

074

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID 5972-INSTRUMENT 1 Calibration Date 12/29/95 Time 0746

Lab File ID C0777 D Init Calib Date(s) 12/18/96

Heated Purge (Y/N) Init Calib Times

GC Column DB-624 X 7 ID 0 53 (mm)

COMPOUND	RRF	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0 205	0 150		26 8	30 0
Chloromethane	0 202	0 168		16 8	30 0
Vinyl chloride	0 214	0 201		6 1	30 0
Bromomethane	0 121	0 127		-5 0	30 0
Chloroethane	0 130	0 136		-4 6	30 0
Trichlorofluoromethane	0 376	0 380		-1 1	30 0
1 1-Dichloroethene	0 234	0 233		0 4	30 0
Methylene chloride	0 220	0 275		-25 0	30 0
trans 1 2-Dichloroethene	0 267	0 269		-0 7	30 0
1 1-Dichloroethane	0 497	0 512		-3 0	30 0
2 2-Dichloropropane	0 407	0 434		-6 6	30 0
cis-1 2-Dichloroethene	0 254	0 264		-3 9	30 0
Bromochloromethane	0 098	0 102		-4 1	30 0
Chloroform	0 439	0 457		-4 1	30 0
1 1 1-Trichloroethane	0 447	0 463		-3 6	30 0
Carbon tetrachloride	0 404	0 426		-5 4	30 0
1 1-Dichloropropene	0 416	0 431		-3 6	30 0
Benzene	0 857	0 883		-3 0	30 0
1 2 Dichloroethane	0 163	0 179		-9 8	30 0
Trichloroethene	0 348	0 363		-4 3	30 0
1 2-Dichloropropane	0 285	0 303		-6 3	30 0
Dibromomethane	0 113	0 122		-8 0	30 0
Bromodichloromethane	0 341	0 370		-8 5	30 0
cis-1,3-Dichloropropene	0 313	0 335		-7 0	30 0
Toluene	0 624	0 638		-2 2	30 0
trans-1,3-Dichloropropene	0 206	0 225		-9 2	30 0
1,1,2-Trichloroethane	0 110	0 119		-8 2	30 0
Tetrachloroethene	0 410	0 420		-2 4	30 0
1,3-Dichloropropane	0 213	0 230		-8 0	30 0
Dibromochloromethane	0 215	0 233		-8 4	30 0
1,2-Dibromoethane	0 000	0 000			30 0
Chlorobenzene	0 660	0 697		-5 6	30 0
1,1,1,2-Tetrachloroethane	0 265	0 283		-6 8	30 0
Ethylbenzene	1 241	1 290		-3 9	30 0
Xylene (para & meta)	0 473	0 495		-4 7	30 0
Xylene (Ortho)	0 424	0 449		-5 9	30 0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID 5972-INSTRUMENT 1 Calibration Date 12/29/95 Time 0746

Lab File ID C0777 D Init Calib Date(s) 12/18/96

Heated Purge (Y/N) Init Calib Times

GC Column DB-624 X 7 ID 0 53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0 626	0 669		-6 9	30 0
Bromoform	0 119	0 123		-3 4	30 0
Isopropylbenzene	1 210	1 280		-5 8	30 0
Bromobenzene	0 276	0 292		-5 8	30 0
1,1,2,2-Tetrachloroethane	0 141	0 154		-9 2	30 0
1,2 3-Trichloropropane	0 135	0 152		-12 6	30 0
n-Propylbenzene	1 672	1 756		-5 0	30 0
2 Chlorotoluene	0 967	0 936		3 2	30 0
4-Chlorotoluene	1 035	1 115		-7 7	30 0
1 3 5-Trimethylbenzene	1 023	1 085		-6 1	30 0
tert-Butylbenzene	1 078	1 223		-13 5	30 0
1 2 4-Trimethylbenzene	0 993	1 051		-5 8	30 0
sec-Butylbenzene	1 621	1 722		-6 2	30 0
1 3-Dichlorobenzene	0 553	0 591		-6 9	30 0
4-Isopropyltoluene	1 277	1 368		-7 1	30 0
1 4-Dichlorobenzene	0 536	0 593		-10 6	30 0
1 2-Dichlorobenzene	0 421	0 454		-7 8	30 0
n-Butylbenzene	1 320	1 405		-6 4	30 0
1 2-Dibromo-3-chloropropane	0 027	0 029		-7 4	30 0
1 2 4-Trichlorobenzene	0 341	0 363		-6 5	30 0
Hexachlorobutadiene	0 316	0 328		-3 8	30 0
Naphthalene	0 338	0 357		-5 6	30 0
1,2 3-Trichlorobenzene	0 248	0 269		-8 5	30 0
4-Bromofluorobenzene	0 472	0 491		-4 0	30 0
1,2-Dichlorobenzene-d4	0 278	0 290		-4 3	30 0

Evaluate Continuing Calibration Report

Data File D \HPCHEM\1\DATA\C0777 D Vial 2
Acq On 29 Dec 95 7 46 am Operator SRK
Sample 10 PPB CHK STANDARD Inst 5972 - In
Misc 25 ML Multiplr 1 00

Method C \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Last Update Tue Dec 26 17:40 31 1995
Response via . Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area . 50% Max R T. Dev 0 30min
Max. RRF Dev : 30% Max. Rel. Area . 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1 000	1 000	0.0	98	-0 08
2	M	Dichlorodifluoromethane	0 205	0 150	27 0	67	-0.06
3	M	Chloromethane	0.202	0 168	16 9	77	-0.06
4	M	Vinyl chloride	0.214	0.201	6.4	85	-0.06
5	M	Bromomethane	0 121	0.127	-5 0	104	-0 07
6	M	Chloroethane	0 130	0 136	-4 8	90	-0.08
7	M	Trichlorofluoromethane	0 376	0 380	-0 9	94	-0 07
8	M	1,1-Dichloroethene	0 234	0 233	0 7	93	-0 08
9	M	Methylene chloride	0 220	0 275	-25 3	106	-0 09
0	M	trans-1,2-Dichloroethene	0 267	0 269	-0 9	95	-0.08
11		Hexane	0 000	0 000#	0 0	0#	-0.17
12	M	1,1-Dichloroethane	0 497	0 512	-2 9	97	-0 09
13	M	2,2-Dichloropropane	0 407	0 434	-6 6	100	-0 08
14	M	cis-1,2-Dichloroethene	0 254	0 264	-4 0	99	-0 08
15		2-Butanone	0 000	0 000#	0 0	0#	-11 21#
16	M	Bromochloromethane	0 098	0 102	-3 5	101	-0 08
17	M	Chloroform	0 439	0 457	-4 1	100	-0 08
18	M	1,1,1-Trichloroethane	0 447	0 463	-3 5	98	-0 08
19	M	Carbon tetrachloride	0 404	0.426	-5 4	99	-0 09
0	M	1,1-Dichloropropene	0 416	0 431	-3 8	97	-0 08
21	M	Benzene	0 857	0 883	-3 1	99	-0 08
22	M	1,2-Dichloroethane	0 163	0 179	-10 0	104	-0 08
23	M	Trichloroethene	0 348	0.363	-4 2	99	-0 08
24	M	1,2-Dichloropropane	0 285	0.303	-6 4	101	-0.08
25	M	Dibromomethane	0.113	0.122	-8.3	104	-0.08
26	M	Bromodichloromethane	0 341	0.370	-8.5	103	-0.07
27	M	cis-1,3-Dichloropropene	0 313	0.335	-7 2	102	-0.07
28	M	Toluene	0 624	0 638	-2 2	99	-0 08
29	M	trans-1,3-Dichloropropene	0 206	0 225	-9 0	103	-0 08
30	M	1,1,2-Trichloroethane	0.110	0.119	-8.7	104	-0.08
31	M	Tetrachloroethene	0.410	0.420	-2.6	98	-0.07
32	M	1,3-Dichloropropane	0.213	0.230	-7.8	104	-0.08
33	M	Dibromochloromethane	0.215	0.233	-8.6	105	-0.08
34	M	1,2-Dibromoethane	0.156	0.169	-8.2	104	-0.07
35	M	Chlorobenzene	0.660	0 697	-5.7	100	-0.07
36	M	1,1,1,2-Tetrachloroethane	0.265	0.283	-6.9	102	-0.07
37	M	Ethylbenzene	1.241	1 290	-4.0	98	-0.07
38	M	Xylene (para & meta)	0 473	0 495	-4 5	97	-0 07
39	M	Xylene (Ortho)	0.424	0 449	-5 8	100	-0.07
40	M	Styrene	0.626	0.669	-6 8	100	-0.07
41	M	Bromoform	0.119	0.123	-2.6	104	-0.07
42	M	Isopropylbenzene	1.210	1.280	-5.8	100	-0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File D \HPCHEM\1\DATA\C0777 D
Acq On 29 Dec 95 7 46 am
Sample 10 PPB CHK STANDARD
Misc 25 ML

Vial 2
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method C \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17:40:31 1995
Response via Multiple Level Calibration

Min RRF 0.001 Min. Rel. Area 50% Max R T. Dev 0 30min
Max RRF Dev 30% Max Rel. Area 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.472	0.491	-4.1	102	-0 07
44	M	Bromobenzene	0.276	0.292	-5 7	100	-0 07
45	M	1,1,2,2-Tetrachloroethane	0.141	0 154	-9.2	104	-0 06
46	M	1,2,3-Trichloropropane	0.135	0.152	-12.4	113	-0 07
47	M	n-Propylbenzene	1.672	1.756	-5.0	99	-0 06
48	M	2-Chlorotoluene	0.967	0.936	3.2	91	-0.07
49	M	4-Chlorotoluene	1.035	1 115	-7.7	100	-0.06
50	M	1,3,5-Trimethylbenzene	1 023	1 085	-6 1	99	-0 07
51	M	tert-Butylbenzene	1 078	1 223	-13 5	110	-0 06
52	M	1,2,4-Trimethylbenzene	0 993	1 051	-5 8	99	-0 06
53	M	sec-Butylbenzene	1 621	1 722	-6 3	99	-0 06
54	M	1,3-Dichlorobenzene	0 553	0 591	-6 8	100	-0 06
55	M	4-Isopropyltoluene	1 277	1 368	-7.1	99	-0 06
56	M	1,4-Dichlorobenzene	0 536	0 593	-10.7	104	-0 23
57	S	1,2-Dichlorobenzene-d4	0.278	0 290	-4.6	101	-0 07
58	M	1,2-Dichlorobenzene	0 421	0 454	-7.9	102	-0 06
59	M	n-Butylbenzene	1 320	1 405	-6.4	98	-0 06
60	M	1,2-Dibromo-3-chloropropane	0 027	0 029	-7 4	107	-0.06
61	M	1,2,4-Trichlorobenzene	0 341	0 363	-6 4	101	-0 06
62	M	Hexachlorobutadiene	0.316	0 328	-3 7	97	-0 06
63	M	Naphthalene	0 338	0 357	-5 7	104	-0 06
64	M	1,2,3-Trichlorobenzene	0.248	0 269	-8 6	102	-0 07
65		Methyl-tert butyl ether	0 266	0 277	-4.0	102	-0 08
66		tert-Butyl Alcohol	0 004	0 005	-12.7	115	-0 08

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

078

Data File D \HPCHEM\1\DATA\C0777 D
Acq On 29 Dec 95 7 46 am
Sample 10 PPB CHK STANDARD
Misc 25 ML
Quant Time Dec 31 8 26 1995

Vial 2
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method C \HPCHEM\1\METHODS\VOA524.M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17.40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.05	96	1403737	5 00 ug/L	-0.08
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 30	95	689126	5 20 ug/L	104 07%
57) 1,2-Dichlorobenzene-d4	22 10	152	407547	5.23 ug/L	104 62%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3 41	85	420323	7.30 ug/L m	97
3) Chloromethane	3 81	50	470415	8.31 ug/L	96
4) Vinyl chloride	4 04	62	563448	9 36 ug/L	97
5) Bromomethane	4 72	94	357192	10 50 ug/L	97
6) Chloroethane	4 96	64	382958	10 48 ug/L	99
7) Trichlorofluoromethane	5 56	101	1065960	10 09 ug/L	98
8) 1,1-Dichloroethene	6 66	96	653428	9.93 ug/L	97
9) Methylene chloride	7.66	84	772588	12.53 ug/L	91
10) trans-1,2-Dichloroethene	8 20	96	756408	10 09 ug/L	98
12) 1,1-Dichloroethane	8 99	63	1436112	10 29 ug/L	98
13) 2,2-Dichloropropane	10 04	77	1217287	10 66 ug/L	99
14) cis-1,2-Dichloroethene	10.05	96	740911	10 40 ug/L	99
16) Bromochloromethane	10 49	128	286299	10 35 ug/L	94
17) Chloroform	10 63	83	1282270	10 41 ug/L	98
18) 1,1,1-Trichloroethane	10 94	97	1298457	10 35 ug/L	99
19) Carbon tetrachloride	11 23	117	1195063	10 54 ug/L	97
20) 1,1-Dichloropropene	11 23	75	1211035	10 38 ug/L	99
21) Benzene	11 58	78	2478794	10 31 ug/L	100
22) 1,2-Dichloroethane	11 61	62	501697	11 00 ug/L	99
23) Trichloroethene	12.68	95	1019469	10.42 ug/L	98
24) 1,2-Dichloropropane	13.05	63	850519	10.64 ug/L	99
25) Dibromomethane	13.26	93	342666	10.83 ug/L	99
26) Bromodichloromethane	13.53	83	1037841	10 85 ug/L	99
27) cis-1,3-Dichloropropene	14.28	75	940934	10 72 ug/L	99
28) Toluene	14.85	92	1789813	10.22 ug/L	100
29) trans-1,3-Dichloropropene	15.21	75	631839	10 90 ug/L	98
30) 1,1,2-Trichloroethane	15.53	83	334915	10.87 ug/L	96
31) Tetrachloroethene	15.81	166	1179355	10.26 ug/L	99
32) 1,3-Dichloropropane	15.82	76	645267	10.78 ug/L	97
33) Dibromochloromethane	16.22	129	655503	10.86 ug/L	99
34) 1,2-Dibromoethane	16.42	107	473135	10.82 ug/L	99
35) Chlorobenzene	17 28	112	1957735	10.57 ug/L	99
36) 1,1,1,2-Tetrachloroethane	17 41	131	794514	10 69 ug/L	97
37) Ethylbenzene	17 46	91	3622160	10 40 ug/L	98
38) Xylene (para & meta)	17 66	106	2777346	20.91 ug/L	98
39) Xylene (Ortho)	18 37	106	1260897	10.58 ug/L	99
40) Styrene	18.39	104	1877436	10.68 ug/L	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File D:\HPCHEM\1\DATA\C0777 D
Acq On 29 Dec 95 7 46 am
Sample 10 PPB CHK STANDARD
Misc 25 ML
Quant Time Dec 31 8 26 1995

Vial: 2
Operator SRK
Inst : 5972 - Ir
Multiplr: 1.00

Method C:\HPCHEM\1\METHODS\VOA524.M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17 40:31 1995
Response via Multiple Level Calibration

	Compound	R T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18 73	173	344258	10 26 ug/L		98
42)	Isopropylbenzene	19.02	105	3592947	10 58 ug/L	m	0
44)	Bromobenzene	19 59	156	820454	10.57 ug/L		96
45)	1,1,2,2-Tetrachloroethane	19 55	83	433507	10 92 ug/L		100
46)	1,2,3-Trichloropropane	19 63	75	426033	11 24 ug/L	#	1
47)	n-Propylbenzene	19 77	91	4928524	10 50 ug/L		94
48)	2-Chlorotoluene	19.93	91	2627469	9.68 ug/L		91
49)	4-Chlorotoluene	20 13	91	3129531	10.77 ug/L	m	98
50)	1,3,5-Trimethylbenzene	20 07	105	3046871	10 61 ug/L		99
51)	tert-Butylbenzene	20.67	119	3433009	11 35 ug/L		99
52)	1,2,4-Trimethylbenzene	20 77	105	2949983	10 58 ug/L		99
53)	sec-Butylbenzene	21 07	105	4835697	10 63 ug/L		99
54)	1,3-Dichlorobenzene	21 29	146	1657965	10 68 ug/L		99
55)	4-Isopropyltoluene	21 33	119	3840282	10 71 ug/L		99
56)	1,4-Dichlorobenzene	21 29	146	1664041	11 07 ug/L		98
58)	1,2-Dichlorobenzene	22 14	146	1274288	10 79 ug/L	m	0
59)	n-Butylbenzene	22.08	91	3944214	10 64 ug/L		100
60)	1,2-Dibromo-3-chloropropan	23 56	75	80247	10 74 ug/L		98
61)	1,2,4-Trichlorobenzene	25 11	180	1019076	10 64 ug/L		98
62)	Hexachlorobutadiene	25 43	225	921032	10 37 ug/L		99
63)	Naphthalene	25 57	128	1003114	10 57 ug/L		100
64)	1,2,3-Trichlorobenzene	26 05	180	755755	10.86 ug/L	m	0
65)	Methyl-tert butyl ether	8 24	73	776819	10 40 ug/L		99
66)	tert-Butyl Alcohol	8 00	59	25434	22 54 ug/L		100

(#) = qualifier out of range (m) = manual integration

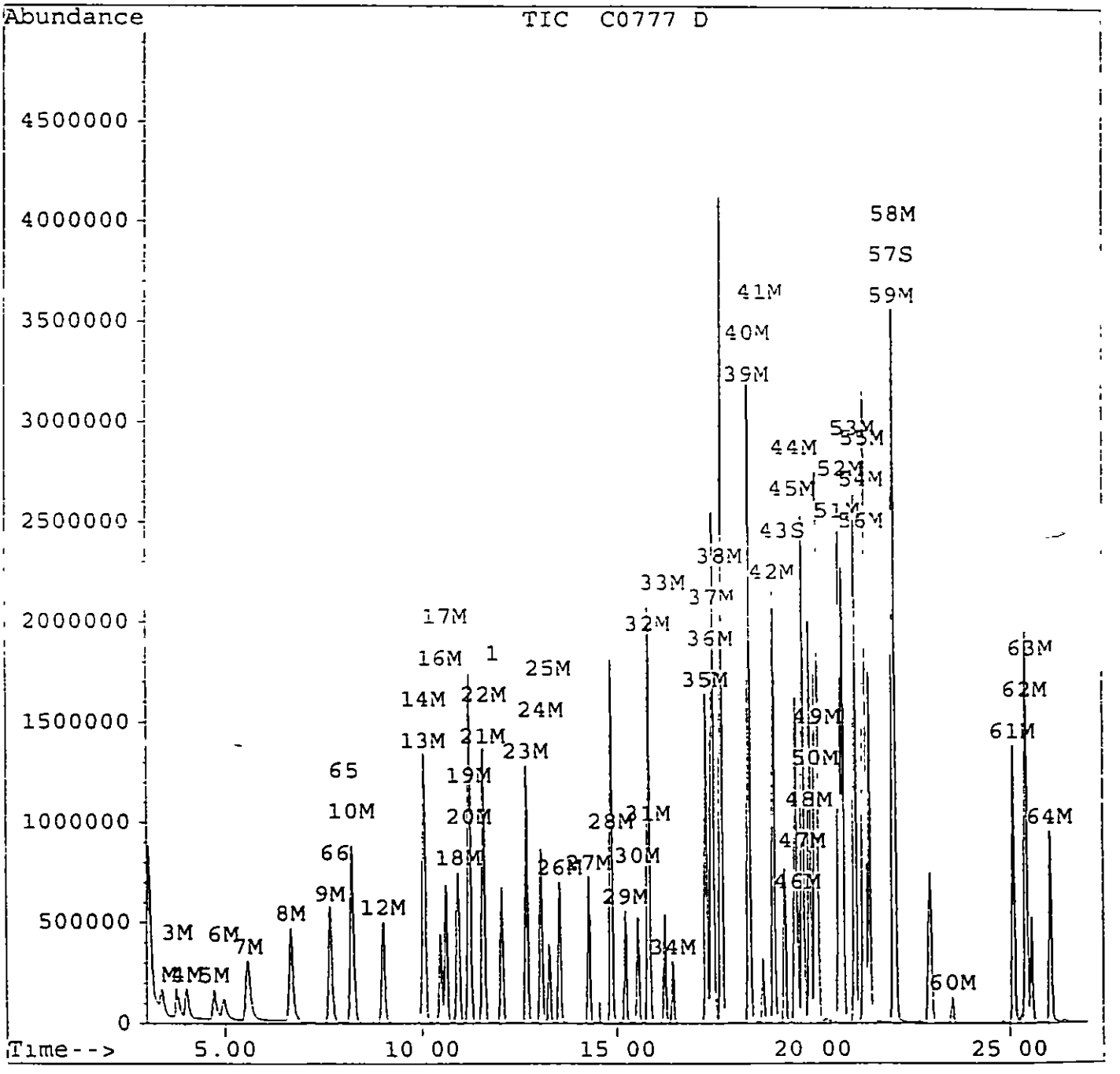
Quantitation Report

060

Data File : D:\HPCHEM\1\DATA\C0777 D
Acq On : 29 Dec 95 7 46 am
Sample : 10 PPB CHK STANDARD
Misc : 25 ML
Quant Time : Dec 31 8 26 1995

Vial 2
Operator SRK
Inst 5972 - In
Multiplr. 1 00

Method : C:\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17 40 31 1995
Response via : Multiple Level Calibration



Quantitation Report

081

Data File d \hpchem\1\data\c0792 d
Acq On 29 Dec 95 4 23 pm
Sample 1 PPB QCS
Misc 25 ML
Quant Time Dec 31 8:51 1995

Vial 17
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c:\HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12 06	96	1245852	5 00 ug/L	-0 07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.31	95	608759	5 18 ug/L	103.59%
57) 1,2-Dichlorobenzene-d4	22.11	152	367326	5.31 ug/L	106 25%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3 42	85	73513	1.44 ug/L	96
3) Chloromethane	3 82	50	45628	0.91 ug/L	96
4) Vinyl chloride	4 04	62	60363	1 13 ug/L	99
5) Bromomethane	4.74	94	39672	1 31 ug/L	92
6) Chloroethane	4 99	64	36277	1 12 ug/L	95
7) Trichlorofluoromethane	5 56	101	110248	1 18 ug/L	100
8) 1,1-Dichloroethene	6 67	96	69402	1.19 ug/L	92
9) Methylene chloride	7.67	84	265494	4.85 ug/L	97
10) trans-1,2-Dichloroethene	8.21	96	78322	1.18 ug/L	99
12) 1,1-Dichloroethane	8.99	63	141759	1 14 ug/L	96
13) 2,2-Dichloropropane	10.05	77	96082	0.95 ug/L	93
14) cis-1,2-Dichloroethene	10.06	96	74213	1 17 ug/L	91
16) Bromochloromethane	10 48	128	26621	1.08 ug/L	95
17) Chloroform	10 64	83	125263	1 15 ug/L	98
18) 1,1,1-Trichloroethane	10 95	97	123661	1 11 ug/L	99
19) Carbon tetrachloride	11 25	117	114843	1 14 ug/L	93
20) 1,1-Dichloropropene	11 24	75	124205	1 20 ug/L	98
21) Benzene	11.59	78	234798	1 10 ug/L	100
22) 1,2-Dichloroethane	11.62	62	47810	1 18 ug/L	96
23) Trichloroethene	12.69	95	101687	1 17 ug/L	98
24) 1,2-Dichloropropane	13.06	63	85312	1 20 ug/L	98
25) Dibromomethane	13.27	93	33705	1 20 ug/L	97
26) Bromodichloromethane	13.53	83	104647	1.23 ug/L	99
27) cis-1,3-Dichloropropene	14 28	75	98548	1 26 ug/L	96
28) Toluene	14 86	92	194990	1 25 ug/L	99
29) trans-1,3-Dichloropropene	15.22	75	63438	1.23 ug/L	97
30) 1,1,2-Trichloroethane	15.53	83	35546	1 30 ug/L	93
31) Tetrachloroethene	15.81	166	121492	1 19 ug/L	93
32) 1,3-Dichloropropane	15.83	76	67532	1.27 ug/L	97
33) Dibromochloromethane	16.23	129	68315	1.27 ug/L	99
34) 1,2-Dibromoethane	16 43	107	48371	1.25 ug/L	97
35) Chlorobenzene	17.28	112	197486	1.20 ug/L	100
36) 1,1,1,2-Tetrachloroethane	17 43	131	86621	1.31 ug/L	98
37) Ethylbenzene	17 47	91	359249	1.16 ug/L	100
38) Xylene (para & meta)	17.67	106	278071	2.36 ug/L	98
39) Xylene (Ortho)	18.37	106	127821	1.21 ug/L	97
40) Styrene	18.40	104	186037	1.19 ug/L	94

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0792 d
Acq On 29 Dec 95 4.23 pm
Sample 1 PPB QCS
Misc 25 ML
Quant Time. Dec 31 8 51 1995

Vial: 17
Operator SRK
Inst . 5972 - In
Multiplr 1 00

Method : c:\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40 31 1995
Response via : Multiple Level Calibration

	Compound	R T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18 75	173	35649	1 20 ug/L		98
42)	Isopropylbenzene	19 02	105	394176	1 31 ug/L		98
44)	Bromobenzene	19 59	156	84542	1 23 ug/L		98
45)	1,1,2,2-Tetrachloroethane	19 55	83	48726	1.38 ug/L		97
46)	1,2,3-Trichloropropane	19.64	75	48400	1 44 ug/L	#	1
47)	n-Propylbenzene	19.77	91	505226	1.21 ug/L		93
48)	2-Chlorotoluene	19.94	91	303009	1.26 ug/L		91
49)	4-Chlorotoluene	20.13	91	324807	1.26 ug/L	m	99
50)	1,3,5-Trimethylbenzene	20.09	105	305207	1.20 ug/L		99
51)	tert-Butylbenzene	20.68	119	365194	1.36 ug/L		100
52)	1,2,4-Trimethylbenzene	20 77	105	307969	1 24 ug/L		97
53)	sec-Butylbenzene	21.08	105	511494	1 27 ug/L		98
54)	1,3-Dichlorobenzene	21 30	146	181354	1 32 ug/L		97
55)	4-Isopropyltoluene	21 34	119	392196	1 23 ug/L		97
56)	1,4-Dichlorobenzene	21 46	146	176198	1 32 ug/L		96
58)	1,2-Dichlorobenzene	22 15	146	142686	1.36 ug/L	m	0
59)	n-Butylbenzene	22 09	91	390177	1.19 ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.57	75	8536	1.29 ug/L		92
61)	1,2,4-Trichlorobenzene	25.11	180	99855	1.17 ug/L		95
62)	Hexachlorobutadiene	25.43	225	92085	1 17 ug/L		99
63)	Napnthalene	25 57	128	106006	1 26 ug/L		100
64)	1,2,3-Trichlorobenzene	26 07	180	74405	1 20 ug/L		99

(#) = qualifier out of range (m) = manual integration

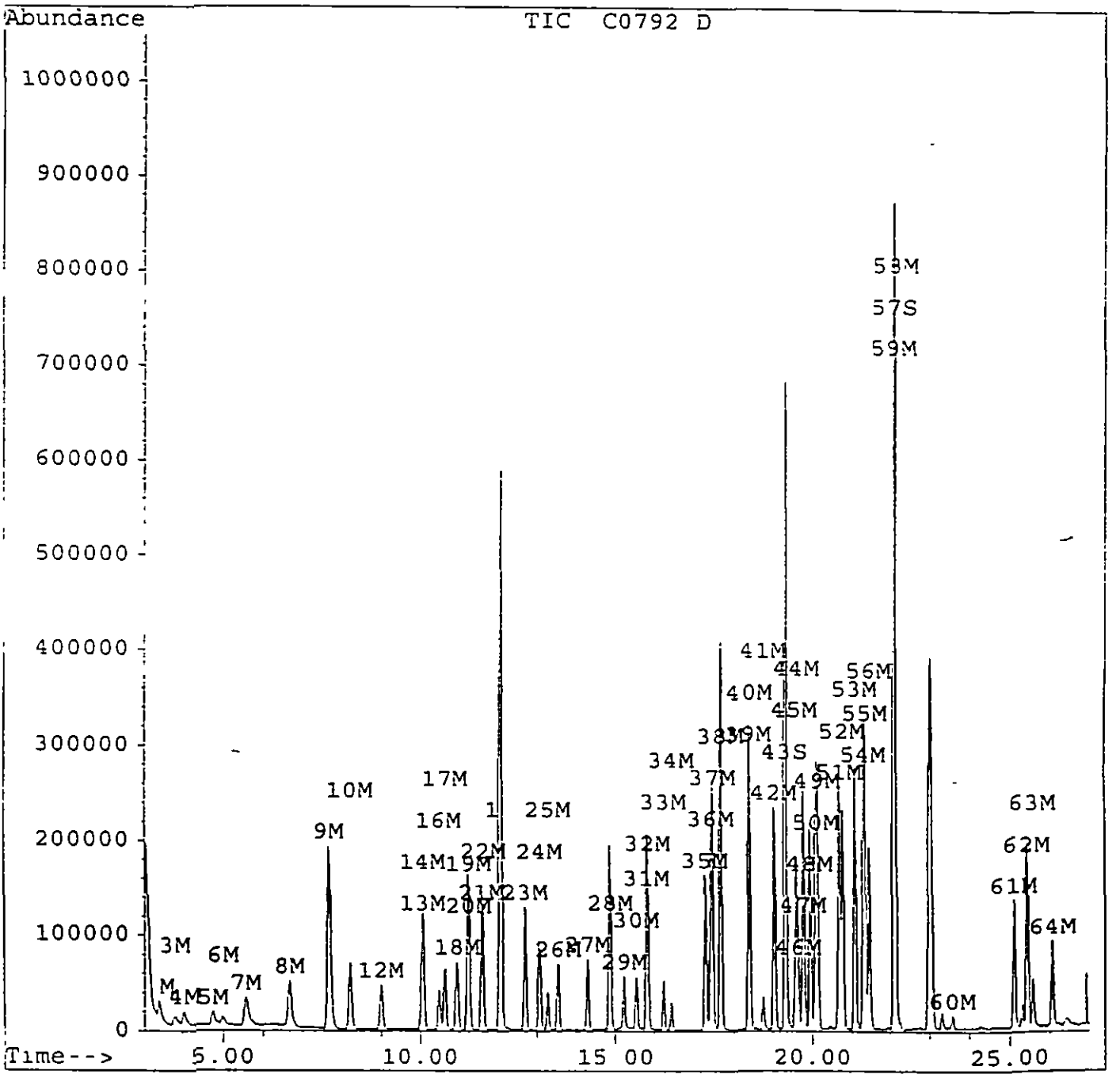
Quantitation Report

083

Data File : d.\hpchem\1\data\c0792 d
Acq On : 29 Dec 95 4 23 pm
Sample : 1 PPB QCS
Misc : 25 ML
Quant Time. Dec 31 8 51 1995

Vial 17
Operator SRK
Inst 5972 - In
Multiplr. 1 00

Method . c.\HPCHEM\1\METHODS\VOA524 M
Title . 524 2 Purgable Organics
Last Update : Tue Dec 26 17:40 31 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

084

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard) C0696 D Date Analyzed 12/26/95

Instrument ID 5972-INSTRUMENT 1 Time Analyzed 1706

GC Column DB-624 X 75M ID 0 53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1403167	12 14				
	UPPER LIMIT	1824117	12 64				
	LOWER LIMIT	982217	11 64				
	SAMPLE NO						
01	VBLK01	1394456	12 14				
02	9557856V	1410488	12 13				
03	9557857V	1389985	12 14				
04	9558188V	1331918	12 13				
05	9558189V	1315325	12 14				
06	9558190V	1269155	12 13				
07	9558191V	1252384	12 14				
08	9558192V	1346572	12 13				
09	9558196V	1326650	12 14				
10	9558197V	1334639	12 15				
11	9558195V	1398582	12 14				
12	9557856MS	1289903	12 14				
13	9557856MSD	1165721	12 12				
14	10 QCS	1346351	12 13				
15	1 STND	1286016	12 14				
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% 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 values outside QC limits with an asterisk
* Values outside of QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

085

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard) C0777 D Date Analyzed 12/29/95

Instrument ID 5972-INSTRUMENT 1 Time Analyzed 0746

GC Column DB-624 X 75M ID 0 53 (mm) Heated Purge (Y/N)

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1403737	12 05				
	UPPER LIMIT	1824858	12 55				
	LOWER LIMIT	982616	11 55				
	SAMPLE NO						
01	VBLK01	1420918	12 06				
02	9558500V	1402153	12 07				
03	9558501V	1394848	12 08				
04	9558191V	1320567	12 08				
05	9558192V	1349002	12 08				
06	9558312V	1322876	12 07				
07	9558313V	1334653	12 07				
08	9558311V	1342950	12 07				
09	9558314V	1339570	12 06				
10	9558315V	1257455	12 07				
11	9558316V	1340207	12 06				
12	9558317V	1252968	12 07				
13	9559346V	1142560	12 06				
14	9558196V	1293768	12 05				
15	1 STND	1245852	12 06				
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% 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 values outside QC limits with an asterisk
* Values outside of QC limits

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EMETL# 086

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# NJDEP MW# TB

Matrix (soil/water) WATER Lab Sample ID 9558312V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0783 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1 1-Dichloroethene	50	U
75-09-2	Methylene chloride	1 4	B
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2,2-Dichloropropane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1 2-Dibromomethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EMETL# 087

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 290 NJDEP MW# TB

Matrix (soil/water) WATER Lab Sample ID 9558312V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0783 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1,2,2-Tetrachloroethane	50	U
96-18-4	1,2 3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1,3 5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2 4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1 3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methy-tertiary butyl ether	50	U
75-65-0	tertiary-Butyl alcohol	2 0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EMETL# 086

Lab Name: EMSL ANALYTICAL Contract: U S ARMY

Project No: FT MONMOUTH NJ Bldg#: NJDEP MW#: TB

Matrix (soil/water): WATER Lab Sample ID: 9558312V

Sample wt/vol: 25 0 (g/mL) ML Lab File ID: C0783 D

Level (low/med): LOW Date Received:

% Moisture not dec: NA Date Analyzed: 12/29/95

GC Column: DB-624 X 75M ID: 0 53 (mm) Dilution Factor: 1 0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 3 Concentration Units (ug/L or ug/Kg): ug/L

	CAS Number	Compound Name	RT	Est Conc	Q
1	109-99-9	Furan, tetrahydro-	10 61	2	J
2		Column Bleed	19 62	2	J
3		Column Bleed	23 00	1	J
4					
5					
6					
7					
8					
9					
10					
11					
12					
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27					
28					
29					
30					

Quantitation Report

089

Data File d:\hpchem\1\data\c0783 d
Acq On 29 Dec 95 11 14 am
Sample 9558312 TB
Misc 25 ML
Quant Time Dec 31 8 35 1995

Vial 8
Operator SRK
Inst 5972 - In
Multiplr. 1 00

Method c:\HPCHEM\1\METHODS\VOA524 M
Title . 524.2 Purgable Organics
Last Update : Tue Dec 26 17 40 31 1995
Response via : Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.07	96	1322876	5 00 ug/L	-0 06
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 32	95	643966	5.16 ug/L	103 20%
57) 1,2-Dichlorobenzene-d4	22.11	152	380637	5.18 ug/L	103 69%
Target Compounds					Qvalue
9) Methylene chloride	7 67	84	81198	1.40 ug/L	95

(#) = qualifier out of range (m) = manual integration

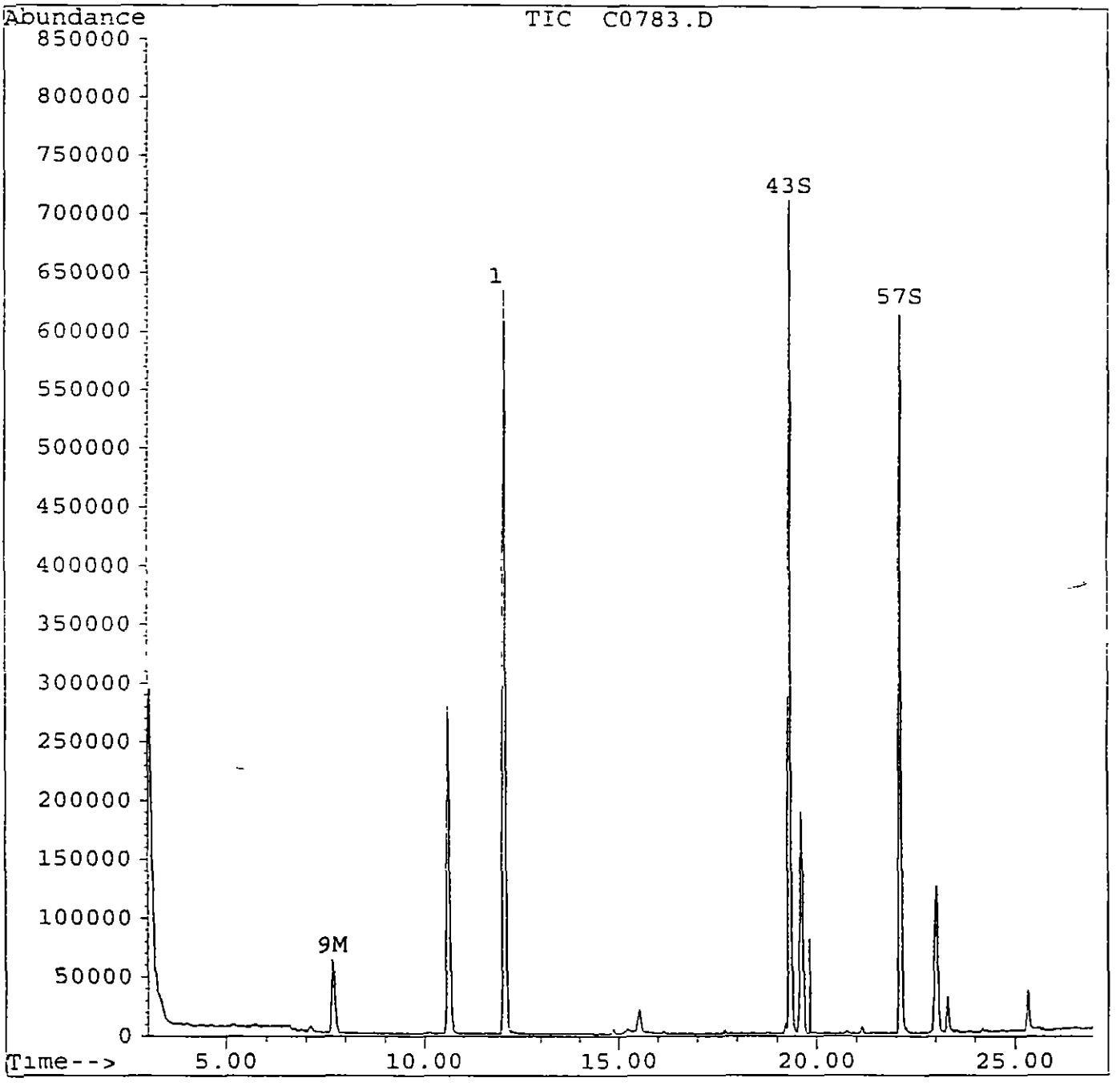
Quantitation Report

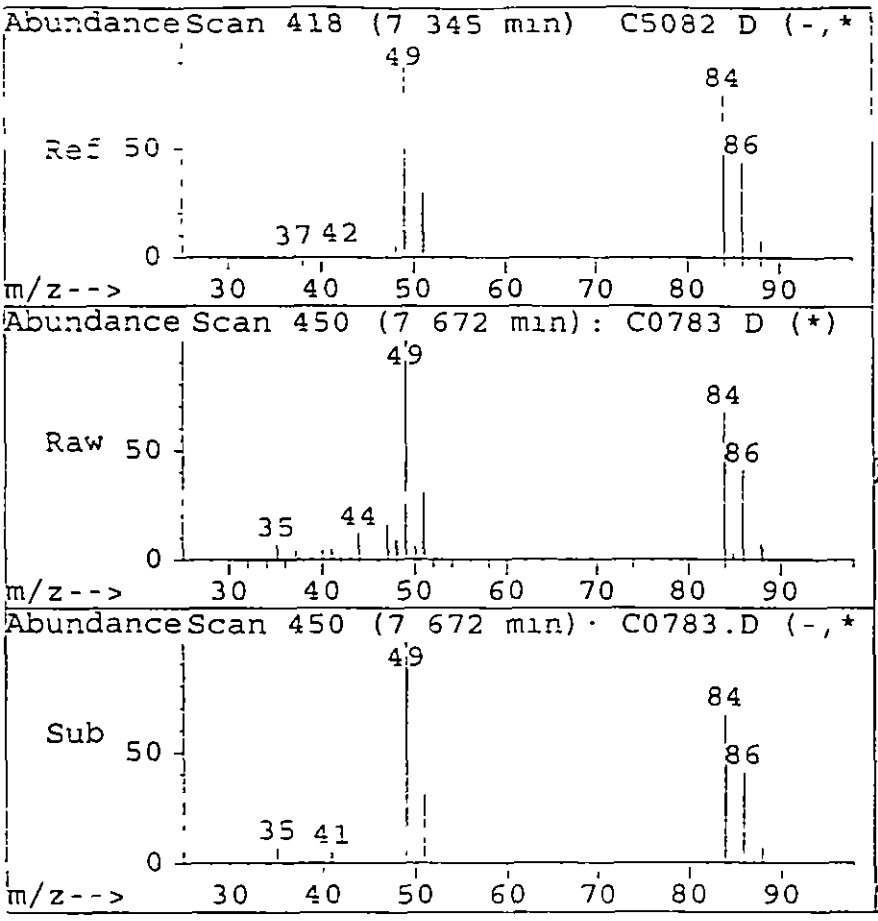
090

Data File d \hpchem\1\data\c0783 d
Acq On 29 Dec 95 11 14 am
Sample 9558312 TB
Misc 25 ML
Quant Time Dec 31 8 35 1995

Vial: 8
Operator SRK
Inst 5972 - In
Multiplr: 1.00

Method c \HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update . Tue Dec 26 17 40.31 1995
Response via : Multiple Level Calibration

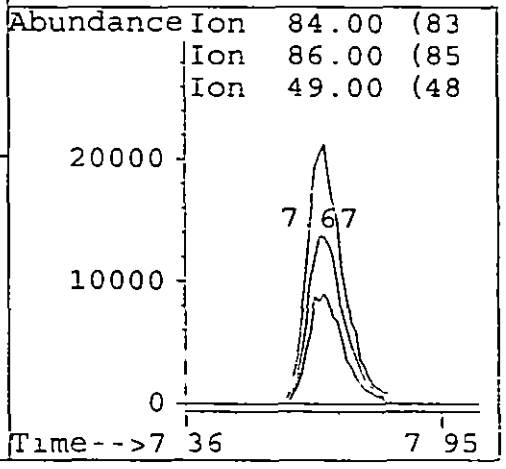




#9
Methylene chloride
Concen 1 40 ug/L
RT 7 67 min Scan= 450
Delta R T -0 08 min
Lab File c0783 d
Acq 29 Dec 95 11 14 am

Tgt Ion:84 Resp: 81198

Ion	Ratio	Lower	Upper
84	100		
86	60.9	41 4	81.4
49	148.7	120.0	160 0
0	0.0	0.0	0 0



Library Search Compound Report

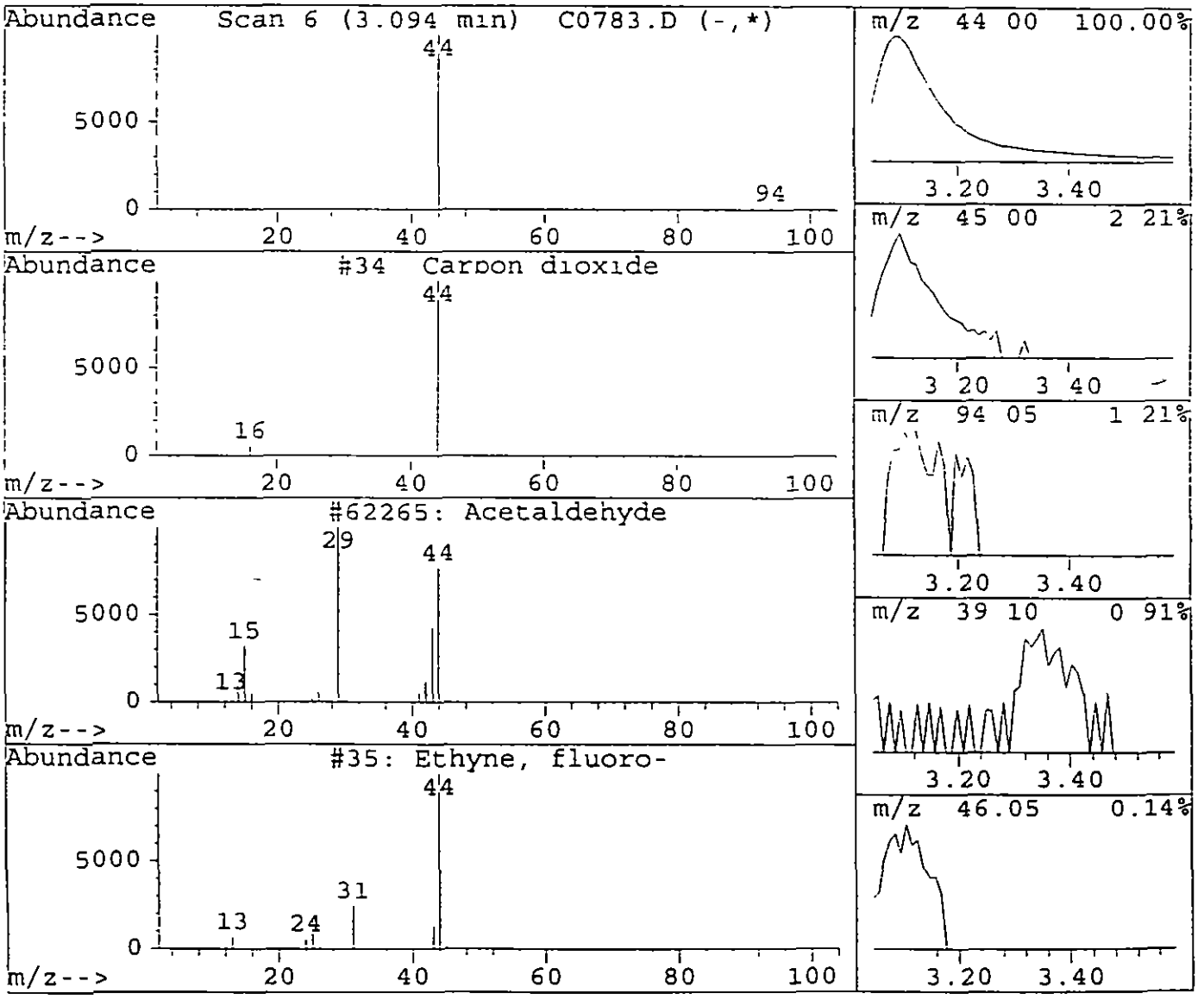
Data File d \hpchem\1\data\c0783 d
Acq On 29 Dec 95 11 14 am
Sample 9558312 TB
Misc 25 ML

Vial 8 093
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524.M
Title 524 2 Purgable Organics
Library C \DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R T
3 09	3.38 ug/L	1890229	Fluorobenzene	12 07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	3
2	Acetaldehyde	62265	000075-07-0	3
3	Ethyne, fluoro-	35	002713-09-9	3
4	Ethylene oxide	37	000075-21-8	3
5	Propane	62269	000074-98-6	2



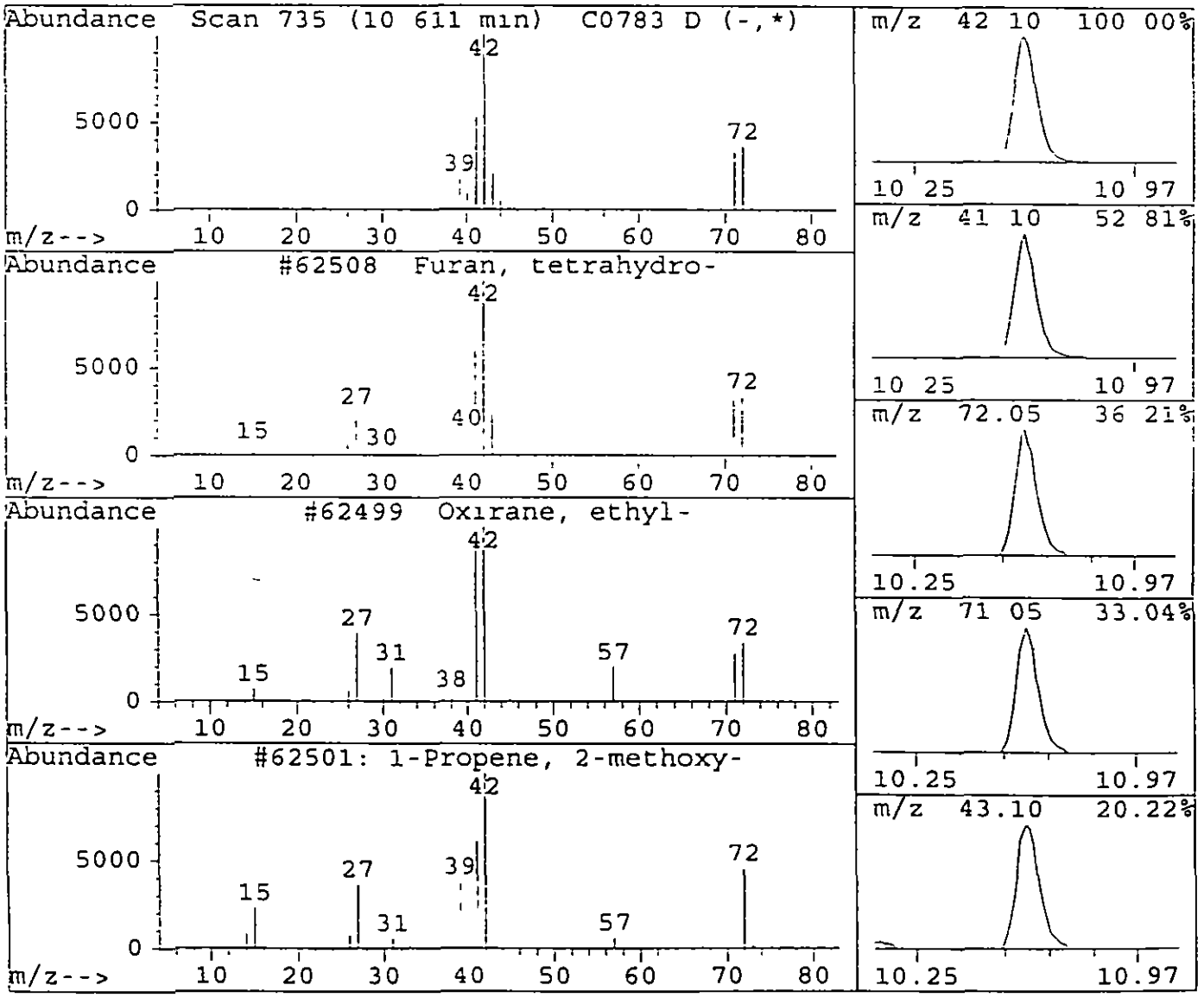
Data File d \hpchem\1\data\c0783 d
Acq On 29 Dec 95 11 14 am
Sample . 9558312 TB
Misc 25 ML

Vial 8
Operator SRK
Inst 5972 - Ir
Multiplr 1.00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Library C \DATABASE\NBS75K.L

R T	Conc	Area	Relative to ISTD	R T.
10 61	2 48 ug/L	1383277	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62508	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	40
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	Azetidine, 1-methyl-	246	004923-79-9	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	9



Library Search Compound Report

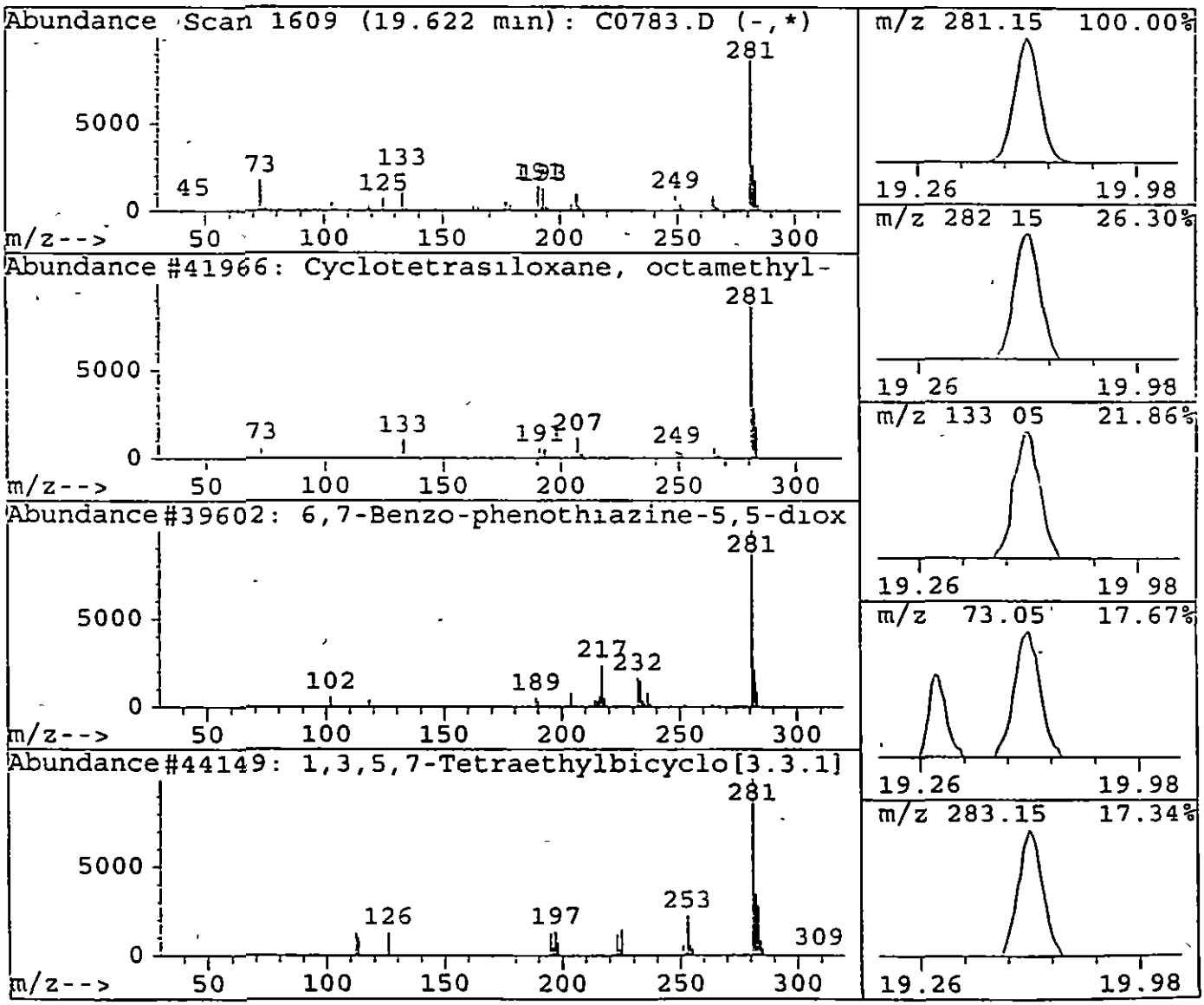
Data File d:\hpchem\1\data\c0783.d
Acq On 29 Dec 95 11 14 am
Sample 9558312 TB
Misc 25 ML

Vial: 8
Operator SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c \HPCHEM\1\METHODS\VOA524 M
Title . 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
19.62	1.62 ug/L	902532	Fluorobenzene	12.07

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	72
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	9
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	9
5	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47



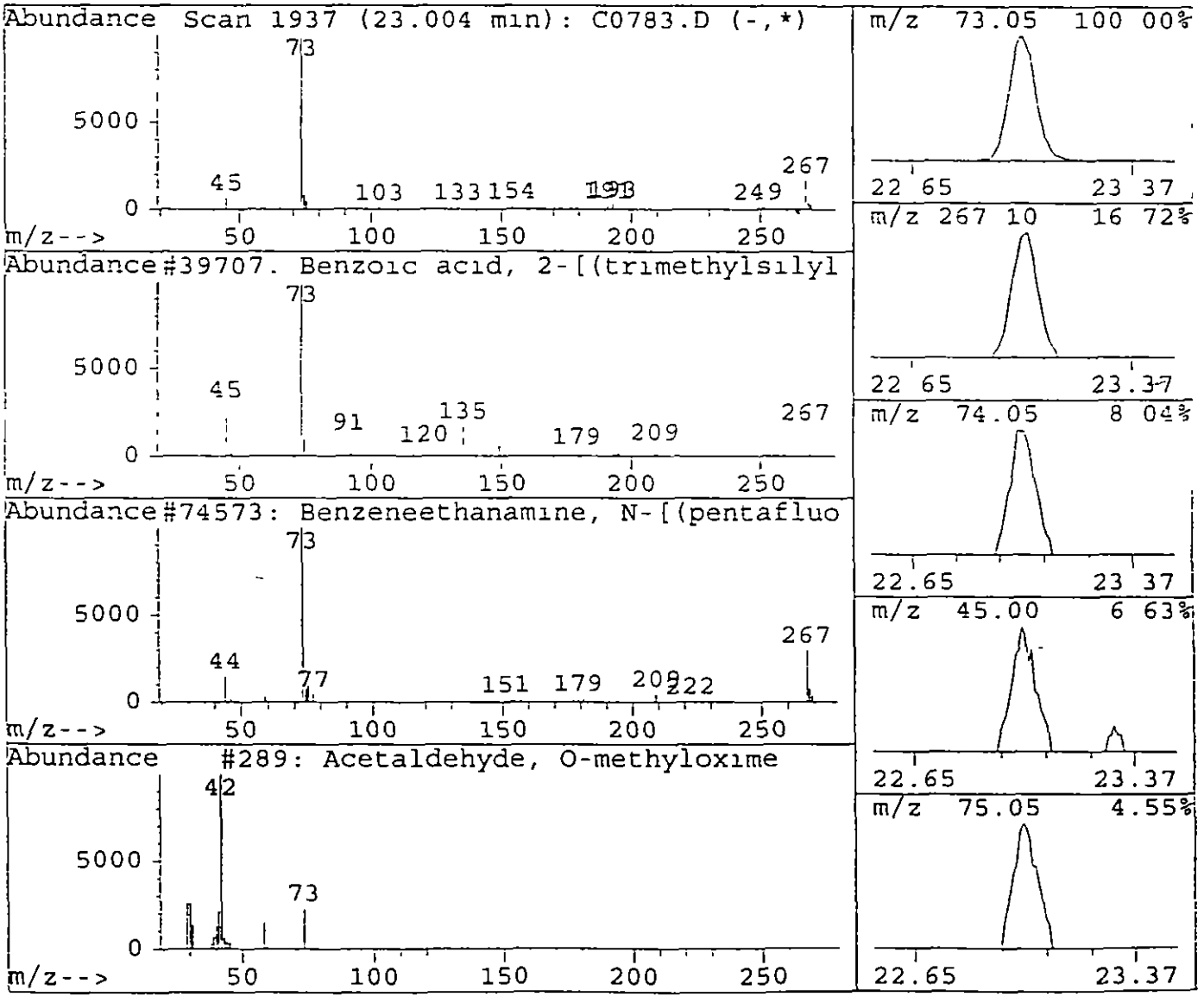
Data File d \hpchem\1\data\c0783 d
Acq On 29 Dec 95 11 14 am
Sample 9558312 TB
Misc 25 ML

Vial 8
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Library C \DATABASE\NBS75K L

R T	Conc	Area	Relative to ISTD	R T.
23 00	1 10 ug/L	615108	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	36
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	Acetaldehyde, O-methyloxime	289	033581-43-0	4
4	Trimethylsilyl ether of glycerol	43898	006787-10-6	2
5	N-Ethylformamide	292	000627-45-2	3



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 096

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# NJDEP MW# FB

Matrix (soil/water) WATER Lab Sample ID 9558313V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0784 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	1 4	B
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2,2-Dichloropropane	50	U
156-59-2	cis-1 2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromomethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

097

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 290 NJDEP MW# FB

Matrix (soil/water) WATER Lab Sample ID 9558313V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0784 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1 2 2-Tetrachloroethane	50	U
96-18-4	1 2 3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1,3 5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1 2 4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1 3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1 4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methy-tertiary butyl ether	50	U
75-65-0	tertiary-Butyl alcohol	2 0	U

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EMETL#

09

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# NJDEP MW# FB

Matrix (soil/water) WATER Lab Sample ID 9558313V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0784 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/95

GC Column DB-624 X 75M ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume (uL) Soil Aliquot Volume (uL)

Number TICs found 2 Concentration Units (ug/L or ug/Kg) ug/L

	CAS Number	Compound Name	RT	Est Conc	Q
1	109-99-9	Furan tetrahydro-	10 60	2	J
2		Column Bleed	19 61	1	J
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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23					
24					
25					
26					
27					
28					
29					
30					

Quantitation Report

099

Data File d \hpchem\1\data\c0784 d
Acq On 29 Dec 95 11 49 am
Sample 9558313 FB
Misc 25 ML
Quant Time Dec 31 8·36 1995

Vial 9
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update · Tue Dec 26 17 40.31 1995
Response via · Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.07	96	1334653	5 00 ug/L	-0 07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.31	95	648486	5 15 ug/L	103 01%
57) 1,2-Dichlorobenzene-d4	22.11	152	383609	5 18 ug/L	103 57%
Target Compounds					Qvalue
9) Methylene chloride	7.67	84	84415	1.44 ug/L	98

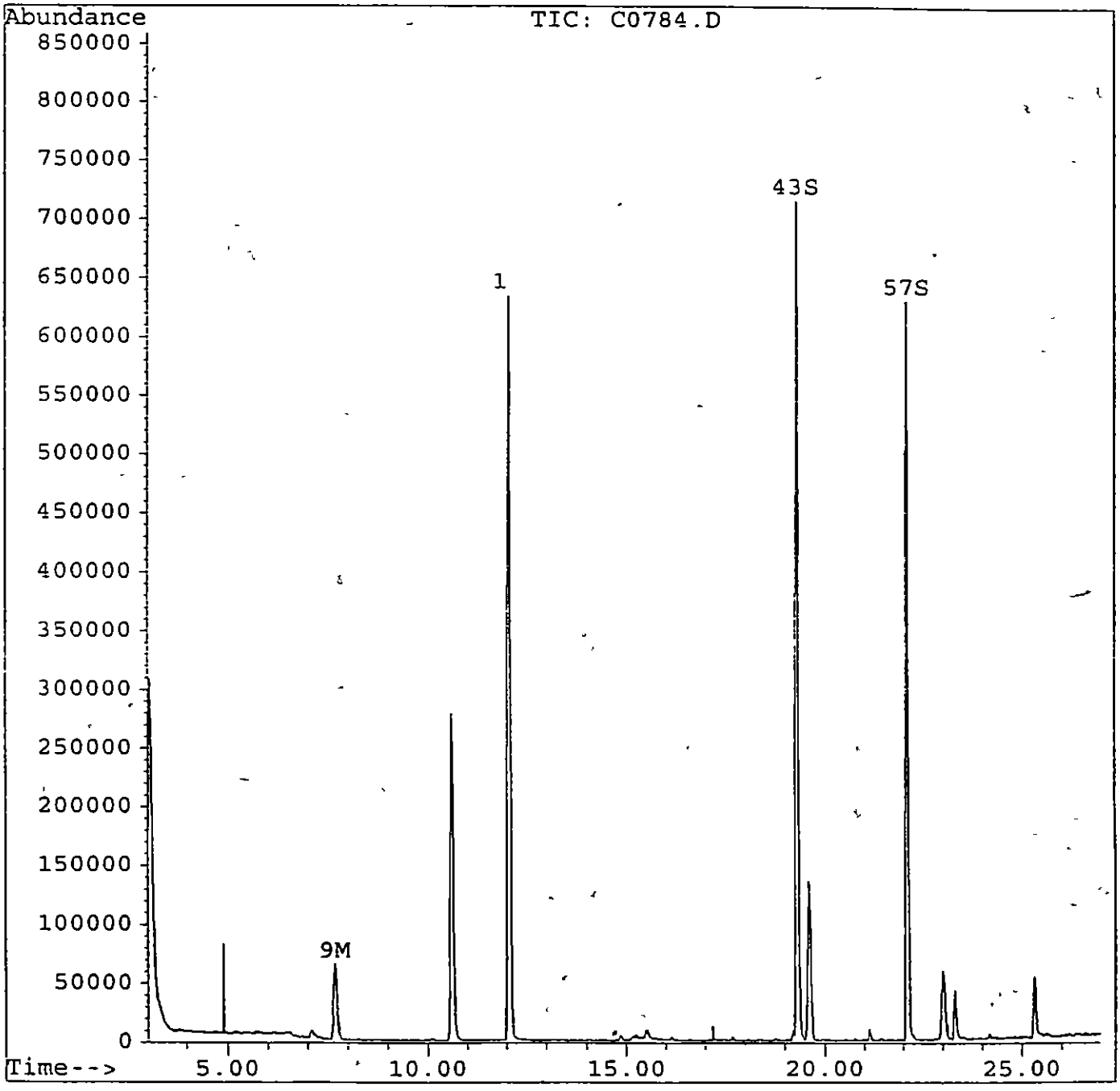
(#) = qualifier out of range (m) = manual integration

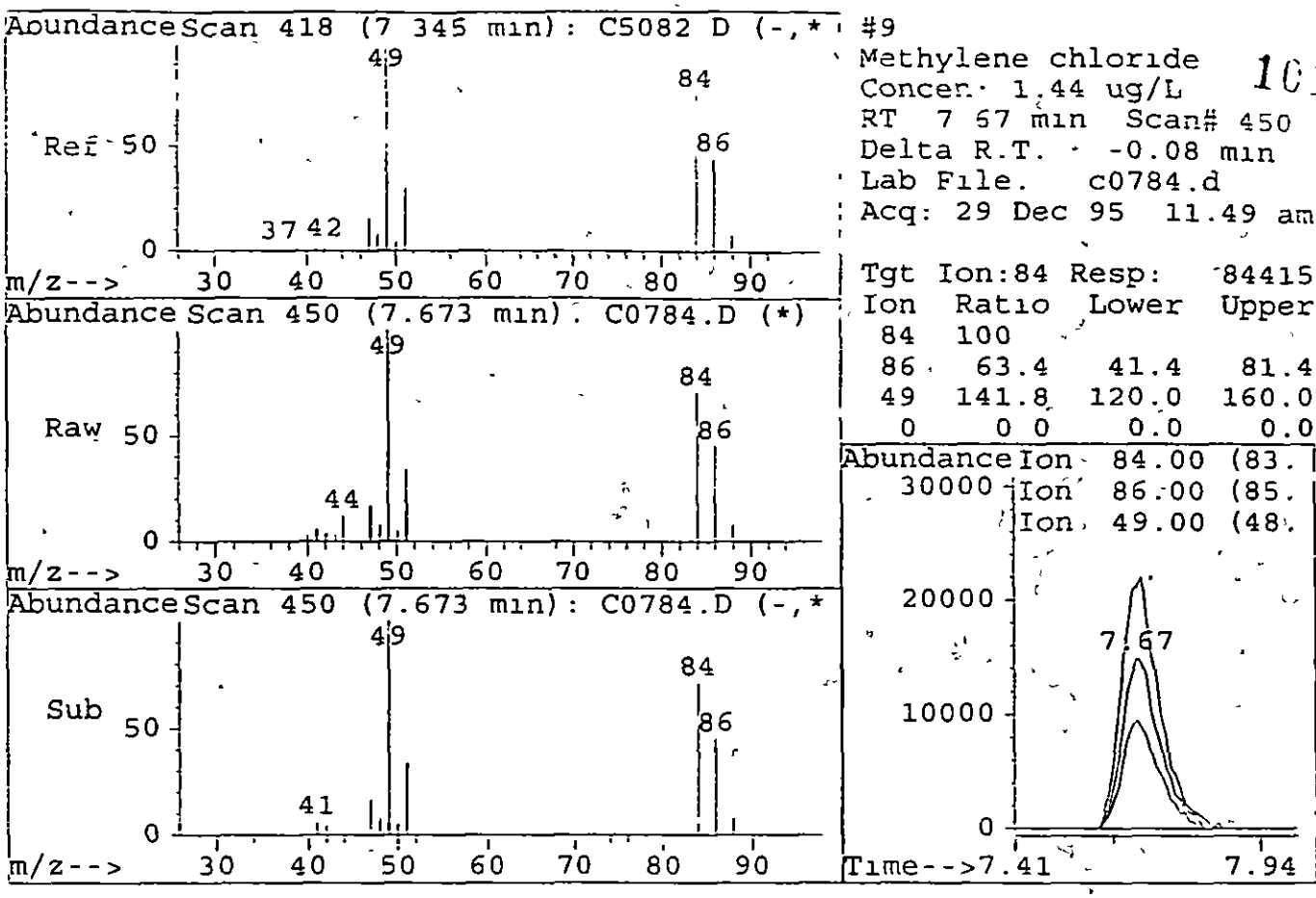
Quantitation Report

Data File : d \hpchem\1\data\c0784.d
Acq On : 29 Dec 95 11 49 am
Sample : 9558313 FB
Misc 25 ML
Quant Time: Dec 31 8:36 1995

Vial: 9 100
Operator: SRK
Inst 5972 - In
Multiplr: 1.00

Method : c.\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration





#9
Methylene chloride
Concen· 1.44 ug/L
RT 7 67 mın Scan# 450
Delta R.T. · -0.08 mın
Lab File. c0784.d
Acq: 29 Dec 95 11.49 am

Tgt Ion:84 Resp: 84415

Ion	Ratıo	Lower	Upper
84	100		
86	63.4	41.4	81.4
49	141.8	120.0	160.0
0	0 0	0.0	0.0

Library Search Compound Report

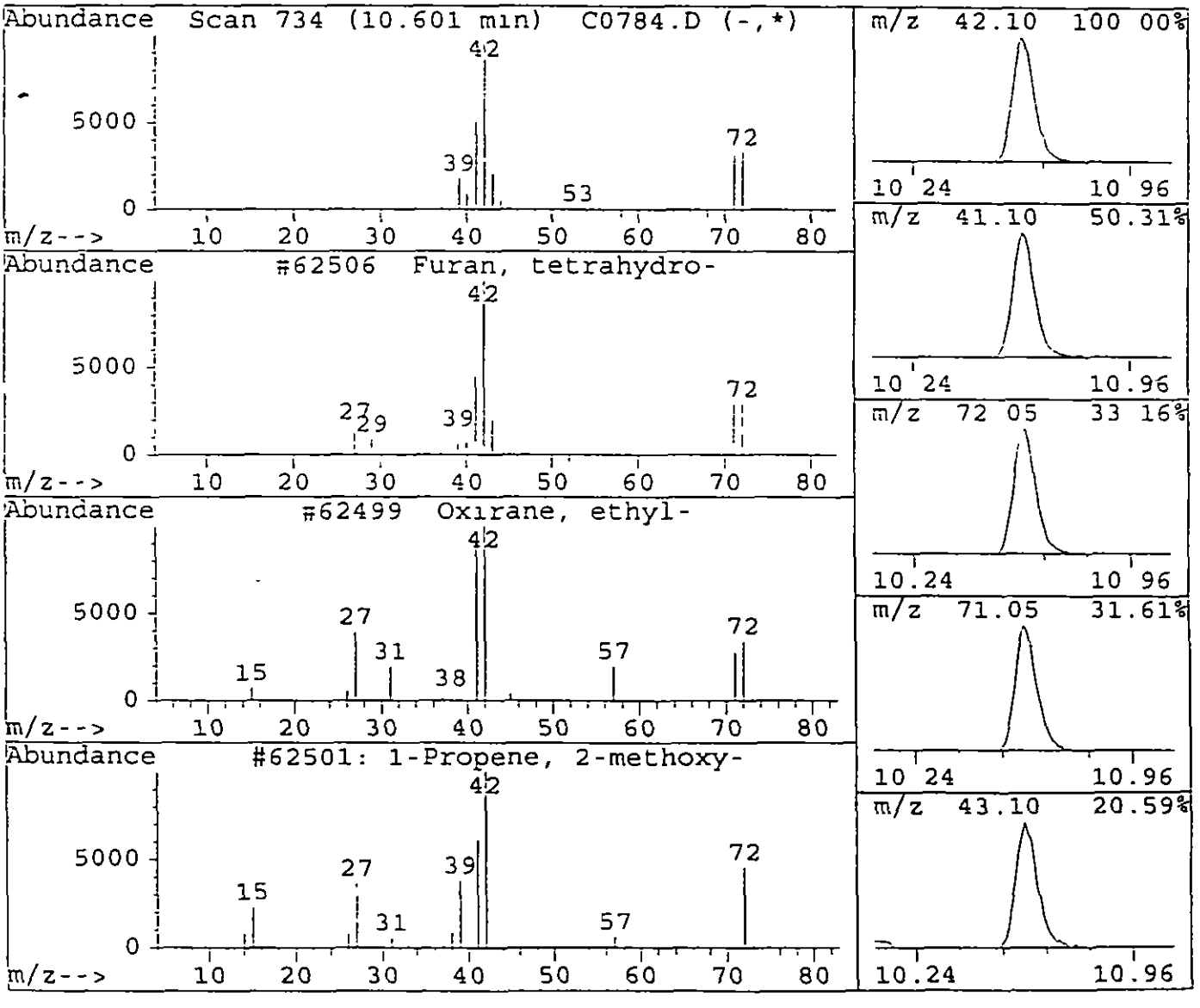
Data File d \hpchem\1\data\c0784 d
Acq On 29 Dec 95 11 49 am
Sample 9558313 FB
Misc 25 ML

Vial 9
Operator SRK
Inst 5972 - In
Multiplr. 1.00

Method . c \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Library C \DATABASE\NBS75K L

R.T.	Conc	Area	Relative to ISTD	R.T
10 60	2.48 ug/L	1398893	Fluorobenzene	12.07

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62506	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	40
3	1-Propene, 2-methoxy-	62501	000116-11-0	38
4	Oxirane, 2,2-dimethyl-	62511	000558-30-5	43
5	Formaldehyde, dimethylhydrazone	257	002035-89-4	4



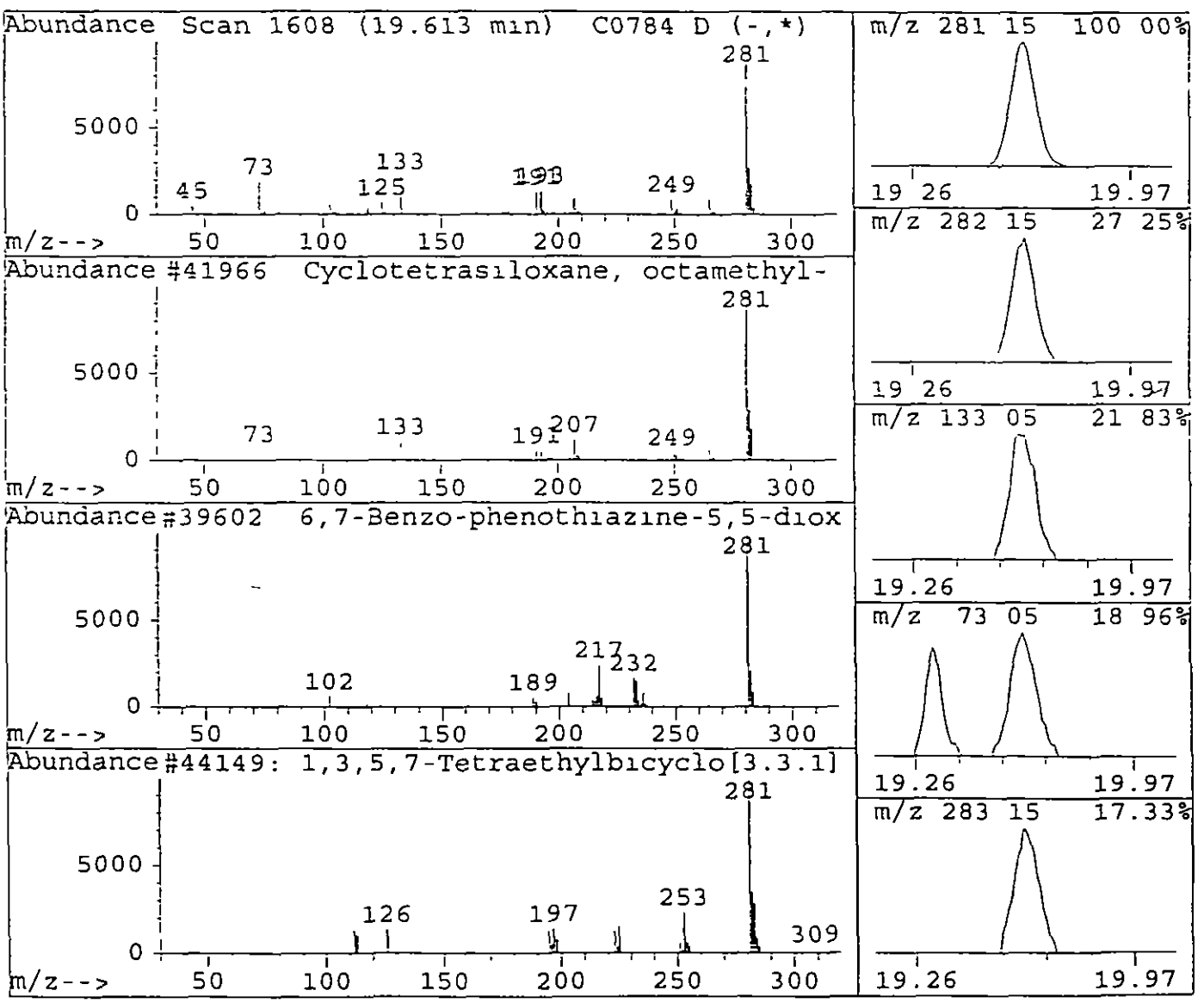
Data File d \hpcnem\1\data\c0784 d
Acq On 29 Dec 95 11 49 am
Sample 9558313 FB
Misc 25 ML

Vial 9
Operator SRK
Inst 5972 - In
Multiplr. 1 00

Method c \HPCHEM\1\METHODS\VOA524.M
Title . 524 2 Purgable Organics
Library · C·\DATABASE\NBS75K L

R T.	Conc	Area	Relative to ISTD	R.T.
19.61	1.05 ug/L	594136	Fluorobenzene	12.07

Hit# of 18	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	10
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3 3.1]tet	44149	073420-21-0	4
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
5	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

10

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	1 0	B
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2,2-Dichloropropane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1,1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1,1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromomethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1 2,2-Tetrachloroethane	50	U
96-18-4	1 2 3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methy-tertiary butyl ether	50	U
75-65-0	tertiary-Butyl alcohol	2 0	U

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL#

166

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 616 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9558316V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0788 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/95

GC Column DB-624 X 75M ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume (uL) Soil Aliquot Volume (uL)

Number TICs found 2 Concentration Units (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1	Column Bleed	19 61	1	J
2	Column Bleed	23 00	5	J
3				
4				
5				
6				
7				
8				
9				
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Quantitation Report

Data File d:\hpchem\1\data\c0788.d
Acq On 29 Dec 95 2:06 pm
Sample 9558316 BLDG 616 MW-1
Misc : 25 ML
Quant Time: Dec 31 8 41 1995

Vial: 13 107
Operator SRK
Inst 5972 - In
Multiplr: 1.00

Method c:\HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.06	96	1340207	5 00 ug/L	-0.07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.31	95	640503	5.07 ug/L	101 32%
57) 1,2-Dichlorobenzene-d4	22.11	152	385964	5.19 ug/L	103 78%
Target Compounds					Qvalue
9) Methylene chloride	7.67	84	61511	1.04 ug/L	97

(#) = qualifier out of range (m) = manual integration

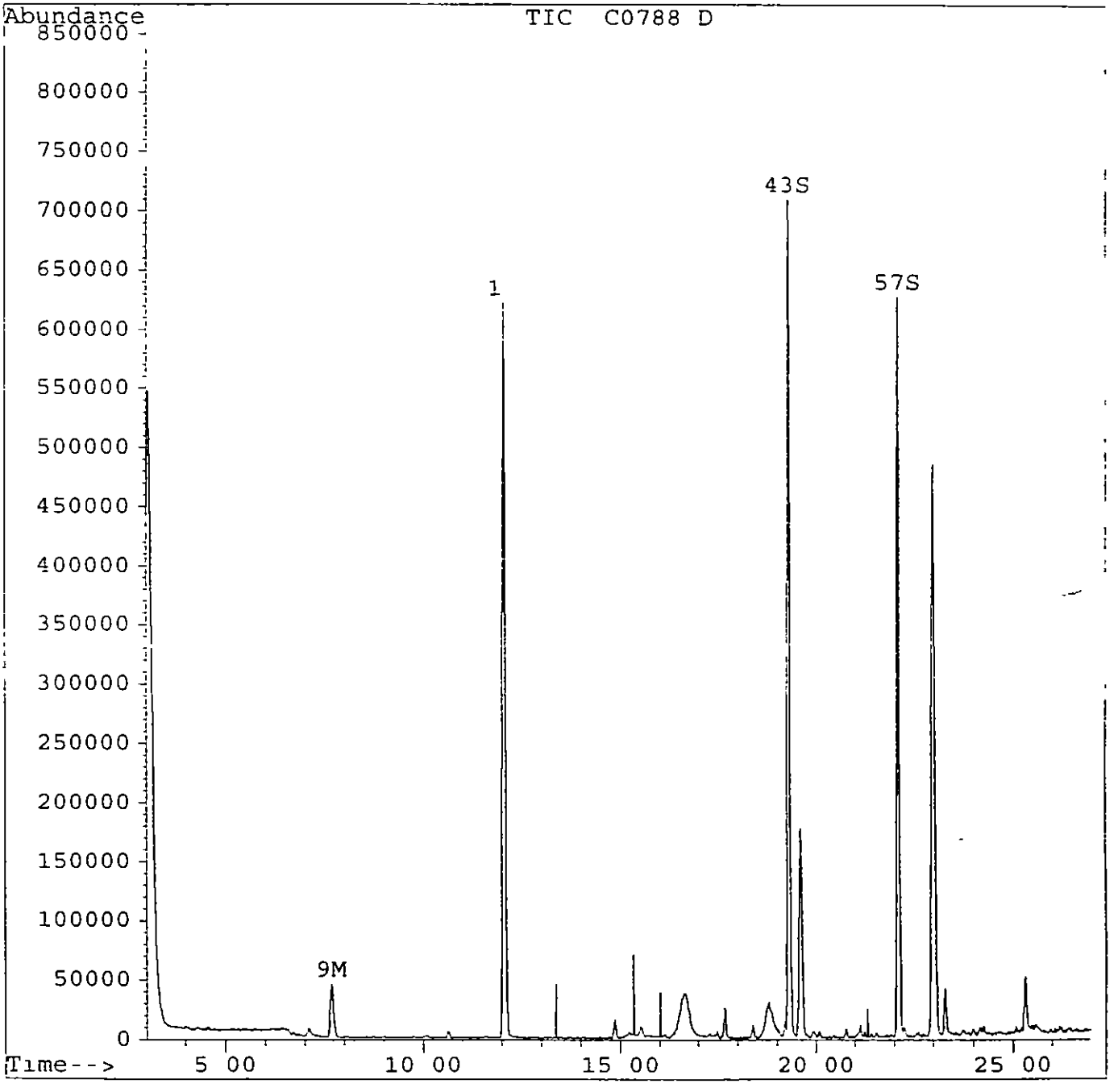
Quantitation Report

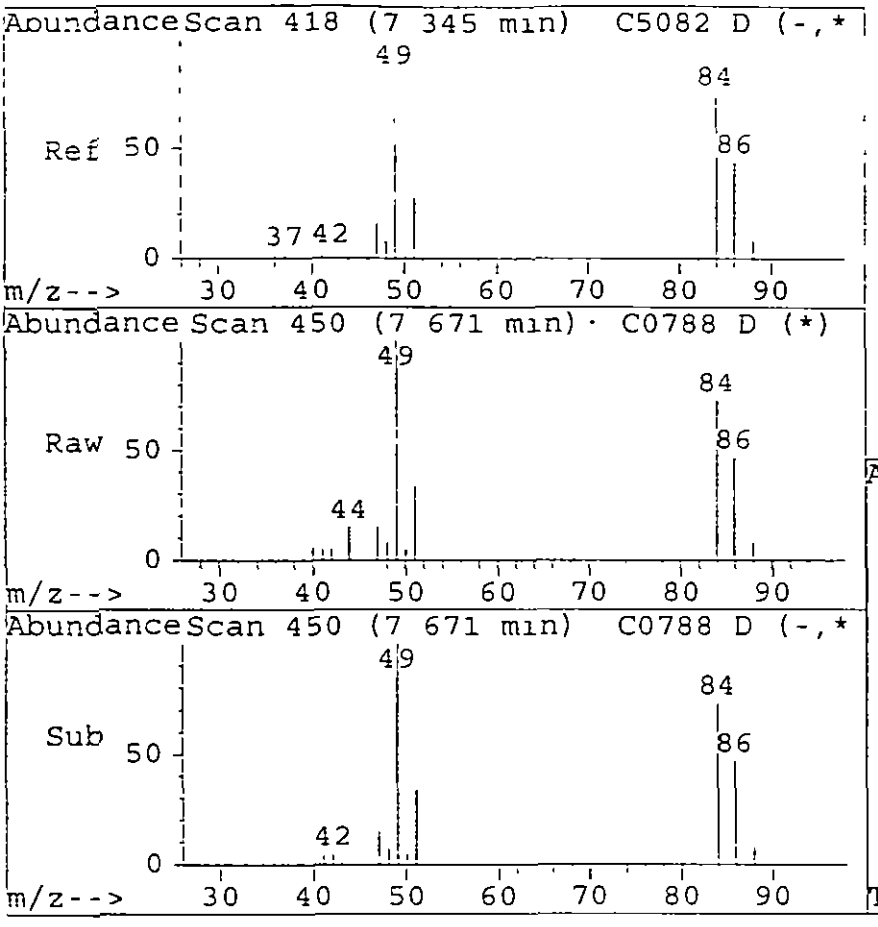
Data File d \npchem\1\data\c0788 d
Acq On 29 Dec 95 2 06 pm
Sample 9558316 BLDG 616 MW-1
Misc 25 ML
Quant Time Dec 31 8 41 1995

Vial 13
Operator SRK
Inst 5972 - In
Multiplr 1 00

166

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Last Update Tue Dec 26 17 40 31 1995
Response via Multiple Level Calibration

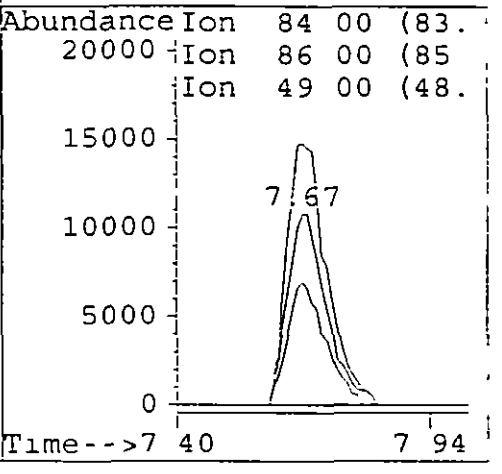




#9
Methylene chloride
Concen 1 04 ug/L
RT 7 67 min Scan= 450
Delta R T -0 08 min
Lab File c0788 d
Acq 29 Dec 95 2 06 pm

Tgt Ion 84 Resp. 61511

Ion	Ratio	Lower	Upper
84	100		
86	64 7	41 4	81 4
49	136 6	120 0	160 0
0	0 0	0 0	0 0



Library Search Compound Report

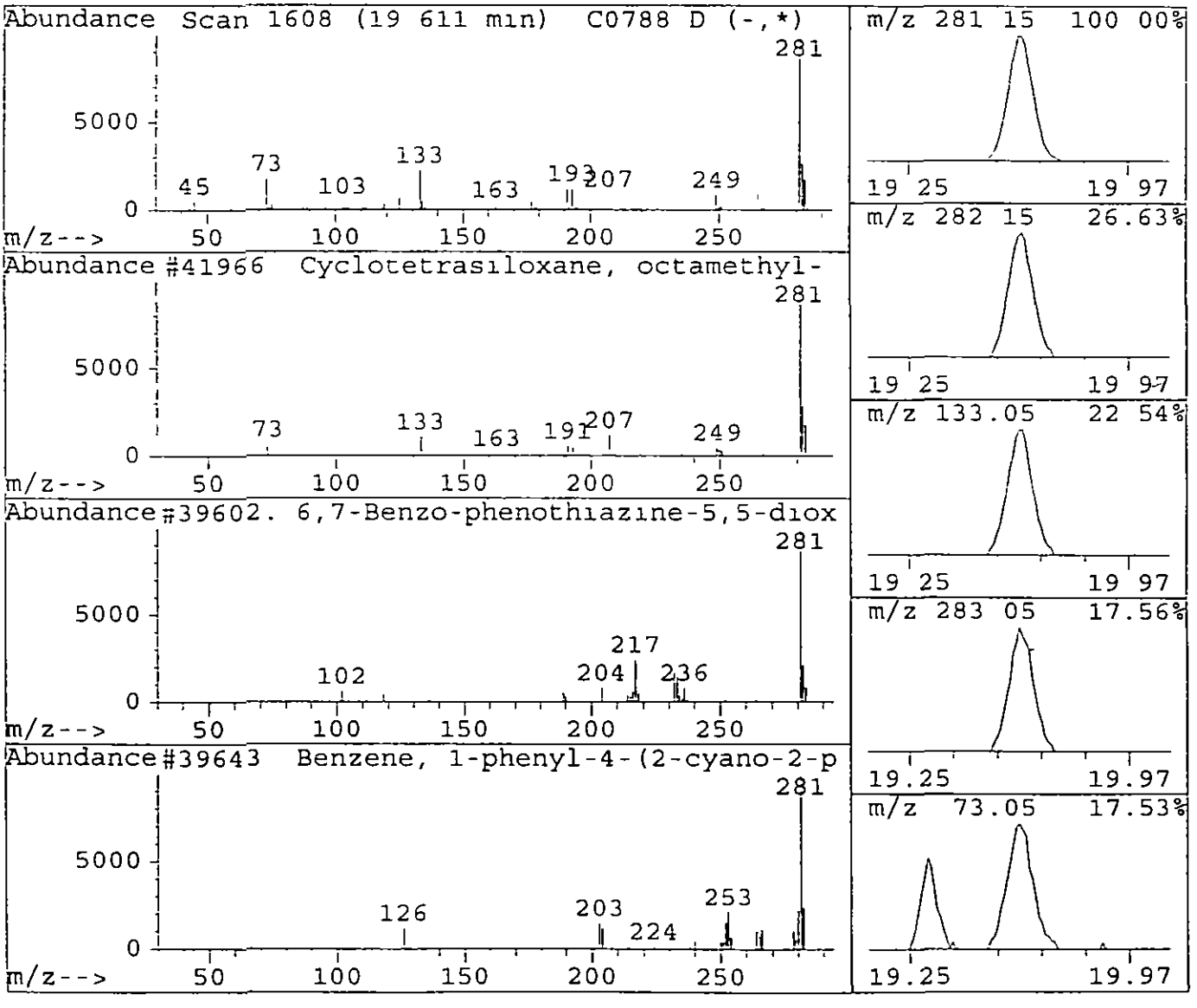
Data File d \hpchem\1\data\c0788 d
Acq On 29 Dec 95 2 06 pm
Sample 9558316 BLDG 616 MW-1
Misc 25 ML

Vial 13
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method : c \HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Library : C \DATABASE\NBS75K L

R T.	Conc	Area	Relative to ISTD	R T
19 61	1 34 ug/L	744728	Fluorobenzene	12 06

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	10
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47
4	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	9
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	47



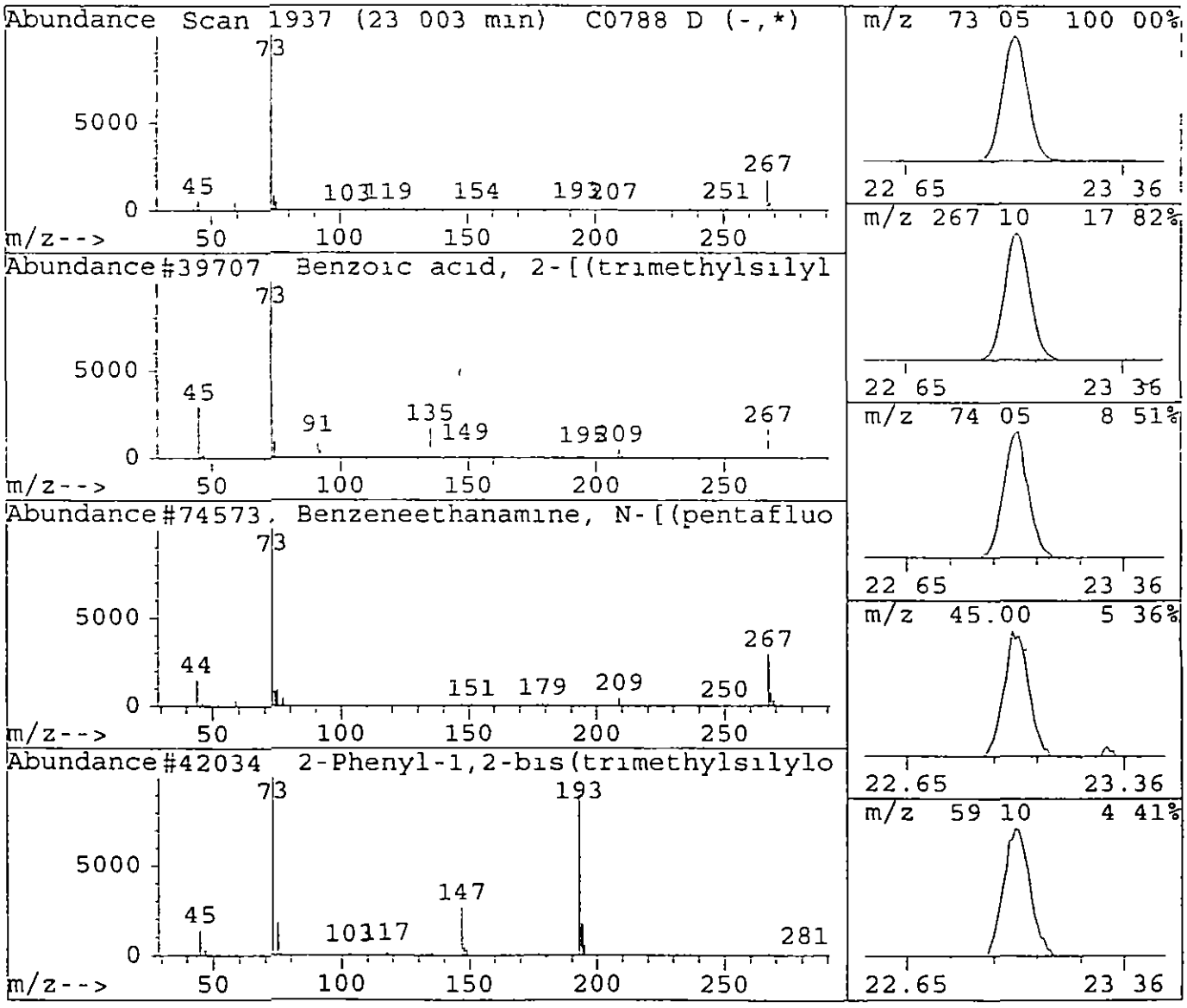
Data File d \hpchem\1\data\c0788 d
Acq On 29 Dec 95 2 06 pm
Sample 9558316 BLDG 616 MW-1
Misc 25 ML

Vial 13
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524 2 Purgable Organics
Library C \DATABASE\NBS75K L

R T	Conc	Area	Relative to ISTD	R T
23 00	5 00 ug/L	2774811	Fluorobenzene	12 06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	4
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	28
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Benzeneacetic acid, trimethylsilyl	70091	002078-18-4	5



WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	104	105			
02	9557856V	103	105			
03	9557857V	102	104			
04	9558188V	108	107			
05	9558189V	103	105			
06	9558190V	105	107			
07	9558191V	100	103			
08	9558192V	100	102			
09	9558196V	101	105			
10	9558197V	102	105			
11	9558195V	103	105			
12	9557856MS	102	105			
13	9557856MSD	102	104			
14	10 QCS	99	101			
15	1 STND	101	105			
16						
17						
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28						
29						
30						

QC LIMITS

SMC1 (BFB) = 4-Bromofluorobenzene (80-120)

SMC2 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name EMSL ANALYTICAL Contract _____

Project No _____ Site _____ Location _____ Group _____

	SAMPLE NO	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	102	104			
02	9558500V	104	106			
03	9558501V	104	104			
04	9558191V	105	108			
05	9558192V	103	105			
06	9558312V	103	104			
07	9558313V	103	104			
08	9558311V	104	103			
09	9558314V	111	103			
10	9558315V	106	107			
11	9558316V	101	104			
12	9558317V	112	110			
13	9559346V	118	107			
14	9558196V	102	105			
15	1 STND	104	106			
16						
17						
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	QC LIMITS
SMC1 (BFB) = 4-Bromofluorobenzene	(80-120)
SMC2 (DCB) = 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE No. 14

VBLK01

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID C0697 D Lab Sample ID M BLANK

Date Analyzed 12/26/95 Time Analyzed 1741

GC Column DB-624 X 75M ID 0 53 (mm) Heated Purge (Y/N) N

Instrument ID 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES MS AND MSD

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	9557856V	9557856V	C0698 D	1815
02	9557857V	9557857V	C0699 D	1850
03	9558188V	9558188V	C0700 D	1924
04	9558189V	9558189V	C0701 D	1958
05	9558190V	9558190V	C0702 D	2032
06	9558191V	9558191V	C0703 D	2107
07	9558192V	9558192V	C0704 D	2141
08	9558196V	9558196V	C0705 D	2215
09	9558197V	9558197V	C0706 D	2250
10	9558195V	9558195V	C0707 D	2324
11	9557856MS	57856MS	C0708 D	2358
12	9557856MSD	57856MSD	C0709 D	0032
13	10 QCS	10 QCS	C0710 D	0107
14	1 STND	1 STND	C0711 D	0141
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COMMENTS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 115

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID M BLANK

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0697 D

Level (low/med) LOW Date Received NA

% Moisture not dec NA Date Analyzed 12/26/95

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1 1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1 1-Dichloroethane	50	U
594-20-7	2 2-Dichloropropane	50	U
156-59-2	cis-1 2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 116

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID M BLANK

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0697 D

Level (low/med) LOW Date Received NA

% Moisture not dec NA Date Analyzed 12/26/95

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene (total)	50	U
100-42-1	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-1	1,1 2 2-Tetrachloroethane	50	U
96-18-4	1 2 3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
106-43-4	4-Chlorotoluene	50	U
108-67-8	1,3 5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2 4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
541-73-1	1 3-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
91-20-3	Naphthalene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO: VBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Matrix (soil/water): WATER Lab Sample ID: M BLANK

Sample wt/vol: 25 0 (g/mL) ML Lab File ID: C0697 D

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

% Moisture not dec: NA Date Analyzed: 12/26/95

GC Column: DB-624 X 75M ID: 0 53 (mm) Dilution Factor: 1 0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units (ug/L or ug/Kg): ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1	NONE FOUND			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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30				

Quantitation Report

115

Data File : d \hpchem\1\data\c0697 d
Acq On : 26 Dec 95 5.41 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time. Dec 27 13 36 1995

Vial 3
Operator SRK
Inst 5972 - I
Multiplr 1 00

Method : c \HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update : Tue Dec 26 17:40.31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.14	96	1394456	5.00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.37	95	683004	5 19 ug/L	103 84%
57) 1,2-Dichlorobenzene-d4	22.17	152	407809	5.27 ug/L	105 39%
Target Compounds					Qvalue

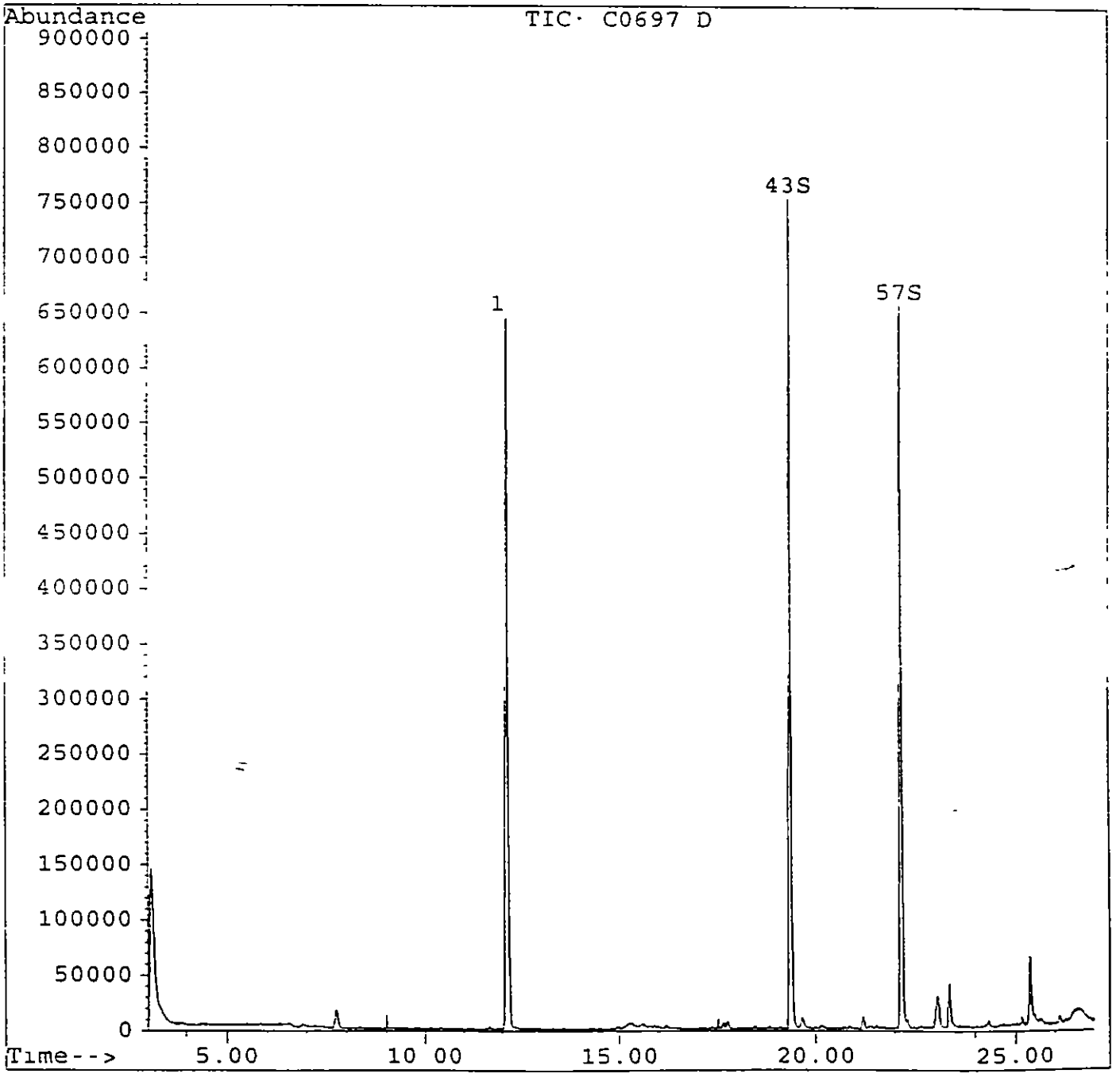
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d \hpchem\1\data\c0697 d
Acq On : 26 Dec 95 5 41 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 27 13 36 1995

Vial. 3
Operator SRK
Inst : 5972 - I
Multiplr: 1 00.

Method : c.\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40 31 1995
Response via : Multiple Level Calibration



Library Search Compound Report

120

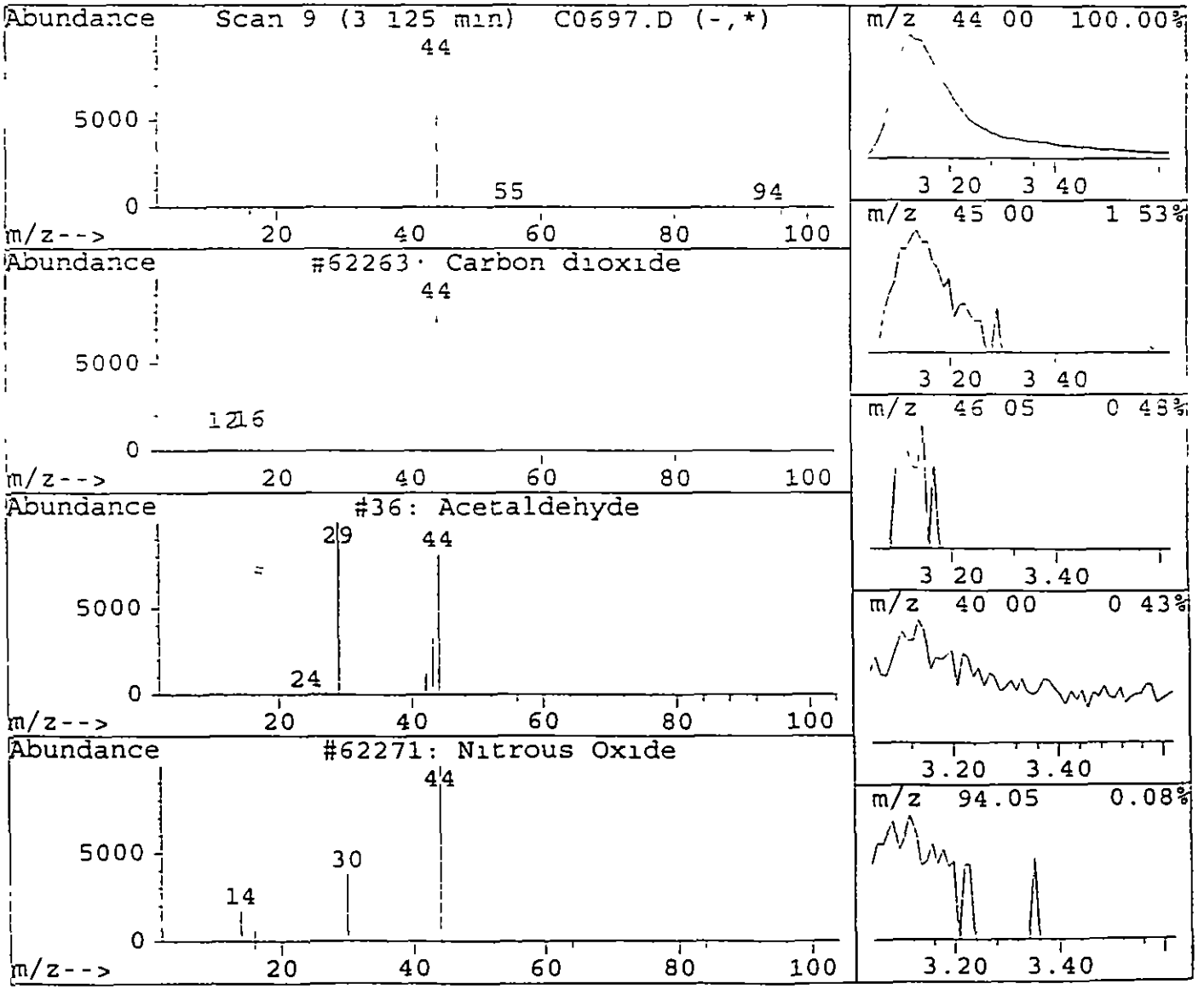
Data File . d \hpchem\1\data\c0697 d
Acq On 26 Dec 95 5 41 pm
Sample METHOD BLANK
Misc 25 ML

Vial 3
Operator SRK
Inst 5972 - I-
Multiplr 1 00

Method . c.\HPCHEM\1\METHODS\VOA524.M
Title : 524 2 Purgable Organics
Library . C \DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R T.
3.13	1.49 ug/L	861401	Fluorobenzene	12 14

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Acetaldehyde	36	000075-07-0	3
3	Nitrous Oxide	62271	010024-97-2	3
4	Ethyne, fluoro-	35	002713-09-9	2
5	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2



4A

SAMPLE NO

VBLK01

VOLATILE METHOD BLANK SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID C0778 D Lab Sample ID M BLANK

Date Analyzed 12/29/95 Time Analyzed 0821

GC Column DB-624 X 75M ID 0 53 (mm) Heated Purge (Y/N)

Instrument ID 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	9558500V	9558500V	C0779 D	0856
02	9558501V	9558501V	C0780 D	0931
03	9558191V	9558191V	C0781 D	1005
04	9558192V	9558192V	C0782 D	1040
05	9558312V	9558312V	C0783 D	1114
06	9558313V	9558313V	C0784 D	1149
07	9558311V	9558311V	C0785 D	1223
08	9558314V	9558314V	C0786 D	1257
09	9558315V	9558315V	C0787 D	1332
10	9558316V	9558316V	C0788 D	1406
11	9558317V	9558317V	C0789 D	1440
12	9559346V	9559346V	C0790 D	1514
13	9558196V	9558196V	C0791 D	1549
14	1 STND	1 STND	C0792 D	1623
15				
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COMMENTS

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 122

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID M BLANK

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0778 D

Level (low/med) LOW Date Received NA

% Moisture not dec NA Date Analyzed 12/29/96

GC Column DB-624 x 75m ID 0 53 (mm) Dilution Factor 1 0

CAS No	Compound	Concentration Units (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	90	
156-60-65	trans-1,2-Dichloroethene	50	U
75-34-3	1 1-Dichloroethane	50	U
594-20-7	2 2-Dichloropropane	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
74-97-1	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1 1 1-Trichloroethane	50	U
56-23-1	Carbon tetrachloride	50	U
563-58-6	1 1-Dichloropropene	50	U
71-43-2	Benzene	50	U
107-06-2	1,2-Dichloroethane	50	U
79-01-6	Trichloroethene	50	U
78-87-1	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-1	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	50	U
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 123

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0778.D

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

% Moisture: not dec. NA Date Analyzed: 12/29/96

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO 124
VBLK01

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID M BLANK

Sample wt/vol 25 0 (g/mL) ML Lab File ID C0778 D

Level (low/med) LOW Date Received

% Moisture not dec NA Date Analyzed 12/29/95

GC Column DB-624 X 75M ID 0 53 (mm) Dilution Factor 1 0

Soil Extract Volume (uL) Soil Aliquot Volume (uL)

Number TICs found 0 Concentration Units (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1	NONE FOUND			
2				
3				
4				
5				
6				
7				
8				
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10				
11				
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Quantitation Report

125

Data File : d \hpchem\1\data\c0778 d
Acq On 29 Dec 95 8 21 am
Sample METHOD BLANK
Misc 25 ML
Quant Time Dec 31 8 27 1995

Vial: 3
Operator SRK
Inst 5972 - I-
Multiplr: 1.00

Method : c \HPCHEM\1\METHODS\VOA524 M
Title . 524.2 Purgable Organics
Last Update : Tue Dec 26 17 40:31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.06	96	1420918	5 00 ug/L	-0 07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.31	95	683281	5.10 ug/L	101 94%
57) 1,2-Dichlorobenzene-d4	22.11	152	408458	5.18 ug/L	103.59%
Target Compounds					Qvalue
9) Methylene chloride	7.67	84	58341	0.93 ug/L	99

(#) = qualifier out of range (m) = manual integration

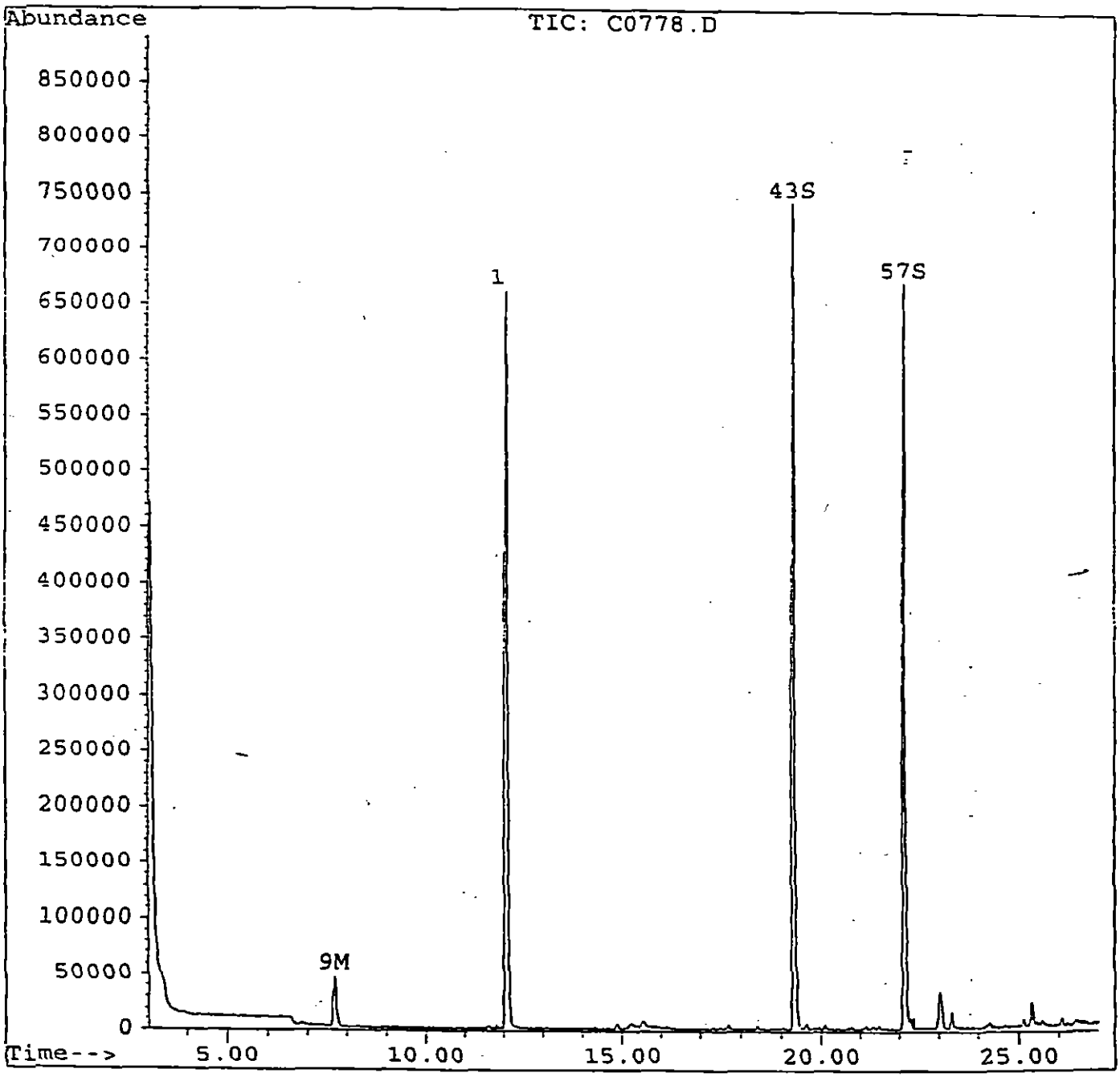
Quantitation Report

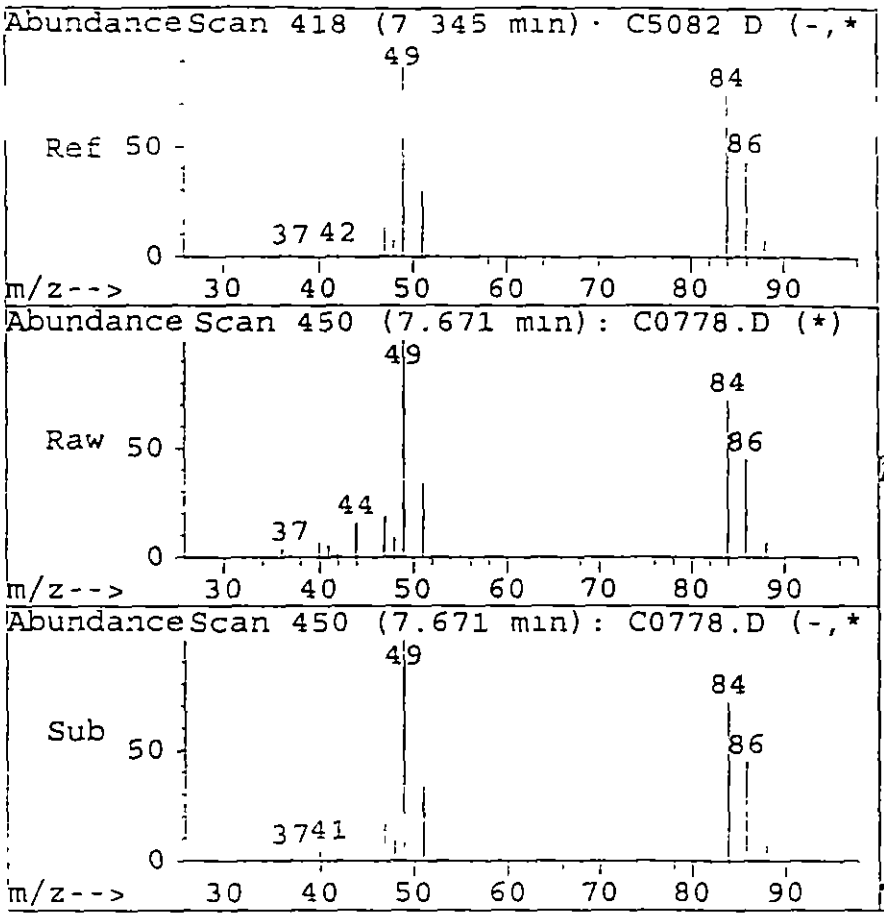
Data File : d:\hpchem\1\data\c0778.d
Acq On : 29 Dec 95 8:21 am
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 31 8:27 1995

Vial: 3
Operator: SRK
Inst : 5972 - I
Multiplr: 1.00

126

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration

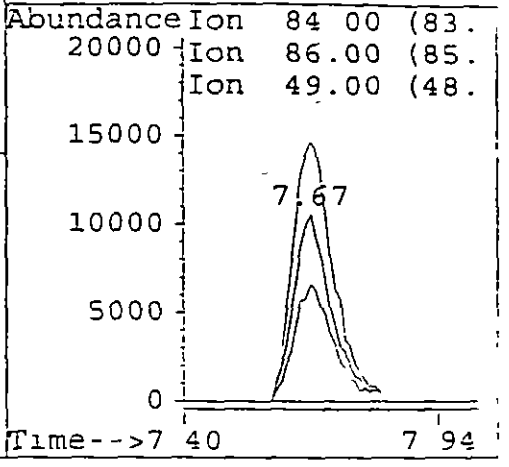




#9
Methylene chloride
Concen 0 93 ug/L
RT 7 67 min Scan# 45
Delta R T. -0.08 min
Lab File c0778.d
Acq 29 Dec 95 8·21 am

Tgt Ion.84 Resp· 58341

Ion	Ratio	Lower	Upper
84	100		
86	62 6	41.4	81.4
49	138.4	120.0	160.0
0	0 0	0.0	0.0



Library Search Compound Report

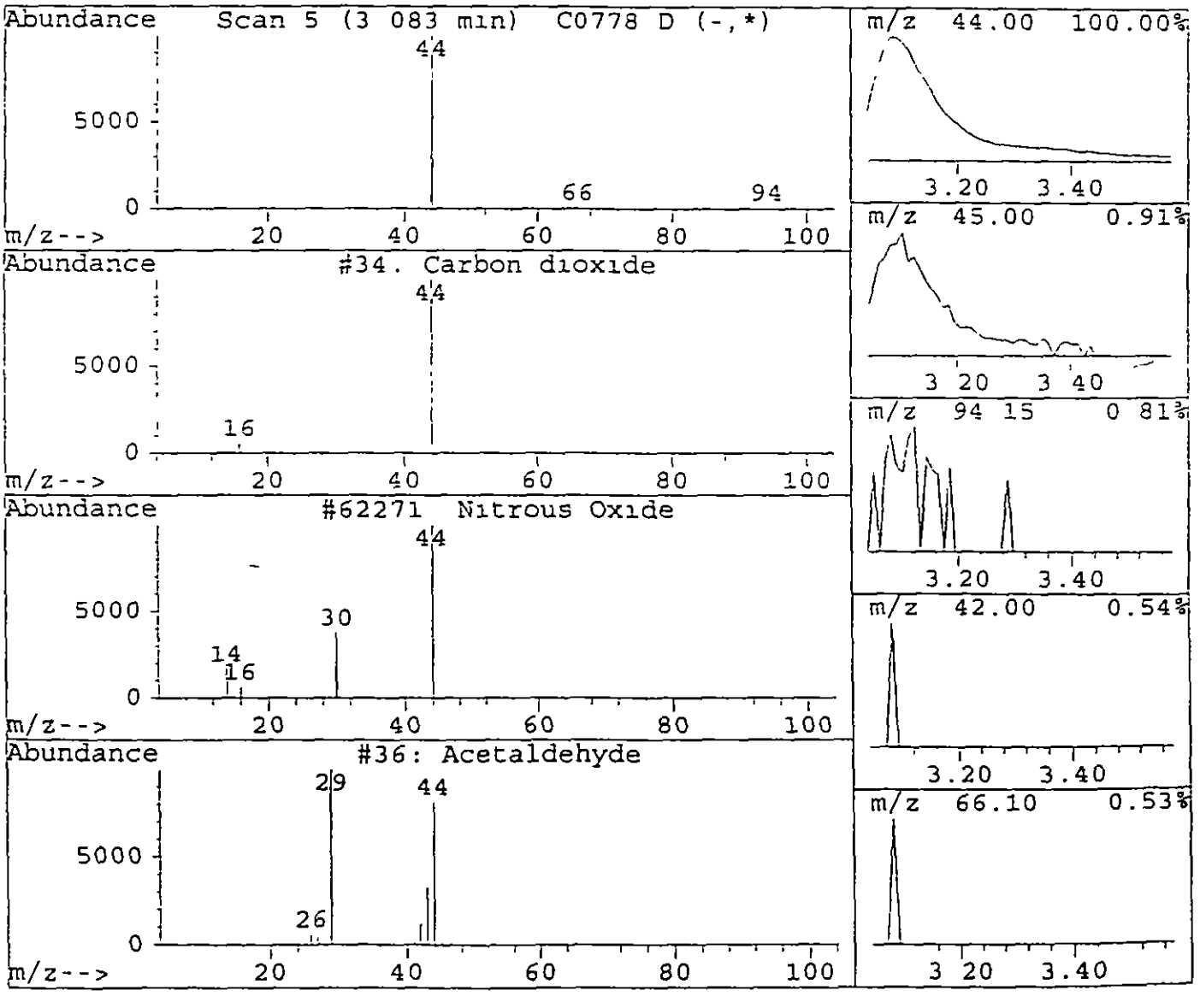
Data File d.\hpchem\1\data\c0778 d
Acq On 29 Dec 95 8 21 am
Sample METHOD BLANK
Misc . 25 ML

Vial 3
Operator SRK
Inst 5972 - Ir
Multiplr: 1 00

Method c \HPCHEM\1\METHODS\VOA524.M
Title : 524 2 Purgable Organics
Library : C.\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T
3.08	4.26 ug/L	2533529	Fluorobenzene	12.06

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Acetaldehyde	36	000075-07-0	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Initial Calibration

Non-Spiked Sample: C0698.D

	Spike Sample	Spike Duplicate Sample
File ID :	C0708.D	C0709.D
Sample :	9557856 MS	9557856 MSD
Acq Time:	26 Dec 95 11:58 pm	27 Dec 95 12:32 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	9	8	85	82	3	25	80-120
Chloromethane	0.0	10	8	8	84	84	0	25	80-120
Vinyl chloride	0.0	10	10	9	95	92	3	25	80-120
Bromomethane	0.0	10	11	12	111	119	7	25	80-120
Chloroethane	0.0	10	11	11	108	105	3	25	80-120
Trichlorofluorometha	0.0	10	10	10	97	97	0	25	80-120
1,1-Dichloroethene	0.0	10	10	10	99	98	1	25	80-120
Methylene chloride	0.6	10	9	9	86	85	2	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	101	101	0	25	80-120
1,1-Dichloroethane	0.0	10	10	10	102	101	1	25	80-120
2,2-Dichloropropane	0.0	10	9	9	90	89	2	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	104	104	0	25	80-120
Bromochloromethane	0.0	10	10	10	104	104	0	25	80-120
Chloroform	0.0	10	10	10	102	102	0	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	100	99	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	101	101	0	25	80-120
1,1-Dichloropropene	0.0	10	10	10	100	98	3	25	80-120
Benzene	0.0	10	10	10	102	102	0	25	80-120
1,2-Dichloroethane	0.0	10	11	11	107	105	1	25	80-120
Trichloroethene	0.0	10	10	10	102	102	1	25	80-120
1,2-Dichloropropane	0.0	10	10	10	104	104	1	25	80-120
Dibromomethane	0.0	10	10	10	104	102	2	25	80-120
Bromodichloromethane	0.0	10	10	10	104	103	1	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	103	101	2	25	80-120
Toluene	0.0	10	10	10	99	98	1	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	103	100	3	25	80-120
1,1,2-Trichloroethan	0.0	10	11	10	106	103	3	25	80-120
Tetrachloroethene	0.0	10	10	10	102	102	1	25	80-120
1,3-Dichloropropane	0.0	10	11	10	106	103	3	25	80-120
Dibromochloromethane	0.0	10	11	10	106	104	2	25	80-120
1,2-Dibromoethane	0.0	10	11	10	107	104	3	25	80-120
Chlorobenzene	0.0	10	10	11	105	106	1	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	11	11	114	106	7	25	80-120
Ethylbenzene	0.0	10	10	10	100	99	1	25	80-120
Xylene (para & meta)	0.0	20	20	18	99	92	7	25	80-120
Xylene (Ortho)	0.0	10	10	9	101	93	7	25	80-120
Styrene	0.0	10	10	8	98	83	16	25	80-120
Bromoform	0.0	10	10	10	100	98	2	25	80-120
Isopropylbenzene	0.0	10	10	10	101	101	1	25	80-120
Bromobenzene	0.0	10	11	11	106	107	0	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	11	10	106	104	2	25	80-120
1,2,3-Trichloropropa	0.0	10	11	11	108	106	1	25	80-120
n-Propylbenzene	0.0	10	10	10	100	99	0	25	80-120

2-Chlorotoluene	0 0	10	9	10	94	97	2	25	80-120
4-Chlorotoluene	0 0	10	10	10	103	102	1	25	80-120
1,3,5-Trimethylbenze	0 0	10	10	8	96	84	13	25	80-120
tert-Butylbenzene	0 0	10	11	11	111	110	1	25	80-120
1,2,4-Trimethylbenze	0 0	10	10	8	97	80	19	25	80-120
sec-Butylbenzene	0 0	10	10	10	102	101	0	25	80-120
1,3-Dichloropenzene	0.0	10	11	11	105	106	1	25	80-120
4-Isopropyltoluene	0 0	10	10	10	101	96	5	25	80-120
1,4-Dichlorobenzene	0.0	10	10	11	104	109	4	25	80-120
1,2-Dichlorobenzene	0.0	10	11	11	107	106	0	25	80-120
n-Butylbenzene	0.0	10	10	10	102	100	1	25	80-120
1,2-Dibromo-3-chloro	0.0	10	10	10	101	99	2	25	80-120
1,2,4-Trichlorobenze	0.0	10	10	10	103	104	1	25	80-120
Hexachlorobutadiene	0 0	10	10	10	100	100	0	25	80-120
Naphthalene	0.9	10	12	12	108	107	1	25	80-120
1,2,3-Trichlorobenze	0 0	10	10	11	105	105	1	25	80-120

Quantitation Report

131

Data File d \hpchem\1\data\c0708 d
Acq On 26 Dec 95 11 58 pm
Sample 9557856 MS
Misc 25 ML
Quant Time Dec 27 14 28 1995

Vial: 14
Operator: SRK
Inst 5972 - In
Multiplr 1 00

Method C \HPCHEM\1\METHODS\VOA524 M
Title : 524 2 Purgable Organics
Last Update Tue Dec 26 17 40 31 1995
Response via . Multiple Level Calibration

Internal Standards	R.T	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12 14	96	1289903	5 00 ug/L	0 00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 38	95	621347	5.11 ug/L	102 12%
57) 1,2-Dichlorobenzene-d4	22 17	152	377524	5.27 ug/L	105 47%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3 48	85	454768	8.59 ug/L	100
3) Chloromethane	3 89	50	436370	8 39 ug/L	97
4) Vinyl chloride	4 11	62	526351	9 52 ug/L	100
5) Bromomethane	4 79	94	346632	11 09 ug/L	96
6) Chloroethane	5 04	64	364082	10 84 ug/L	99
7) Trichlorofluoromethane	5.64	101	943265	9.71 ug/L	99
8) 1,1-Dichloroethene	6 76	96	598365	9.90 ug/L	95
9) Methylene chloride	7 76	84	524096	9 25 ug/L	95
10) trans-1,2-Dichloroethene	8 29	96	696270	10 10 ug/L	98
12) 1,1-Dichloroethane	9 08	63	1302738	10 16 ug/L	99
13) 2,2-Dichloropropane	10 14	77	951129	9.07 ug/L	98
14) cis-1,2-Dichloroethene	10.15	96	680168	10 39 ug/L	98
16) Bromochloromethane	10.57	128	263775	10 38 ug/L	97
17) Chloroform	10 71	83	1152833	10.18 ug/L	100
18) 1,1,1-Trichloroethane	11 02	97	1152279	10 00 ug/L	99
19) Carbon tetrachloride	11 32	117	1056508	10 14 ug/L	99
20) 1,1-Dichloropropene	11 31	75	1072549	10 01 ug/L	99
21) Benzene	11 66	78	2267277	10 26 ug/L	99
22) 1,2-Dichloroethane	11 69	62	446648	10 65 ug/L	100
23) Trichloroethene	12.77	95	914222	10 17 ug/L	99
24) 1,2-Dichloropropane	13.14	63	766848	10 44 ug/L	99
25) Dibromomethane	13.34	93	303491	10 44 ug/L	98
26) Bromodichloromethane	13.60	83	915060	10.41 ug/L	97
27) cis-1,3-Dichloropropene	14 35	75	831476	10 31 ug/L	100
28) Toluene	14 93	92	1595567	9 91 ug/L	99
29) trans-1,3-Dichloropropene	15 29	75	550786	10.34 ug/L	100
30) 1,1,2-Trichloroethane	15.61	83	301325	10.64 ug/L	97
31) Tetrachloroethene	15.88	166	1074633	10.17 ug/L	98
32) 1,3-Dichloropropane	15.90	76	583576	10.61 ug/L	100
33) Dibromochloromethane	16 30	129	590105	10 64 ug/L	97
34) 1,2-Dibromoethane	16 51	107	431194	10 73 ug/L	99
35) Chlorobenzene	17.35	112	1781113	10.47 ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.50	131	778509	11 40 ug/L	97
37) Ethylbenzene	17.54	91	3222686	10.07 ug/L	100
38) Xylene (para & meta)	17.74	106	2410170	19.74 ug/L	98
39) Xylene (Ortho)	18.45	106	1102810	10.07 ug/L	97
40) Styrene	18.47	104	1585439	9.81 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File d \hpchem\1\data\c0708 d
Acq On 26 Dec 95 11 58 pm
Sample 9557856 MS
Misc 25 ML
Quant Time Dec 27 14 28 1995

Vial 14
Operator SRK
Inst 5972 - I-
Multiplr. 1 00

Method C.\HPCHEM\1\METHODS\VOA524 M
Title : 524.2 Purgable Organics
Last Update Tue Dec 26 17:40:31 1995
Response via Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.81	173	308571	10 01 ug/L	98
42) Isopropylbenzene	19 10	105	3153419	10 11 ug/L m	0
44) Bromobenzene	19 66	156	757517	10.62 ug/L	99
45) 1,1,2,2-Tetrachloroethane	19 62	83	387323	10 62 ug/L	98
46) 1,2,3-Trichloropropane	19 69	75	380382	10 92 ug/L #	39
47) n-Propylbenzene	19 83	91	4308873	9 99 ug/L	93
48) 2-Chlorotoluene	20.00	91	2358529	9.46 ug/L	92
49) 4-Chlorotoluene	20 19	91	2755759	10.32 ug/L	99
50) 1,3,5-Trimethylbenzene	20.15	105	2528574	9.58 ug/L	99
51) tert-Butylbenzene	20.75	119	3090275	11 12 ug/L	99
52) 1,2,4-Trimethylbenzene	20 83	105	2499382	9 75 ug/L	99
53) sec-Butylbenzene	21 14	105	4256632	10 18 ug/L	99
54) 1,3-Dichlorobenzene	21.37	146	1498472	10.50 ug/L	98
55) 4-Isopropyltoluene	21 41	119	3342037	10 14 ug/L	99
56) 1,4-Dichlorobenzene	21 52	146	1441758	10 44 ug/L	99
58) 1,2-Dichlorobenzene	22 21	146	1156268	10 65 ug/L	97
59) n-Butylbenzene	22 15	91	3476871	10 21 ug/L	100
60) 1,2-Dibromo-3-chloropropan	23 62	75	69586	10 13 ug/L	96
61) 1,2,4-Trichlorobenzene	25.17	180	908930	10 33 ug/L	100
62) Hexachlorobutadiene	25.49	225	816995	10.01 ug/L	96
63) Naphthalene	25 64	128	1023095	11 73 ug/L	100
64) 1,2,3-Trichlorobenzene	26 13	180	669440	10 47 ug/L	99
65) Methyl-tert butyl ether	8 33	73	703704	10 25 ug/L	96
66) tert-Butyl Alcohol	8.09	59	24056	23 20 ug/L	100

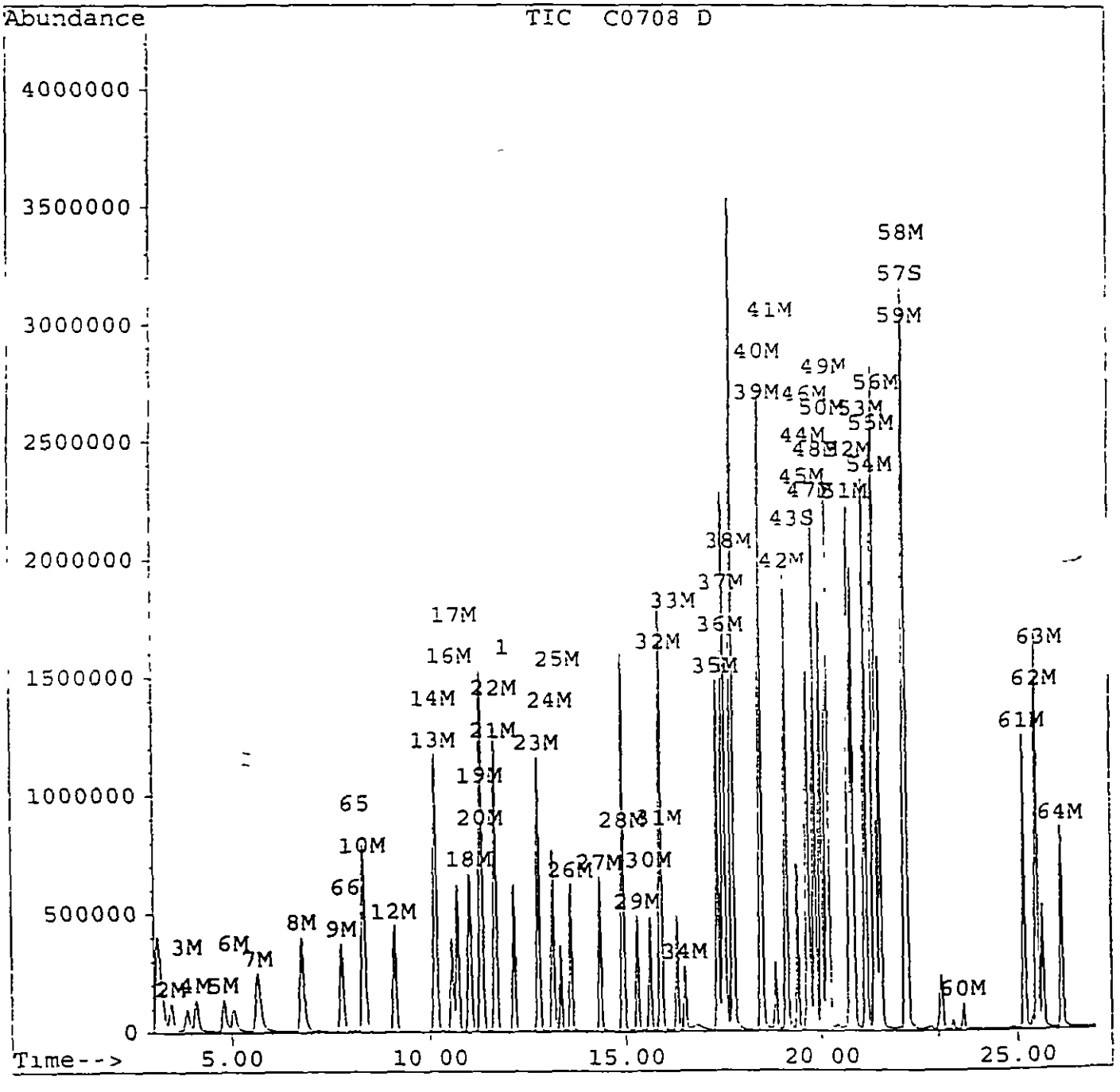
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d \hpchem\1\data\c0708.d
Acq On : 26 Dec 95 11 58 pm
Sample : 9557856 MS
Misc : 25 ML
Quant Time: Dec 27 14:28 1995

Vial 14
Operator SRK
Inst 5972 - In
Multiplr: 1 00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40 31 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File d \hpchem\1\data\c0709 d
Acq On 27 Dec 95 12 32 am
Sample 9557856 MSD
Misc 25 ML
Quant Time Dec 27 14:31 1995

Vial 15
Operator SRK
Inst 5972 - In
Multiplr 1 00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Last Update Tue Dec 26 17 40.31 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12 12	96	1165721	5 00 ug/L	-0 01
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19 37	95	558836	5 08 ug/L	101.63%
57) 1,2-Dichlorobenzene-d4	22.17	152	336903	5 21 ug/L	104 15%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.43	85	398790	8.34 ug/L	99
3) Chloromethane	3.82	50	393812	8.38 ug/L	100
4) Vinyl chloride	4.06	62	461378	9 23 ug/L	99
5) Bromomethane	4.75	94	335508	11 87 ug/L	98
6) Chloroethane	5 00	64	318893	10 51 ug/L	99
7) Trichlorofluoromethane	5 59	101	849039	9 67 ug/L	98
8) 1,1-Dichloroethene	6.71	96	536093	9 81 ug/L	98
9) Methylene chloride	7 72	84	464154	9.07 ug/L	96
10) trans-1,2-Dicnloroethene	8 27	96	628599	10.09 ug/L	98
12) 1,1-Dichloroethane	9.06	63	1169142	10.09 ug/L	98
13) 2,2-Dichloropropane	10.11	77	846833	8.93 ug/L	97
14) cis-1,2-Dichloroethene	10.13	96	615188	10 40 ug/L	95
16) Bromochloromethane	10 56	128	238044	10 37 ug/L	99
17) Chloroform	10 70	83	1038510	10 15 ug/L	100
18) 1,1,1-Trichloroethane	11 01	97	1034493	9 93 ug/L	99
19) Carbon tetrachloride	11.30	117	952154	10 11 ug/L	98
20) 1,1-Dichloropropene	11.30	75	944871	9 75 ug/L	100
21) Benzene	11.66	78	2041839	10 22 ug/L	98
22) 1,2-Dichloroethane	11.68	62	397980	10 50 ug/L	99
23) Trichloroethene	12.75	95	831010	10 23 ug/L	99
24) 1,2-Dichloropropane	13 12	63	688416	10 37 ug/L	100
25) Dibromomethane	13.33	93	269038	10 24 ug/L	96
26) Bromodichloromethane	13.60	83	820724	10 33 ug/L	100
27) cis-1,3-Dichloropropene	14.35	75	734963	10.08 ug/L	100
28) Toluene	14.92	92	1426913	9.81 ug/L	99
29) trans-1,3-Dichloropropene	15.28	75	483118	10 04 ug/L	100
30) 1,1,2-Trichloroethane	15.60	83	264644	10 34 ug/L	99
31) Tetrachloroethene	15.88	166	976963	10.23 ug/L	99
32) 1,3-Dichloropropane	15.89	76	513145	10.32 ug/L	99
33) Dibromochloromethane	16.30	129	521342	10 40 ug/L	97
34) 1,2-Dibromoethane	16.50	107	379373	10 45 ug/L	99
35) Chlorobenzene	17.35	112	1625906	10 57 ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.49	131	653312	10.59 ug/L	99
37) Ethylbenzene	17.53	91	2874005	9.94 ug/L	99
38) Xylene (para & meta)	17.73	106	2025997	18.36 ug/L	99
39) Xylene (Ortho)	18.44	106	925083	9.35 ug/L	100
40) Styrene	18.46	104	1221539	8.36 ug/L m	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File d \hpchem\1\data\c0709 d
Acq On 27 Dec 95 12 32 am
Sample 9557856 MSD
Misc 25 ML
Quant Time Dec 27 14 31 1995

Vial 15
Operator SRK
Inst : 5972 - I
Multiplr 1.00

Method c \HPCHEM\1\METHODS\VOA524 M
Title 524.2 Purgable Organics
Last Update · Tue Dec 26 17:40·31 1995
Response via . Multiple Level Calibration

	Compound	R T	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18 81	173	272756	9 79 ug/L	99
42)	Isopropylbenzene	19 09	105	2834796	10 05 ug/L m	0
44)	Bromobenzene	19 66	156	687913	10 67 ug/L	99
45)	1,1,2,2-Tetrachloroethane	19.62	83	341913	10 37 ug/L	99
46)	1,2,3-Trichloropropane	19 69	75	339785	10.79 ug/L #	55
47)	n-Propylbenzene	19.84	91	3875450	9.94 ug/L	94
48)	2-Chlorotoluene	20.00	91	2181447	9.68 ug/L	90
49)	4-Chlorotoluene	20.20	91	2471632	10.24 ug/L	100
50)	1,3,5-Trimethylbenzene	20.15	105	2001607	8 39 ug/L m	98
51)	tert-Butylbenzene	20.74	119	2766504	11.01 ug/L	98
52)	1,2,4-Trimethylbenzene	20 83	105	1874573	8.09 ug/L	98
53)	sec-Butylbenzene	21 15	105	3846072	10 18 ug/L	99
54)	1,3-Dichlorobenzene	21.36	146	1366502	10 60 ug/L	98
55)	4-Isopropyltoluene	21 40	119	2875318	9.65 ug/L	100
56)	1,4-Dichlorobenzene	21 52	146	1357652	10.87 ug/L	99
58)	1,2-Dichlorobenzene	22.21	146	1041982	10.62 ug/L	97
59)	n-Butylbenzene	22.16	91	3101072	10.08 ug/L	99
60)	1,2-Dibromo-3-chloropropan	23.62	75	61392	9 89 ug/L	88
61)	1,2,4-Trichlorobenzene	25.17	180	828685	10.42 ug/L	100
62)	Hexachlorobutadiene	25.50	225	739015	10 02 ug/L	99
63)	Naphthalene	25 64	128	914925	11 61 ug/L	100
64)	1,2,3-Trichlorobenzene	26 13	180	608513	10 53 ug/L	99
65)	Methyl-tert butyl ether	8 31	73	615540	9 92 ug/L	100
66)	tert-Butyl Alcohol	8 07	59	20790	22 19 ug/L	100

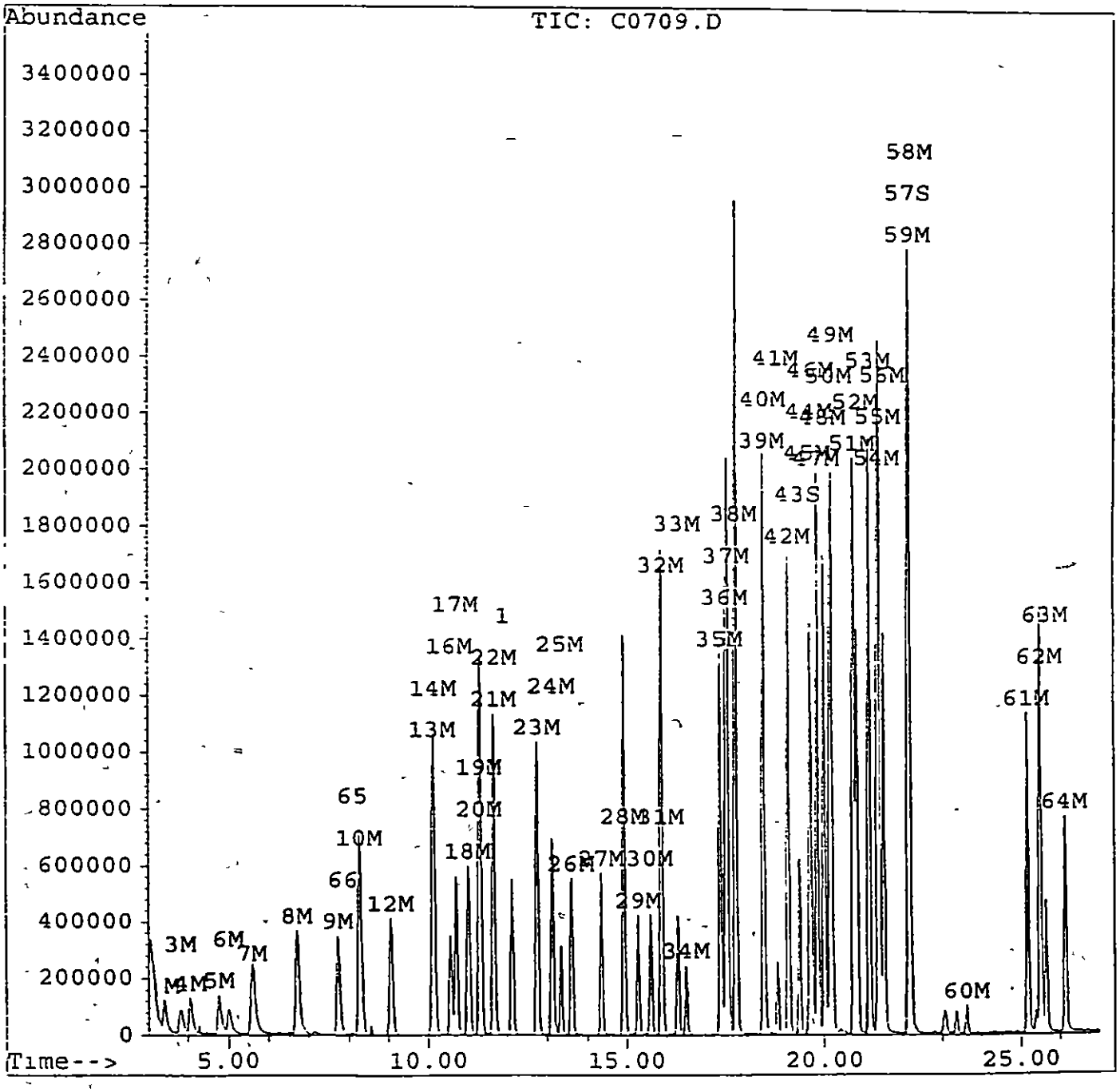
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0709 d
Acq On : 27 Dec 95 12:32 am
Sample : 9557856 MSD
Misc : 25 ML
Quant Time: Dec 27 14 31 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c.\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Dec 26 17:40:31 1995
Response via : Multiple Level Calibration



GC/MS SEMIVOLATILE DATA PACKAGE

58

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMSL Analytical Contract: _____

Lab Code: ____ Case No: _____ SAS No: _____ SDG No: _____

Lab File ID: B8951 D DFTPP Injection Date: 10/22/95

Instrument ID: ABNA DFTPP Injection Time: 1620

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30 0 - 80 0% of mass 198	58.1		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	82.8		
70	Less than 2 0% of mass 69	0 2	0 3	)1
127	25.0 - 75 0% of mass 198	44 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	20 2		
365	Greater than 0 75% of mass 198	2 5		
441	Present, but less than mass 443	10.3		
442	40.0 - 110 0% of mass 198	72.0		
443	15 0 - 24.0% of mass 442	13.9	19 2	)2

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

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

	EPA SAMPLE N	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
#		20 STANDARD	B8952 D	10/22/95	1658
#		50 STANDARD	B8953 D	10/22/95	1749
#		80 STANDARD	B8954 D	10/22/95	1842
#		120 STANDARD	B8955 D	10/22/95	1933
#		160 STANDARD	B8956 D	10/22/95	2024
#					
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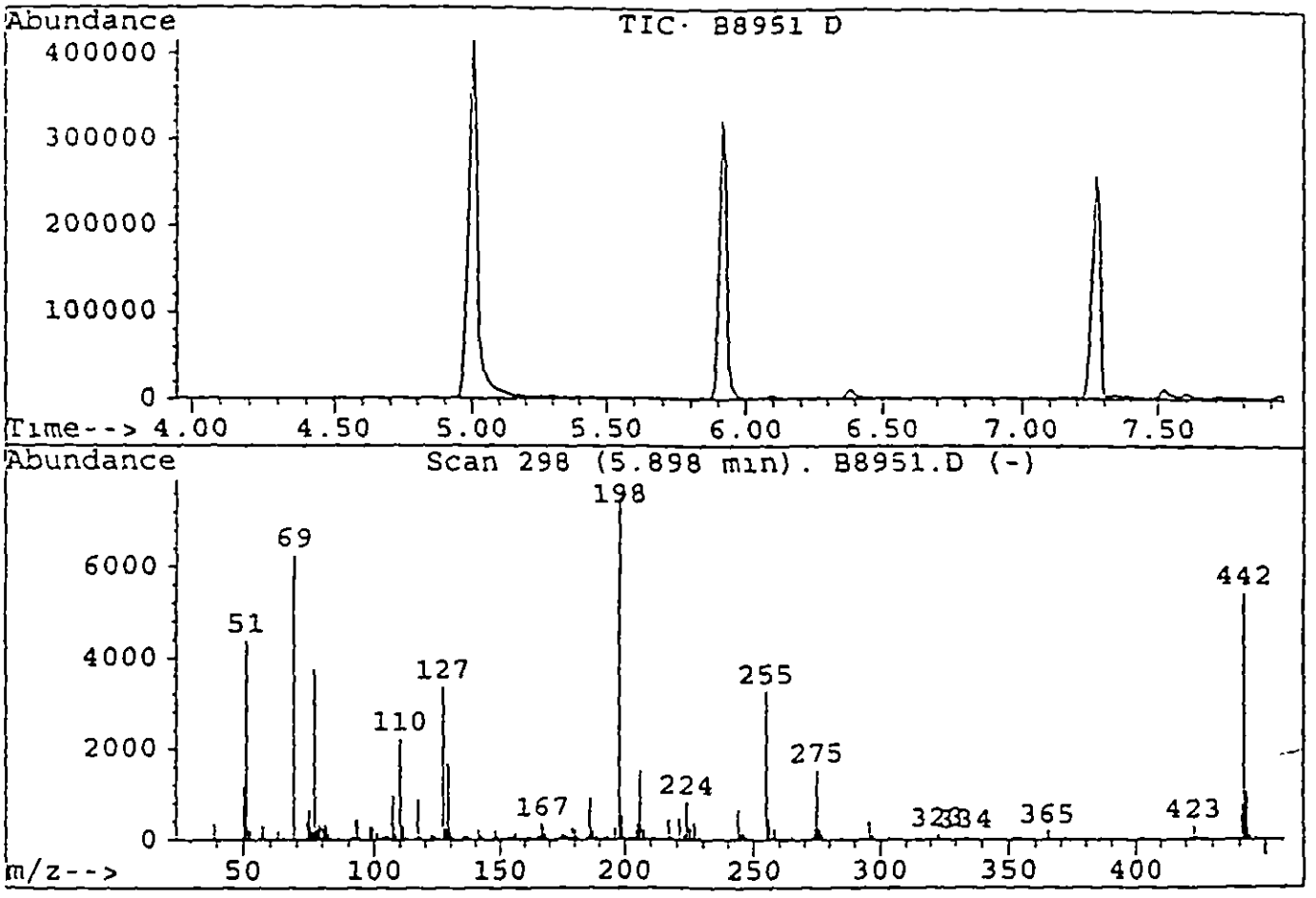
DFTPP

Data File C \HPCHEM\1\DATA2\B8951 D Vial 1
Acq On 22 Oct 95 4 20 pm Operator SCOTTV
Sample DFTPP Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00

Method C \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration



Peak Apex is scan: 303

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.1	4393	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	82.8	6258	PASS
70	69	0	2	0.3	17	PASS
127	198	40	60	44.6	3367	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	7557	PASS
199	198	5	9	6.7	509	PASS
275	198	10	30	20.2	1529	PASS
365	198	1	100	2.5	192	PASS
441	443	0	100	74.6	781	PASS
442	198	40	100	72.0	5439	PASS
443	442	17	23	19.2	1047	PASS

Modified subtracted

m/z	abund	m/z	abund	m/z	abund	m/z	abund
38 10	48	53 20	32	66 25	16	81 05	330
39 10	377	55 15	21	69 05	6258	82 05	125
40 05	27	56 05	141	70 00	17	83 10	43
41 10	10	57 15	307	73 05	24	85 15	33
44 05	7	58 05	32	74 10	427	86 05	107
46 60	11	59 95	22	75 05	682	87 05	21
47 80	16	61 05	55	76 05	197	91 15	87
49 10	37	61.95	44	77.05	3745	92 00	60
50 10	1180	63 05	185	78.10	240	93 00	454
51 10	4393	64 15	16	79.05	321	94 00	50
52.15	214	65 10	64	80.15	246	97.10	3

Scan 298 (5 898 min) B8951 D

odified subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	325	110.00	2222	122.95	109	137.05	74
99.00	281	111.00	317	124.10	52	140.95	229
100.10	5	112.00	46	125.05	31	141.95	94
100.95	139	113.10	20	127.00	3367	142.95	55
102.10	18	115.90	71	128.00	243	145.95	27
102.90	73	117.00	896	129.00	1693	147.00	82
104.00	105	117.90	36	129.90	141	148.00	203
105.00	92	118 10	58	130.95	51	148.95	66
105.90	39	119.00	20	134.00	53	151.05	39
107.00	988	120.00	31	134.95	101	151.85	31
108.00	125	122.00	109	136.05	69	152.05	32

an 298 (5.898 min): B8951.D

odified:subtracted

m/z	abund.	m/z	abund	m/z	abund.	m/z	abund.
152.95	60	165.05	106	176.90	82	187.90	28
154.05	51	166.05	68	177.80	28	188.85	72
154.95	105	166.90	354	178.10	24	191.10	44
156.05	158	167.95	121	178.90	282	192.00	61
156 85	36	169.10	30	180.00	203	193.00	102
157.95	40	170.10	16	181.00	77	194.00	21
158.95	24	171.90	35	183.10	15	195.10	31
159.25	25	173.00	24	183.90	27	195.95	283
159.95	67	173.95	67	184.90	108	197.90	7557
160.95	104	175.00	148	186.00	914	198.90	509
161.75	45	175.90	65	186.95	185	200.00	46

can 298 (5 898 min): B8951.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.60	61	215.95	46	231.05	30	246.80	43
202.90	37	216.80	458	233.85	24	248.80	25
203.95	217	217.95	63	234.85	34	254.85	3269
204.95	357	220.95	493	236.95	39	255.90	462
205.95	1535	222.90	129	238.85	14	256.90	41
206.95	222	223.90	845	240.80	39	257.90	257
207.85	61	224.95	251	242.00	53	258.90	35
210.00	28	226.05	23	243.00	42	264.80	100
210.65	74	226.90	375	243.90	676	265.60	2
211.15	58	227.85	48	244.90	125	271.10	17
214.95	32	228.85	86	245.90	118	272.90	118

n 293 (5.893 min): B8951.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.95	258	303.05	54	340.80	21	382.75	22
274.90	1529	314.00	18	351.85	43	389.90	20
275.90	208	314.80	56	352.85	33	401.90	34
276.80	117	315.80	36	353.85	41	402.80	36
277.65	28	321.00	19	354.65	19	420.80	38
284.25	14	322.85	124	364.75	192	421.80	40
284.55	12	323.80	30	365.65	20	422.75	303
285.05	41	326.80	31	370.75	21	423.85	52
292.75	37	332.00	18	371.85	86	440.80	781
295.80	403	333.80	79	372.75	20	441.85	5439
296.85	79	334.90	23	372.95	20	442.85	1047

n 298 (5.898 min): B8951.D

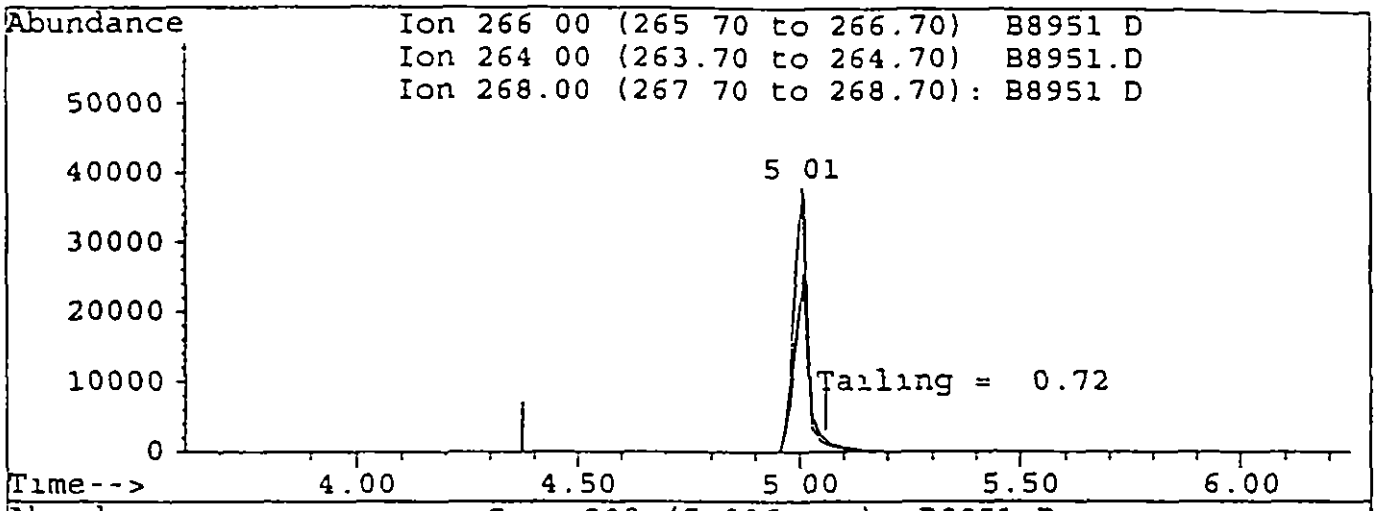
ified:subtracted

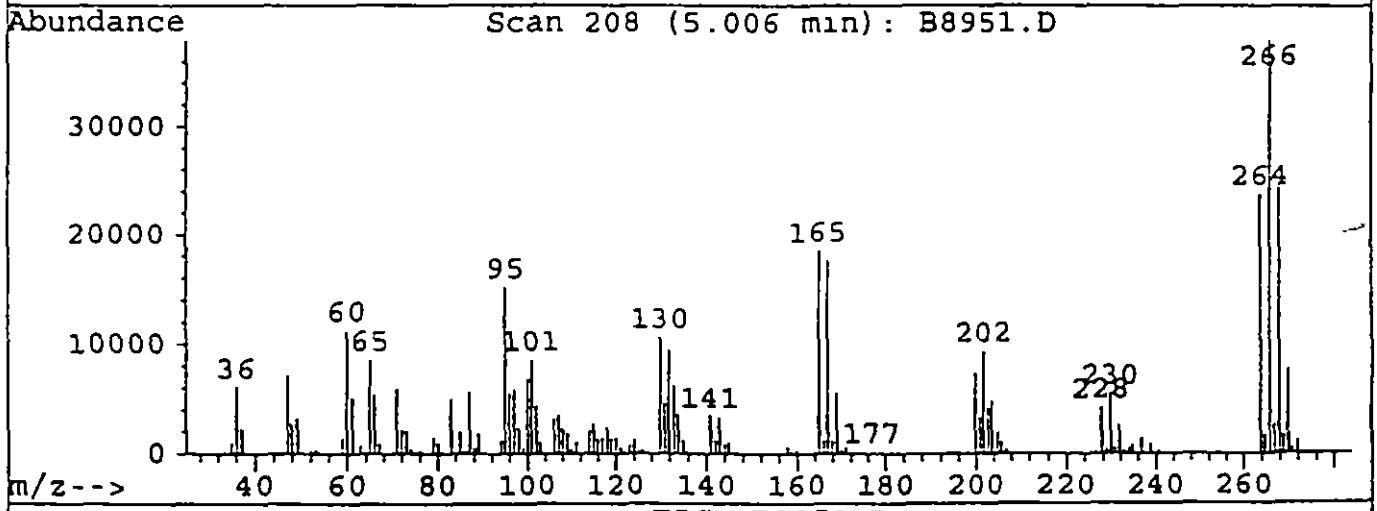
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.85	86						

Quantitation Report

Data File C \HPCHEM\1\DATA2\B8951 D Vial 1
Acq On 22 Oct 95 4 20 pm Operator SCOTTV
Sample DFTPP Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 23 14 06 1995

Method C \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Thu Sep 21 12 47.27 1995
Response via Multiple Level Calibration





TIC: B8951.D

(1) Pentachlorophenol (CM)

5.01min 266.46ug/mL

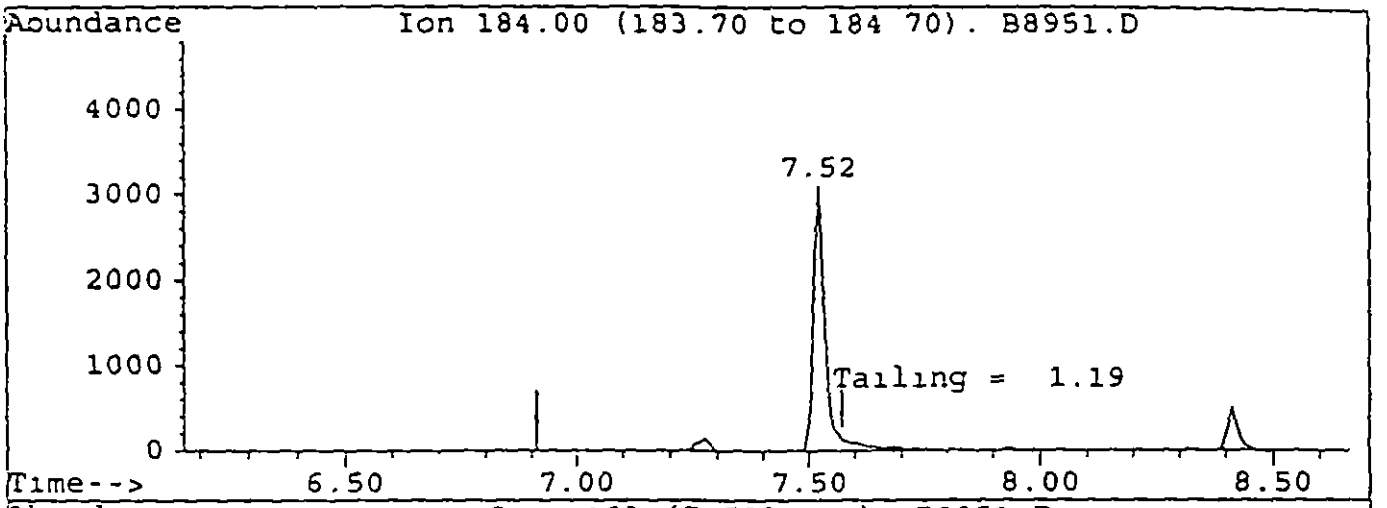
response 88011

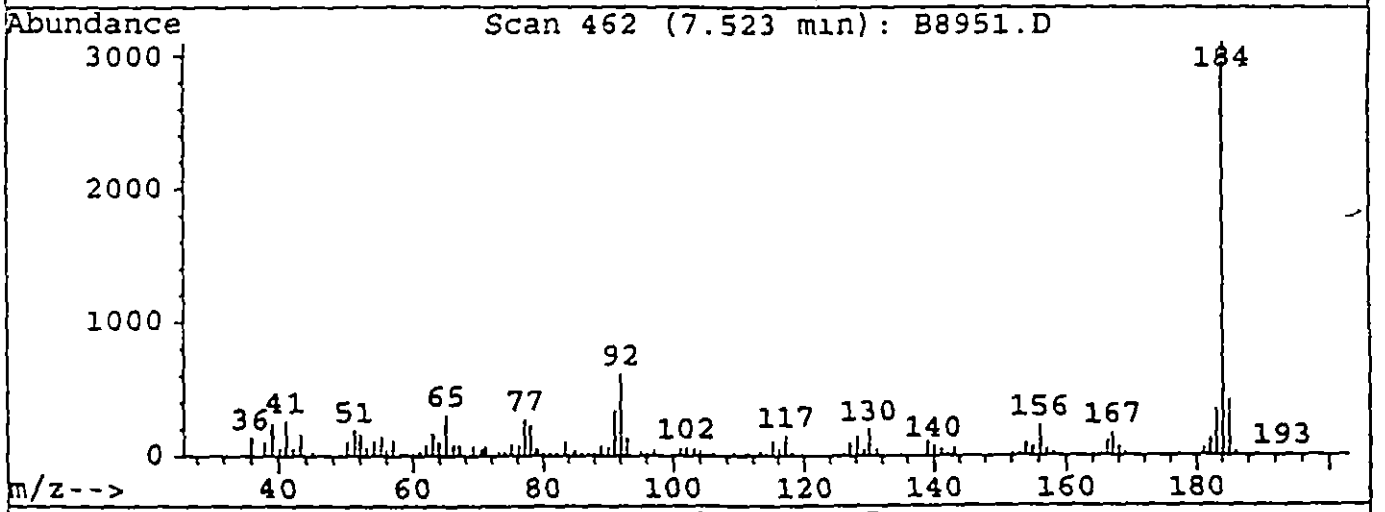
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	67.02
268.00	64.70	64.58
0.00	0.00	0.00

Quantitation Report

Data File C \HPCHEM\1\DATA2\B8951 D Vial 1
Acq On 22 Oct 95 4 20 pm Operator SCOTTV
Sample DFTPP Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 23 14 06 1995

Method C \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Thu Sep 21 12 47:27 1995
Response via Multiple Level Calibration





TIC: B8951.D

(2) Benzidine
7.52min 18.09ug/ml
response 5556

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.298	1.281	1.315	1.267	1.215	1.275	2.98
3)	S	Phenol-d5	2.193	2.110	2.121	2.008	1.912	2.069	5.30
4)	M	N-nitrosodimethylamin	0.949	0.938	0.778	0.886		0.887	8.80
5)		Pyridine	0.977	0.898	0.594	0.908	0.596	0.795	23.24
6)	CM	Phenol	2.058	1.866	1.941	1.876	1.963	1.941	4.00
7)	MT	bis(2-Chloroethyl)eth	2.339	2.271	2.478	2.298	2.478	2.373	4.17
8)	M	2-Chlorophenol	1.340	1.326	1.370	1.335	1.293	1.333	2.08
9)	MT	1,3-Dichlorobenzene	1.333	1.349	1.417	1.396	1.341	1.367	2.72
10)	CM	1,4-Dichlorobenzene	1.341	1.339	1.435	1.444	1.359	1.383	3.74
11)	M	1,2-Dichlorobenzene	1.327	1.309	1.391	1.387	1.322	1.347	2.88
12)	T	2-Methylphenol	1.282	1.266	1.246	1.281	1.320	1.279	2.15
13)	M	bis(2-chloroisopropyl	3.117	2.080	2.102	1.860	2.012	2.234	22.50
14)	T	4-Methylphenol	1.346	1.396	1.393	1.481	1.395	1.402	3.48
15)	PM	N-Nitroso-Di-n-propyl	1.635	1.504	1.491	1.495	1.515	1.528	3.97
16)	M	Hexachloroethane	0.866	0.842	0.908	0.877	0.847	0.868	3.04
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.536	0.548	0.540	0.529	0.557	0.542	2.00
19)	M	Nitrobenzene	0.665	0.462	0.486	0.489	0.494	0.519	15.90
20)	M	Isophorone	1.023	1.026	1.061	1.021	1.376	1.101	13.99
21)	MC	2-Nitrophenol	0.233	0.242	0.253	0.246	0.223	0.239	4.94
22)	M	2,4-Dimethylphenol	0.406	0.400	0.396	0.376	0.355	0.387	5.48
23)	M	bis(2-Chloroethoxy)me	0.594	0.586	0.623	0.583	0.629	0.603	3.57
24)	MC	2,4-Dichlorophenol	0.301	0.295	0.305	0.294	0.281	0.295	3.20
25)	M	1,2,4-Trichlorobenzen	0.299	0.303	0.314	0.309	0.297	0.304	2.24
26)	M	Naphthalene	0.999	1.022	0.994	1.016	0.985	1.003	1.53
27)	T	4-Chloroaniline	0.476	0.462	0.491	0.449	0.476	0.470	3.41
28)	MC	Hexachlorobutadiene	0.155	0.162	0.164	0.161	0.155	0.160	2.53
29)	MC	4-Chloro-3-methylphen	0.402	0.386	0.385	0.392	0.376	0.388	2.50
30)	M	2-Chloronaphthalene	0.643	0.619	0.649	0.634	0.627	0.634	1.88
31)	T	2-Methylnaphthalene	0.823	0.860	0.870	0.905	0.890	0.870	3.60
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.305	0.321	0.324	0.243	0.254	0.289	13.21
34)	MC	2,4,6-Trichlorophenol	0.491	0.481	0.415	0.404	0.339	0.426	14.61
35)	T	2,4,5-Trichlorophenol	0.271	0.293	0.373	0.403	0.396	0.347	17.62
36)	S	2-Fluorobiphenyl	1.238	1.248	1.189	1.241	1.184	1.220	2.53
37)	T	2-Nitroaniline	0.841	0.736	0.817	0.751	0.769	0.783	5.72
38)	M	Dimethylphthalate	1.333	1.293	1.362	1.377	1.474	1.368	4.92
39)	M	Acenaphthylene	1.777	1.826	1.858	1.846	1.697	1.801	3.66
40)	M	2,6-Dinitrotoluene	0.243	0.258	0.320	0.377	0.339	0.308	18.23
41)	T	3-Nitroaniline	0.298	0.316	0.358	0.366	0.372	0.342	9.62

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.987	1.017	1.050	1.041	1.005	1.020	2.52
43)	MP	2,4-Dinitrophenol	0.242	0.217	0.207	0.173		0.210	13.59
44)	PM	4-Nitrophenol	0.243	0.224	0.225	0.220		0.228	4.42
45)	T	Dibenzofuran	1.535	1.581	1.527	1.568	1.461	1.534	3.05
46)	M	2,4-Dinitrotoluene	0.350	0.503	0.509	0.467	0.434	0.452	14.36
47)	M	Diethylphthalate	1.464	1.545	1.538	1.580	1.653	1.556	4.40
48)	M	Fluorene	1.177	1.197	1.128	1.203	1.132	1.167	3.03
49)	M	4-Chlorophenyl-phenyl	0.476	0.512	0.504	0.514	0.538	0.509	4.32
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.201	0.219	0.237	0.246	0.248	0.230	8.80
52)	MC	4,6-Dinitro-2-methylp	0.143	0.147	0.146	0.157		0.148	4.25
53)	T	n-Nitrosodiphenylamin	0.502	0.521	0.559	0.565	0.566	0.543	5.37
54)	S	2,4,6-Tribromophenol	0.137	0.130	0.130	0.122	0.114	0.127	6.88
55)		1,2-Diphenylhydrazine	1.727	1.765	1.839	1.876	1.714	1.784	3.97
56)	M	4-Bromophenyl-phenyle	0.170	0.189	0.192	0.186	0.198	0.187	5.57
57)	M	Hexachlorobenzene	0.234	0.240	0.250	0.239	0.223	0.237	4.16
58)	CM	Pentachlorophenol	0.176	0.169	0.159	0.146		0.163	7.89
59)	M	Phenanthrene	1.052	1.101	1.091	1.128	1.062	1.087	2.81
60)	M	Anthracene	1.028	1.059	1.084	1.099	1.067	1.068	2.50
61)		Carbazole	1.073	1.102	1.155	1.045	0.948	1.065	7.19
62)	M	Di-n-butylphthalate	1.934	2.050	1.972	2.064	2.036	2.011	2.76
63)	MC	Fluoranthene	1.064	1.116	1.124	1.122	1.034	1.092	3.74
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.292	0.287	0.271	0.235	0.282	0.274	8.41
66)	M	Pyrene	1.738	1.691	1.628	1.557	1.388	1.600	8.56
67)	S	Terphenyl-d14	1.136	1.078	0.983	0.913	0.857	0.994	11.56
68)	M	Butylbenzylphthalate	1.325	1.272	1.223	1.223	1.183	1.245	4.39
69)	M	Benzo[a]anthracene	1.452	1.523	1.454	1.486	1.231	1.429	8.01
70)	M	3,3'-Dichlorobenzidin	0.363	0.382	0.412	0.399	0.375	0.386	5.04
71)	M	Chrysene	0.772	0.885	0.894	0.868	0.865	0.857	5.70
72)	M	bis(2-Ethylhexyl)phth	1.753	1.891	1.767	1.774	1.738	1.785	3.42
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	5.446	5.792	5.574	5.955		5.692	3.97
75)	M	Benzo[b]fluoranthene	1.854	2.099	1.614	2.424	1.772	1.952	16.21
76)	m	Benzo[k]fluoranthene	1.092	1.112	1.104	1.200	1.303	1.162	7.73
77)	mc	Benzo[a]pyrene	1.053	1.059	1.082	1.079	1.132	1.081	2.85
78)	m	Indeno[1,2,3-cd]pyren	0.593	0.636	0.621	0.586	0.371	0.561	19.33
79)	m	Dibenz[a,h]anthracene	0.600	0.602	0.587	0.572	0.382	0.549	17.12
80)	M	Benzo[g,h,i]perylene	0.552	0.576	0.573	0.534	0.312	0.510	21.93
81)		1-Methyl naphthalene						0.000#	-1.00
82)		7,12-Dimethylbenz(a)a						0.000#	-1.00

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Oct 25 10:15:01 1995
Response via : Initial Calibration

Calibration Files
160 =B8956.D 120 =B8955.D 80 =B8954.D
50 =B8953.D 20 =B8952.D

	Compound	160	120	80	50	20	Avg	%RSD
83)	Quinoline						0.000#	-1.00
84)	Thiophenol						0.000#	-1.00
85)	4-Methyl chrysene						0.000#	-1.00
86)	Dibenz(a,j)acridine						0.000#	-1.00
87)	Indene						0.000#	-1.00
88)	Benzyl alcohol						0.000#	-1.00
89)	Benzoic acid						0.000#	-1.00

#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b8952.d
Acq On : 22 Oct 95 4:58 pm
Sample : 20 STD..... Converted from RTE.d
Misc :
Quant Time: Oct 25 9:45 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	29442	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.41	136	115955	40.00	ug/mL	-0.35
32) Acenaphthene-d10	17.73	164	69183	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.20	188	103757	40.00	ug/ml	-0.38
64) Chrysene-d12	30.29	240	75851	40.00	ug/mL	-0.40
73) Perylene-d12	34.27	264	29259	40.00	ug/mL	-0.43
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	44724	46.49	ug/mL	46.49%
3) Phenol-d5	8.08	99	70383	45.87	ug/mL	45.87%
18) Nitrobenzene-d5	10.37	82	80764	52.70	ug/mL	52.70%
36) 2-Fluorobiphenyl	15.88	172	102384	48.24	ug/mL	48.24%
54) 2,4,6-Tribromophenol	20.14	330	14825	53.50	ug/mL	53.50%
67) Terphenyl-d14	27.36	244	81257	33.34	ug/mL	33.34%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	15448	25.20	ug/ml	100
6) Phenol	8.11	94	28900	20.59	ug/mL	100
7) bis(2-Chloroethyl)ether	12.10	93	36472	22.04	ug/mL	94
8) 2-Chlorophenol	8.09	128	19030	19.10	ug/mL#	81
9) 1,3-Dichlorobenzene	8.48	146	19737	19.33	ug/mL	96
10) 1,4-Dichlorobenzene	8.73	146	20003	19.12	ug/mL	96
11) 1,2-Dichlorobenzene	9.12	146	19457	19.34	ug/mL	97
12) 2-Methylphenol	9.81	108	19438	21.22	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.79	45	29616	23.05	ug/mL#	40
14) 4-Methylphenol	10.31	108	20537	20.05	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.18	70	22300	21.23	ug/mL	94
16) Hexachloroethane	10.08	117	12474	20.33	ug/mL#	63
19) Nitrobenzene	10.43	77	28618	20.36	ug/mL	93
20) Isophorone	10.37	82	79753	25.72	ug/mL#	67
21) 2-Nitrophenol	11.37	139	12913	20.42	ug/mL#	86
22) 2,4-Dimethylphenol	11.83	107	20567	18.72	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.10	93	36472	21.56	ug/mL#	100
24) 2,4-Dichlorophenol	12.16	162	16269	19.83	ug/mL#	93
25) 1,2,4-Trichlorobenzene	12.32	180	17221	20.08	ug/mL	95
26) Naphthalene	12.47	128	57119	19.89	ug/mL	100
27) 4-Chloroaniline	12.84	127	27603	20.47	ug/mL	99
28) Hexachlorobutadiene	12.99	225	9013	20.60	ug/mL	95
29) 4-Chloro-3-methylphenol	14.57	107	21812	20.86	ug/mL	96
30) 2-Chloronaphthalene	16.05	162	36338	21.53	ug/ml#	100
31) 2-Methylnaphthalene	14.61	142	51624	30.41	ug/mL	95
33) Hexachlorocyclopentadiene	15.13	237	8772	19.27	ug/mL#	90
34) 2,4,6-Trichlorophenol	15.59	196	11710	15.31	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	13699	21.15	ug/mL	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

146

Data File: c:\hpchem\1\data2\b8952.d — Vial: 2
Acq On: 22 Oct 95 4:58 pm — Operator: SCOTTV
Sample: 20 STD — Converted from RTE.d — Inst: ABNA
Misc — BT Multiplr: 1.00
Quant Time: Oct 25 9:45 1995

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via: Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.83	65	26617	23.54	ug/mL	72
38)	Dimethylphthalate	17.31	163	50983	22.95	ug/mL#	13
39)	Acenaphthylene	17.25	152	58691	19.03	ug/mL	98
40)	2,6-Dinitrotoluene	17.40	165	11726	19.95	ug/mL#	87
41)	3-Nitroaniline	19.68	138	12871	24.57	ug/mL#	87
42)	Acenaphthene	17.81	153	34778	18.65	ug/mL	99
43)	2,4-Dinitrophenol	18.15	184	4144	18.76	ug/mL#	66
44)	4-Nitrophenol	18.65	109	6336	21.77	ug/mL#	57
45)	Dibenzofuran	18.37	168	50539	19.77	ug/mL#	88
46)	2,4-Dinitrotoluene	18.56	165	15019	23.85	ug/mL#	1
47)	Diethylphthalate	19.54	149	57169	23.32	ug/mL	95
48)	Fluorene	19.39	166	39160	19.64	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.60	204	18593	20.88	ug/mL	90
51)	4-Nitroaniline	19.68	138	12871	21.96	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.77	198	6716	20.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.02	169	29360	21.36	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.08	77	88943	17.28	ug/ml	100
56)	4-Bromophenyl-phenylether	21.06	248	10252	18.11	ug/mL#	76
57)	Hexachlorobenzene	21.01	284	11578	18.19	ug/mL#	52
58)	Pentachlorophenol	21.74	266	5478	14.77	ug/mL	99
59)	Phenanthrene	22.28	178	55118	18.45	ug/mL	100
60)	Anthracene	22.41	178	55350	19.28	ug/mLm	100
61)	Carbazole	23.07	167	49203	17.84	ug/ml	97
62)	Di-n-butylphthalate	24.61	149	105600	19.26	ug/mL	99
63)	Fluoranthene	25.88	202	53632	19.37	ug/mL#	58
65)	Benzidine	26.57	184	10709	16.44	ug/ml	100
66)	Pyrene	26.50	202	52626	12.69	ug/mL#	75
68)	Butylbenzylphthalate	29.14	149	44863	17.91	ug/mL#	9
69)	Benzo[a]anthracene	30.26	228	46690	19.16	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.43	252	14204	27.28	ug/mL#	88
71)	Chrysene	30.35	228	32814	17.31	ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	31.12	149	65904	18.81	ug/mL#	35
74)	Di-n-octylphthalate	33.03	149	94455	16.40	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	25924	16.54	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	19069	16.16	ug/mLm	85
77)	Benzo[a]pyrene	34.11	252	16555	19.26	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.79	276	5424	14.32	ug/mL#	23
79)	Dibenz[a,h]anthracene	36.91	278	5588	18.32	ug/mL#	74
80)	Benzo[g,h,i]perylene	37.31	276	4565	14.10	ug/mLm	59

(#) = qualifier out of range (m) = manual integration

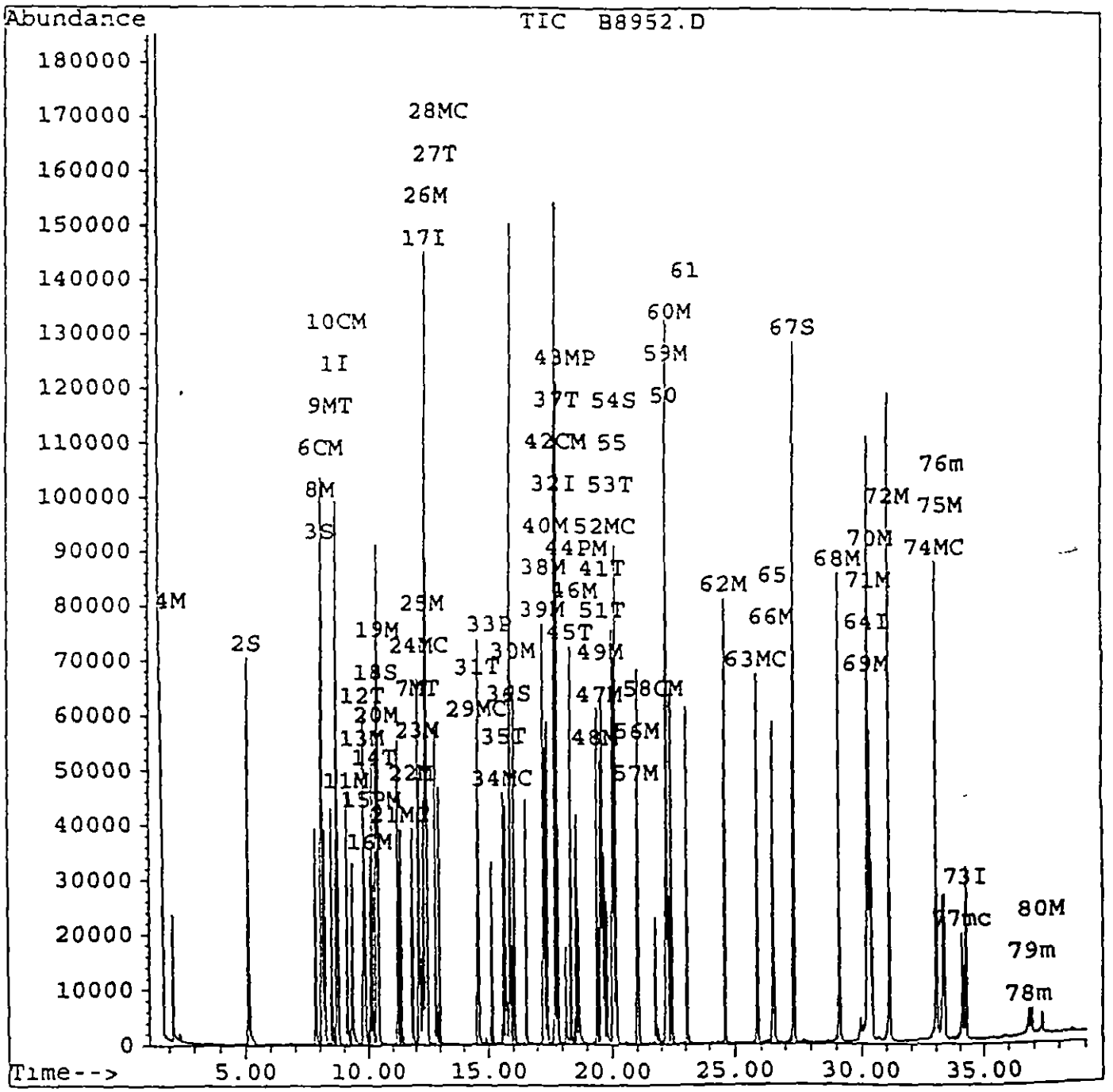
Quantitation Report

145

Data File c \hpchem 1\data2\b8952 d
Acq On 22 Oct 95 4 58 pm
Sample 20 STD
Misc
Quant Time Oct 25 9 45 1995

Vial 2
Operator SCOTTV
Converted from RTE d Inst ABNA
BT Multiplr 1 00

Method c \-PC-EM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Thu Sep 21 12 47 27 1995
Response via Multiple Level Calibration



b8952 d BNACLP M Wed Oct 25 10:21:14 1995

Quantitation Report

150

Data File: c:\hpchem\1\data2\b8953.d
Acq On: 22 Oct 95 5:49 pm
Sample: 50 STD
Misc:
Quant Time: Oct 25 9:46 1995

Converted from RTE.d

Vial: 3
Operator: SCOTTV
Inst: ABNA
BT Multipl: 1.00

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	30029	40.00	ug/mL	-0.33
17) Naphthalene-d8	12.43	136	118447	40.00	ug/mL	-0.33
32) Acenaphthene-d10	17.73	164	66652	40.00	ug/mL	-0.35
50) Phenanthrene-d10	22.23	188	99018	40.00	ug/ml	-0.35
64) Chrysene-d12	30.29	240	71387	40.00	ug/mL	-0.41
73) Perylene-d12	34.24	264	29156	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.11	112	47542	48.46	ug/mL	48.46%
3) Phenol-d5	8.09	99	75366	48.16	ug/mL	48.16%
18) Nitrobenzene-d5	10.39	82	78309	50.02	ug/mL	50.02%
36) 2-Fluorobiphenyl	15.90	172	103420	50.58	ug/mL	50.58%
54) 2,4,6-Tribromophenol	20.17	330	15101	57.11	ug/mL	57.11%
67) Terphenyl-d14	27.36	244	81512	35.53	ug/mL	35.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.14	74	33256	53.18	ug/ml	100
6) Phenol	8.13	94	70425	49.19	ug/mL	100
7) bis(2-Chloroethyl)ether	12.12	93	86266	51.11	ug/mL	97
8) 2-Chlorophenol	8.11	128	50107	49.31	ug/mL#	79
9) 1,3-Dichlorobenzene	8.48	146	52404	50.32	ug/mL	98
10) 1,4-Dichlorobenzene	8.75	146	54194	50.78	ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	52073	50.76	ug/mL	96
12) 2-Methylphenol	9.83	108	48095	51.48	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.77	45	69800	53.26	ug/mL	98
14) 4-Methylphenol	10.35	108	55590	53.22	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.22	70	56128	52.39	ug/mL#	95
16) Hexachloroethane	10.08	117	32913	52.60	ug/mL#	72
19) Nitrobenzene	10.45	77	72432	50.46	ug/mL	88
20) Isophorone	11.28	82	151156	47.73	ug/mL	94
21) 2-Nitrophenol	11.39	139	36365	56.30	ug/mL#	87
22) 2,4-Dimethylphenol	11.87	107	55686	49.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.12	93	86266	49.92	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	43494	51.90	ug/mL	93
25) 1,2,4-Trichlorobenzene	12.32	180	45688	52.14	ug/mL	95
26) Naphthalene	12.49	128	150500	51.30	ug/mL	98
27) 4-Chloroaniline	12.86	127	66405	48.20	ug/mL	99
28) Hexachlorobutadiene	12.99	225	23776	53.19	ug/mL	97
29) 4-Chloro-3-methylphenol	14.57	107	58006	54.32	ug/mL	87
30) 2-Chloronaphthalene	16.06	162	93821	54.43	ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	133962	77.26	ug/mL	96
33) Hexachlorocyclopentadiene	15.13	237	20265	46.21	ug/mL	98
34) 2,4,6-Trichlorophenol	15.61	196	33685	45.73	ug/mL	96
35) 2,4,5-Trichlorophenol	15.69	196	33610	53.87	ug/mL	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 1995

Vial: 3
Operator: SCOTTV
Inst : ABNA
DT Multipl: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.85	65	62561	57.42	ug/mL	88
38)	Dimethylphthalate	17.35	163	114727	53.61	ug/mL#	12
39)	Acenaphthylene	17.27	152	153827	51.77	ug/mL	98
40)	2,6-Dinitrotoluene	17.43	165	31425	55.50	ug/mL#	99
41)	3-Nitroaniline	19.74	138	30489	60.41	ug/mL#	88
42)	Acenaphthene	17.83	153	86706	48.26	ug/mL	98
43)	2,4-Dinitrophenol	18.18	184	14425	67.78	ug/mL#	82
44)	4-Nitrophenol	18.66	109	18330	65.38	ug/mL#	60
45)	Dibenzofuran	18.39	168	130635	53.03	ug/mL#	88
46)	2,4-Dinitrotoluene	18.60	165	38874	64.08	ug/mL#	1
47)	Diethylphthalate	19.57	149	131625	55.73	ug/mL	94
48)	Fluorene	19.41	166	100228	52.18	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.62	204	42840	49.93	ug/mL#	83
51)	4-Nitroaniline	19.74	138	30489	54.51	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.82	198	19462	63.27	ug/mL	100
53)	n-Nitrosodiphenylamine	20.05	169	69895	53.29	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.09	77	232246	47.27	ug/ml	100
56)	4-Bromophenyl-phenylether	21.07	248	23079	42.71	ug/mL#	91
57)	Hexachlorobenzene	21.03	284	29529	48.61	ug/mL#	45
58)	Pentachlorophenol	21.77	266	18120	51.19	ug/mL	99
59)	Phenanthrene	22.29	178	139586	48.95	ug/mL	99
60)	Anthracene	22.44	178	136009	49.65	ug/mLm	99
61)	Carbazole	23.10	167	129337	49.15	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	255450	48.81	ug/mL#	97
63)	Fluoranthene	26.53	202	138921	52.58	ug/mL#	56
65)	Benzidine	22.23	184	20957	34.19	ug/mlm	100
66)	Pyrene	26.53	202	138921	35.60	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	109116	46.28	ug/mL#	9
69)	Benzo[a]anthracene	30.27	228	132632	57.82	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.42	252	35599	72.64	ug/mL#	92
71)	Chrysene	30.36	228	77428	43.39	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	158269	47.99	ug/mL#	37
74)	Di-n-octylphthalate	33.04	149	217022	37.81	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	88341	56.55	ug/mLm	86
76)	Benzo[k]fluoranthene	33.39	252	43746	37.21	ug/mLm	86
77)	Benzo[a]pyrene	34.09	252	39340	45.93	ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.76	276	21346	56.57	ug/mL#	25
79)	Dibenz[a,h]anthracene	36.88	278	20854	68.60	ug/mL#	76
80)	Benzo[g,h,i]perylene	37.30	276	19464	60.33	ug/mLm	60

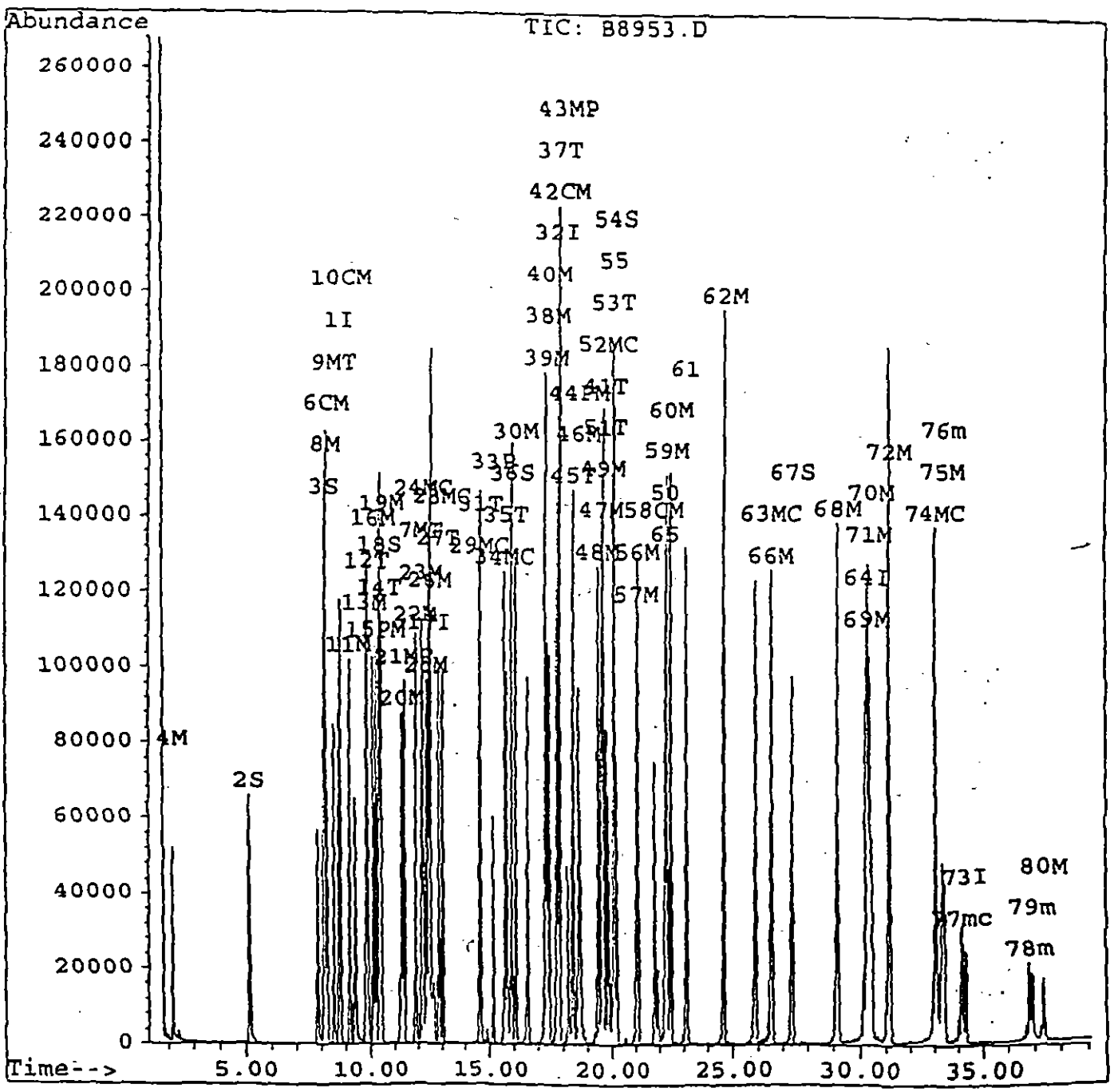
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8953.d
Acq On : 22 Oct 95 5:49 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 9:46 1995

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File: c:\hpchem\1\data2\b8954.d Vial: 4
Acq On: 22 Oct 95 6:42 pm Operator: SCOTTV
Sample: 80 STD Converted from RTE.d Inst: ABNA
Misc: BT Multiplr: 1.00
Quant Time: Oct 25 9:48 1995

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via: Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.69	152	27758	40.00 ug/mL	-0.33
17) Naphthalene-d8	12.43	136	110409	40.00 ug/mL	-0.33
32) Acenaphthene-d10	17.74	164	64239	40.00 ug/mL	-0.34
50) Phenanthrene-d10	22.23	188	96790	40.00 ug/ml	-0.34
64) Chrysene-d12	30.31	240	65927	40.00 ug/mL	-0.38
73) Perylene-d12	34.25	264	27421	40.00 ug/mL	-0.45
System Monitoring Compounds					**%Recovery**
2) 2-Fluorophenol	5.11	112	45615	50.30 ug/mL	50.30%
3) Phenol-d5	8.11	99	73604	50.88 ug/mL	50.88%
18) Nitrobenzene-d5	10.41	82	74558	51.09 ug/mL	51.09%
36) 2-Fluorobiphenyl	15.90	172	95476	48.45 ug/mL	48.45%
54) 2,4,6-Tribromophenol	20.19	330	15745	60.91 ug/mL	60.91%
67) Terphenyl-d14	27.36	244	80989	38.23 ug/mL	38.23%
Target Compounds					**Qvalue**
4) N-nitrosodimethylamine	2.14	74	43170	74.69 ug/ml	100
6) Phenol	8.15	94	107752	81.42 ug/mL	100
7) bis(2-Chloroethyl)ether	12.14	93	137545	88.16 ug/mL	93
8) 2-Chlorophenol	8.11	128	76031	80.94 ug/mL#	84
9) 1,3-Dichlorobenzene	8.50	146	78669	81.71 ug/mL	97
10) 1,4-Dichlorobenzene	8.75	146	79665	80.76 ug/mL	97
11) 1,2-Dichlorobenzene	9.14	146	77232	81.44 ug/mL	97
12) 2-Methylphenol	9.85	108	69148	80.08 ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.81	45	116703	96.34 ug/mL#	59
14) 4-Methylphenol	10.37	108	77308	80.07 ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.24	70	82768	83.57 ug/mL	93
16) Hexachloroethane	10.08	117	50425	87.18 ug/mL#	78
19) Nitrobenzene	10.47	77	107228	80.13 ug/mL	91
20) Isophorone	11.31	82	234237	79.35 ug/mL	95
21) 2-Nitrophenol	11.39	139	55945	92.92 ug/mL#	92
22) 2,4-Dimethylphenol	11.89	107	87491	83.64 ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.14	93	137545	85.38 ug/mL#	100
24) 2,4-Dichlorophenol	12.20	162	67435	86.32 ug/mL	93
25) 1,2,4-Trichlorobenzene	12.34	180	69245	84.78 ug/mL	94
26) Naphthalene	12.49	128	219568	80.29 ug/mL	100
27) 4-Chloroaniline	12.88	127	108351	84.37 ug/mL	100
28) Hexachlorobutadiene	13.01	225	36309	87.14 ug/mL	100
29) 4-Chloro-3-methylphenol	14.59	107	85056	85.45 ug/mL#	77
30) 2-Chloronaphthalene	16.08	162	143223	89.13 ug/ml#	100
31) 2-Methylnaphthalene	14.63	142	192207	118.92 ug/mL	96
33) Hexachlorocyclopentadiene	15.15	237	41659	98.56 ug/mL	98
34) 2,4,6-Trichlorophenol	15.63	196	53315	75.09 ug/mL	96
35) 2,4,5-Trichlorophenol	15.71	196	47946	79.73 ug/mL	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File: c:\hpchem\1\data2\b9954.d
Acq On: 22 Oct 95 6:42 pm
Sample: 80 STD
Misc:
Quant Time: Oct 25 9:48 1995

Converted from RTE.d

Vial: 4
Operator: SCOTTV
Inst: ABNA
BT Multiplr: 1.00

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via: Multiple Level Calibration

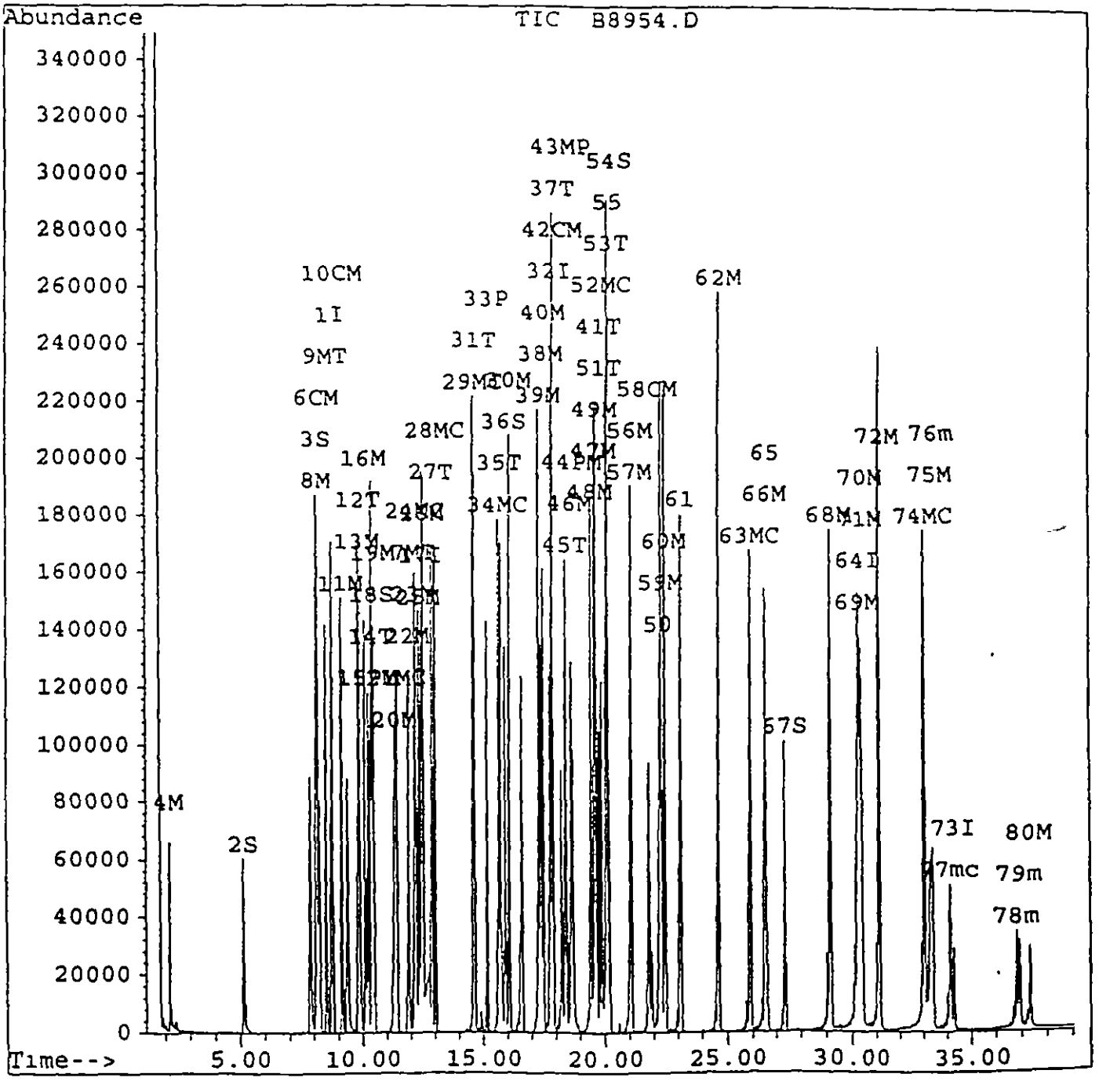
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.87	65	104963	99.96	ug/mL	87
38)	Dimethylphthalate	17.37	163	175032	84.87	ug/mL#	12
39)	Acenaphthylene	17.29	152	238659	83.33	ug/mL	97
40)	2,6-Dinitrotoluene	17.47	165	41143	75.39	ug/mL#	91
41)	3-Nitroaniline	19.76	138	45967	94.49	ug/mL	87
42)	Acenaphthene	17.85	153	134868	77.88	ug/mL	99
43)	2,4-Dinitrophenol	18.20	184	26551	129.44	ug/mL#	84
44)	4-Nitrophenol	18.70	109	28923	107.04	ug/mL#	53
45)	Dibenzofuran	18.39	168	196167	82.63	ug/mL	93
46)	2,4-Dinitrotoluene	18.62	165	65450	111.94	ug/mL#	1
47)	Diethylphthalate	19.59	149	197611	86.81	ug/mL	95
48)	Fluorene	19.43	166	144915	78.28	ug/mL	100
49)	4-Chlorophenyl-phenylether	19.63	204	64693	78.23	ug/mL#	85
51)	4-Nitroaniline	19.76	138	45967	84.07	ug/mL	87
52)	4,6-Dinitro-2-methylphenol	19.86	198	28218	93.85	ug/mL	100
53)	n-Nitrosodiphenylamine	20.07	169	108144	84.35	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.11	77	356011	74.13	ug/ml	100
56)	4-Bromophenyl-phenylether	21.08	248	37114	70.27	ug/mL	95
57)	Hexachlorobenzene	21.06	284	48488	81.66	ug/mL#	37
58)	Pentachlorophenol	21.77	266	30727	88.81	ug/mL	99
59)	Phenanthrene	22.31	178	211278	75.80	ug/mL	99
60)	Anthracene	22.47	178	209890	78.38	ug/mLm	99
61)	Carbazole	23.12	167	223505	86.89	ug/ml	97
62)	Di-n-butylphthalate	24.64	149	381823	74.63	ug/mL	98
63)	Fluoranthene	25.91	202	217602	84.25	ug/mL#	58
65)	Benzidine	26.59	184	35718	63.11	ug/ml	100
66)	Pyrene	26.53	202	214611	59.55	ug/mL#	71
68)	Butylbenzylphthalate	29.15	149	161233	74.04	ug/mL#	11
69)	Benzo[a]anthracene	30.27	228	191680	90.48	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.41	252	54288	119.95	ug/mL#	91
71)	Chrysene	30.37	228	117879	71.53	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.12	149	232983	76.50	ug/mL#	36
74)	Di-n-octylphthalate	33.03	149	305687	56.63	ug/mL#	100
75)	Benzo[b]fluoranthene	33.32	252	88515	60.24	ug/mL#	85
76)	Benzo[k]fluoranthene	33.38	252	60541	54.76	ug/mLm	85
77)	Benzo[a]pyrene	34.09	252	59358	73.68	ug/mLm	85
78)	Indeno[1,2,3-cd]pyrene	36.77	276	34042	95.92	ug/mL#	27
79)	Dibenz[a,h]anthracene	36.89	278	32174	112.54	ug/mL#	73
80)	Benzo[g,h,i]perylene	37.31	276	31449	103.65	ug/mLm	61

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File	c \hpchem\1\data2\b8954 d	Vial	4
Acq On	22 Oct 95 6 42 pm	Operator	SCOTTV
Sample	80 STD Converted from RTE d	Inst	ABNA
Misc		BT Multiplr	1 00
Quant Time	Oct 25 9 48 1995		

Method	c \HPCHEM\1\MET-ODS\BNACLP M
Title	CLP BNA Calibration
Last Update	Thu Sep 21 12 47 27 1995
Response via	Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8955.d
Acq On : 22 Oct 95 7:33 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Oct 25 10:18 1995

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.70	152	27461	40.00	ug/mL	-0.32
17) Naphthalene-d8	12.44	136	106422	40.00	ug/mL	-0.32
32) Acenaphthene-d10	17.75	164	62579	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.23	188	90364	40.00	ug/ml	-0.35
64) Chrysene-d12	30.31	240	57405	40.00	ug/mL	-0.39
73) Perylene-d12	34.25	264	23394	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.12	112	43975	49.01	ug/mL	49.01%
3) Phenol-d5	8.14	99	72439	50.61	ug/mL	50.61%
18) Nitrobenzene-d5	10.42	82	72866	51.80	ug/mL	51.80%
36) 2-Fluorobiphenyl	15.91	172	97613	50.85	ug/mL	50.85%
54) 2,4,6-Tribromophenol	20.20	330	14666	60.77	ug/mL	60.77%
67) Terphenyl-d14	27.36	244	77377	41.94	ug/mL	41.94%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.15	74	77244	135.08	ug/ml	100
6) Phenol	8.18	94	153731	117.41	ug/mL	100
7) bis(2-Chloroethyl)ether	12.17	93	187081	121.20	ug/mL	88
8) 2-Chlorophenol	8.14	128	109258	117.57	ug/mL#	81
9) 1,3-Dichlorobenzene	8.51	146	111126	116.67	ug/mL	98
10) 1,4-Dichlorobenzene	8.76	146	110282	113.00	ug/mL	96
11) 1,2-Dichlorobenzene	9.14	146	107878	114.99	ug/mL	96
12) 2-Methylphenol	9.88	108	104312	122.10	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.80	45	171386	143.01	ug/mL#	85
14) 4-Methylphenol	10.40	108	115007	120.40	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.28	70	123864	126.42	ug/mL	94
16) Hexachloroethane	10.09	117	69400	121.28	ug/mL#	76
19) Nitrobenzene	10.49	77	147477	114.34	ug/mL	99
20) Isophorone	11.36	82	327700	115.17	ug/mLm	95
21) 2-Nitrophenol	11.42	139	77152	132.95	ug/mL#	94
22) 2,4-Dimethylphenol	11.92	107	127738	126.70	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.17	93	187081	120.48	ug/mL#	100
24) 2,4-Dichlorophenol	12.23	162	94341	125.29	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.35	180	96836	123.00	ug/mL	94
26) Naphthalene	12.52	128	326255	123.77	ug/mL	98
27) 4-Chloroaniline	12.89	127	147346	119.03	ug/mL	100
28) Hexachlorobutadiene	13.02	225	51692	128.71	ug/mL	99
29) 4-Chloro-3-methylphenol	14.60	107	123083	128.28	ug/mL#	60
30) 2-Chloronaphthalene	16.09	162	197694	127.64	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	274545	176.23	ug/mL	96
33) Hexachlorocyclopentadiene	15.16	237	60194	146.19	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.64	196	90332	130.60	ug/mL	97
35) 2,4,5-Trichlorophenol	15.72	196	54995	93.88	ug/mL	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File: c:\hpchem\1\data2\b3955.d
Acq On: 22 Oct 95 7:33 pm
Sample: 120 STD
Misc:
Quant Time: Oct 25 10:18 1995

Vial: 5
Operator: SCOTTV
Converted from RTE.d Inst: ABNA
BT Multipl: 1.00

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via: Multiple Level Calibration

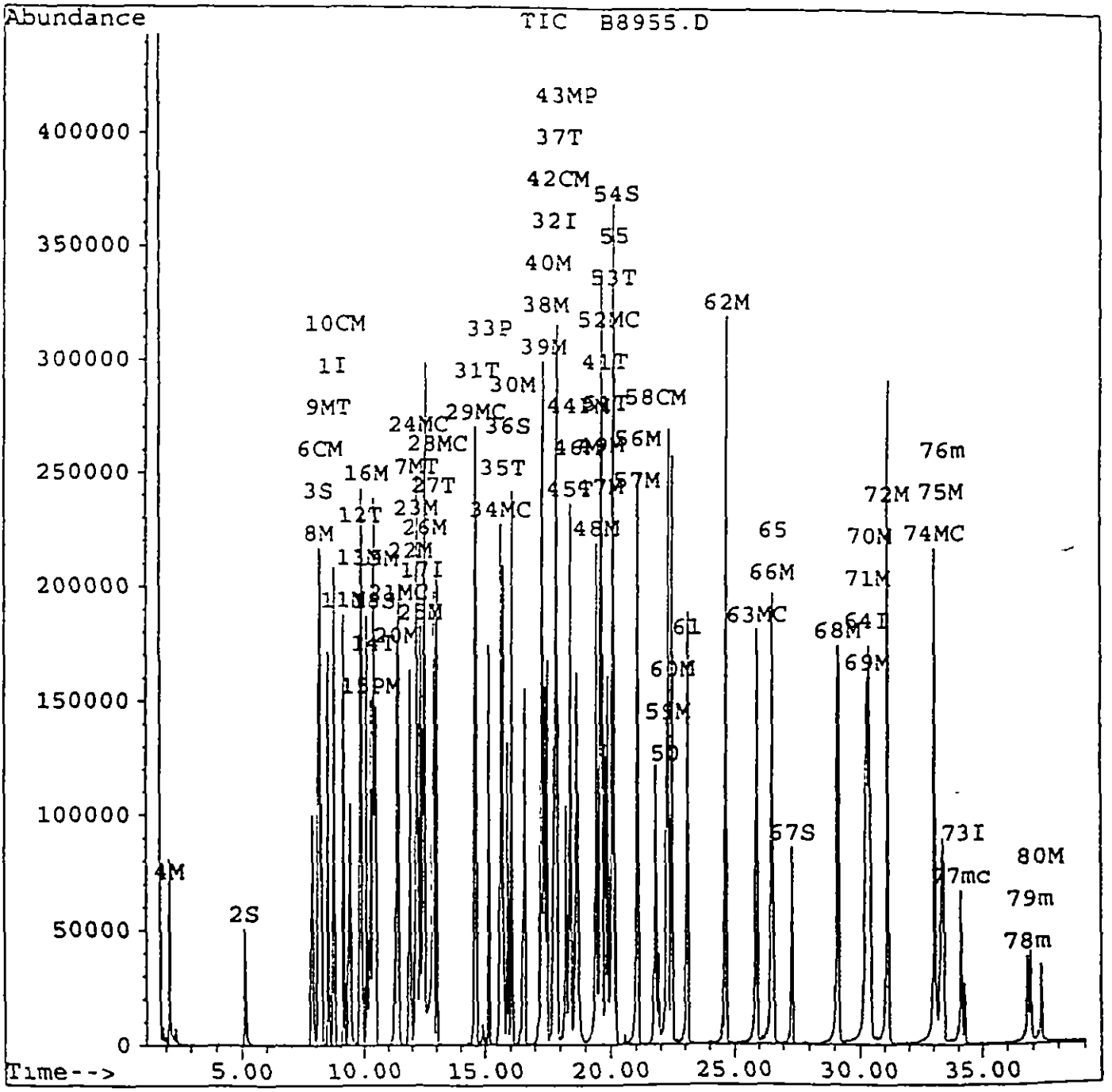
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.90	65	138140	135.05	ug/mL	88
38)	Dimethylphthalate	17.40	163	242759	120.83	ug/mL#	12
39)	Acenaphthylene	17.30	152	342901	122.91	ug/mL	97
40)	2,6-Dinitrotoluene	17.48	165	48493	91.22	ug/mL#	96
41)	3-Nitroaniline	19.78	138	59286	125.11	ug/mL	88
42)	Acenaphthene	17.86	153	190884	113.15	ug/mL	98
43)	2,4-Dinitrophenol	18.23	184	40770	204.04	ug/mL#	89
44)	4-Nitrophenol	18.71	109	42019	159.64	ug/mL#	54
45)	Dibenzofuran	18.42	168	296801	128.34	ug/mL	89
46)	2,4-Dinitrotoluene	18.66	165	94345	165.64	ug/mL#	1
47)	Diethylphthalate	19.62	149	290137	130.83	ug/mL#	92
48)	Fluorene	19.45	166	224635	124.55	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.64	204	96095	119.28	ug/mL#	87
51)	4-Nitroaniline	19.78	138	59286	116.15	ug/mL	88
52)	4,6-Dinitro-2-methylphenol	19.89	198	39986	142.45	ug/mL	100
53)	n-Nitrosodiphenylamine	20.09	169	141300	118.05	ug/mL	94
55)	1,2-Diphenylhydrazine (as	20.12	77	478381	106.69	ug/ml	100
56)	4-Bromophenyl-phenylether	21.09	248	51369	104.17	ug/mL#	91
57)	Hexachlorobenzene	21.07	284	65026	117.30	ug/mL#	42
58)	Pentachlorophenol	21.78	266	45899	142.10	ug/mL	100
59)	Phenanthrene	22.33	178	298581	114.74	ug/mL	99
60)	Anthracene	22.48	178	287179	114.86	ug/mLm	99
61)	Carbazole	23.12	167	298791	124.42	ug/ml	96
62)	Di-n-butylphthalate	24.66	149	555739	116.35	ug/mL#	97
63)	Fluoranthene	25.91	202	302618	125.50	ug/mL#	71
65)	Benzidine	26.59	184	49499	100.44	ug/ml	100
66)	Pyrene	26.55	202	291218	92.80	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	219105	115.56	ug/mL#	13
69)	Benzo[a]anthracene	30.29	228	262300	142.20	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.43	252	65850	167.10	ug/mL#	92
71)	Chrysene	30.35	228	152357	106.18	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.14	149	325654	122.80	ug/mL#	38
74)	Di-n-octylphthalate	33.03	149	406461	88.26	ug/mL#	100
75)	Benzo[b]fluoranthene	33.30	252	147288	117.50	ug/mL#	84
76)	Benzo[k]fluoranthene	33.38	252	78044	82.74	ug/mLm	84
77)	Benzo[a]pyrene	34.11	252	74349	108.18	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.77	276	44660	147.50	ug/mL#	47
79)	Dibenz[a,h]anthracene	36.89	278	42251	173.22	ug/mL#	78
80)	Benzo[g,h,i]perylene	37.31	276	40459	156.30	ug/mLm	71

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b8955 d Vial 5
Acq On 22 Oct 95 7 33 pm Operator SCOTTV
Sample 120 STD Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 25 10 18 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Thu Sep 21 12 47 27 1995
Response via Multiple Level Calibration



Quantitation Report

155

Data File: c:\hpchem\1\data2\b8956.d
Acq On: 22 Oct 95 8:24 pm
Sample: 160 STD
Misc:
Quant Time: Oct 25 10:17 1995

Converted from RTE.d

Vial: 6
Operator: SCOTTV
Inst: ABNA
BT Multiplr: 1.00

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Thu Sep 21 12:47:27 1995
Response via: Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.72	152	27386	40.00	ug/mL	-0.31
17) Naphthalene-d8	12.46	136	107758	40.00	ug/mL	-0.30
32) Acenaphthene-d10	17.76	164	64001	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.24	188	95140	40.00	ug/ml	-0.33
64) Chrysene-d12	30.32	240	58225	40.00	ug/mL	-0.37
73) Perylene-d12	34.24	264	21063	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.13	112	44445	49.67	ug/mL	49.67%
3) Phenol-d5	8.16	99	75083	52.60	ug/mL	52.60%
18) Nitrobenzene-d5	10.43	82	72264	50.74	ug/mL	50.74%
36) 2-Fluorobiphenyl	15.91	172	99060	50.46	ug/mL	50.46%
54) 2,4,6-Tribromophenol	20.22	330	16295	64.13	ug/mL	64.13%
67) Terphenyl-d14	27.35	244	82703	44.20	ug/mL	44.20%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.17	74	103908	182.21	ug/ml	100
6) Phenol	8.21	94	225479	172.68	ug/mL	100
7) bis(2-Chloroethyl)ether	12.19	93	256181	166.42	ug/mL#	85
8) 2-Chlorophenol	8.16	128	146818	158.42	ug/mL#	83
9) 1,3-Dichlorobenzene	8.52	146	146004	153.71	ug/mL	97
10) 1,4-Dichlorobenzene	8.77	146	146889	150.93	ug/mL	96
11) 1,2-Dichlorobenzene	9.16	146	145353	155.36	ug/mL	97
12) 2-Methylphenol	9.89	108	140431	164.83	ug/mLm	98
13) bis(2-chloroisopropyl)ethe	9.91	45	341496	285.74	ug/mL#	1
14) 4-Methylphenol	10.43	108	147459	154.79	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.34	70	179120	183.32	ug/mL#	95
16) Hexachloroethane	10.10	117	94889	166.27	ug/mL#	68
19) Nitrobenzene	10.51	77	286692	219.52	ug/mL	90
20) Isophorone	11.42	82	441137	153.12	ug/mLm	92
21) 2-Nitrophenol	11.44	139	100411	170.88	ug/mL#	93
22) 2,4-Dimethylphenol	11.96	107	175209	171.62	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.19	93	256181	162.94	ug/mL#	100
24) 2,4-Dichlorophenol	12.27	162	129942	170.43	ug/mL#	91
25) 1,2,4-Trichlorobenzene	12.36	180	128880	161.68	ug/mL	94
26) Naphthalene	12.54	128	430569	161.32	ug/mL	98
27) 4-Chloroaniline	12.90	127	204994	163.55	ug/mL	100
28) Hexachlorobutadiene	13.02	225	66955	164.65	ug/mL	98
29) 4-Chloro-3-methylphenol	14.64	107	173471	178.55	ug/mL#	24
30) 2-Chloronaphthalene	16.10	162	277170	176.73	ug/ml#	100
31) 2-Methylnaphthalene	14.64	142	354781	224.91	ug/mL#	68
33) Hexachlorocyclopentadiene	15.16	237	78011	185.25	ug/mL	98
34) 2,4,6-Trichlorophenol	15.66	196	125669	177.65	ug/mL	96
35) 2,4,5-Trichlorophenol	15.74	196	69360	115.77	ug/mL	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

100

Data File : c:\hpchem\1\data2\b8956.d
Acq On : 22 Oct 95 8:24 pm
Sample : 160 STD....
Misc :
Quant Time: Oct 25 10:17 1995

Converted from RTE d

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

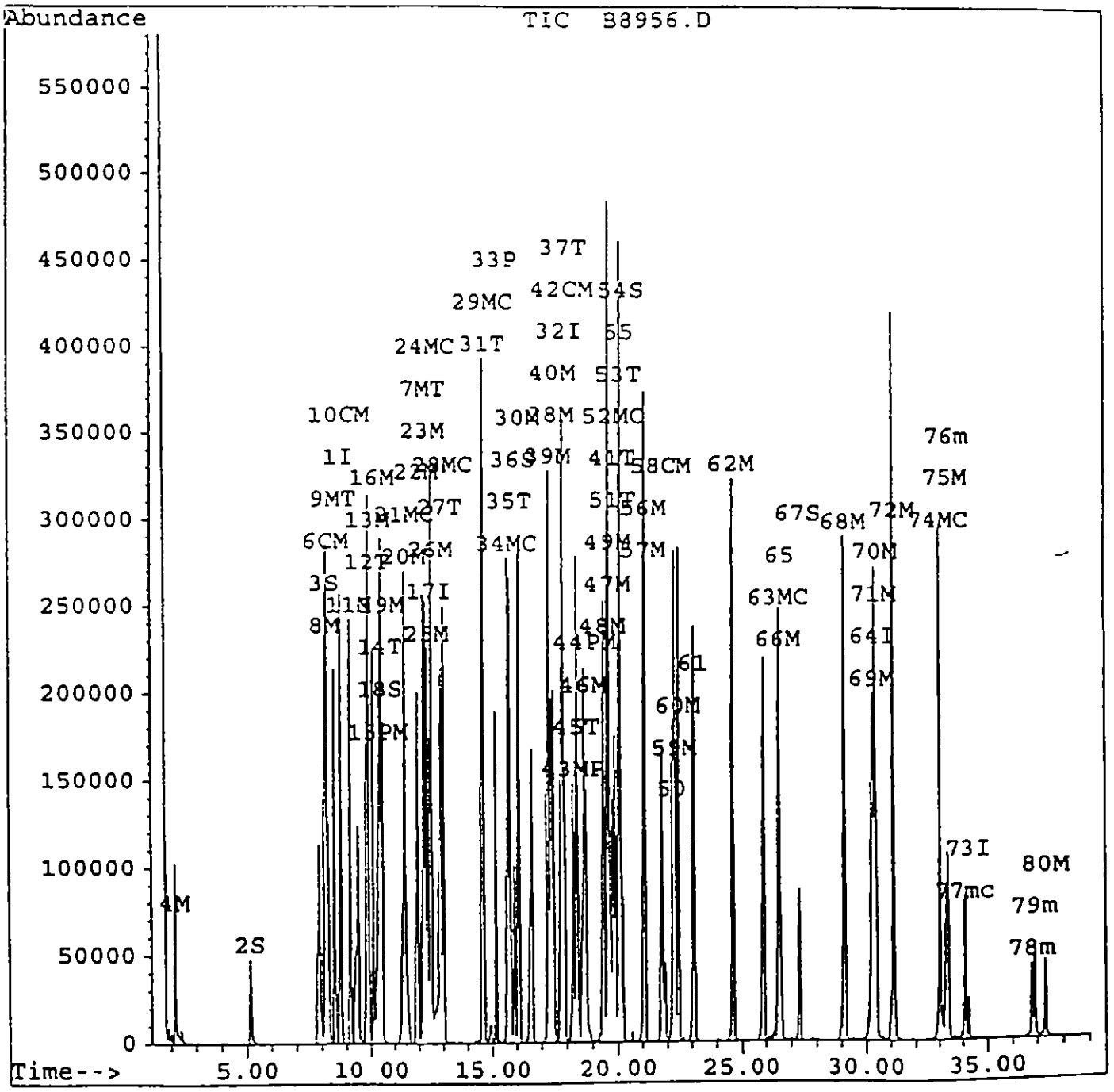
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Sep 21 12:47:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.94	65	215417	205.92	ug/mL	88
38)	Dimethylphthalate	17.44	163	341294	166.10	ug/mL#	12
39)	Acenaphthylene	17.32	152	455035	159.47	ug/mL	97
40)	2,6-Dinitrotoluene	17.51	165	62227	114.45	ug/mL#	92
41)	3-Nitroaniline	19.87	138	76342	157.52	ug/mL	90
42)	Acenaphthene	17.88	153	252605	146.41	ug/mL	98
43)	2,4-Dinitrophenol	18.29	184	61925	303.03	ug/mL#	73
44)	4-Nitrophenol	18.77	109	62124	230.78	ug/mL#	58
45)	Dibenzofuran	18.44	168	392936	166.13	ug/mL#	88
46)	2,4-Dinitrotoluene	18.71	165	89489	153.63	ug/mL#	1
47)	Diethylphthalate	19.66	149	374865	165.28	ug/mL	94
48)	Fluorene	19.46	166	301296	163.35	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.68	204	121982	148.05	ug/mL#	70
51)	4-Nitroaniline	19.87	138	76342	142.05	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	19.93	198	54285	183.68	ug/mL	100
53)	n-Nitrosodiphenylamine	20.10	169	191063	151.61	ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.14	77	657253	139.22	ug/ml	100
56)	4-Bromophenyl-phenylether	21.10	248	64647	124.52	ug/mL#	84
57)	Hexachlorobenzene	21.09	284	89180	152.80	ug/mL#	34
58)	Pentachlorophenol	21.82	266	66850	196.57	ug/mL	98
59)	Phenanthrene	22.34	178	400329	146.12	ug/mL	99
60)	Anthracene	22.50	178	391392	148.69	ug/mLm	99
61)	Carbazole	23.13	167	408325	161.50	ug/ml	95
62)	Di-n-butylphthalate	24.65	149	736070	146.37	ug/mL#	98
63)	Fluoranthene	26.52	202	405072	159.56	ug/mL#	56
65)	Benzidine	26.60	184	67999	136.03	ug/ml	100
66)	Pyrene	26.52	202	404840	127.19	ug/mL#	69
68)	Butylbenzylphthalate	29.15	149	308513	160.42	ug/mL#	9
69)	Benzo[a]anthracene	30.30	228	338083	180.70	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.44	252	84475	211.34	ug/mL#	93
71)	Chrysene	30.38	228	179795	123.54	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.13	149	408318	151.80	ug/mL#	37
74)	Di-n-octylphthalate	33.02	149	458843	110.66	ug/mL#	100
75)	Benzo[b]fluoranthene	33.31	252	156175	138.38	ug/mL#	83
76)	Benzo[k]fluoranthene	33.39	252	91964	108.29	ug/mLm	83
77)	Benzo[a]pyrene	34.10	252	88750	143.42	ug/mLm	83
78)	Indeno[1,2,3-cd]pyrene	36.78	276	49957	183.25	ug/mL#	44
79)	Dibenz[a,h]anthracene	36.90	278	50575	230.29	ug/mL#	79
80)	Benzo[g,h,i]perylene	37.32	276	46503	199.53	ug/mLm	69

(#) = qualifier out of range (m) = manual integration

Data File c \hpchem 1\data2\b8956 d Vial 6
Acq On 22 Oct 95 8 24 pm Operator SCOTTV
Sample 160 STD Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 25 10 27 1995

Method c \-PCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Thu Sep 21 12 47 27 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract _____

Lab Code _____ Case No _____ SAS No _____ SDG No _____

Lab File ID B9453 D DFTPP Injection Date 12/21/95

Instrument ID ABNA DFTPP Injection Time 1040

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30 0 - 80 0% of mass 198	41 0		
68	Less than 2 0% of mass 69	0 0	0 0	)1
69	Mass 69 relative abundance	60 5		
70	Less than 2 0% of mass 69	0 9	1 5	)1
127	25 0 - 75 0% of mass 198	41 5		
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 0		
275	10 0 - 30 0% of mass 198	19 0		
365	Greater than 0 75% of mass 198	2 6		
441	Present, but less than mass 443	105 0		
442	40 0 - 110 0% of mass 198	64 0		
443	15 0 - 24 0% of mass 442	11 5	17 9	)2

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

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

	EPA SAMPLE N	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
#		20 STANDARD	B9454	12/21/95	1127
#		50 STANDARD	B9455	12/21/95	1218
#		80 STANDARD	B9456	12/21/95	1310
#		120 STANDARD	B9457	12/21/95	1402
#		160 STANDARD	B9458	12/21/95	1454
#					
#					
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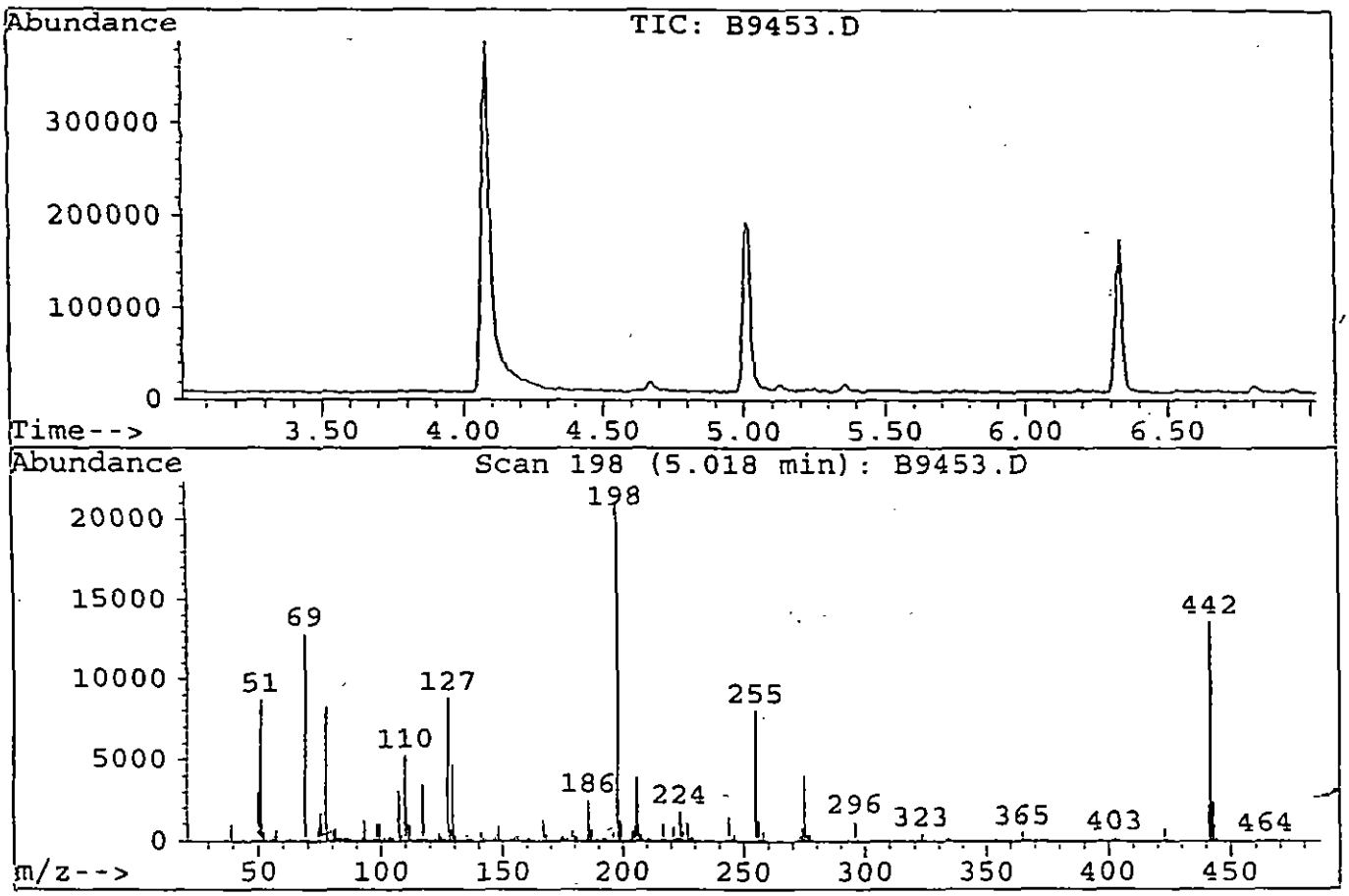
DFTPP

Data File : C:\HPCHEM\1\DATA2\B9453.D Vial: 1
Acq On : 21 Dec 95 10:40 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 198

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.0	8742	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.5	12879	PASS
70	69	0	2	1.5	189	PASS
127	198	40	60	41.5	8838	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	21304	PASS
199	198	5	9	6.0	1278	PASS
275	198	10	30	19.0	4048	PASS
365	198	1	100	2.6	547	PASS
441	443	0	100	92.1	2247	PASS
442	198	40	100	64.0	13633	PASS
443	442	17	23	17.9	2441	PASS

B9453.D BNACLP.M Thu Dec 21 11:19:10 1995 BNA

:an 198 (5 018 mın) · B9453.D
'TPP . . . Converted from RTE data file >B9453 D5

m/z	abund	m/z	abund	m/z	abund	m/z	abund
36 00	62	49 95	3032	61 25	138	67 55	178
36 80	144	50 95	8742	61.45	122	68 95	12879
37.90	298	51 95	554	61 75	90	70.05	189
39 10	1022	53.65	49	62.05	77	72 15	18
40 60	12	54 15	21	62 85	289	72 85	127
42 10	38	54 95	139	63.85	80	74 05	1066
42.80	117	55 15	151	64.65	83	75 05	1774
43.95	188	55 85	375	65 15	81	76.05	565
47 15	52	56.95	679	66.45	101	77 05	8292
47.85	62	58 95	50	66 65	108	78.05	598
48 65	90	60.85	110	67.05	63	79.05	744

-:an 198 (5.018 mın) B9453.D
DFTPP . . . Converted from RTE data file >B9453 .D5

m/z	abund	m/z	abund	m/z	abund	m/z	abund
80 05	680	87.65	42	97.05	165	108 05	435
80 95	831	88.65	74	98.05	1101	109 95	5269
81.95	222	89.35	48	99.05	1040	111 05	935
82 35	95	91.05	253	99.95	102	111.95	82
82 55	93	92.05	219	101.05	281	112 65	60
83 05	208	92.95	1301	101.75	51	113.15	93
83 35	200	93 75	134	101 95	53	113 95	81
84 05	109	94 65	39	102 95	284	114 85	134
84 85	224	95.25	84	103.95	315	115.95	188
85 95	232	96 05	104	104 95	219	116 95	3544
87 05	173	96 65	120	107.05	3186	118.05	184

an 198 (5 018 mın) B9453.D
TPP . . . Converted from RTE data file >B9453·:D5

m/z	abund	m/z	abund.	m/z	abund.	m/z	abund
118 85	53	130 00	375	140 90	569	154 10	117
119 75	86	130.90	103	142 00	234	155 00	331
121.95	340	132 40	81	142 90	95	156 10	365
123 05	517	132 90	45	145 30	28	157 00	115
123 95	265	134 10	139	145.90	113	158.70	82
125 05	141	135.00	427	146 80	317	159.00	127
125.25	160	135 90	202	147 90	901	160 00	240
125 55	113	136.80	214	148.90	127	161.00	281
127.05	8838	137.70	36	150.00	68	161.70	30
127.95	709	139.50	56	151 00	118	162.80	47
129.05	4726	140 10	102	153.00	161	163 00	44

an 198 (5.018 min) · B9453 D
DFTPP.. ... . . Converted from RTE data file >B9453 ·D5

m/z	abund.	m/z	abund	m/z	abund.	m/z	abund.
163 80	31	173.90	257	183.50	41	193 90	116
165 10	141	175 00	326	183.80	36	194 60	70
167.00	1310	176.00	154	185.00	346	196.10	579
168 00	493	176.90	292	186 00	2523	198 00	21304
168.70	76	178 00	70	187 00	724	199.00	1278
169.10	87	179 00	679	188.00	66	200 10	160
170.00	67	180 00	342	188.90	233	200.80	62
170 50	30	180 80	219	189.90	116	201.50	157
171 00	79	182.20	40	191.10	67	202.90	302
171.80	148	182.90	32	191.90	297	204.00	704
173.00	146	183.30	42	193.00	254	205.10	1039

Scan 198 (5.018 min). B9453.D
DFTPP . .. .. Converted from RTE data file >B9453· D5

m/z	abund	m/z	abund	m/z	abund	m/z	abund
206 00	3967	216 85	1060	229 95	60	239 85	20
207 10	429	217.85	161	230 95	129	240.15	30
207.90	206	220 95	883	231 25	90	240.95	85
208 90	35	222 05	188	233.55	48	242 05	88
210.40	181	222 95	247	234 05	78	242.75	150
210 90	175	223 95	1827	234 95	133	243 05	137
213.30	77	224.95	607	235.95	84	243 95	1490
214 00	11	225 85	93	236 75	104	244.95	274
214.60	101	226.95	1141	237 95	24	245 95	464
214 90	51	227.85	275	238.25	16	246 95	113
216.10	152	228 95	303	239 15	53	248.85	74

Scan 198 (5 018 min) B9453.D
DFTPP . . . . Converted from RTE data file >B9453.·D5

m/z	abund	m/z	abund	m/z	abund.	m/z	abund.
249 85	69	260 75	23	274.95	4048	285 45	31
251.25	40	261 05	17	275 95	436	285.65	32
251.55	45	263.05	58	276.95	432	286 65	12
251.85	84	264.95	190	278 15	73	289.75	24
252.95	71	265 85	43	279.25	29	292.35	27
254.95	8092	267 65	37	280.15	34	293 15	153
255 95	1298	267 85	35	281 65	25	295.95	1227
256.95	174	269 65	37	282 75	54	296.85	184
257 95	677	271 95	89	282 95	52	298 25	22
258 75	70	272 95	341	283 95	32	298.55	23
258.95	76	273 95	849	285 05	67	300.45	52

Scan 198 (5.018 min) B9453.D
DFTPP. .. . . Converted from RTE data file >B9453 ·D5

m/z	abund	m/z	abund	m/z	abund.	m/z	abund.
300 75	42	311 80	50	321.80	57	334 90	58
301.05	35	312 70	49	322.10	50	335.70	31
302.05	91	314 00	58	323.00	465	336 90	16
302 70	116	314 60	95	323 80	96	340 30	23
303 10	132	314 90	117	324 10	75	342.00	26
303.70	48	315 80	55	327.90	72	343 20	13
305 50	41	318.20	71	330 90	19	343 80	26
308 00	76	318.60	33	331 20	19	345.90	111
308 60	40	318 90	27	332.00	75	350.80	37
309.80	43	319.60	36	333.10	74	352.00	103
311.50	30	320.90	64	333.90	248	353 10	107

Scan 198 (5 018 min): B9453.D
DFTPP. .. . . Converted from RTE data file >B9453:.D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.10	160	371.00	60	389.65	29	404.15	89
355 00	32	372.10	302	389 85	31	410 75	31
356.00	30	372.70	53	390 75	18	412 95	23
357.20	46	372.90	68	393.65	37	414.95	33
359.00	32	374 10	33	393.95	34	416.35	42
363.80	20	374.50	19	394.95	12	416.75	27
364 90	547	379.00	91	396.35	39	420.95	87
366 00	111	381.70	28	400.35	16	421.85	94
369.90	32	383.00	105	401 05	47	422.05	94
370.10	36	383 70	18	401.85	126	422.95	792
370.50	30	384.00	25	402.95	226	423.85	170

:an 198 (5.018 min): B9453.D
'TPP .... Converted from RTE data file >B9453::D5

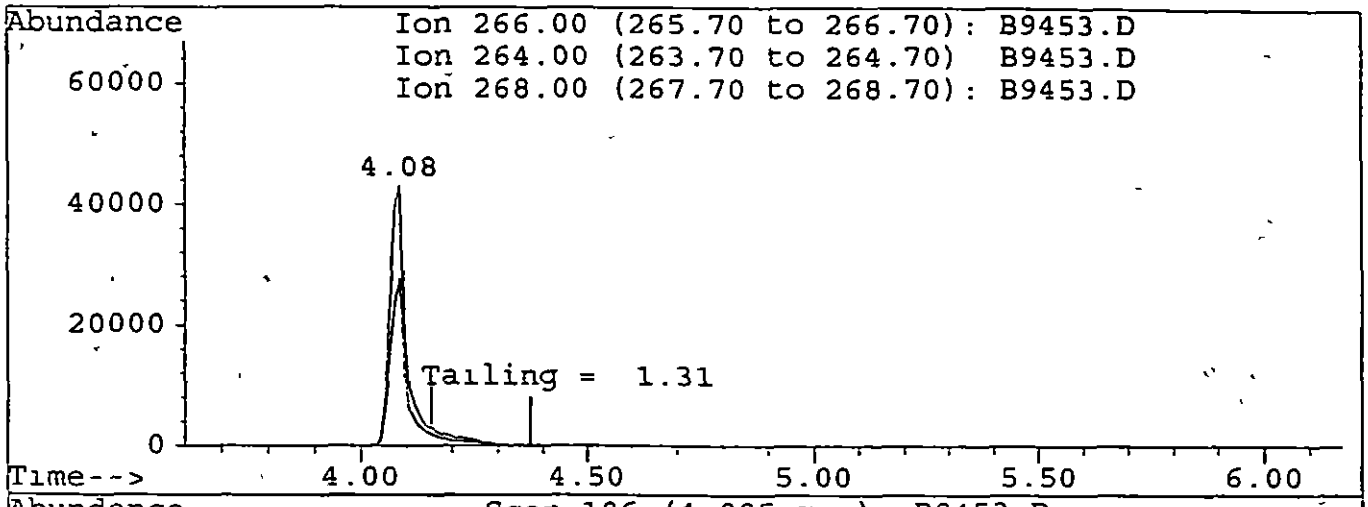
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
426.85	17	453.35	40				
435.05	42	459.15	23				
436.45	46	460.65	52				
437.35	29	464.35	85				
440.95	2247	468.05	39				
441.95	13633	470.25	26				
442.95	2441	472.05	20				
444.15	185						
449.05	27						
450.45	16						
451.05	12						

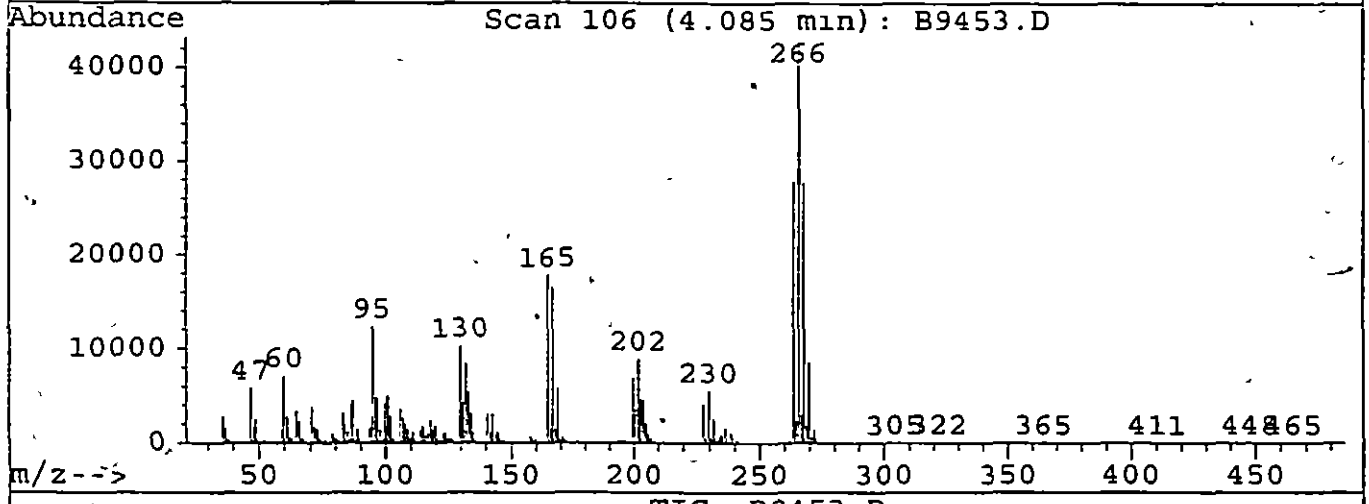
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B9453.D
Acq On : 21 Dec 95 10.40 am
Sample : DFTPP.....: ... Converted from RTE d
Misc :
Quant Time: Dec 21 11:09 1995

Vial: 1 167
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C.\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21:54 1995
Response via : Multiple Level Calibration





TIC: B9453.D

(1) Pentachlorophenol (CM)

5.12min 1.14ug/mL

response 376

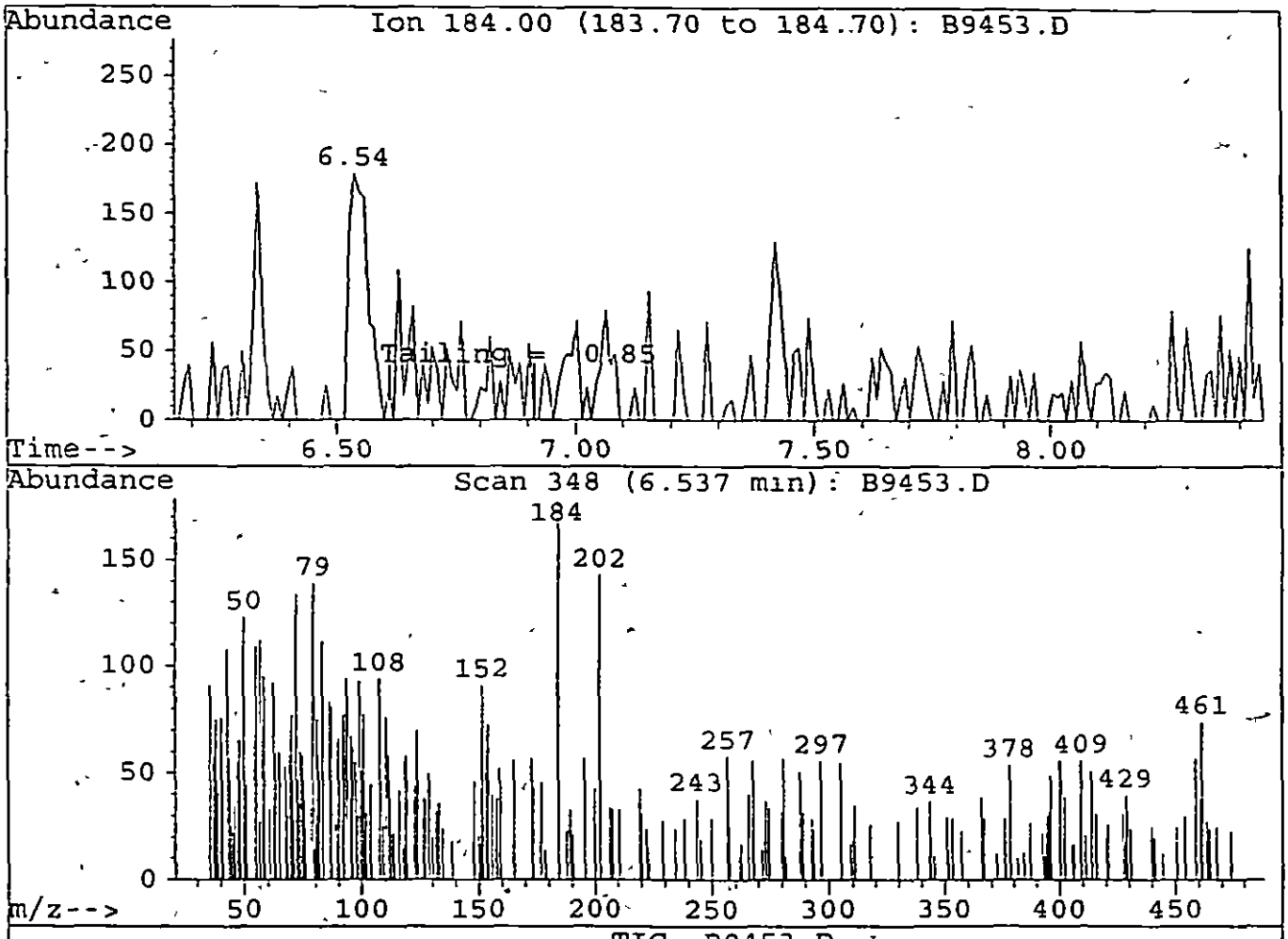
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	33.51#
268.00	64.70	25.26#
0.00	0.00	0.00

Quantitation Report

Data File . C:\HPCHEM\1\DATA2\B9453.D
Acq On : 21 Dec 95 10:40 am
Sample DFTPP. . ..... Converted from RTE d
Misc .
Quant Time: Dec 21 11:09 1995

Vial: 1
Operator. SCOTTV
Inst ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed Nov 22 12:21.54 1995
Response via : Multiple Level Calibration



TIC: B9453.D

(2) Benzidine
7.42min 0.67ug/ml
response 205

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:04:15 1995
Response via : Initial Calibration

Calibration Files
160 =B9458.D 120 =B9457.D 80 =B9456.D
50 =B9455.D 20 =B9454.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.228	1.184	1.154	1.079	0.994	1.128	8.21
3)	S	Phenol-d5	2.072	1.805	1.745	1.612	1.425	1.732	13.84
4)	M	N-nitrosodimethylamin	0.863	0.840	0.578	0.697	0.631	0.722	17.42
5)		Pyridine		3.013				3.013	0.00
6)	CM	Phenol	1.609	1.727	1.640	1.575	1.310	1.572	9.98
7)	MT	bis(2-Chloroethyl)eth	1.872	1.941	1.803	1.860	1.547	1.805	8.43
8)	M	2-Chlorophenol	1.300	1.350	1.289	1.318	1.202	1.292	4.28
9)	MT	1,3-Dichlorobenzene	1.365	1.409	1.336	1.361	1.301	1.354	2.94
10)	CM	1,4-Dichlorobenzene	1.360	1.457	1.372	1.415	1.375	1.396	2.87
11)	M	1,2-Dichlorobenzene	1.322	1.404	1.352	1.379	1.323	1.356	2.62
12)	T	2-Methylphenol	1.129	1.192	1.189	1.154	0.951	1.123	8.89
13)	M	bis(2-chloroisopropyl	1.954	1.967	1.222	1.242	1.456	1.568	23.57
14)	T	4-Methylphenol	1.290	1.306	1.304	1.244	1.106	1.250	6.75
15)	PM	N-Nitroso-Di-n-propyl	1.125	1.113	0.984	1.048	0.818	1.018	12.29
16)	M	Hexachloroethane	0.850	0.895	0.888	0.896	0.803	0.866	4.67
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.413	0.407	0.396	0.366	0.323	0.381	9.80
19)	M	Nitrobenzene	0.505	0.488	0.480	0.459	0.393	0.465	9.35
20)	M	Isophorone	0.739	0.723	0.702	0.689	0.603	0.691	7.61
21)	MC	2-Nitrophenol	0.212	0.213	0.207	0.213	0.182	0.205	6.47
22)	M	2,4-Dimethylphenol	0.371	0.362	0.360	0.356	0.323	0.355	5.20
23)	M	bis(2-Chloroethoxy)me	0.449	0.449	0.416	0.427	0.367	0.421	8.01
24)	MC	2,4-Dichlorophenol	0.259	0.267	0.272	0.289	0.258	0.269	4.63
25)	M	1,2,4-Trichlorobenzen	0.281	0.288	0.291	0.303	0.319	0.296	5.00
26)	M	Naphthalene	0.940	0.867	0.903	0.944	0.874	0.906	3.96
27)	T	4-Chloroaniline	0.426	0.447	0.436	0.406	0.378	0.419	6.49
28)	MC	Hexachlorobutadiene	0.173	0.186	0.175	0.193	0.199	0.185	6.05
29)	MC	4-Chloro-3-methylphen	0.344	0.345	0.334	0.339	0.289	0.330	7.10
30)	M	2-Chloronaphthalene	0.648	0.636	0.586	0.643	0.647	0.632	4.11
31)	T	2-Methylnaphthalene	0.661	0.595	0.602	0.601	0.587	0.609	4.82
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.346	0.354	0.344	0.348	0.283	0.335	8.73
34)	MC	2,4,6-Trichlorophenol	0.429	0.371	0.357	0.362	0.358	0.375	8.06
35)	T	2,4,5-Trichlorophenol	0.295	0.347	0.371	0.362	0.308	0.337	9.96
36)	S	2-Fluorobiphenyl	1.221	1.177	1.206	1.205	1.227	1.207	1.60
37)	T	2-Nitroaniline	0.424	0.435	0.481	0.378	0.274	0.399	19.68
38)	M	Dimethylphthalate	1.045	1.180	1.271	1.324	1.353	1.235	10.11
39)	M	Acenaphthylene	1.716	1.723	1.667	1.724	1.614	1.689	2.83
40)	M	2,6-Dinitrotoluene	0.270	0.290	0.308	0.315	0.279	0.292	6.48
41)	T	3-Nitroaniline	0.161	0.220	0.291	0.222	0.170	0.213	24.31

#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:04:15 1995
Response via : Initial Calibration

Calibration Files
160 =B9458.D 120 =B9457.D 80 =B9456.D
50 =B9455.D 20 =B9454.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	1.079	1.071	1.018	1.069	1.026	1 053	2.71
43)	MP	2,4-Dinitrophenol	0.145	0.164	0.148	0.099		0 139	19.97
44)	PM	4-Nitrophenol	0.188	0.255	0.246	0.177		0.216	18.37
45)	T	Dibenzofuran	1.245	1.299	1.506	1.464	1.412	1.385	7.96
46)	M	2,4-Dinitrotoluene	0.330	0.391	0.424	0.329	0.281	0.351	16.06
47)	M	Diethylphthalate	1.135	1.322	1.391	1.397	1.423	1.334	8.78
48)	M	Fluorene	0.932	1.076	1.070	1.099	1.098	1.055	6.62
49)	M	4-Chlorophenyl-phenyl	0.413	0.466	0.482	0.506	0.515	0.476	8.46
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.125	0.141	0.177	0.181	0.134	0 152	16 67
52)	MC	4,6-Dinitro-2-methylp	0.107	0.151	0.146	0.116	0.088	0 122	21.65
53)	T	n-Nitrosodiphenylamin	0.453	0.426	0.406	0.540	0.533	0.472	13.03
54)	S	2,4,6-Tribromophenol	0 243	0.231	0.221	0.250	0.238	0 237	4.72
55)		1,2-Diphenylhydrazine	1 271	1 193	1.107	1.356	1.180	1 221	7.79
56)	M	4-Bromophenyl-phenyle	0 236	0.223	0.220	0.278	0.254	0.242	9.95
57)	M	Hexachlorobenzene	0 352	0 339	0.320	0.366	0.294	0.334	8.32
58)	CM	Pentachlorophenol	0.207	0.207	0.183	0.146		0 186	15.51
59)	M	Phenanthrene	1.071	1 035	1.013	1.045	0.977	1 028	3.42
60)	M	Anthracene	1.067	1.012	1.026	1.052	0.943	1 020	4.69
61)		Carbazole	0.975	1.004	0.959	0.823	0.563	0.865	21 12
62)	M	Di-n-butylphthalate	1.840	1.863	1.901	1.738	1.445	1.757	10.52
63)	MC	Fluoranthene	1.176	1.195	1 252	1 065	0.850	1 108	14 37
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.015	0.010	0.009	0.011		0.011#	22.14
66)	M	Pyrene	1.369	1.312	1.259	1.189	0 974	1 221	12.54
67)	S	Terphenyl-d14	1.083	1.022	0.997	0.890	0.809	0.960	11.40
68)	M	Butylbenzylphthalate	0.888	0.877	0.834	0.818	0.684	0.820	9.95
69)	M	Benzo[a]anthracene	1.350	1.271	1.156	1.092	0.964	1.167	12 95
70)	M	3,3'-Dichlorobenzidin	0.394	0.506	0.385	0.375	0.368	0.406	14.09
71)	M	Chrysene	0.724	0.830	0.895	0.958	0.975	0.876	11.71
72)	M	bis(2-Ethylhexyl)phth	1.266	1.226	1.169	1.140	1.004	1 161	8.63
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	3.247	3.396	3.061	2.567		3.068	11.75
75)	M	Benzo[b]fluoranthene	1.411	1.440	1.591	1.328	1.036	1.361	15.07
76)	m	Benzo[k]fluoranthene	1.350	0.971	1.142	1.177	1.138	1.156	11.68
77)	mc	Benzo[a]pyrene	1.067	1.059	1 152	1.008	0.917	1.041	8.30
78)	m	Indeno[1,2,3-cd]pyren	0.513	0.520	0.606	0.513	0.537	0.538	7.33
79)	m	Dibenz[a,h]anthracene	0.545	0.524	0.616	0.530	0.501	0.543	8.04
80)	M	Benzo[g,h,i]perylene	0.433	0.511	0.614	0.445	0.471	0 495	14.80

#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b9454 d Vial: 2
Acq On : 21 Dec 95 11:27 am Operator. SCOTTV
Sample : 20 STD.... .. . Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 26 12:00 1995

Method : C \HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09 14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.28	152	7662	40.00	ug/mL	-0 56
17) Naphthalene-d8	11.01	136	32322	40.00	ug/mL	-0.56
32) Acenaphthene-d10	16.25	164	19863	40.00	ug/mL	-0.58
50) Phenanthrene-d10	20.64	188	25176	40.00	ug/ml	-0.61
64) Chrysene-d12	28.61	240	22480	40.00	ug/mL	-0.63
73) Perylene-d12	32.56	264	20050	40.00	ug/mL	-0.60
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.54	112	9517	43.63	ug/mL	43.63%
3) Phenol-d5	6.82	99	13651	37.58	ug/mL	37.58%
18) Nitrobenzene-d5	9.01	82	13036	33 75	ug/mL	33.75%
36) 2-Fluorobiphenyl	14.50	172	30473	57.71	ug/mL	57 71%
54) 2,4,6-Tribromophenol	18.66	330	7498	67.67	ug/mL	67.67%
67) Terphenyl-d14	25.78	244	22736	36.68	ug/mL	36.68%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	2412	14.76	ug/ml	100
6) Phenol	6.85	94	5020	15.89	ug/mL	100
7) bis(2-Chloroethyl)ether	10.80	93	5927	14.35	ug/mL	89
8) 2-Chlorophenol	6.72	128	4605	18.47	ug/mL#	89
9) 1,3-Dichlorobenzene	7.05	146	4983	19.23	ug/mL#	94
10) 1,4-Dichlorobenzene	7.32	146	5266	20.08	ug/mL	98
11) 1,2-Dichlorobenzene	7.70	146	5069	19.48	ug/mL	98
12) 2-Methylphenol	8.57	108	3642	15.61	ug/mLm	89
13) bis(2-chloroisopropyl)ethe	8.53	45	5577	12.97	ug/mLm	95
14) 4-Methylphenol	9.09	108	4236	16.93	ug/mL	89
15) N-Nitroso-Di-n-propylamine	8.84	70	3134	11.62	ug/mL#	87
16) Hexachloroethane	8.67	117	3075	19.39	ug/mL#	76
19) Nitrobenzene	9.05	77	6355	14.06	ug/mL#	62
20) Isophorone	9.88	82	9752	15.67	ug/mL	99
21) 2-Nitrophenol	9.99	139	2943	16.91	ug/mL#	79
22) 2,4-Dimethylphenol	10.59	107	5223	17.01	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.80	93	5927	14.19	ug/mL#	100
24) 2,4-Dichlorophenol	10.86	162	4169	18.64	ug/mL	94
25) 1,2,4-Trichlorobenzene	10.94	180	5150	20.39	ug/mL	92
26) Naphthalene	11.07	128	14124	18.24	ug/mL	98
27) 4-Chloroaniline	11.50	127	6115	16.97	ug/mL	97
28) Hexachlorobutadiene	11.63	225	3208	21.16	ug/mL	97
29) 4-Chloro-3-methylphenol	13.32	107	4666	14.54	ug/mL	95
30) 2-Chloronaphthalene	14.61	162	10449	18.67	ug/ml#	100
31) 2-Methylnaphthalene	13.19	142	9490	13.99	ug/mL	99
33) Hexachlorocyclopentadiene	13.73	237	2810	21 10	ug/mL	93
34) 2,4,6-Trichlorophenol	14.23	196	3554	20.37	ug/mL	88
35) 2,4,5-Trichlorophenol	14.38	196	3056	17.26	ug/mL	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9454.d
Acq On : 21 Dec 95 11:27 am
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C.\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	16.42	65	2724	8.44	ug/mL	91
38) Dimethylphthalate	15.94	163	13442	19.82	ug/mL#	12
39) Acenaphthylene	15.79	152	16031	20.09	ug/mL	97
40) 2,6-Dinitrotoluene	16.00	165	2773	16.62	ug/mL#	87
41) 3-Nitroaniline	18.23	138	1691	10.46	ug/mL	87
42) Acenaphthene	16.33	153	10185	20.10	ug/mL	96
43) 2,4-Dinitrophenol	10.94	184	777	8.57	ug/mLm	91
44) 4-Nitrophenol	17.48	109	787	6.76	ug/mLm	76
45) Dibenzofuran	16.89	168	14025	19 72	ug/mL#	86
46) 2,4-Dinitrotoluene	17.16	165	2795	12.19	ug/mL#	1
47) Diethylphthalate	18.14	149	14134	19.00	ug/mL#	93
48) Fluorene	17.91	166	10906	19.53	ug/mL	98
49) 4-Chlorophenyl-phenylether	18 14	204	5114	19 37	ug/mL#	88
51) 4-Nitroaniline	18.23	138	1691	15.00	ug/mL	87
52) 4,6-Dinitro-2-methylphenol	18.33	198	1110	13.48	ug/mL	100
53) n-Nitrosodiphenylamine	18.56	169	6704	25.12	ug/mL	96
55) 1,2-Diphenylhydrazine (as	18.60	77	14848	19.77	ug/ml	100
56) 4-Bromophenyl-phenylether	19.56	248	3203	24.35	ug/mL	93
57) Hexachlorobenzene	19.47	284	3706	20.06	ug/mL	96
58) Pentachlorophenol	20.26	266	1247	10.87	ug/mL	91
59) Phenanthrene	20.70	178	12303	19.77	ug/mL	93
60) Anthracene	20.85	178	11874	18.90	ug/mLm	93
61) Carbazole	21.56	167	7085	11.83	ug/ml	97
62) Di-n-butylphthalate	23.16	149	18189	15.79	ug/mL	99
63) Fluoranthene	24.26	202	10702	15.57	ug/mLm	98
65) Benzidine	20.31	184	79	1.21	ug/mlm	100
66) Pyrene	24.86	202	10946	13.15	ug/mL	94
68) Butylbenzylphthalate	27.61	149	7686	12.60	ug/mL#	28
69) Benzo[a]anthracene	28.59	228	10834	15.38	ug/mL	99
70) 3,3'-Dichlorobenzidine	28.82	252	4132	18.98	ug/mL	96
71) Chrysene	28.67	228	10955	21.54	ug/mLm	99
72) bis(2-Ethylhexyl)phthalate	29.63	149	11290	13.50	ug/mL#	28
74) Di-n-octylphthalate	31.52	149	18880	8.88	ug/mL#	100
75) Benzo[b]fluoranthene	31.59	252	10387	12.77	ug/mLm	96
76) Benzo[k]fluoranthene	31.69	252	11411	18.67	ug/mL	96
77) Benzo[a]pyrene	32.40	252	9191	17.76	ug/mLm	96
78) Indeno[1,2,3-cd]pyrene	35.04	276	5380	14.75	ug/mL	90
79) Dibenz[a,h]anthracene	35.19	278	5024	14.06	ug/mL	97
80) Benzo[g,h,i]perylene	35.58	276	4721	12.99	ug/mLm	90

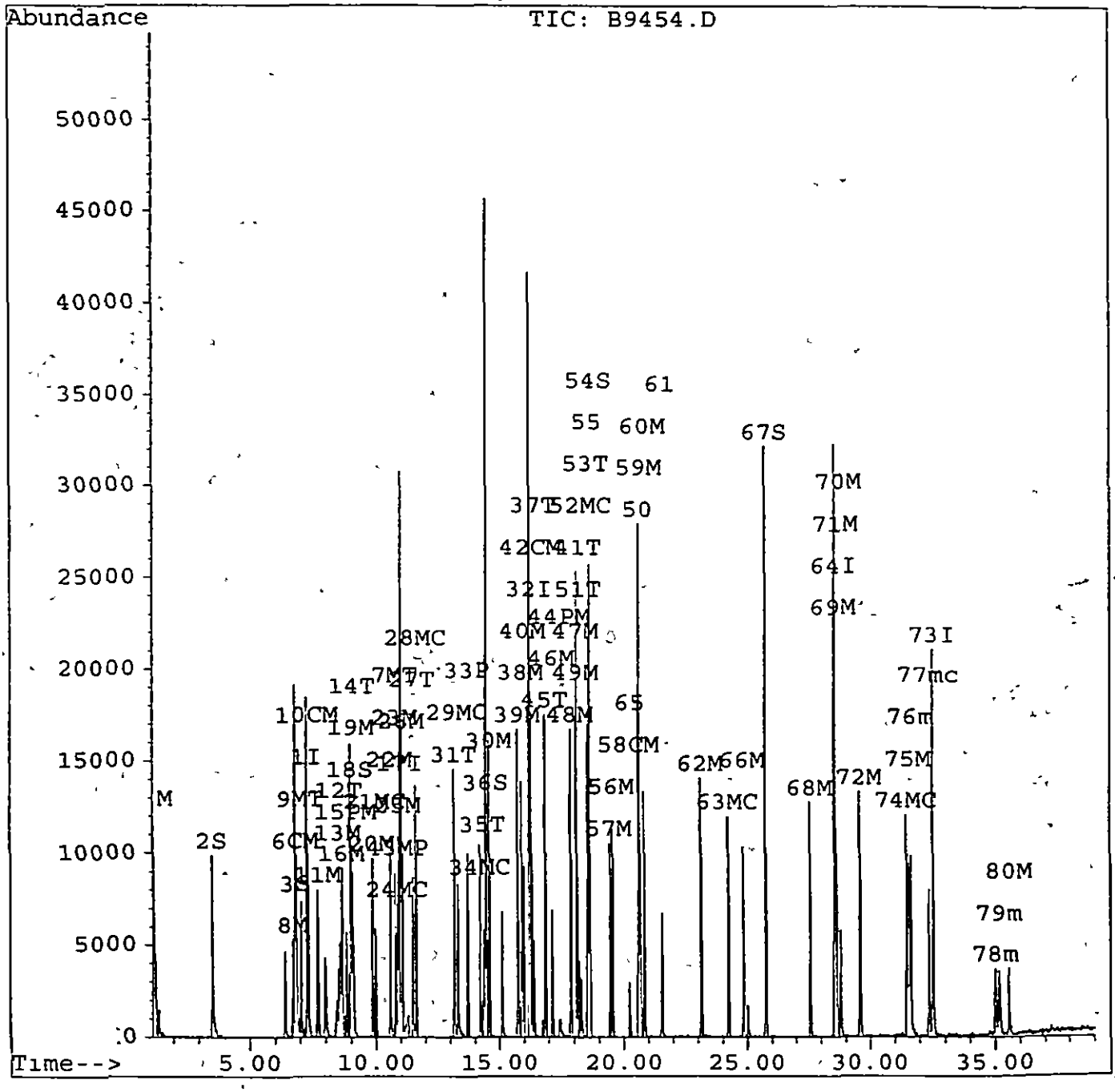
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9454.d
Acq On : 21 Dec 95 11:27 am
Sample : 20 STD . . . . . Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12.09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File c \hpchem\1\data2\b9455.d Vial 3
Acq On 21 Dec 95 12 18 pm Operator SCOTTV
Sample 50 STD. . . . Converted from RTE d Inst . ABNA
Misc BT Multiplr: 1 00
Quant Time. Dec 26 11 51 1995

Method c \HPCHEM\1\METHODS\BNACLP.M
Title . CLP BNA Calibration
Last Update . Tue Dec 26 12.09.14 1995
Response via . Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 28	152	8004	40 00	ug/mL	-0 56
17) Naphthalene-d8	11 04	136	34892	40 00	ug/mL	-0 54
32) Acenaphthene-d10	16.26	164	20965	40.00	ug/mL	-0 58
50) Phenanthrene-d10	20.65	188	25751	40.00	ug/ml	-0 60
64) Chrysene-d12	28 62	240	23396	40 00	ug/mL	-0 63
73) Perylene-d12	32 55	264	16072	40 00	ug/mL	-0.61
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3 55	112	10796	47 38	ug/mL	47 38%
3) Phenol-d5	6 84	99	16130	42 51	ug/mL	42 51%
18) Nitrobenzene-d5	9 01	82	15954	38 26	ug/mL	38 26%
36) 2-Fluorobiphenyl	14 50	172	31574	56 65	ug/mL	56 65%
54) 2,4,6-Tribromophenol	18.66	330	8050	71 03	ug/mL	71 03%
67) Terphenyl-d14	25 79	244	26040	40.36	ug/mL	40 36%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	6976	40 87	ug/mlm	100
6) Phenol	6 88	94	15753	47 74	ug/mL	100
7) bis(2-Chloroethyl)ether	10 82	93	18609	43.12	ug/mL	89
8) 2-Chlorophenol	6.72	128	13188	50.62	ug/mL	90
9) 1,3-Dichlorobenzene	7.07	146	13616	50 29	ug/mL	99
10) 1,4-Dichlorobenzene	7.34	146	14161	51 68	ug/mL	97
11) 1,2-Dichlorobenzene	7 72	146	13798	50 75	ug/mL	98
12) 2-Methylphenol	8 59	108	11542	47 35	ug/mLm	97
13) bis(2-chloroisopropyl)ethe	8 47	45	12427	27 66	ug/mL#	93
14) 4-Methylphenol	9 11	108	12447	47 61	ug/mL	97
15) N-Nitroso-Di-n-propylamine	8.88	70	10482	37 21	ug/mL	88
16) Hexachloroethane	8.67	117	8967	54 11	ug/mL#	77
19) Nitrobenzene	9.07	77	20011	41.02	ug/mL#	77
20) Isophorone	9.92	82	30040	44.71	ug/mL	97
21) 2-Nitrophenol	10 02	139	9284	49 41	ug/mL#	80
22) 2,4-Dimethylphenol	10 61	107	15516	46 80	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.82	93	18609	41 28	ug/mL#	100
24) 2,4-Dichlorophenol	10.88	162	12585	52 13	ug/mL	95
25) 1,2,4-Trichlorobenzene	10.94	180	13201	48 41	ug/mL	94
26) Naphthalene	11.09	128	41172	49 27	ug/mL	100
27) 4-Chloroaniline	11.52	127	17713	45 52	ug/mL	94
28) Hexachlorobutadiene	11.63	225	8430	51 52	ug/mL	95
29) 4-Chloro-3-methylphenol	13.33	107	14771	42 63	ug/mL	92
30) 2-Chloronaphthalene	14.62	162	28046	46 42	ug/ml#	100
31) 2-Methylnaphthalene	13.21	142	26210	35 80	ug/mL	99
33) Hexachlorocyclopentadiene	13.73	237	9109	64 81	ug/mL	99
34) 2,4,6-Trichlorophenol	14.25	196	9481	51.47	ug/mL	99
35) 2,4,5-Trichlorophenol	14.37	196	9487	50 77	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File . c \hpchem\1\data2\b9455.d
Acq On . 21 Dec 95 12.18 pm
Sample . 50 STD . . Converted from RTE d
Misc .
Quant Time: Dec 26 11 51 1995

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method . c.\HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration
Last Update . Tue Dec 26 12:09·14 1995
Response via Multiple Level Calibration

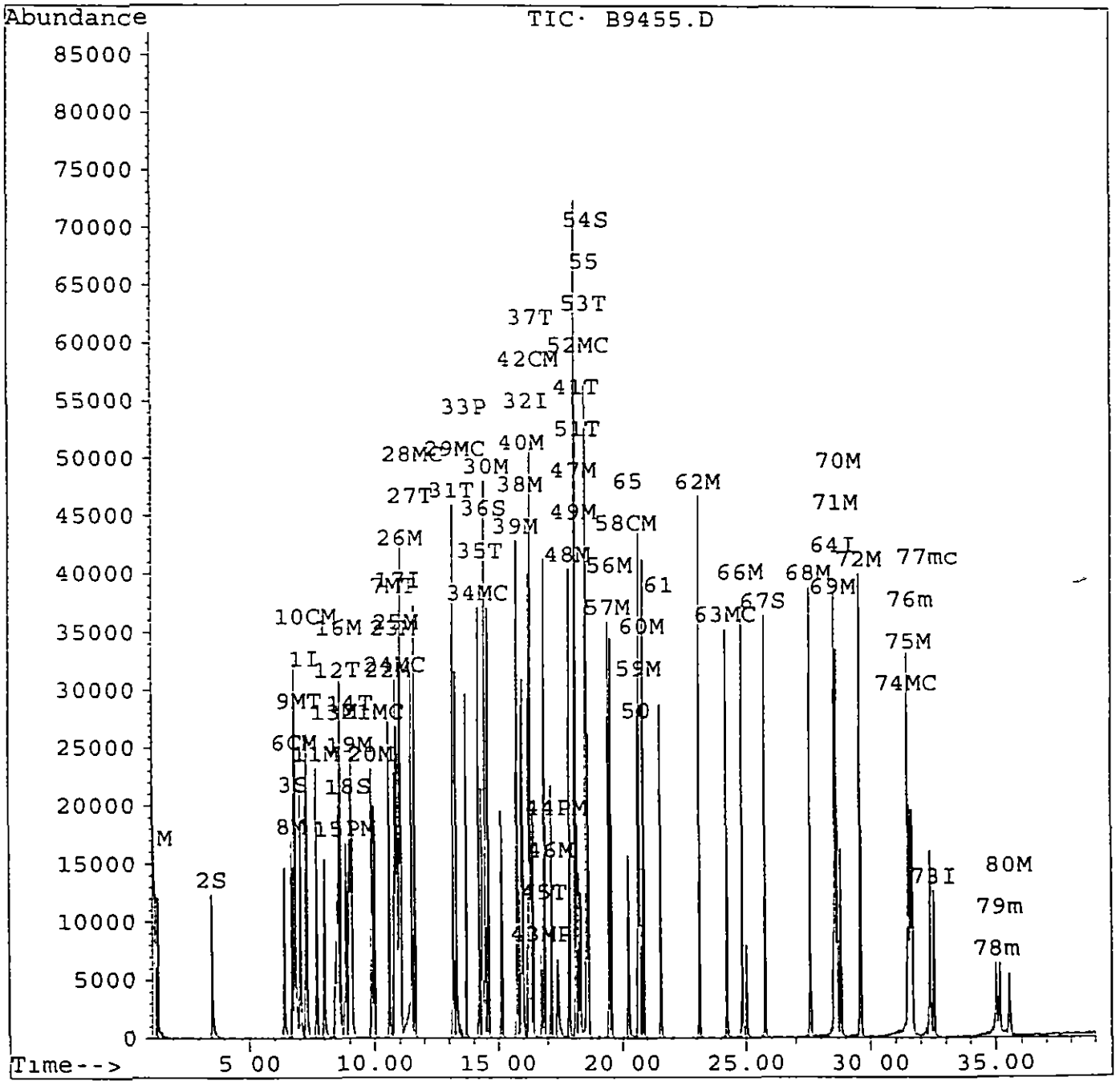
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.45	65	9916	29.09 ug/mL	92
38)	Dimethylphthalate	15.97	163	34709	48 48 ug/mL#	12
39)	Acenaphthylene	15 79	152	45172	53.64 ug/mL	99
40)	2,6-Dinitrotoluene	16.04	165	8250	46 84 ug/mL#	99
41)	3-Nitroaniline	18 30	138	5812	34 06 ug/mL#	77
42)	Acenaphthene	16 35	153	28015	52 38 ug/mL	96
43)	2,4-Dinitrophenol	16.78	184	2600	27 17 ug/mLm	71
44)	4-Nitrophenol	17 43	109	4634	37 73 ug/mLm	78
45)	Dibenzofuran	16.91	168	38364	51.10 ug/mL#	84
46)	2,4-Dinitrotoluene	17 18	165	8614	35.59 ug/mL#	1
47)	Diethylphthalate	18 16	149	36616	46.63 ug/mL	95
48)	Fluorene	17 91	166	28788	48.84 ug/mL	94
49)	4-Chlorophenyl-phenylether	18.16	204	13265	47 61 ug/mL#	73
51)	4-Nitroaniline	18 30	138	5812	50 41 ug/mL	77
52)	4,6-Dinitro-2-methylphenol	18.35	198	3739	44 38 ug/mL	100
53)	n-Nitrosodiphenylamine	18.59	169	17383	63 67 ug/mL	99
55)	1,2-Diphenylhydrazine (as	18.61	77	43654	56 83 ug/ml	100
56)	4-Bromophenyl-phenylether	19.57	248	8944	66 47 ug/mL	93
57)	Hexachlorobenzene	19.49	284	11769	62.27 ug/mL#	78
58)	Pentachlorophenol	20.26	266	4704	40.08 ug/mL	97
59)	Phenanthrene	20 72	178	33635	52.84 ug/mL	99
60)	Anthracene	20.88	178	33856	52.67 ug/mLm	99
61)	Carbazole	21.57	167	26489	43 23 ug/ml	94
62)	Di-n-butylphthalate	23 17	149	55929	47.47 ug/mL#	98
63)	Fluoranthene	24.27	202	34277	48 75 ug/mLm	83
65)	Benzidine	20 32	184	317	4 67 ug/mlm	100
66)	Pyrene	24.88	202	34777	40 14 ug/mL	95
68)	Butylbenzylphthalate	27.62	149	23933	37 69 ug/mL#	25
69)	Benzo[a]anthracene	28.60	228	31934	43 56 ug/mL	97
70)	3,3'-Dichlorobenzidine	28.83	252	10964	48 40 ug/mL	97
71)	Chrysene	28.69	228	28025	52 95 ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	29.62	149	33349	38 30 ug/mL#	19
74)	Di-n-octylphthalate	31.51	149	51581	30 27 ug/mL#	100
75)	Benzo[b]fluoranthene	31.60	252	26682	40.92 ug/mL	99
76)	Benzo[k]fluoranthene	31.68	252	23647	48.26 ug/mLm	99
77)	Benzo[a]pyrene	32 39	252	20248	48 82 ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	35.05	276	10316	35.28 ug/mL	96
79)	Dibenz[a,h]anthracene	35 18	278	10651	37 19 ug/mL	95
80)	Benzo[g,h,i]perylene	35.57	276	8932	30 66 ug/mLm	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9455 d Vial 3
Acq On 21 Dec 95 12 18 pm Operator SCOTTV
Sample 50 STD . . . Converted from RTE d Inst ABNA
Misc : BT Multiplr: 1.00
Quant Time. Dec 26 11 51 1995

Method : c.\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12.09 14 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b9456.d
Acq On : 21 Dec 95 1 10 pm
Sample : 80 STD. . . Converted from RTE d
Misc
Quant Time Dec 26 12.00 1995

Vial: 4 177
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method c:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Tue Dec 26 12.09 14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 28	152	8895	40.00	ug/mL	-0 55
17) Naphthalene-d8	11 04	136	38554	40 00	ug/mL	-0 53
32) Acenaphthene-d10	16.28	164	23163	40.00	ug/mL	-0 55
50) Phenanthrene-d10	20.68	188	38104	40 00	ug/ml	-0 57
64) Chrysene-d12	28.65	240	38515	40 00	ug/mL	-0 59
73) Perylene-d12	32 54	264	22559	40 00	ug/mL	-0 61
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.57	112	12835	50.68	ug/mL	50.68%
3) Phenol-d5	6 86	99	19407	46.02	ug/mL	46 02%
18) Nitrobenzene-d5	9.04	82	19101	41 46	ug/mL	41 46%
36) 2-Fluorobiphenyl	14 51	172	34911	56.70	ug/mL	56 70%
54) 2,4,6-Tribromophenol	18 69	330	10517	62 72	ug/mL	62.72%
67) Terphenyl-d14	25 80	244	48017	45 21	ug/mL	45 21%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.43	74	10289	54 25	ug/ml	100
6) Phenol	6.90	94	29184	79 59	ug/mL	100
7) bis(2-Chloroethyl)ether	10.85	93	32076	66 88	ug/mL	94
8) 2-Chlorophenol	6 73	128	22932	79 21	ug/mL	94
9) 1,3-Dichlorobenzene	7 07	146	23775	79.02	ug/mL	92
10) 1,4-Dichlorobenzene	7 34	146	24405	80 15	ug/mL	97
11) 1,2-Dichlorobenzene	7.73	146	24045	79.58	ug/mL	98
12) 2-Methylphenol	8.61	108	21155	78 09	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	8.50	45	21748	43.55	ug/mL	98
14) 4-Methylphenol	9.13	108	23194	79.83	ug/mL	99
15) N-Nitroso-Di-n-propylamine	8.92	70	17507	55.93	ug/mL	94
16) Hexachloroethane	8.67	117	15793	85 76	ug/mL#	80
19) Nitrobenzene	9.10	77	37043	68 72	ug/mL#	82
20) Isophorone	9.96	82	54123	72.91	ug/mL	96
21) 2-Nitrophenol	10.04	139	15978	76 96	ug/mL#	84
22) 2,4-Dimethylphenol	10.65	107	27775	75 81	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.85	93	32076	64 40	ug/mL#	100
24) 2,4-Dichlorophenol	10.91	162	20955	78 56	ug/mL	99
25) 1,2,4-Trichlorobenzene	10.96	180	22417	74 40	ug/mL	95
26) Naphthalene	11.10	128	69662	75.44	ug/mL	100
27) 4-Chloroaniline	11.54	127	33624	78.21	ug/mL	99
28) Hexachlorobutadiene	11.64	225	13513	74.73	ug/mL	99
29) 4-Chloro-3-methylphenol	13.33	107	25746	67.24	ug/mL	98
30) 2-Chloronaphthalene	14.64	162	45214	67.73	ug/ml#	100
31) 2-Methylnaphthalene	13.22	142	46386	57.34	ug/mL	96
33) Hexachlorocyclopentadiene	13 74	237	15949	102.71	ug/mL	99
34) 2,4,6-Trichlorophenol	14.26	196	16557	81.36	ug/mL	97
35) 2,4,5-Trichlorophenol	14.35	196	17168	83.15	ug/mL	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9456.d
Acq On : 21 Dec 95 1:10 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 1995

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.47	65	22280	59.17 ug/mL	85
38)	Dimethylphthalate	16.01	163	58869	74 42 ug/mL#	12
39)	Acenaphthylene	15.82	152	77218	82.99 ug/mL	99
40)	2,6-Dinitrotoluene	16.07	165	14251	73.23 ug/mL#	100
41)	3-Nitroaniline	18.36	138	13461	71.40 ug/mL#	83
42)	Acenaphthene	16.38	153	47163	79.81 ug/mL	97
43)	2,4-Dinitrophenol	16.80	184	6858	64.88 ug/mL	89
44)	4-Nitrophenol	17.42	109	11409	84.07 ug/mL#	78
45)	Dibenzofuran	16.92	168	69770	84.11 ug/mL	89
46)	2,4-Dinitrotoluene	17.21	165	19651	73.48 ug/mL#	1
47)	Diethylphthalate	18.19	149	64429	74.26 ug/mL	95
48)	Fluorene	17.94	166	49570	76.12 ug/mL	96
49)	4-Chlorophenyl-phenylether	18.17	204	22315	72.49 ug/mL#	81
51)	4-Nitroaniline	18.36	138	13461	78.91 ug/mL	83
52)	4,6-Dinitro-2-methylphenol	18.42	198	11092	88.97 ug/mL	100
53)	n-Nitrosodiphenylamine	18.61	169	30957	76.63 ug/mL	97
55)	1,2-Diphenylhydrazine (as	18.63	77	84354	74.22 ug/ml	100
56)	4-Bromophenyl-phenylether	19.60	248	16761	84.18 ug/mL#	83
57)	Hexachlorobenzene	19.52	284	24393	87.22 ug/mL#	67
58)	Pentachlorophenol	20.29	266	13970	80.43 ug/mL	97
59)	Phenanthrene	20.75	178	77201	81.97 ug/mLm	99
60)	Anthracene	20.91	178	78172	82.19 ug/mL	99
61)	Carbazole	21.60	167	73111	80.63 ug/ml	95
62)	Di-n-butylphthalate	23.18	149	144908	83.12 ug/mL	99
63)	Fluoranthene	24.30	202	95434	91.73 ug/mLm	81
65)	Benzidine	20.33	184	688	6.15 ug/mlm	100
66)	Pyrene	24.91	202	97013	68.01 ug/mL#	90
68)	Butylbenzylphthalate	27.63	149	64270	61.48 ug/mL#	23
69)	Benzo[a]anthracene	28.61	228	89034	73.77 ug/mL	100
70)	3,3'-Dichlorobenzidine	28.84	252	29641	79.48 ug/mL#	93
71)	Chrysene	28.71	228	68904	79.08 ug/mLm	100
72)	bis(2-Ethylhexyl)phthalate	29.63	149	90066	62.84 ug/mL#	28
74)	Di-n-octylphthalate	31.52	149	138120	57.74 ug/mL#	100
75)	Benzo[b]fluoranthene	31.62	252	71800	78.45 ug/mL	99
76)	Benzo[k]fluoranthene	31.69	252	51514	74.90 ug/mLm	99
77)	Benzo[a]pyrene	32.41	252	51963	89.25 ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	35.04	276	27346	66.62 ug/mL	99
79)	Dibenz[a,h]anthracene	35.18	278	27796	69.14 ug/mL	95
80)	Benzo[g,h,i]perylene	35.56	276	27708	67.77 ug/mLm	99

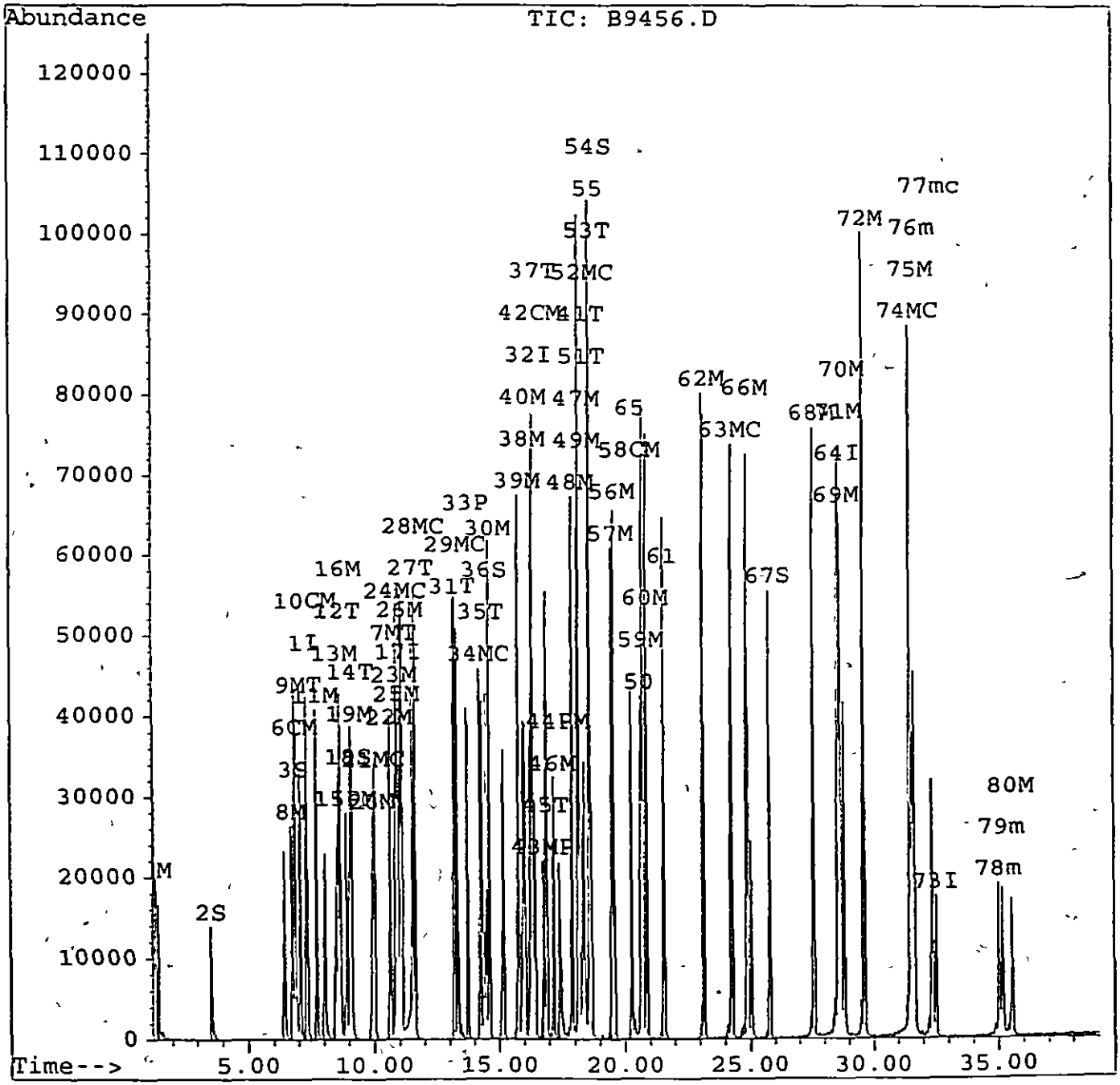
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b9456.d
Acq On : 21 Dec 95 1 10 pm
Sample : 80 STD. .... Converted from RTE d
Misc :
Quant Time: Dec 26 12:00 1995

Vial: 4
Operator. SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration



Quantitation Report

180

Data File c \hpchem\1\data2\b9457 d
Acq On 21 Dec 95 2 02 pm
Sample 120 STD Converted from RTE d
Misc
Quant Time· Dec 26 12.00 1995

Vial: 5
Operator· SCOTTV
Inst ABNA
BT Multiplr· 1.00

Method c \HPCHEM\1\METHODS\BNACLP M
Title · CLP BNA Calibration
Last Update Tue Dec 26 12 09:14 1995
Response via · Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 30	152	8190	40 00	ug/mL	-0 54
17) Naphthalene-d8	11 06	136	35391	40 00	ug/mL	-0.51
32) Acenaphthene-d10	16.28	164	22200	40 00	ug/mL	-0.55
50) Phenanthrene-d10	20.68	188	34602	40.00	ug/ml	-0 57
64) Chrysene-d12	28 66	240	32600	40.00	ug/mL	-0 59
73) Perylene-d12	32.53	264	18735	40 00	ug/mL	-0 62
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	3.57	112	12125	52 00	ug/mL	52.00%
3) Phenol-d5	6.88	99	18477	47 59	ug/mL	47.59%
18) Nitrobenzene-d5	9 06	82	17988	42.53	ug/mL	42 53%
36) 2-Fluorobiphenyl	14 53	172	32672	55.36	ug/mL	55 36%
54) 2,4,6-Tribromophenol	18 69	330	10000	65 67	ug/mL	65 67%
67) Terphenyl-d14	25 79	244	41637	46.32	ug/mL	46 32%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.45	74	20634	118.15	ug/mlm	100
6) Phenol	6.92	94	42436	125 69	ug/mL	100
7) bis(2-Chloroethyl)ether	10 87	93	47690	108.00	ug/mL	96
8) 2-Chlorophenol	6 74	128	33167	124 42	ug/mL	96
9) 1,3-Dichlorobenzene	7 09	146	34619	124 97	ug/mL	100
10) 1,4-Dichlorobenzene	7.36	146	35798	127 68	ug/mL	97
11) 1,2-Dichlorobenzene	7.75	146	34486	123 96	ug/mL	96
12) 2-Methylphenol	8.63	108	29290	117 42	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	8 50	45	48332	105 12	ug/mL#	94
14) 4-Methylphenol	9 17	108	32087	119 94	ug/mL	99
15) N-Nitroso-Di-n-propylamine	8 96	70	27347	94.88	ug/mL	93
16) Hexachloroethane	8 69	117	22000	129.75	ug/mL#	70
19) Nitrobenzene	9.11	77	51833	104 75	ug/mL	92
20) Isophorone	10 02	82	76712	112.57	ug/mL	99
21) 2-Nitrophenol	10 06	139	22639	118.78	ug/mL#	88
22) 2,4-Dimethylphenol	10.67	107	38451	114 33	ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.87	93	47690	104.30	ug/mL#	100
24) 2,4-Dichlorophenol	10.93	162	28385	115.92	ug/mL	96
25) 1,2,4-Trichlorobenzene	10.96	180	30567	110.51	ug/mL	94
26) Naphthalene	11.12	128	92013	108.55	ug/mL	100
27) 4-Chloroaniline	11.56	127	47491	120.34	ug/mL	99
28) Hexachlorobutadiene	11 64	225	19723	118.83	ug/mL	98
29) 4-Chloro-3-methylphenol	13 35	107	36615	104.18	ug/mL	96
30) 2-Chloronaphthalene	14 64	162	67502	110.15	ug/ml#	100
31) 2-Methylnaphthalene	13.24	142	63165	85 06	ug/mL	97
33) Hexachlorocyclopentadiene	13.76	237	23556	158.28	ug/mL	99
34) 2,4,6-Trichlorophenol	14 28	196	24740	126.84	ug/mL	99
35) 2,4,5-Trichlorophenol	14.37	196	23132	116.90	ug/mL	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9457.d
Acq On 21 Dec 95 2 02 pm
Sample 120 STD . Converted from RTE d
Misc
Quant Time Dec 26 12 00 1995

Vial 5
Operator SCOTTV
Inst ABNA
BT Multiplr 1.00

Method c \HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Tue Dec 26 12 09.14 1995
Response via Multiple Level Calibration

Compound	R T	QIon	Response	Conc Unit	Qvalue
37) 2-Nitroaniline	16 49	65	28959	80 24 ug/mL	93
38) Dimethylphthalate	16.03	163	78566	103.63 ug/mL#	12
39) Acenaphthylene	15.82	152	114738	128 66 ug/mL	99
40) 2,6-Dinitrotoluene	16.09	165	19290	103.42 ug/mL#	97
41) 3-Nitroaniline	18 37	138	14668	81.18 ug/mL#	85
42) Acenaphthene	16 38	153	71340	125.96 ug/mL	99
43) 2,4-Dinitrophenol	16 82	184	10898	107 57 ug/mL	94
44) 4-Nitrophenol	17 44	109	16951	130.32 ug/mL	85
45) Dibenzofuran	16 94	168	86490	108 79 ug/mL#	83
46) 2,4-Dinitrotoluene	17.23	165	26014	101.49 ug/mL#	1
47) Diethylphthalate	18.21	149	88020	105 86 ug/mL#	93
48) Fluorene	17.96	166	71673	114 84 ug/mL	97
49) 4-Chlorophenyl-phenylether	18.19	204	31028	105 16 ug/mL#	69
51) 4-Nitroaniline	18 37	138	14668	94 69 ug/mL	85
52) 4,6-Dinitro-2-methylphenol	18 42	198	15657	138.30 ug/mL	100
53) n-Nitrosodiphenylamine	18 62	169	44226	120.55 ug/mL	94
55) 1,2-Diphenylhydrazine (as	18 66	77	123892	120.03 ug/ml	100
56) 4-Bromophenyl-phenylether	19 60	248	23142	128 00 ug/mL#	85
57) Hexachlorobenzene	19.52	284	35191	138 57 ug/mL#	83
58) Pentachlorophenol	20.29	266	21519	136.44 ug/mL	97
59) Phenanthrene	20 76	178	107392	125 56 ug/mL	99
60) Anthracene	20.91	178	105043	121 62 ug/mLm	99
61) Carbazole	21.61	167	104225	126 58 ug/ml	96
62) Di-n-butylphthalate	23.18	149	193398	122 17 ug/mL#	99
63) Fluoranthene	24 30	202	123997	131 25 ug/mLm	77
65) Benzidine	20 33	184	1007	10 64 ug/mlm	100
66) Pyrene	24.92	202	128320	106 28 ug/mL#	88
68) Butylbenzylphthalate	27.62	149	85757	96 92 ug/mL#	27
69) Benzo[a]anthracene	28.62	228	124306	121 68 ug/mL	100
70) 3,3'-Dichlorobenzidine	28.83	252	49504	156 82 ug/mL#	95
71) Chrysene	28 71	228	81173	110 06 ug/mLm	100
72) bis(2-Ethylhexyl)phthalate	29.62	149	119876	98 81 ug/mL#	23
74) Di-n-octylphthalate	31.51	149	190845	96 07 ug/mL#	100
75) Benzo[b]fluoranthene	31 63	252	80942	106.49 ug/mLm	97
76) Benzo[k]fluoranthene	31.70	252	54593	95.58 ug/mLm	97
77) Benzo[a]pyrene	32.40	252	59541	123.14 ug/mLm	97
78) Indeno[1,2,3-cd]pyrene	35 03	276	29204	85.67 ug/mL	99
79) Dibenz[a,h]anthracene	35.17	278	29443	88.19 ug/mL#	91
80) Benzo[g,h,i]perylene	35 56	276	28700	84.52 ug/mLm	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

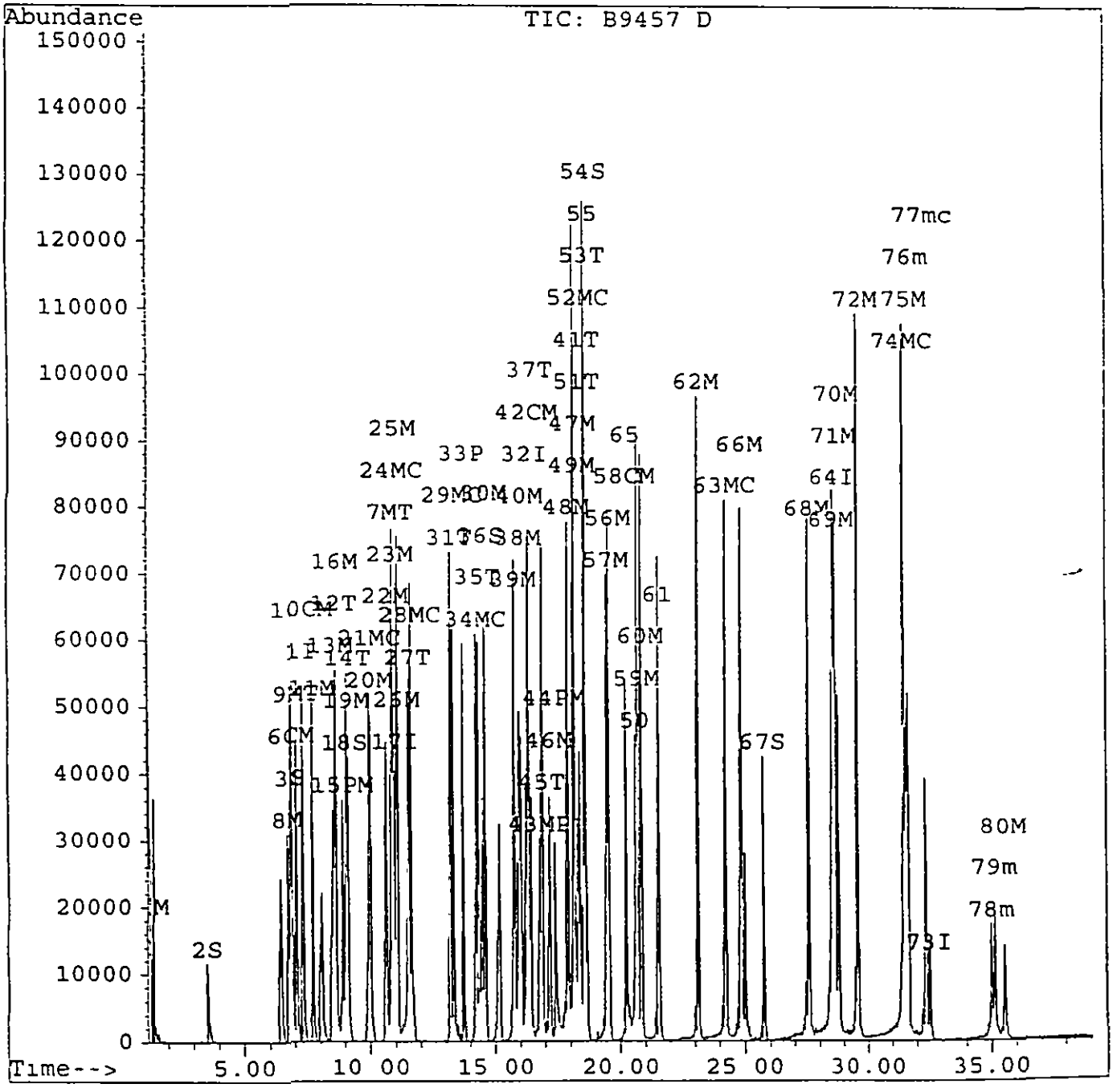
Data File : c.\hpchem\1\data2\b9457 d
Acq On : 21 Dec 95 2:02 pm
Sample : 120 STD
Misc
Quant Time Dec 26 12:00 1995

Converted from RTE d

Vial 5
Operator SCOTTV
Inst ABNA
BT Multiplr 1.00

183

Method . c.\HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12.09.14 1995
Response via . Multiple Level Calibration



Quantitation Report

Data File c \npchem\1\data2\b9458 d Vial 6
Acq On 21 Dec 95 2:54 pm Operator SCOTTV
Sample 160 STD Converted from RTE d Inst . ABNA
Misc BT Multiplr 1 00
Quant Time Dec 26 12.02 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration
Last Update . Tue Dec 26 12 09:14 1995
Response via . Multiple Level Calibration

Internal Standards	R.T	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 30	152	8269	40 00 ug/mL	-0 54
17) Naphthalene-d8	11 06	136	34499	40 00 ug/mL	-0 51
32) Acenaphthene-d10	16 29	164	21782	40.00 ug/mL	-0 55
50) Phenanthrene-d10	20 67	188	27930	40 00 ug/ml	-0 58
64) Chrysene-d12	28.65	240	23706	40.00 ug/mL	-0 59
73) Perylene-d12	32 54	264	14423	40 00 ug/mL	-0.61
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	3.57	112	12694	53.92 ug/mL	53.92%
3) Phenol-d5	6.88	99	21421	54.64 ug/mL	54 64%
18) Nitrobenzene-d5	9 06	82	17829	43.25 ug/mL	43 25%
36) 2-Fluorobiphenyl	14 53	172	33244	57.41 ug/mL	57 41%
54) 2,4,6-Tribromophenol	18 70	330	8467	68 88 ug/mL	68 88%
67) Terphenyl-d14	25 79	244	32094	49 10 ug/mL	49.10%
Target Compounds					Qvalue
4) N-nitrosodimethylamine	1.45	74	28534	161 82 ug/mlm	100
6) Phenol	6.92	94	53208	156 09 ug/mL	100
7) bis(2-Chloroethyl)ether	10.89	93	61925	138 90 ug/mL	87
8) 2-Chlorophenol	6.76	128	42995	159 75 ug/mL	97
9) 1,3-Dichlorobenzene	7 09	146	45149	161 42 ug/mL	99
10) 1,4-Dichlorobenzene	7 36	146	44987	158.92 ug/mL	97
11) 1,2-Dichlorobenzene	7 75	146	43720	155.65 ug/mL	97
12) 2-Methylphenol	8 65	108	37342	148.27 ug/mLm	94
13) bis(2-chloroisopropyl)etne	8 50	45	64623	139 21 ug/mL#	93
14) 4-Methylphenol	9 19	108	42669	157.98 ug/mL	94
15) N-Nitroso-Di-n-propylamine	8 98	70	37226	127.93 ug/mL	99
16) Hexachloroethane	8.69	117	28100	164 14 ug/mL#	78
19) Nitrobenzene	9.13	77	69678	144.45 ug/mL	98
20) Isophorone	10 06	82	101950	153.48 ug/mLm	97
21) 2-Nitrophenol	10.06	139	29260	157.49 ug/mL	91
22) 2,4-Dimethylphenol	10.68	107	51255	156.35 ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.89	93	61925	138.93 ug/mL#	100
24) 2,4-Dichlorophenol	10.93	162	35697	149.55 ug/mL	97
25) 1,2,4-Trichlorobenzene	10.98	180	38777	143.82 ug/mL	93
26) Naphthalene	11.14	128	129660	156.92 ug/mL	99
27) 4-Chloroaniline	11.56	127	58737	152.68 ug/mL	99
28) Hexachlorobutadiene	11 66	225	23811	147 16 ug/mL	98
29) 4-Chloro-3-methylphenol	13.35	107	47402	138.36 ug/mL	96
30) 2-Chloronaphthalene	14.67	162	89457	149 75 ug/ml#	100
31) 2-Methylnaphthalene	13 24	142	91151	125.92 ug/mL	95
33) Hexachlorocyclopentadiene	13.76	237	30132	206.35 ug/mL	98
34) 2,4,6-Trichlorophenol	14.28	196	37340	195.12 ug/mL	97
35) 2,4,5-Trichlorophenol	14.38	196	25693	132.34 ug/mL	97

(#) = qualifier out of range (m) = manual integration

Data File . c \hpchem\1\data2\b9458 d Vial 6
Acq On 21 Dec 95 2 54 pm Operator SCOTTV
Sample 160 STD. . Converted from RTE d Inst . ABNA
Misc BT Multiplr: 1 00
Quant Time Dec 26 12 02 1995

Method c·\HPCHEM\1\METHODS\BNACLP M
Title · CLP BNA Calibration
Last Update Tue Dec 26 12 09.14 1995
Response via · Multiple Level Calibration

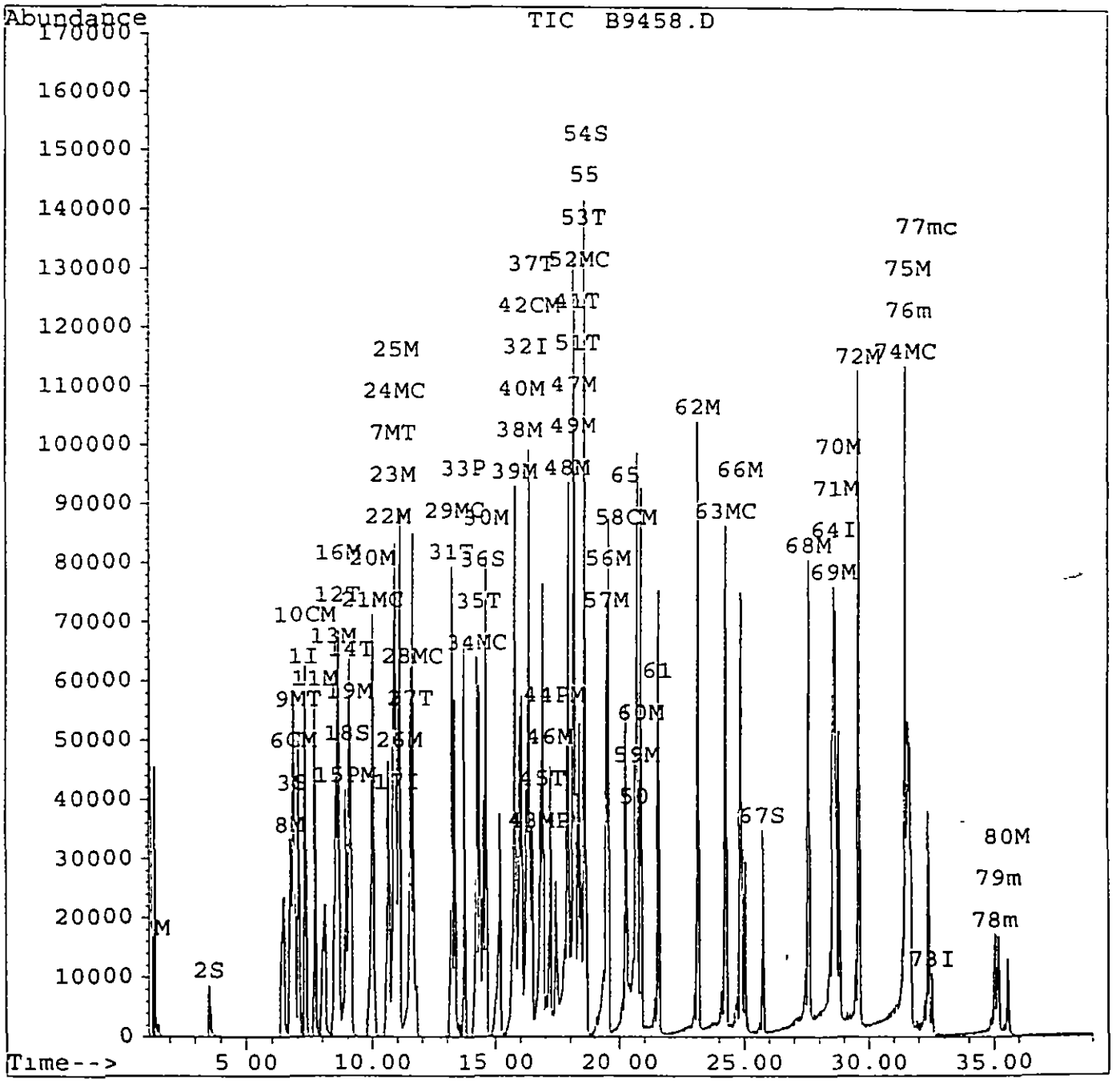
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.52	65	36969	104.40	ug/mL	87
38)	Dimethylphthalate	16 03	163	91077	122 44	ug/mL#	11
39)	Acenaphthylene	15.84	152	149482	170 84	ug/mL	100
40)	2,6-Dinitrotoluene	16 11	165	23495	128 39	ug/mL#	93
41)	3-Nitroaniline	18 37	138	14010	79 02	ug/mL	90
42)	Acenaphthene	16 40	153	94052	169 25	ug/mL	96
43)	2,4-Dinitrophenol	16 83	184	12676	127.52	ug/mL	86
44)	4-Nitrophenol	17.44	109	16337	128.01	ug/mL#	81
45)	Dibenzofuran	16.94	168	108498	139.09	ug/mL#	87
46)	2,4-Dinitrotoluene	17.25	165	28746	114.30	ug/mL#	1
47)	Diethylphthalate	18.22	149	98897	121.22	ug/mL#	92
48)	Fluorene	17 96	166	81212	132 62	ug/mL	95
49)	4-Chlorophenyl-phenylether	18.20	204	36009	124 38	ug/mL#	70
51)	4-Nitroaniline	18.37	138	14010	112 04	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	18 45	198	12005	131 37	ug/mL	100
53)	n-Nitrosodiphenylamine	18 62	169	50591	170 84	ug/mL	98
55)	1,2-Diphenylhydrazine (as	18 66	77	141967	170 40	ug/ml	100
56)	4-Bromophenyl-phenylether	19.61	248	26396	180 87	ug/mL#	89
57)	Hexachlorobenzene	19.53	284	39275	191 60	ug/mL#	87
58)	Pentachlorophenol	20.30	266	23142	181 78	ug/mL	95
59)	Phenanthrene	20.76	178	119616	173 26	ug/mL	99
60)	Anthracene	20.92	178	119156	170 92	ug/mLm	99
61)	Carbazole	21 61	167	108930	163 89	ug/ml	95
62)	Di-n-butylphthalate	23.19	149	205554	160 87	ug/mL#	98
63)	Fluoranthene	24 31	202	131389	172 29	ug/mLm	82
65)	Benzidine	20.34	184	1395	20 27	ug/mlm	100
66)	Pyrene	24.91	202	129819	147.87	ug/mL	92
68)	Butylbenzylphthalate	27.63	149	84223	130.90	ug/mL#	25
69)	Benzo[a]anthracene	28.63	228	128013	172.33	ug/mL	99
70)	3,3'-Dichlorobenzidine	28.84	252	37391	162.89	ug/mL#	95
71)	Chrysene	28.73	228	68647	128.00	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	29.63	149	120019	136 04	ug/mL#	25
74)	Di-n-octylphthalate	31.52	149	187341	122.50	ug/mL#	100
75)	Benzo[b]fluoranthene	31.64	252	81381	139 08	ug/mLm	97
76)	Benzo[k]fluoranthene	31.64	252	77913	177 18	ug/mLm	97
77)	Benzo[a]pyrene	32.41	252	61572	165.42	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	35.05	276	29591	112.76	ug/mL	98
79)	Dibenz[a,h]anthracene	35 18	278	31456	122.38	ug/mL#	92
80)	Benzo[g,h,i]perylene	35.57	276	24967	95.51	ug/mLm	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c:\hpchem\1\data2\b9458 d Vial 6 185
Acq On 21 Dec 95 2 54 pm Operator SCOTTV
Sample 160 STD . Converted from RTE d Inst ABNA
Misc . BT Multiplr· 1 00
Quant Time. Dec 26 12 02 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration
Last Update : Tue Dec 26 12.09:14 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

186

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Lab File ID: B9005 D DFTPP Injection Date: 10/27/95

Instrument ID: ABNA DFTPP Injection Time: 1121

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30 0 - 80 0% of mass 198	58 5
68	Less than 2 0% of mass 69	0 0 (0 0)1
69	Mass 69 relative abundance	76 5
70	Less than 2 0% of mass 69	0 0 (0 0)1
127	25 0 - 75 0% of mass 198	46 5
197	Less than 1 0% of mass 198	0 0
198	Base Peak, 100 % relative abundance	100 0
199	5 0 - 9 0% of mass 198	7 5
275	10 0 - 30 0% of mass 198	19 3
365	Greater than 0 75% of mass 198	2 3
441	Present, but less than mass 443	10 1
442	40 0 - 110 0% of mass 198	62 3
443	15 0 - 24 0% of mass 442	11 8 (19 0)2

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

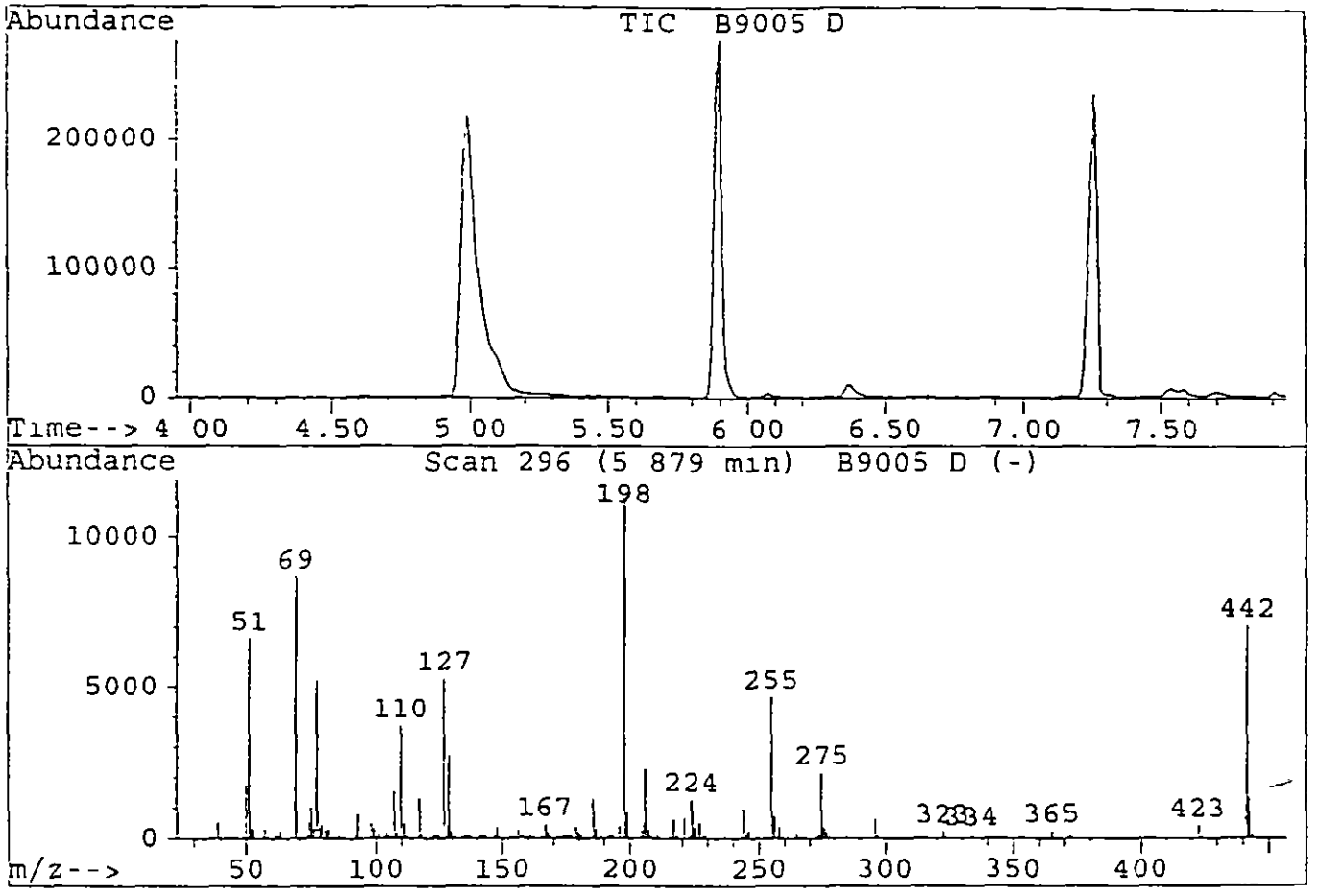
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B9008 D	10/27/95	1329
02	SBLK01	BLANK1	B9009 D	10/27/95	1421
03	9547000B	9547000B	B9010 D	10/27/95	1512
04	46360MS	46360MS	B9011 D	10/27/95	1604
05	46360MSD	46360MSD	B9012 D	10/27/95	1656
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP

Data File C \HPCHEM\1\DATA2\B9005 D Vial 1
Acq On 27 Oct 95 11 21 am Operator SCOTTV
Sample DFTPP Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00

Method C \HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration



Peak Apex is scan: 303

Target Mass	Rel to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	58.5	6640	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	76.5	8681	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	46.5	5278	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	11354	PASS
199	198	5	9	7.5	851	PASS
275	198	10	30	19.3	2186	PASS
365	198	1	100	2.3	262	PASS
441	443	0	100	85.7	1150	PASS
442	198	40	100	62.3	7070	PASS
443	442	17	23	19.0	1342	PASS

Scan 296 (5 879 min) B9005 D

Modified subtracted

m/z	abund	m/z	abund	m/z	abund	m/z	abund
37 00	76	61 05	162	78 05	357	92 95	836
39 10	538	62 05	105	78 95	456	94 05	60
40 10	11	63 05	251	80 05	272	96 00	4
49 15	60	64 05	21	81 05	337	98 00	514
50 10	1802	65 05	39	82 05	22	99.00	334
51 10	6640	69 05	8681	83 95	27	100 00	61
52 10	309	73 25	96	84 15	30	100 90	173
56 05	84	74 05	568	85 95	152	102.10	23
57 05	325	74 95	1043	87 05	60	103 00	131
57 95	40	75.95	325	88.15	24	104 00	213
58 95	33	77 05	5224	92 15	139	105 00	77

Scan 296 (5 879 min) B9005 D

Modified subtracted

m/z	abund	m/z	abund	m/z	abund	m/z	abund
106.10	45	119.20	28	131 95	21	145 95	60
107.00	1558	120.10	23	133 85	94	147.05	123
108 00	176	122.10	159	135.05	173	147.95	389
109.10	71	123.10	219	135.95	85	148.85	58
109.95	3714	124.00	134	136 95	116	150.05	34
111.00	519	125 00	94	137.75	36	151.25	56
112.00	87	127.00	5278	140 05	29	151 95	43
113 10	31	128 00	424	140 95	285	152 95	140
116 00	131	128.95	2715	141 95	153	153.95	69
117.00	1370	129.85	217	143 05	97	154.95	138
117 90	140	131 10	50	145.05	19	156.05	290

Scan 296 (5.879 min) B9005 D

Modified.subtracted

m/z	abund	m/z	abund	m/z	abund	m/z	abund.
157 15	71	169 10	53	178 80	398	189.90	28
157.95	86	170.20	25	179.85	215	190 90	62
158 95	48	170.90	34	180 90	122	191.90	140
159 95	73	171 90	78	181.90	29	193.00	137
160 85	143	173.00	95	182 80	17	195 00	27
161.95	53	174.00	147	184.00	47	195 90	402
164 05	17	175 00	154	184 80	122	197.90	11354
164.90	13	176.00	98	185.85	1327	198.80	851
165.95	79	177.10	135	186.90	319	200.00	72
166 90	470	177.80	31	187.90	49	201.40	85
167.90	186	178.10	37	188.80	46	203.00	60

Scan 296 (5.879 min): B9005.D

Modified:subtracted

m/z	abund.	m/z	abund	m/z	abund.	m/z	abund.
203.80	274	220.95	681	234.95	47	246.90	54
204.95	542	222.85	148	235.95	43	247.60	10
205.95	2320	223.85	1298	236.95	67	248.90	64
206 85	289	224.95	385	239.05	37	253.40	16
207.95	112	225.95	47	239 90	19	254.90	4690
208 95	41	226.95	533	240.90	49	255.80	735
210.75	167	227.95	107	241 80	74	256.90	64
214.85	42	228.85	163	242.90	80	257.90	400
215.95	68	229 95	32	243.90	1011	258.90	49
216.75	644	230.85	57	244.80	168	264.90	163
217.95	101	233.85	55	245.90	273	271.80	20

Scan 296 (5 879 min) B9005 D

Modified subtracted

m/z	abund	m/z	abund	m/z	abund	m/z	abund
272 90	141	302 85	75	331 70	25	365 85	41
273 80	394	303 95	33	332 90	24	370 85	31
274 90	2186	313 80	44	333 90	159	371 85	130
275 90	356	314 90	72	334 90	33	382 55	16
276 85	235	315.90	45	340 70	20	382 95	24
277 75	37	320 70	24	345 80	64	389.70	22
282 95	18	321 80	17	351 95	54	401 90	58
284 95	37	322 90	232	352.95	51	402.80	67
293 05	43	323 90	53	353.85	74	403.70	21
295 85	649	326 70	36	354 85	17	420 90	47
296 85	108	327 90	29	364 85	262	422 90	447

Scan 296 (5 879 min): B9005 D

Modified subtracted

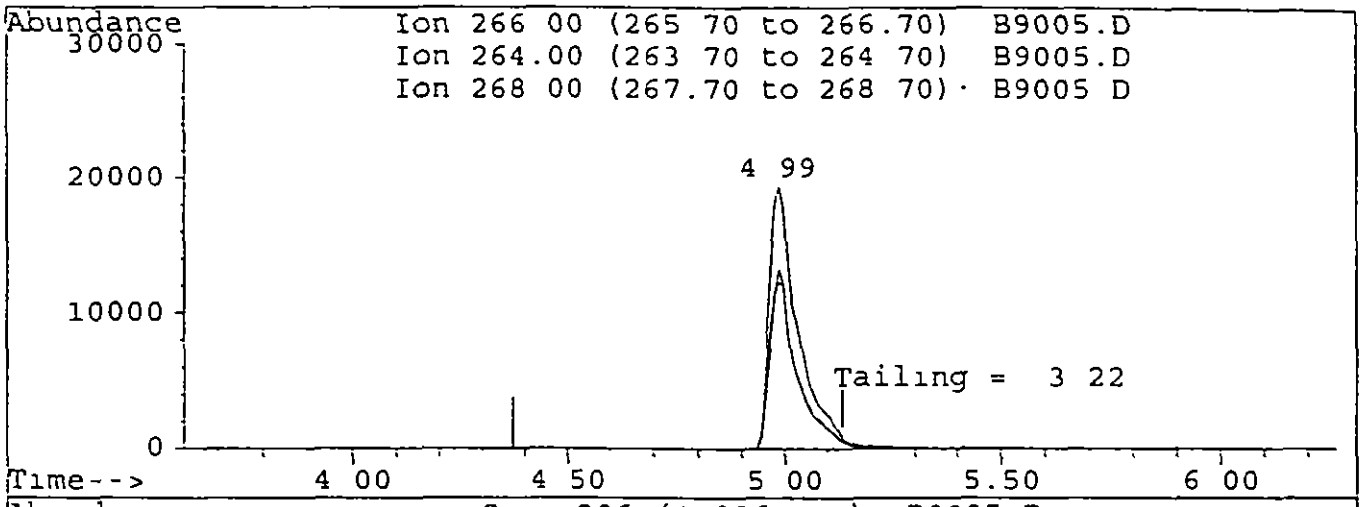
m/z	abund	m/z	abund	m/z	abund.	m/z	abund.
423.85	81						
440 85	1150						
441.85	7070						
442.75	1342						
443 75	155						

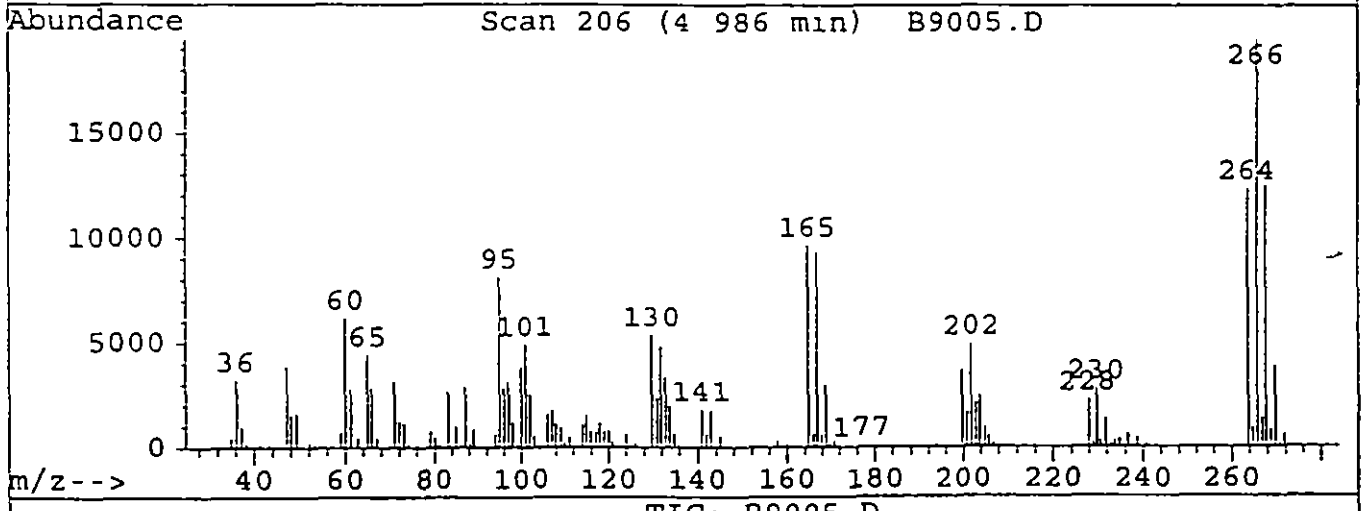
Quantitation Report

100

Data File C \HPCHEM\1\DATA2\B9005 D Vial 1
Acq On 27 Oct 95 11 21 am Operator SCOTTV
Sample DFTPP Converted from RTE d Inst ABNA
Misc BT Multiplr 1.00
Quant Time Oct 27 12 32 1995

Method C \HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update Wed Oct 25 10 20 51 1995
Response via Multiple Level Calibration





TIC: B9005.D

(1) Pentachlorophenol (CM)

4.99min 272.64ug/mL

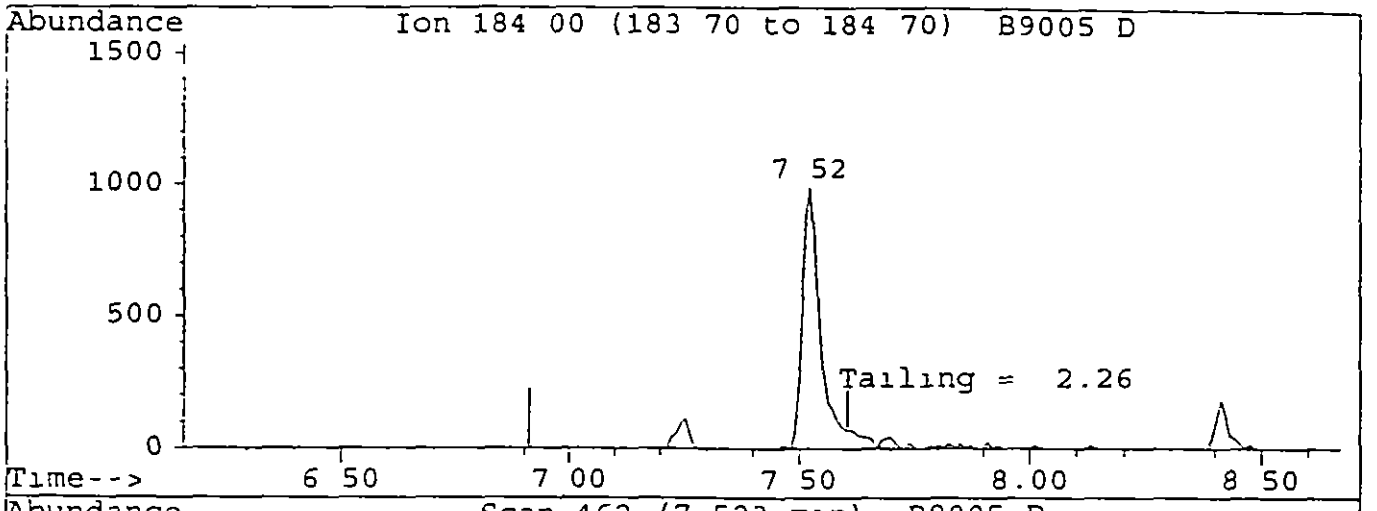
response 90052

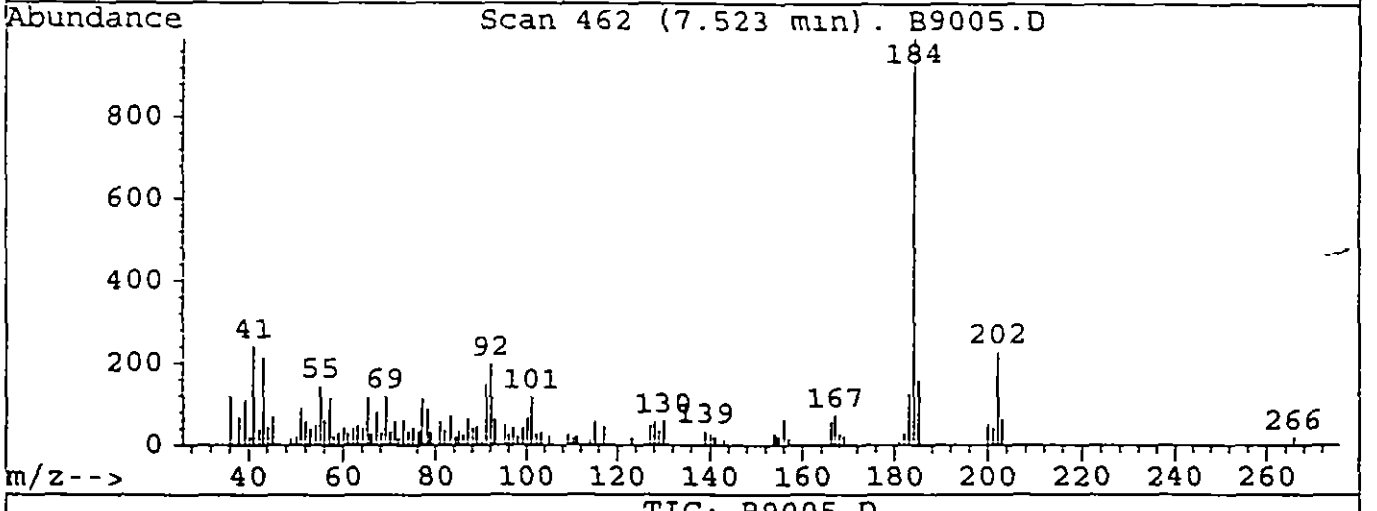
Ion	Exp%	Act%
266.00	100	100
264.00	64 30	63.35
268.00	64.70	68.27
0.00	0.00	0.00

Quantitation Report

Data File	C \HPCHEM\1\DATA2\B9005 D	Vial	1
Acq On	27 Oct 95 11 21 am	Operator	SCOTTV
Sample	DFTPP Converted from RTE d	Inst	ABNA
Misc		BT Multiplr	1.00
Quart Time	Oct 27 12 32 1995		

Method	C \HPCHEM\1\METHODS\BNACLP M
Title	CLP BNA Calibration
Last Update	Wed Oct 25 10 20.51 1995
Response via	Multiple Level Calibration





TIC: B9005.D

(2) Benzidine

7.52min 9.14ug/ml

response 2809

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0 00	0.00

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No: _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABN A Calibration Date: #### Time: 1329

Lab File ID: B9008 D Init Calib Date(s): #### 1/0/00

Init Calib Times: 1329 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0 887	0 841		5 2	
bis(2-Chloroethyl)ether	2 373	2 336		1 6	
1,3-Dichlorobenzene	1 367	1 410		-3 1	
1,4-Dichlorobenzene	1 383	1 419		-2 6	30 0
1,2-Dichlorobenzene	1 347	1 385		-2 8	
bis(2-chloroisopropyl)ether	2 234	1 940		13 2	
N-Nitroso-Di-n-propylamine	1 528	1 444	0 050	5 5	
Hexachloroethane	0 868	0 883		-1 7	
Nitrobenzene	0 519	0 516		0 6	
Isophorone	1 101	1 024		7 0	
bis(2-Chloroethoxy)methane	0 603	0 598		0 8	
1,2,4-Trichlorobenzene	0 304	0 309		-1 6	
Naphthalene	1 003	0 942		6 1	
Hexachlorobutadiene	0 160	0 160		0 0	30 0
Hexachlorocyclopentadiene	0 289	0 246	0 050	14 9	
2-Chloronaphthalene	0 634	0 647		-2 1	
Dimethylphthalate	1 368	1 400		-2 3	
Acenaphthylene	1 801	1 833		-1 8	
2,6-Dinitrotoluene	0 308	0 351		-14 0	
Acenaphthene	1 020	1 150		-12 7	30 0
2,4-Dinitrotoluene	0 452	0 459		-1 5	
Diethylphthalate	1 556	1 602		-3 0	
Fluorene	1 167	1 206		-3 3	
4-Chlorophenyl-phenylether	0 509	0 505		0 8	
n-Nitrosodiphenylamine	0 543	0 578		-6 4	
1,2-Diphenylhydrazine(as azo)	0 000	0 000			
4-Bromophenyl-phenylether	0 187	0 199		-6 4	
Hexachlorobenzene	0 237	0 247		-4 2	
Phenanthrene	1 087	1 152		-6 0	
Anthracene	1 068	1 135		-6 3	
Di-n-butylphthalate	2 011	1 728		14 1	
Fluoranthene	1 092	0 939		14 0	30 0
Benzidine	0 274	0 276		-0 7	
Pyrene	1 600	1 832		-14 5	
Butylbenzylphthalate	1 245	1 293		-3 9	
Benzo[a]anthracene	1 429	1 239		13 3	
3,3'-Dichlorobenzidine	0 386	0 330		14 5	

All other compounds must meet a minimum RRF of 0 010

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Instrument ID: ABNA Calibration Date: #### Time: 1329

Lab File ID: B9008 D Init Calib Date(s): #### 1/0/00

Init Calib Times: 1329 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chrysene	0 857	1 008		-17 6	
bis(2-Ethylhexyl)phthalate	1 785	1 714		4 0	
Di-n-octylphthalate	5 692	5 727		-0 6	30 0
Benzo[b]fluoranthene	1 952	1 846		5 4	
Benzo[k]fluoranthene	1 162	1 246		-7 2	
Benzo[a]pyrene	1 081	1 178		-9 0	30 0
Indeno[1,2,3-cd]pyrene	0 561	0 585		-4 3	
Dibenz[a,h]anthracene	0 549	0 494		10 0	
Benzo[g,h,i]perylene	0 510	0 437		14 3	
Nitrobenzene-d5	0 542	0 524		3 3	
2-Fluorobiphenyl	1 220	1 209		0 9	
Terphenyl-d14	0 994	1 151		-15 8	

All other compounds must meet a minimum RRF of 0 010

Evaluate Continuing Calibration Report

Data File C:\HPCHEM\1\DATA2\B9008.D Vial 2
Acq On 27 Oct 95 1:29 pm Operator SCOTTV SUF
Sample 50 STD Converted from RTE d Inst ABNA
Misc BT Multiplr 1.00

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Wed Oct 25 10:20:51 1995
Response via Multiple Level Calibration

Min RRF : 0.050 Min Rel Area 50% Max R.T. Dev 0.50min
Max RRF Dev 30% Max Rel Area 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	-0.10
2	S	2-Fluorophenol	1.275	1.248	2.1	88	-0.08
3	S	Phenol-d5	2.069	2.002	3.2	89	-0.04
4	M	N-nitrosodimethylamine	0.887	0.841	5.2	84	-0.06
5		Pyridine	0.795	0.000#	100.0#	0#	-1.55#
6	CM	Phenol	1.941	2.100	-8.2	100	-0.04
7	MT	bis(2-Chloroethyl)ether	2.373	2.336	1.6	90	-0.08
8	M	2-Chlorophenol	1.333	1.349	-1.2	90	-0.08
9	MT	1,3-Dichlorobenzene	1.367	1.410	-3.1	90	-0.08
10	CM	1,4-Dichlorobenzene	1.383	1.419	-2.6	87	-0.10
11	M	1,2-Dichlorobenzene	1.347	1.385	-2.8	89	-0.10
12	T	2-Methylphenol	1.279	1.273	0.5	88	-0.06
13	M	bis(2-chloroisopropyl)ether	2.234	1.940	13.2	93	-0.06
14	T	4-Methylphenol	1.402	1.302	7.1	78	-0.06
15	PM	N-Nitroso-Di-n-propylamine	1.528	1.444	5.5	86	-0.08
16	M	Hexachloroethane	0.868	0.883	-1.7	90	-0.10
17	I	Naphthalene-d8	1.000	1.000	0.0	88	-0.10
18	S	Nitrobenzene-d5	0.542	0.524	3.4	87	-0.08
19	M	Nitrobenzene	0.519	0.516	0.6	93	-0.08
20	M	Isophorone	1.101	1.024	7.0	88	-0.10
21	MC	2-Nitrophenol	0.239	0.227	5.2	81	-0.10
22	M	2,4-Dimethylphenol	0.387	0.378	2.2	89	-0.06
23	M	bis(2-Chloroethoxy)methane	0.603	0.598	0.8	90	-0.08
24	MC	2,4-Dichlorophenol	0.295	0.282	4.4	85	-0.06
25	M	1,2,4-Trichlorobenzene	0.304	0.309	-1.6	88	-0.10
26	M	Naphthalene	1.003	0.942	6.1	82	-0.10
27	T	4-Chloroaniline	0.470	0.439	6.7	86	-0.08
28	MC	Hexachlorobutadiene	0.160	0.160	-0.5	88	-0.08
29	MC	4-Chloro-3-methylphenol	0.388	0.356	8.4	80	-0.04
30	M	2-Chloronaphthalene	0.634	0.647	-2.0	90	-0.08
31	T	2-Methylnaphthalene	0.870	0.829	4.7	81	-0.10
32	I	Acenaphthene-d10	1.000	1.000	0.0	87	-0.10
33	P	Hexachlorocyclopentadiene	0.289	0.246	15.1	88	-0.08
34	MC	2,4,6-Trichlorophenol	0.426	0.387	9.2	83	-0.08
35	T	2,4,5-Trichlorophenol	0.347	0.413	-18.9	89	-0.06
36	S	2-Fluorobiphenyl	1.220	1.209	0.9	84	-0.10
37	T	2-Nitroaniline	0.783	0.773	1.3	89	-0.06
38	M	Dimethylphthalate	1.368	1.400	-2.3	88	-0.08
39	M	Acenaphthylene	1.801	1.833	-1.8	86	-0.10
40	M	2,6-Dinitrotoluene	0.308	0.351	-14.1	81	-0.08

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File C:\HPCHEM\1\DATA2\B9008.D Vial 2
Acq On 27 Oct 95 1:29 pm Operator SCOTTV
Sample 50 STD Converted from RTE.d Inst ABNA
Misc BT Multiplr 1.00

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Wed Oct 25 10:20:51 1995
Response via Multiple Level Calibration

Min RRF 0.050 Min Rel Area 50% Max R.T. Dev 0.50min
Max RRF Dev 30% Max Rel Area 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.342	0.354	-3.5	84	-0.06
42	CM	Acenaphthene	1.020	1.150	-12.8	96	-0.10
43	MP	2,4-Dinitrophenol	0.210	0.227	-8.3	114	-0.08
44	PM	4-Nitrophenol	0.228	0.222	2.4	88	0.00
45	T	Dibenzofuran	1.534	1.481	3.5	82	-0.10
46	M	2,4-Dinitrotoluene	0.452	0.459	-1.4	85	-0.08
47	M	Diethylphthalate	1.556	1.602	-2.9	88	-0.08
48	M	Fluorene	1.167	1.206	-3.3	87	-0.08
49	M	4-Chlorophenyl-phenylether	0.509	0.505	0.8	85	-0.10
50		Phenanthrene-d10	1.000	1.000	0.0	80	-0.10
51	T	4-Nitroaniline	0.230	0.259	-12.3	84	-0.06
52	MC	4,6-Dinitro-2-methylphenol	0.148	0.147	1.1	74	-0.08
53	T	n-Nitrosodiphenylamine	0.543	0.578	-6.6	82	-0.08
54	S	2,4,6-Tribromophenol	0.127	0.123	2.6	81	-0.08
55		1,2-Diphenylhydrazine (as a	1.784	1.999	-12.0	85	-0.08
56	M	4-Bromophenyl-phenylether	0.187	0.199	-6.3	85	-0.10
57	M	Hexachlorobenzene	0.237	0.247	-4.3	83	-0.10
58	CM	Pentachlorophenol	0.163	0.130	19.7	71	-0.10
59	M	Phenanthrene	1.087	1.152	-6.0	82	-0.09
60	M	Anthracene	1.068	1.135	-6.3	82	-0.09
61		Carbazole	1.065	0.890	16.4	68	-0.09
62	M	Di-n-butylphthalate	2.011	1.728	14.1	67	-0.11
63	MC	Fluoranthene	1.092	0.939	14.1	67	-0.74#
64	I	Chrysene-d12	1.000	1.000	0.0	36#	-0.11
65		Benzidine	0.274	0.276	-0.9	42#	-0.10
66	M	Pyrene	1.600	1.832	-14.5	42#	-0.11
67	S	Terphenyl-d14	0.994	1.151	-15.8	45#	-0.11
68	M	Butylbenzylphthalate	1.245	1.293	-3.9	38#	-0.11
69	M	Benzo[a]anthracene	1.429	1.239	13.3	30#	-0.13
70	M	3,3'-Dichlorobenzidine	0.386	0.330	14.4	30#	-0.09
71	M	Chrysene	0.857	1.008	-17.6	42#	-0.11
72	M	bis(2-Ethylhexyl)phthalate	1.785	1.714	3.9	35#	-0.11
73	I	Perylene-d12	1.000	1.000	0.0	34#	-0.09
74	MC	Di-n-octylphthalate	5.692	5.727	-0.6	33#	-0.11
75	M	Benzo[b]fluoranthene	1.952	1.846	5.5	26#	-0.11
76	m	Benzo[k]fluoranthene	1.162	1.246	-7.2	36#	-0.11
77	mc	Benzo[a]pyrene	1.081	1.178	-8.9	37#	-0.09
78	m	Indeno[1,2,3-cd]pyrene	0.561	0.585	-4.3	34#	-0.09
79	m	Dibenz[a,h]anthracene	0.549	0.494	9.9	30#	-0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File C:\HPCHEM\1\DATA2\B9008.D Vial: 2
Acq On 27 Oct 95 1:29 pm Operator SCOTTV SUF
Sample 50 STD Converted from RTE.d Inst ABNA
Misc BT Multiplr: 1.00

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Wed Oct 25 10:20:51 1995
Response via : Multiple Level Calibration

Min RRF : 0.050 Min Rel. Area : 50% Max. R.T. Dev 0.50min
Max RRF Dev 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	M	Benzo[g,h,i]perylene	0.510	0.437	14.3	28#	-0.09
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-14.07#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	0#	-36.48#
83		Quinoline	0.000	0.000#	0.0	85	-0.08
84		Thiophenol	0.000	0.000#	0.0	0#	-5.86#
85		4-Methyl chrysene	0.000	0.000#	0.0	0#	-31.87#
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	29#	-0.09
87		Indene	0.000	0.000#	0.0	0#	-9.67#
88		Benzyl alcohol	0.000	0.000#	0.0	91	-0.10
89		Benzoic acid	0.000	0.000#	0.0	90	-0.06

Quantitation Report

Data File: c:\hpchem\1\data2\b9008.d — Vial: 2
Acq On: 27 Oct 95 1 29 pm — Operator: SCOTTV
Sample: 50 STD — Converted from RTE d — Inst: ABNA
Misc — BT Multiplr: 1.00
Quant Time: Oct 30 14 27 1995

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Wed Oct 25 10 20 51 1995
Response via: Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	26722	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.33	136	104351	40.00	ug/mL	-0.10
32) Acenaphthene-d10	17.63	164	57774	40.00	ug/mL	-0.10
50) Phenanthrene-d10	22.12	188	79042	40.00	ug/ml	-0.10
64) Chrysene-d12	30.18	240	25699	40.00	ug/mL	-0.11
73) Perylene-d12	34.15	264	9983	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.03	112	41696	48.95	ug/mL	48.95%
3) Phenol-d5	8.05	99	66887	48.39	ug/mL	48.39%
18) Nitrobenzene-d5	10.31	82	68307	48.30	ug/mL	48.30%
36) 2-Fluorobiphenyl	15.80	172	87328	49.56	ug/mL	49.56%
54) 2,4,6-Tribromophenol	20.08	330	12186	48.69	ug/mL	48.69%
67) Terphenyl-d14	27.25	244	36967	57.91	ug/mL	57.91%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.08	74	28093	47.39	ug/ml	100
6) Phenol	8.09	94	70156	54.11	ug/mL	100
7) bis(2-Chloroethyl)ether	12.04	93	78019	49.22	ug/mL	99
8) 2-Chlorophenol	8.03	128	45049	50.60	ug/mL#	80
9) 1,3-Dichlorobenzene	8.40	146	47089	51.56	ug/mL	96
10) 1,4-Dichlorobenzene	8.65	146	47410	51.30	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	46258	51.39	ug/mL	96
12) 2-Methylphenol	9.77	108	42525	49.77	ug/mLm	100
13) bis(2-chloroisopropyl)ethe	9.71	45	64814	43.42	ug/mL	99
14) 4-Methylphenol	10.29	108	43505	46.44	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.13	70	48217	47.24	ug/mL	93
16) Hexachloroethane	9.98	117	29491	50.85	ug/mL#	74
19) Nitrobenzene	10.37	77	67275	49.68	ug/mLm	91
20) Isophorone	11.17	82	133559	46.48	ug/mL	94
21) 2-Nitrophenol	11.29	139	29599	47.42	ug/mL#	90
22) 2,4-Dimethylphenol	11.81	107	49328	48.89	ug/mL#	100
23) bis(2-Chloroethoxy)methane	12.04	93	78019	49.60	ug/mL#	100
24) 2,4-Dichlorophenol	12.12	162	36829	47.80	ug/mL	96
25) 1,2,4-Trichlorobenzene	12.22	180	40319	50.79	ug/mL	94
26) Naphthalene	12.39	128	122894	46.95	ug/mL	100
27) 4-Chloroaniline	12.78	127	57235	46.63	ug/mL	99
28) Hexachlorobutadiene	12.91	225	20908	50.23	ug/mL	99
29) 4-Chloro-3-methylphenol	14.53	107	46386	45.80	ug/mL#	1
30) 2-Chloronaphthalene	15.97	162	84381	51.00	ug/ml#	100
31) 2-Methylnaphthalene	14.53	142	108166	47.67	ug/mL#	71
33) Hexachlorocyclopentadiene	15.05	237	17734	42.44	ug/mL#	96
34) 2,4,6-Trichlorophenol	15.53	196	27935	45.40	ug/mL	96
35) 2,4,5-Trichlorophenol	15.63	196	29810	59.43	ug/mL	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9008 d Vial 2
Acq On 27 Oct 95 1 29 pm Operator SCOTTV
Sample 50 STD Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 30 14 27 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10 20 51 1995
Response via Multiple Level Calibration

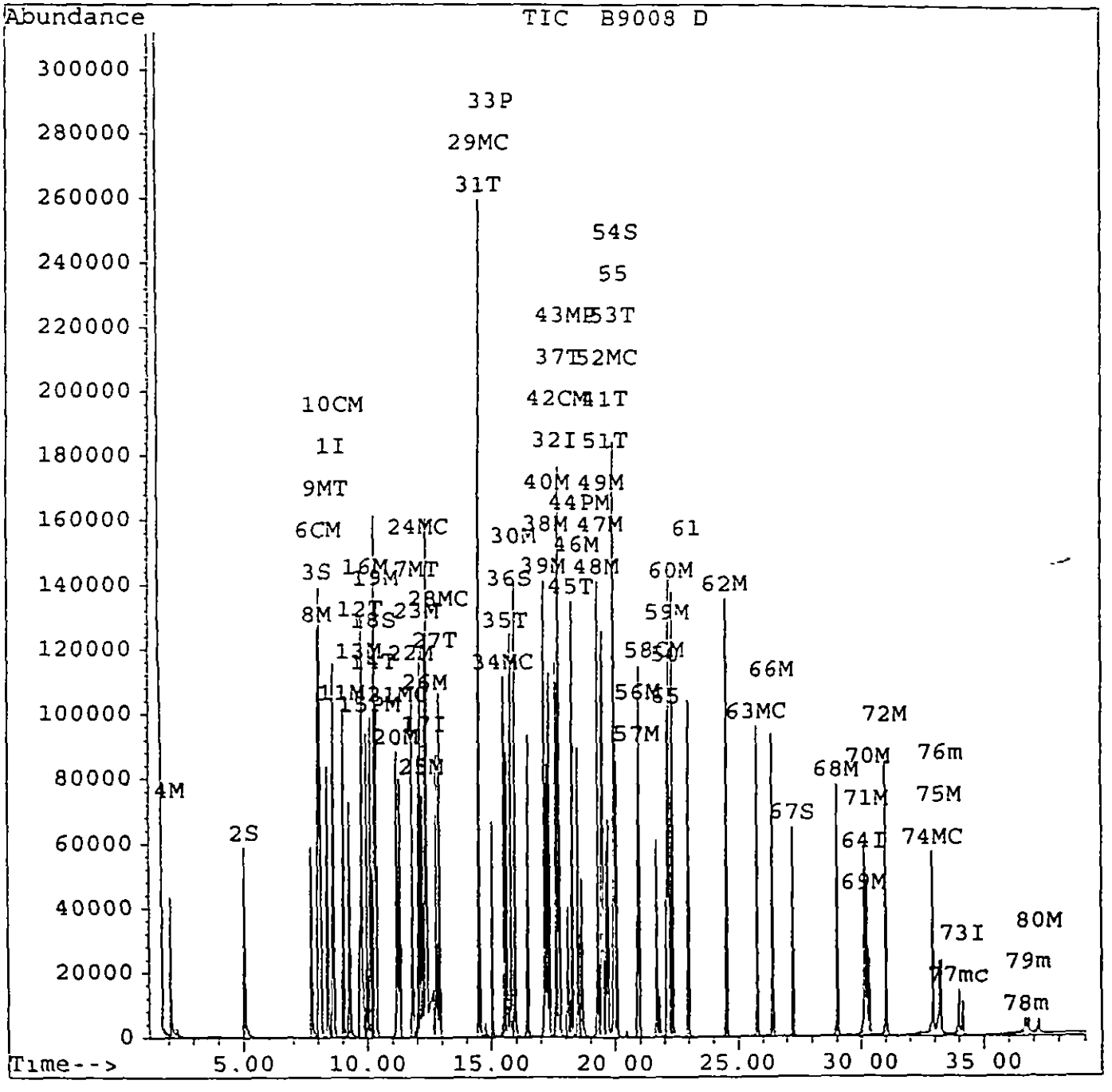
	Compound	R T	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	17 79	65	55820	49 36 ug/mL	86
38)	Dimethylphthalate	17 27	163	101087	51 16 ug/mL#	12
39)	Acenaphthylene	17 17	152	132357	50 88 ug/mL	98
40)	2,6-Dinitrotoluene	17 34	165	25335	57 03 ug/mLm	99
41)	3-Nitroaniline	19 68	138	25550	51 73 ug/mL	89
42)	Acenaphthene	17 73	153	83055	56 38 ug/mL	98
43)	2,4-Dinitrophenol	18 10	184	16396	54.13 ug/mLm	83
44)	4-Nitrophenol	18.65	109	16063	48.80 ug/mLm	55
45)	Dibenzofuran	18.29	168	106926	48.25 ug/mL	94
46)	2,4-Dinitrotoluene	18 52	165	33124	50 69 ug/mL#	1
47)	Diethylphthalate	19 48	149	115678	51 47 ug/mL#	93
48)	Fluorene	19 33	166	87065	51.64 ug/mL	98
49)	4-Chlorophenyl-phenylether	19 52	204	36435	49 59 ug/mL#	85
51)	4-Nitroaniline	19.68	138	25550	56 16 ug/mL	89
52)	4,6-Dinitro-2-methylphenol	19.73	198	14484	49.43 ug/mL	100
53)	n-Nitrosodiphenylamine	19.97	169	57135	53.30 ug/mL	95
55)	1,2-Diphenylhydrazine (as	20.00	77	197478	56.01 ug/ml	100
56)	4-Bromophenyl-phenylether	20.97	248	19642	53.15 ug/mL	91
57)	Hexachlorobenzene	20.93	284	24441	52.13 ug/mL#	50
58)	Pentachlorophenol	21.66	266	12892	40.14 ug/mLm	97
59)	Phenanthrene	22 20	178	113864	53.01 ug/mL	99
60)	Anthracene	22 36	178	112150	53.16 ug/mLm	99
61)	Carbazole	23.01	167	87921	41.79 ug/ml	96
62)	Di-n-butylphthalate	24 53	149	170725	42.96 ug/mL	99
63)	Fluoranthene	25 78	202	92729	42.97 ug/mLm	70
65)	Benzidine	22 12	184	8865	50.45 ug/mlm	100
66)	Pyrene	26.42	202	58853	57.24 ug/mLm	60
68)	Butylbenzylphthalate	29.04	149	41544	51.93 ug/mL#	12
69)	Benzo[a]anthracene	30.14	228	39805	43.35 ug/mL	99
70)	3,3'-Dichlorobenzidine	30 33	252	10615	42.80 ug/mL#	90
71)	Chrysene	30.25	228	32370	58.81 ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31 03	149	55067	48.03 ug/mL#	34
74)	Di-n-octylphthalate	32 93	149	71466	50.31 ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	23032	47.27 ug/mL#	80
76)	Benzo[k]fluoranthene	33.28	252	15551	53.61 ug/mLm	80
77)	Benzo[a]pyrene	34.00	252	14699	54.47 ug/mLm	80
78)	Indeno[1,2,3-cd]pyrene	36.67	276	7304	52.14 ug/mLm	32
79)	Dibenz[a,h]anthracene	36.79	278	6166	45.03 ug/mL#	83
80)	Benzo[g,h,i]perylene	37.21	276	5449	42.84 ug/mL#	63

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File	c \hpchem\1\data2\b9008 d	Vial	2
Acq On	27 Oct 95 1 29 pm	Operator	SCOTTV
Sample	50 STD	Converted from RTE d Inst	ABNA
Misc		BT Multiplr	1 00
Quant Time	Oct 30 14 27 1995		

Method	c \HPCHEM\1\METHODS\BNACLP M
Title	CLP BNA Calibration
Last Update	Wed Oct 25 10 20 51 1995
Response via	Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

20 U

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID B9468 D DFTPP Injection Date 12/26/95

Instrument ID ABNA DFTPP Injection Time 1104

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30 0 - 80 0% of mass 198	54 0
68	Less than 2 0% of mass 69	0 0 (0 0)1
69	Mass 69 relative abundance	71 7
70	Less than 2 0% of mass 69	0 0 (0 0)1
127	25 0 - 75 0% of mass 198	42 8
197	Less than 1 0% of mass 198	0 0
198	Base Peak, 100 % relative abundance	100 0
199	5 0 - 9 0% of mass 198	7 8
275	10 0 - 30 0% of mass 198	18 4
365	Greater than 0 75% of mass 198	2 9
441	Present, but less than mass 443	9 5
442	40 0 - 110 0% of mass 198	52 8
443	15 0 - 24 0% of mass 442	10 8 (20 4)2

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

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS

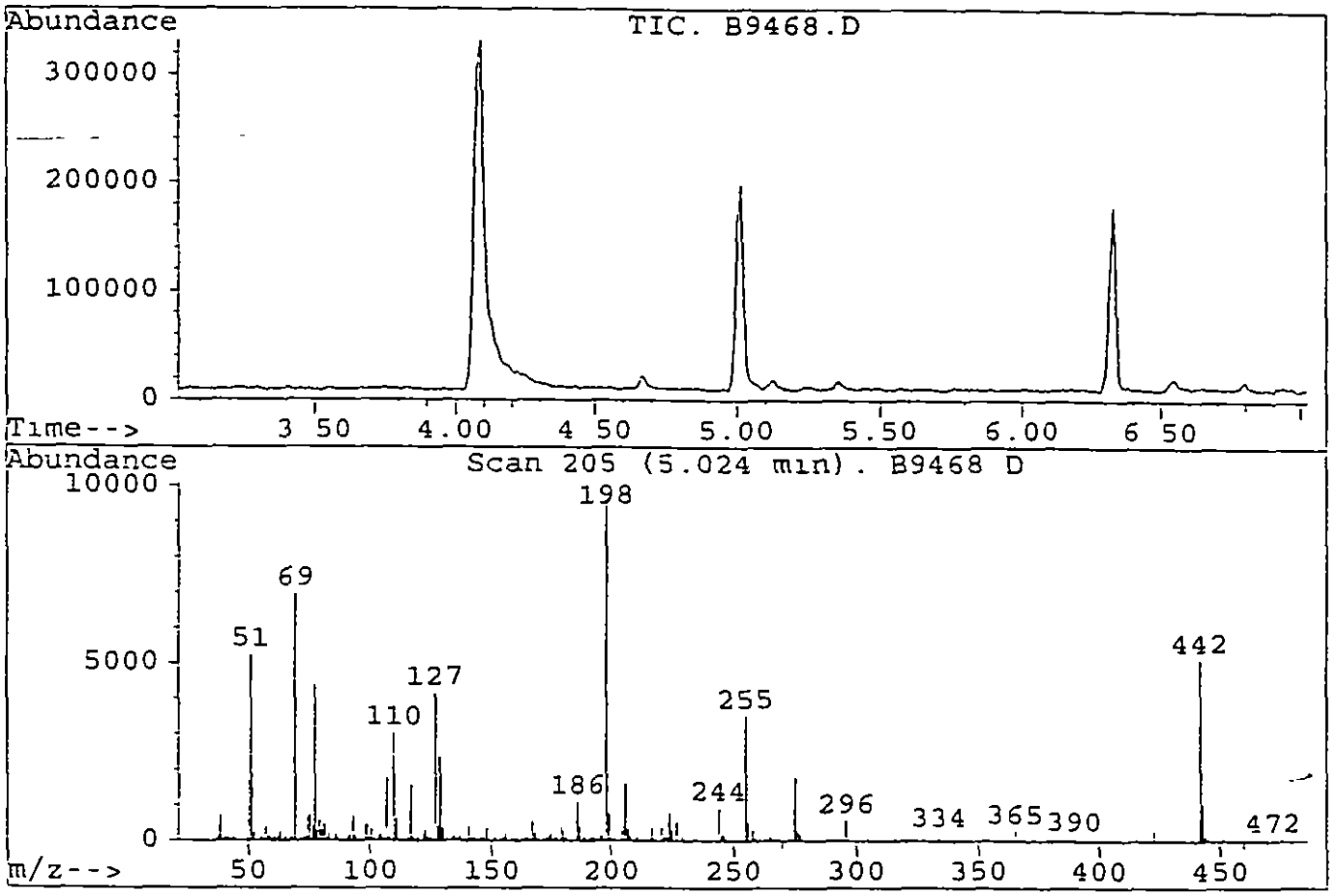
	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B9469 D	12/26/95	1125
02	SBLK01	BLANK1	B9470 D	12/26/95	1236
03	9558188B	9558188B	B9471 D	12/26/95	1328
04	9558189B	9558189B	B9472 D	12/26/95	1420
05	9558190B	9558190B	B9473 D	12/26/95	1513
06	9558191B	9558191B	B9474 D	12/26/95	1605
07	9558195B	9558195B	B9475 D	12/26/95	1656
08	9558196B	9558196B	B9476 D	12/26/95	1749
09	SBLK02	BLANK2	B9477 D	12/26/95	1840
10	9558311B	9558311B	B9478 D	12/26/95	1932
11	9558313B	9558313B	B9479 D	12/26/95	2023
12	9558314B	9558314B	B9480 D	12/26/95	2115
13	9558315B	9558315B	B9481 D	12/26/95	2206
14	9558316B	9558316B	B9482 D	12/26/95	2257
15	9558317B	9558317B	B9483 D	12/26/95	2348
16					
17					
18					
19					
20					
21					
22					

Data File : C \HPCHEM\1\DATA2\B9468 D
Acq On : 26 Dec 95 11.04 am
Sample : DFTPP .....
Misc :

Converted from RTE d

Vial 1
Operator SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C \HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration



Peak Apex is scan: 205

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.0	5234	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	71.7	6954	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	42.8	4153	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	9693	PASS
199	198	5	9	7.8	753	PASS
275	198	10	30	18.4	1788	PASS
365	198	1	100	2.9	284	PASS
441	443	0	100	88.4	923	PASS
442	198	40	100	52.8	5118	PASS
443	442	17	23	20.4	1044	PASS

an 205 (5 024 min) B9468 D
DFTPP . Converted from RTE data file >B9468..D5

m/z	abund	m/z	abund	m/z	abund.	m/z	abund.
36.10	47	51.05	5234	61 85	145	72.95	150
38 10	137	52.15	219	62.95	258	74.05	694
38 90	706	54 35	69	64 75	91	74.95	713
40 00	58	55 05	96	65 05	112	76.15	395
40 80	137	55 85	243	66.75	61	77.05	4390
41.80	72	56.95	401	67 05	65	78.05	260
42.50	37	58.15	122	67.25	59	79.05	568
44.05	129	58.75	60	67.65	93	79.95	283
44.75	28	58.95	64	68.95	6954	81.05	463
48.95	151	60 15	148	70 75	40	82.15	86
49 95	1732	60.85	77	72.05	89	83.05	176

Scan 205 (5.024 min): B9468 D
TPP .. . .. Converted from RTE data file >B9468::D5

m/z	abund	m/z	abund.	m/z	abund	m/z	abund
85.15	163	95.45	44	105.85	85	117.85	104
85.95	177	96.05	40	107.05	1802	119.85	89
86.65	38	97.05	78	108.05	248	122.15	174
87.15	38	97.95	577	108.95	47	122.85	306
89.05	21	98.95	424	110.05	3036	123.95	109
89.95	38	100.05	76	110.95	644	124.45	43
90.45	100	100.85	317	112.85	48	125 25	93
91 05	163	102.05	40	114.35	24	126 95	4153
91 85	193	102 45	21	115 85	79	128 05	410
92 95	842	103 85	137	116.05	81	129.05	2392
94 05	134	104 85	208	116.95	1606	129 95	359

an 205 (5.024 min) B9468.D
DFTPP ..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund	m/z	abund	m/z	abund
131 10	58	142.90	98	151 30	107	164.00	81
131 90	59	143.60	31	151.50	106	165 00	154
133 90	111	144.60	20	151 80	64	165 70	30
134.90	161	145.00	68	154 00	92	167.00	545
135 80	82	145.70	61	155 00	129	168.00	209
136 30	39	146.00	79	156.10	200	169.30	58
137 00	167	146.20	81	158.10	53	171.80	80
138 70	21	146.90	149	158.90	49	172.80	70
139.60	14	148.00	338	159.80	76	173.30	66
140.90	391	148.70	43	160.70	111	174.00	146
141.80	88	150.30	17	163.30	43	174.90	216

Scan 205 (5 024 min) B9468.D
TPP ..... Converted from RTE data file >B9468::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.80	96	186.90	403	199.00	753	209.00	61
177.10	66	188.20	73	199.90	76	210.30	40
177.40	48	189.00	137	200.50	22	210.80	100
179.00	373	191.10	89	201.30	72	211.10	108
179.80	266	192.00	104	201.70	32	213.70	42
181 00	95	192.70	132	203.00	47	216.10	86
182 50	27	193.20	77	204.10	271	216.95	378
183.20	20	195 10	59	205.00	416	217.85	56
183.80	56	195.90	148	206.00	1641	219.75	18
184.80	134	196.40	140	207.00	321	220.95	368
186.00	1089	198.00	9693	207.90	112	221.75	100

an 205 (5 024 min). B9468.D
TPP.. .. Converted from RTE data file >B9468. D5

m/z	abund	m/z	abund	m/z	abund	m/z	abund
222 65	119	235.15	45	242 85	29	252.25	20
222.95	127	236.25	31	244 05	933	252 65	45
224 05	792	236.75	32	244 95	168	253 25	35
224.95	279	239 05	70	245 95	152	254.95	3537
226 95	536	239.95	37	246 55	55	255.95	537
228.95	143	240.25	35	247 95	35	257.15	54
230.05	28	240.85	52	248.95	57	257 95	283
233.55	96	241.35	23	249.85	34	258.95	69
234.25	23	241.65	40	250.65	17	260.85	33
234 55	33	241.85	45	251.65	46	262.75	15
234.85	38	242 55	28	251 95	33	263 35	60

Scan 205 (5.024 min) B9468.D
TPP... . Converted from RTE data file >B9468.:D5

m/z	abund	m/z	abund	m/z	abund.	m/z	abund.
263.85	106	276.05	261	290.45	15	306.20	22
264.95	251	277.05	207	291.75	26	309.40	13
265 95	60	277.95	57	292.35	77	310.10	29
266.85	51	278.95	25	293.15	30	312.90	53
267 65	47	279.25	20	294 05	26	315.00	68
268 65	41	281.85	27	296 05	582	315.90	54
268 95	37	282 65	47	300.55	29	317 80	23
272 05	50	283.15	37	301 05	24	321 00	51
273.05	90	283 35	40	303.90	45	323.10	180
274 05	335	283.75	39	304.90	25	324.00	62
275 05	1788	290 15	34	305.20	45	327.00	55

an 205 (5 024 min) B9468.D
TPP. ..... Converted from RTE data file >B9468: D5

m/z	abund	m/z	abund	m/z	abund	m/z	abund.
327.20	55	350.60	23	367 10	23	388 65	55
329.20	13	351 90	71	368 10	39	389.65	76
331 70	19	353 40	56	369.80	17	395 95	26
333 90	180	354.00	84	371.90	93	396.25	29
335 50	34	357.80	26	373 20	47	396.65	44
336 90	35	359 70	21	376 70	67	399.95	24
340 20	20	360.70	27	377.90	31	400.35	12
341 00	13	362.80	45	378.90	52	400.65	18
342.40	31	364.40	39	383.80	59	401.45	23
345.10	34	365.00	284	385.10	34	403.75	32
346.00	80	366.00	31	387.40	35	407.15	32

can 205 (5.024 min) B9468.D
PP..... Converted from RTE data file >B9468:·D5

m/z	abund.	m/z	abund	m/z	abund	m/z	abund.
407.65	16	422.95	277	445.45	41	469.45	19
407.85	21	425.15	11	448.15	36	472.25	42
408.45	43	428.75	18	450.35	13		
409 25	10	430.25	28	450.95	33		
410 15	17	434.95	47	451.55	72		
412 45	30	437.35	20	453 95	34		
415 15	38	438.75	49	454.55	17		
418.05	33	441 05	923	454.85	19		
419.95	25	441 95	5118	457.55	10		
420.15	23	443.05	1044	460.55	37		
421.85	38	443.95	130	465.95	33		

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID ABNA Calibration Date #### Time 1125

Lab File ID B9469 D Init Calib Date(s) #### 1/0/00

Init Calib Times 1125 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0 722	0 640		11 4	
bis(2-Chloroethyl)ether	1 805	1 717		4 9	
1,3-Dichlorobenzene	1 354	1 414		-4 4	
1,4-Dichlorobenzene	1 396	1 400		-0 3	30 0
1,2-Dichlorobenzene	1 356	1 356		0 0	
bis(2-chloroisopropyl)ether	1 568	1 668		-6 4	
N-Nitroso-Di-n-propylamine	1 018	0 877	0 050	13 9	
Hexachloroethane	0 866	0 842		2 8	
Nitrobenzene	0 465	0 462		0 6	
Isophorone	0 691	0 667		3 5	
bis(2-Chloroethoxy)methane	0 421	0 424		-0 7	
1 2,4-Trichlorobenzene	0 296	0 315		-6 4	
Naphthalene	0 906	0 903		0 3	
Hexachlorobutadiene	0 185	0 200		-8 1	30 0
Hexachlorocyclopentadiene	0 335	0 303	0 050	9 6	
2-Chloronaphthalene	0 632	0 670		-6 0	
Dimethylphthalate	1 235	1 292		-4 6	
Acenaphthylene	1 689	1 698		-0 5	
2,6-Dinitrotoluene	0 292	0 323		-10 6	
Acenaphthene	1 053	1 117		-6 1	30 0
2,4-Dinitrotoluene	0 351	0 322		8 3	
Diethylphthalate	1 334	1 547		-16 0	
Fluorene	1 055	1 259		-19 3	
4-Chlorophenyl-phenylether	0 476	0 547		-14 9	
n-Nitrosodiphenylamine	0 472	0 485		-2 8	
1,2-Diphenylhydrazine(as azo)	0 000	0 000			
4-Bromophenyl-phenylether	0 242	0 268		-10 7	
Hexachlorobenzene	0 334	0 357		-6 9	
Phenanthrene	1 028	1 106		-7 6	
Anthracene	1 020	1 117		-9 5	
Di-n-butylphthalate	1 757	1 960		-11 6	
Fluoranthene	1 108	1 305		-17 8	30 0
Benzidine	0 011	0 012		-9 1	
Pyrene	1 221	1 291		-5 7	
Butylbenzylphthalate	0 820	0 858		-4 6	
Benzo[a]anthracene	1 167	1 222		-4 7	
3,3'-Dichlorobenzidine	0 406	0 393		3 2	

All other compounds must meet a minimum RRF of 0 010

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.876	0.899		-2.6	
bis(2-Ethylhexyl)phthalate	1.161	1.250		-7.7	
Di-n-octylphthalate	3.068	3.082		-0.5	30.0
Benzo[b]fluoranthene	1.361	1.588		-16.7	
Benzo[k]fluoranthene	1.156	1.098		5.0	
Benzo[a]pyrene	1.041	1.163		-11.7	30.0
Indeno[1,2,3-cd]pyrene	0.538	0.572		-6.3	
Dibenz[a,h]anthracene	0.543	0.586		-7.9	
Benzo[g,h,i]perylene	0.495	0.531		-7.3	
Nitrobenzene-d5	0.381	0.366		3.9	
2-Fluorobiphenyl	1.207	1.129		6.5	
Terphenyl-d14	0.960	1.009		-5.1	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID ABNA Calibration Date #### Time 1125

Lab File ID B9469 D Init Calib Date(s) #### 1/0/00

Init Calib Times 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1 572	1 543		1 8	30 0
bis(2-Chloroethyl)ether	1 805	1 717		4 9	
2-Chlorophenol	1 292	1 276		1 2	
1,3-Dichlorobenzene	1 354	1 414		-4 4	
1,4-Dichlorobenzene	1 396	1 400		-0 3	.30 0
1,2-Dichlorobenzene	1 356	1 356		0 0	
2-Methylphenol	1 123	1 198		-6 7	
bis(2-chloroisopropyl)ether	1 568	1 668		-6 4	
4-Methylphenol	1 250	1 198		4 2	
N-Nitroso-Di-n-propylamine	1 018	0 877	0 050	13 9	
Hexachloroethane	0 866	0 842		2 8	
Nitrobenzene	0 465	0 462		0 6	
Isophorone	0 691	0 667		3 5	
2-Nitrophenol	0 205	0 235		-14 6	30 0
2,4-Dimethylphenol	0 355	0 353		0 6	
bis(2-Chloroethoxy)methane	0 421	0 424		-0 7	
2,4-Dichlorophenol	0 269	0 285		-5 9	30 0
1,2,4-Trichlorobenzene	0 296	0 315		-6 4	
Naphthalene	0 906	0 903		0 3	
4-Chloroaniline	0 419	0 431		-2 9	
Hexachlorobutadiene	0 185	0 200		-8 1	30 0
4-Chloro-3-methylphenol	0 330	0 334		-1 2	30 0
2-Methylnaphthalene	0 609	0 617		-1 3	
Hexachlorocyclopentadiene	0 335	0 303	0 050	9 6	
2,4,6-Trichlorophenol	0 375	0 357		4 8	30 0
2,4,5-Trichlorophenol	0 337	0 382		-13 4	
2-Chloronaphthalene	0 632	0 670		-6 0	
2-Nitroaniline	0 399	0 439		-10 0	
Dimethylphthalate	1 235	1 292		-4 6	
Acenaphthylene	1 689	1 698		-0 5	
2,6-Dinitrotoluene	0 292	0 323		-10 6	
3-Nitroaniline	0 213	0 254		-19 2	
Acenaphthene	1 053	1 117		-6 1	30 0
2,4-Dinitrophenol	0 139	0 119	0 050	14 4	
4-Nitrophenol	0 216	0 215	0 050	0 5	
Dibenzofuran	1 385	1 409		-1 7	
2,4-Dinitrotoluene	0 351	0 322		8 3	

All other compounds must meet a minimum RRF of 0 010

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: #### Time: 1125

Lab File ID: B9469.D Init. Calib. Date(s): #### 1/0/00

Init. Calib. Times: 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.334	1.547		-16.0	
Fluorene	1.055	1.259		-19.3	
4-Chlorophenyl-phenylether	0.476	0.547		-14.9	
4-Nitroaniline	0.152	0.143		5.9	
4,6-Dinitro-2-methylphenol	0.122	0.119		2.5	30.0
n-Nitrosodiphenylamine	0.472	0.485		-2.8	
4-Bromophenyl-phenylether	0.242	0.268		-10.7	
Hexachlorobenzene	0.334	0.357		-6.9	
Pentachlorophenol	0.186	0.202		-8.6	30.0
Phenanthrene	1.028	1.106		-7.6	
Anthracene	1.020	1.117		-9.5	
Carbazole	0.865	0.994		-14.9	
Di-n-butylphthalate	1.757	1.960		-11.6	
Fluoranthene	1.108	1.305		-17.8	30.0
Pyrene	1.221	1.291		-5.7	
Butylbenzylphthalate	0.820	0.858		-4.6	
Benzo[a]anthracene	1.167	1.222		-4.7	
3,3'-Dichlorobenzidine	0.406	0.393		3.2	
Chrysene	0.876	0.899		-2.6	
bis(2-Ethylhexyl)phthalate	1.161	1.250		-7.7	
Di-n-octylphthalate	3.068	3.082		-0.5	30.0
Benzo[b]fluoranthene	1.361	1.588		-16.7	
Benzo[k]fluoranthene	1.156	1.098		5.0	
Benzo[a]pyrene	1.041	1.163		-11.7	30.0
Indeno[1,2,3-cd]pyrene	0.538	0.572		-6.3	
Dibenz[a,h]anthracene	0.543	0.586		-7.9	
Benzo[g,h,i]perylene	0.495	0.531		-7.3	
2-Fluorophenol	1.128	1.078		4.4	
Phenol-d5	1.732	1.585		8.5	
Nitrobenzene-d5	0.381	0.366		3.9	
2-Fluorobiphenyl	1.207	1.129		6.5	
2,4,6-Tribromophenol	0.237	0.248		-4.6	
Terphenyl-d14	0.960	1.009		-5.1	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

206

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID ABNA Calibration Date #### Time 1125

Lab File ID B9469 D Init Calib Date(s) #### 1/0/00

Init Calib Times 1125 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0 722	0 640		11 4	
Phenol	1 572	1 543		1 8	30 0
bis(2-Chloroethyl)ether	1 805	1 717		4 9	
2-Chlorophenol	1 292	1 276		1 2	
1,3-Dichlorobenzene	1 354	1 414		-4 4	
1,4-Dichlorobenzene	1 396	1 400		-0 3	30 0
1,2-Dichlorobenzene	1 356	1 356		0 0	
bis(2-chloroisopropyl)ether	1 568	1 668		-6 4	
N-Nitroso-Di-n-propylamine	1 018	0 877	0 050	13 9	
Hexachloroethane	0 866	0 842		2 8	
Nitrobenzene	0 465	0 462		0 6	
Isophorone	0 691	0 667		3 5	
2-Nitrophenol	0 205	0 235		-14 6	30 0
2,4-Dimethylphenol	0 355	0 353		0 6	
bis(2-Chloroethoxy)methane	0 421	0 424		-0 7	
2,4-Dichlorophenol	0 269	0 285		-5 9	30 0
1,2,4-Trichlorobenzene	0 296	0 315		-6 4	
Naphthalene	0 906	0 903		0 3	
Hexachlorobutadiene	0 185	0 200		-8 1	30 0
4-Chloro-3-methylphenol	0 330	0 334		-1 2	30 0
Hexachlorocyclopentadiene	0 335	0 303	0 050	9 6	
2,4,6-Trichlorophenol	0 375	0 357		4 8	30 0
2-Chloronaphthalene	0 632	0 670		-6 0	
Dimethylphthalate	1 235	1 292		-4 6	
Acenaphthylene	1 689	1 698		-0 5	
2,6-Dinitrotoluene	0 292	0 323		-10 6	
Acenaphthene	1 053	1 117		-6 1	30 0
2,4-Dinitrophenol	0 139	0 119	0 050	14 4	
4-Nitrophenol	0 216	0 215	0 050	0 5	
2,4-Dinitrotoluene	0 351	0 322		8 3	
Diethylphthalate	1 334	1 547		-16 0	
Fluorene	1 055	1 259		-19 3	
4-Chlorophenyl-phenylether	0 476	0 547		-14 9	
4,6-Dinitro-2-methylphenol	0 122	0 119		2 5	30 0
n-Nitrosodiphenylamine	0 472	0 485		-2 8	
1,2-Diphenylhydrazine(as azo)	0 000	0 000			
4-Bromophenyl-phenylether	0 242	0 268		-10 7	

All other compounds must meet a minimum RRF of 0 010

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID ABNA Calibration Date #### Time 1125

Lab File ID B9469 D Init Calib Date(s) #### 1/0/00

Init Calib Times 1125 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Hexachlorobenzene	0 334	0 357		-6 9	
Pentachlorophenol	0 186	0 202		-8 6	30 0
Phenanthrene	1 028	1 106		-7 6	
Anthracene	1 020	1 117		-9 5	
Di-n-butylphthalate	1 757	1 960		-11 6	
Fluoranthene	1 108	1 305		-17 8	30 0
Benzidine	0 011	0 012		-9 1	
Pyrene	1 221	1 291		-5 7	
Butylbenzylphthalate	0 820	0 858		-4 6	
Benzo[a]anthracene	1 167	1 222		-4 7	
3 3 -Dichlorobenzidine	0 406	0 393		3 2	
Chrysene	0 876	0 899		-2 6	
bis(2-Ethylhexyl)phthalate	1 161	1 250		-7 7	
Di-n-octylphthalate	3 068	3 082		-0 5	30 0
Benzo[b]fluoranthene	1 361	1 588		-16 7	
Benzo[k]fluoranthene	1 156	1 098		5 0	
Benzo[a]pyrene	1 041	1 163		-11 7	30 0
Indeno[1,2,3-cd]pyrene	0 538	0 572		-6 3	
Dibenz[a,h]anthracene	0 543	0 586		-7 9	
Benzo[g,h,i]perylene	0 495	0 531		-7 3	
2-Fluorophenol	1 128	1 078		4 4	
Phenol-d5	1 732	1 585		8 5	
Nitrobenzene-d5	0 381	0 366		3 9	
2-Fluorobiphenyl	1 207	1 129		6 5	
2,4,6-Tribromophenol	0 237	0 248		-4 6	
Terphenyl-d14	0 960	1 009		-5 1	

All other compounds must meet a minimum RRF of 0 010

Evaluate Continuing Calibration Report

210

Data File C:\HPCHEM\1\DATA2\B9469.D Vial: 2
Acq On 26 Dec 95 11:25 am Operator SCOTTV SUP
Sample 50 STD . .. Converted from RTE.d Inst ABNA
Misc . BT Multiplr. 1.00

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Tue Dec 26 12:09:14 1995
Response via Multiple Level Calibration

Min RRF : 0.050 Min. Rel. Area : 50% Max R.T. Dev 0.50min
Max RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	-0.01
2	S	2-Fluorophenol	1.128	1.078	4.4	97	0.00
3	S	Phenol-d5	1.732	1.585	8.5	95	-0.01
4	M	N-nitrosodimethylamine	0.722	0.640	11.4	89	0.00
5		Pyridine	3.013	0.000#	100.0#	0#	-1.49#
6	CM	Phenol	1.572	1.543	1.8	95	-0.01
7	MT	bis(2-Chloroethyl)ether	1.805	1.717	4.9	90	0.00
8	M	2-Chlorophenol	1.292	1.276	1.2	94	-0.01
9	MT	1,3-Dichlorobenzene	1.354	1.414	-4.4	101	-0.01
10	CM	1,4-Dichlorobenzene	1.396	1.400	-0.3	96	-0.01
11	M	1,2-Dichlorobenzene	1.356	1.356	0.0	95	-0.01
12	T	2-Methylphenol	1.123	1.198	-6.7	101	0.52#
13	M	bis(2-chloroisopropyl)ether	1.568	1.668	-6.4	130	0.06
14	T	4-Methylphenol	1.250	1.198	4.2	93	0.00
15	PM	N-Nitroso-Di-n-propylamine	1.018	0.877	13.9	81	0.00
16	M	Hexachloroethane	0.866	0.842	2.8	91	-0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	90	-0.02
18	S	Nitrobenzene-d5	0.381	0.366	3.8	90	0.00
19	M	Nitrobenzene	0.465	0.462	0.8	91	0.00
20	M	Isophorone	0.691	0.667	3.4	87	-0.01
21	MC	2-Nitrophenol	0.205	0.235	-14.3	99	0.00
22	M	2,4-Dimethylphenol	0.355	0.353	0.3	90	0.00
23	M	bis(2-Chloroethoxy)methane	0.421	0.424	-0.7	90	0.00
24	MC	2,4-Dichlorophenol	0.269	0.285	-6.0	89	-0.02
25	M	1,2,4-Trichlorobenzene	0.296	0.315	-6.5	94	0.00
26	M	Naphthalene	0.906	0.903	0.3	86	-0.02
27	T	4-Chloroaniline	0.419	0.431	-3.0	96	-0.02
28	MC	Hexachlorobutadiene	0.185	0.200	-8.1	93	-0.02
29	MC	4-Chloro-3-methylphenol	0.330	0.334	-1.1	89	-0.02
30	M	2-Chloronaphthalene	0.632	0.670	-6.0	94	0.00
31	T	2-Methylnaphthalene	0.609	0.617	-1.3	93	-0.02
32	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00
33	P	Hexachlorocyclopentadiene	0.335	0.303	9.4	85	-0.02
34	MC	2,4,6-Trichlorophenol	0.375	0.357	5.0	96	-0.02
35	T	2,4,5-Trichlorophenol	0.337	0.382	-13.6	103	-0.02
36	S	2-Fluorobiphenyl	1.207	1.129	6.4	92	-0.02
37	T	2-Nitroaniline	0.399	0.439	-10.1	113	0.00
38	M	Dimethylphthalate	1.235	1.292	-4.7	95	0.00
39	M	Acenaphthylene	1.689	1.698	-0.5	96	0.00
40	M	2,6-Dinitrotoluene	0.292	0.323	-10.5	100	-0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File C:\HPCHEM\1\DATA2\B9469.D Vial 2
Acq On 26 Dec 95 11.25 am Operator SCOTTV SUP
Sample 50 STD. . .. Converted from RTE d Inst ABNA
Misc BT Multiplr 1.00

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update . Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Min RRF . 0.050 Min. Rel. Area 50% Max R.T. Dev 0.50min
Max RRF Dev . 30% Max Rel Area . 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
	T	3-Nitroaniline	0.213	0.254	-19.4	112	0.00
42	CM	Acenaphthene	1.053	1.117	-6.2	102	0.00
	MP	2,4-Dinitrophenol	0.139	0.119	14.1	118	-0.02
	PM	4-Nitrophenol	0.216	0.215	0.7	118	-0.02
45	T	Dibenzofuran	1.385	1.409	-1.7	94	-0.02
46	M	2,4-Dinitrotoluene	0.351	0.322	8.3	96	0.00
	M	Diethylphthalate	1.334	1.547	-16.0	108	-0.02
48	M	Fluorene	1.055	1.259	-19.3	112	0.00
49	M	4-Chlorophenyl-phenylether	0.476	0.547	-14.8	106	-0.02
		Phenanthrene-d10	1.000	1.000	0.0	137	0.00
51	T	4-Nitroaniline	0.152	0.143	5.7	109	0.00
	MC	4,6-Dinitro-2-methylphenol	0.122	0.119	1.9	141	0.00
	T	n-Nitrosodiphenylamine	0.472	0.485	-2.9	123	0.00
54	S	2,4,6-Tribromophenol	0.237	0.248	-4.6	136	0.00
55		1,2-Diphenylhydrazine (as a	1.221	1.051	13.9	106	0.00
	M	4-Bromophenyl-phenylether	0.242	0.268	-10.4	132	0.00
	M	Hexachlorobenzene	0.334	0.357	-6.7	134	-0.01
58	CM	Pentachlorophenol	0.186	0.202	-8.7	190#	0.00
	M	Phenanthrene	1.028	1.106	-7.6	145	0.00
	M	Anthracene	1.020	1.117	-9.6	146	-0.01
61		Carbazole	0.865	0.994	-15.0	166#	0.00
	M	Di-n-butylphthalate	1.757	1.960	-11.6	155#	-0.01
	MC	Fluoranthene	1.108	1.305	-17.8	168#	0.00
64	I	Chrysene-d12	1.000	1.000	0.0	151#	0.00
		Benzidine	0.011	0.012#	-9.2	170#	-0.34
	M	Pyrene	1.221	1.291	-5.7	163#	0.00
67	S	Terphenyl-d14	0.960	1.009	-5.0	171#	-0.01
	M	Butylbenzylphthalate	0.820	0.858	-4.5	158#	-0.01
	M	Benzo[a]anthracene	1.167	1.222	-4.8	168#	-0.01
70	M	3,3'-Dichlorobenzidine	0.406	0.393	3.0	158#	-0.01
	M	Chrysene	0.876	0.899	-2.6	141	0.00
	M	bis(2-Ethylhexyl)phthalate	1.161	1.250	-7.6	165#	0.00
73	I	Perylene-d12	1.000	1.000	0.0	110	-0.01
	MC	Di-n-octylphthalate	3.068	3.082	-0.5	132	0.00
	M	Benzo[b]fluoranthene	1.361	1.588	-16.7	132	0.00
76	m	Benzo[k]fluoranthene	1.156	1.098	5.0	103	0.00
	mc	Benzo[a]pyrene	1.041	1.163	-11.8	127	0.00
	m	Indeno[1,2,3-cd]pyrene	0.538	0.572	-6.4	123	-0.01
79	m	Dibenz[a,h]anthracene	0.543	0.586	-7.9	122	-0.01

#) = Out of Range

Evaluate Continuing Calibration Report

Data File C:\HPCHEM\1\DATA2\B9469.D Vial. 2
Acq On 26 Dec 95 11 25 am Operator. SCOTTV SUP
Sample . 50 STD... ... Converted from RTE d Inst ABNA
Misc . BT Multiplr 1.00

Method C \HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max R.T Dev 0.50min
Max. RRF Dev : 30% Max. Rel Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
0 M	Benzo[g,h,i]perylene	0.495	0.531	-7.4	131	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : c:\hpchem\1\data2\b9469.d
Acq On : 26 Dec 95 11:25 am
Sample : 50 STD . . . .
Misc
Quant Time: Dec 27 9:58 1995

Converted from RTE.d

Vial 2
Operator. SCOTTV
Inst ABNA
BT Multiplr 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09 14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.27	152	7771	40.00 ug/mL	-0.01
17) Naphthalene-d8	11.02	136	31449	40.00 ug/mL	-0.02
32) Acenaphthene-d10	16.26	164	20468	40.00 ug/mL	0.00
50) Phenanthrene-d10	20.65	188	35324	40.00 ug/ml	0.00
64) Chrysene-d12	28.62	240	35218	40.00 ug/mL	0.00
73) Perylene-d12	32.53	264	17686	40.00 ug/mL	-0.01
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	3.55	112	10470	47.78 ug/mL	47.78%
3) Phenol-d5	6.82	99	15400	45.77 ug/mL	45.77%
18) Nitrobenzene-d5	9.02	82	14407	48.10 ug/mL	48.10%
36) 2-Fluorobiphenyl	14.49	172	28898	46.78 ug/mL	46.78%
54) 2,4,6-Tribromophenol	18.67	330	10931	52.32 ug/mL	52.32%
67) Terphenyl-d14	25.77	244	44400	52.51 ug/mL	52.51%
Target Compounds					Qvalue
4) N-nitrosodimethylamine	1.43	74	6215	44.32 ug/ml	100
6) Phenol	6.86	94	14993	49.09 ug/mL	100
7) bis(2-Chloroethyl)ether	10.83	93	16677	47.57 ug/mL	95
8) 2-Chlorophenol	6.71	128	12395	49.39 ug/mL#	88
9) 1,3-Dichlorobenzene	7.05	146	13739	52.21 ug/mL	98
10) 1,4-Dichlorobenzene	7.32	146	13595	50.14 ug/mL	93
11) 1,2-Dichlorobenzene	7.71	146	13168	49.99 ug/mL	94
12) 2-Methylphenol	9.11	108	11634	53.33 ug/mL	93
13) bis(2-chloroisopropyl)ethe	8.54	45	16205	53.19 ug/mLm	97
14) 4-Methylphenol	9.11	108	11634	47.91 ug/mL	93
15) N-Nitroso-Di-n-propylamine	8.88	70	8516	43.07 ug/mL	95
16) Hexachloroethane	8.65	117	8177	48.58 ug/mL	85
19) Nitrobenzene	9.08	77	18146	49.62 ug/mL#	86
20) Isophorone	9.90	82	26231	48.28 ug/mL	99
21) 2-Nitrophenol	10.02	139	9235	57.16 ug/mL#	81
22) 2,4-Dimethylphenol	10.62	107	13895	49.85 ug/mL#	100
23) bis(2-Chloroethoxy)methane	10.83	93	16677	50.33 ug/mL#	100
24) 2,4-Dichlorophenol	10.87	162	11201	52.99 ug/mL	95
25) 1,2,4-Trichlorobenzene	10.94	180	12401	53.25 ug/mL	98
26) Naphthalene	11.08	128	35495	49.86 ug/mL	99
27) 4-Chloroaniline	11.50	127	16961	51.52 ug/mL	100
28) Hexachlorobutadiene	11.62	225	7862	54.03 ug/mL	97
29) 4-Chloro-3-methylphenol	13.31	107	13111	50.54 ug/mL	96
30) 2-Chloronaphthalene	14.62	162	26337	53.00 ug/ml#	100
31) 2-Methylnaphthalene	13.20	142	24264	50.67 ug/mL	96
33) Hexachlorocyclopentadiene	13.72	237	7760	45.29 ug/mL	90
34) 2,4,6-Trichlorophenol	14.24	196	9125	47.50 ug/mL	97
35) 2,4,5-Trichlorophenol	14.35	196	9780	56.80 ug/mL	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File . c \hpchem\1\data2\b9469.d
Acq On 26 Dec 95 11 25 am
Sample 50 STD... .
Misc
Quant Time· Dec 27 9 58 1995

Converted from RTE d

Vial 2
Operator SCOTTV
Inst ABNA
BT Multiplr 1.00

Method . c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12·09.14 1995
Response via Multiple Level Calibration

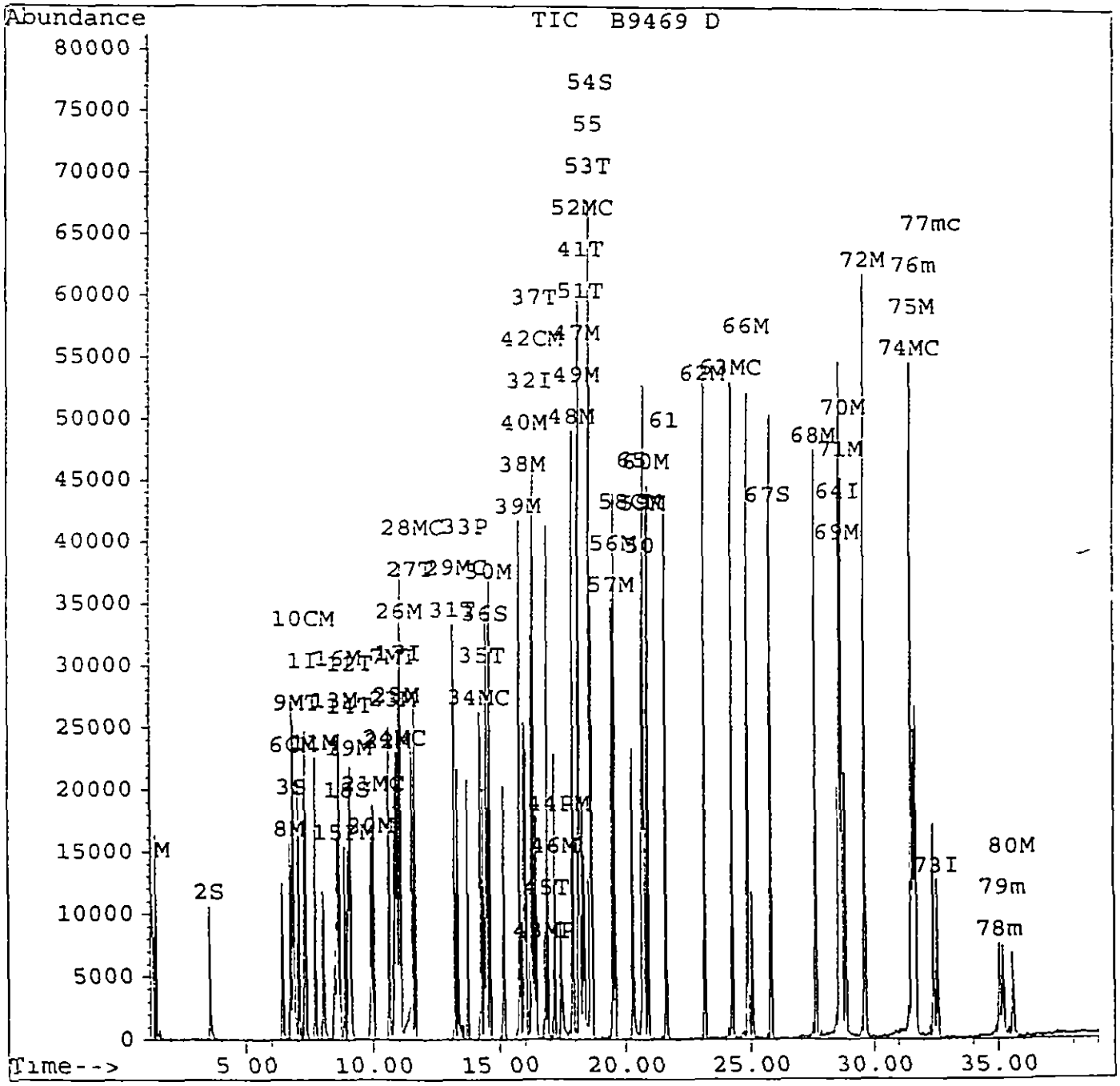
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.45	65	11227	55.05 ug/mL	97
38)	Dimethylphthalate	15.97	163	33061	52.33 ug/mL#	13
39)	Acenaphthylene	15.80	152	43437	50 27 ug/mL	100
40)	2,6-Dinitrotoluene	16 03	165	8264	55 27 ug/mL#	89
41)	3-Nitroaniline	18.30	138	6499	59 70 ug/mLm	94
42)	Acenaphthene	16.36	153	28589	53.08 ug/mL	97
43)	2,4-Dinitrophenol	16.76	184	3056	42.94 ug/mL	88
44)	4-Nitrophenol	17.41	109	5493	49.63 ug/mL	86
45)	Dibenzofuran	16 89	168	36044	50 85 ug/mL#	86
46)	2,4-Dinitrotoluene	17.18	165	8238	45 87 ug/mLm	1
47)	Diethylphthalate	18 15	149	39585	58 01 ug/mL	94
48)	Fluorene	17.92	166	32203	59.65 ug/mL	97
49)	4-Chlorophenyl-phenylether	18.15	204	13995	57 41 ug/mL#	78
51)	4-Nitroaniline	18.30	138	6314	47 15 ug/mLm	94
52)	4,6-Dinitro-2-methylphenol	18.36	198	5268	49.04 ug/mL	100
53)	n-Nitrosodiphenylamine	18.59	169	21420	51.44 ug/mL	98
55)	1,2-Diphenylhydrazine (as	18.61	77	46423	43.04 ug/ml	100
56)	4-Bromophenyl-phenylether	19.57	248	11816	55.22 ug/mL#	90
57)	Hexachlorobenzene	19.48	284	15744	53.36 ug/mL	95
58)	Pentachlorophenol	20.27	266	8927	54 36 ug/mL	95
59)	Phenanthrene	20 73	178	48833	53 79 ug/mL	99
60)	Anthracene	20 86	178	49342	54 79 ug/mLm	99
61)	Carbazole	21 58	167	43897	57 48 ug/ml	96
62)	Di-n-butylphthalate	23 15	149	86560	55 78 ug/mL#	98
63)	Fluoranthene	24.27	202	57609	58.90 ug/mLm	81
65)	Benzidine	20.30	184	538	54.58 ug/mlm	100
66)	Pyrene	24.89	202	56817	52.86 ug/mL#	91
68)	Butylbenzylphthalate	27.60	149	37751	52 27 ug/mL#	31
69)	Benzo[a]anthracene	28.58	228	53808	52.39 ug/mL	99
70)	3,3'-Dichlorobenzidine	28.82	252	17310	48 48 ug/mL	97
71)	Chrysene	28.70	228	39564	51.28 ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	29 62	149	55020	53 82 ug/mL#	24
74)	Di-n-octylphthalate	31.51	149	68136	50.23 ug/mLm	100
75)	Benzo[b]fluoranthene	31.61	252	35111	58.34 ug/mLm	96
76)	Benzo[k]fluoranthene	31.69	252	24269	47.49 ug/mLm	96
77)	Benzo[a]pyrene	32.40	252	25718	55.90 ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	35.04	276	12648	53.19 ug/mL	97
79)	Dibenz[a,h]anthracene	35.17	278	12959	53.95 ug/mL#	93
80)	Benzo[g,h,i]perylene	35 56	276	11744	53.70 ug/mLm	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9469.d Vial: 2
Acq On 26 Dec 95 11.25 am Operator SCOTTV
Sample . 50 STD .. Converted from RTE d Inst : ABNA
Misc BT Multiplr: 1 00
Quant Time Dec 27 9 58 1995

Method c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09 14 1995
Response via Multiple Level Calibration



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

216

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Lab File ID (Standard): B9008 D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	26722	8 59	104351	12 33	57774	17 63
	UPPER LIMIT	53444	9 09	208702	12 83	115548	18 13
	LOWER LIMIT	13361	8 09	52176	11 83	28887	17 13
	SAMPLE NO						
01	SBLK01	22496	8 59	83610	12 31	47426	17 62
02	9547000B	24097	8 60	94497	12 32	54817	17 61
03	46360MS	24328	8 60	97435	12 32	56181	17 64
04	46360MSD	25002	8 60	97241	12 34	55587	17 64
05							
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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

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Lab File ID (Standard): B9008 D Date Analyzed: 10/27/95

Instrument ID: ABNA Time Analyzed: 1329

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	79042	22 12	25699	30 18	9983	34 15
	UPPER LIMIT	158084	22 62	51398	30 68	19966	34 65
	LOWER LIMIT	39521	21 62	12850	29 68	4992	33 65
	SAMPLE NO						
01	SBLK01	61940	22 09	43279	30 18	19502	34 16
02	9547000B	77921	22 11	44563	30 17	16352	34 16
03	46360MS	74786	22 13	35528	30 18	16536	34 14
04	46360MSD	77102	22 13	28509	30 19	10719	34 15
05							
06							
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20							
21							
22							

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard) B9469 D Date Analyzed 12/26/95

Instrument ID ABNA Time Analyzed 1125

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	7771	7 27	31449	11 02	20468	16 26
	UPPER LIMIT	15542	7 77	62898	11 52	40936	16 76
	LOWER LIMIT	3886	6 77	15725	10 52	10234	15 76
	SAMPLE NO						
01	SBLK01	7458	7 26	29914	11 00	18755	16 23
02	9558188B	8924	7 26	36767	11 00	23340	16 24
03	9558189B	7941	7 26	31079	11 00	20400	16 24
04	9558190B	7796	7 26	31276	11 00	20007	16 23
05	9558191B	7989	7 26	31787	10 99	19890	16 23
06	9558195B	8219	7 26	31514	11 00	22858	16 23
07	9558196B	7150	7 26	27915	11 00	17186	16 23
08	SBLK02	8386	7 26	32580	11 00	22116	16 23
09	9558311B	9544	7 26	38966	11 00	24933	16 23
10	9558313B	7690	7 26	30820	11 00	19267	16 23
11	9558314B	8550	7 26	35386	11 00	22395	16 23
12	9558315B	8213	7 26	32583	11 00	20978	16 23
13	9558316B	7706	7 26	32060	11 00	21124	16 23
14	9558317B	8821	7 27	38250	11 00	25653	16 24
15							
16							
17							
18							
19							
20							
21							
22							

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

219

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard) B9469 D Date Analyzed 12/26/95

Instrument ID ABNA Time Analyzed 1125

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	35324	20 65	35218	28 62	17686	32 53
	UPPER LIMIT	70648	21 15	70436	29 12	35372	33 03
	LOWER LIMIT	17662	20 15	17609	28 12	8843	32 03
	SAMPLE NO						
01	SBLK01	35414	20 64	45521	28 61	31190	32 56
02	9558188B	40695	20 65	46341	28 60	31872	32 55
03	9558189B	35349	20 65	39375	28 60	25346	32 54
04	9558190B	35474	20 64	42253	28 59	27158	32 54
05	9558191B	32983	20 64	49439	28 61	36893 *	32 55
06	9558195B	38128	20 64	44965	28 59	30511	32 54
07	9558196B	31872	20 62	44817	28 59	34345	32 56
08	SBLK02	39178	20 64	48266	28 59	36878 *	32 56
09	9558311B	41078	20 64	60115	28 61	41191 *	32 54
10	9558313B	37750	20 64	48903	28 59	37763 *	32 56
11	9558314B	39827	20 62	50880	28 59	44639 *	32 54
12	9558315B	38289	20 64	53562	28 59	40526 *	32 54
13	9558316B	38478	20 64	50164	28 59	37293 *	32 54
14	9558317B	43586	20 63	53856	28 61	40386 *	32 55
15							
16							
17							
18							
19							
20							
21							
22							

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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 9558313B Field Blank 220

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558313B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9479 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
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
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO

9558313B
Field Blank

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558313B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9479 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	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-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9558313B
Field Blank

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558313B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID B9479 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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 Hydrocarbon	27 84	6	J
2				
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Quantitation Report

223

Data File c \hpchem\1\data2\b9479 d Vial 12
Acq On 26 Dec 95 8 23 pm Operator SCOTTV
Sample 58313. . . Converted from RTE d Inst . ABNA
Misc BT Multiplr 1.00
Quant Time· Dec 27 11:00 1995

Method : c \HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update . Tue Dec 26 12·09:14 1995
Response via : Multiple Level Calibration

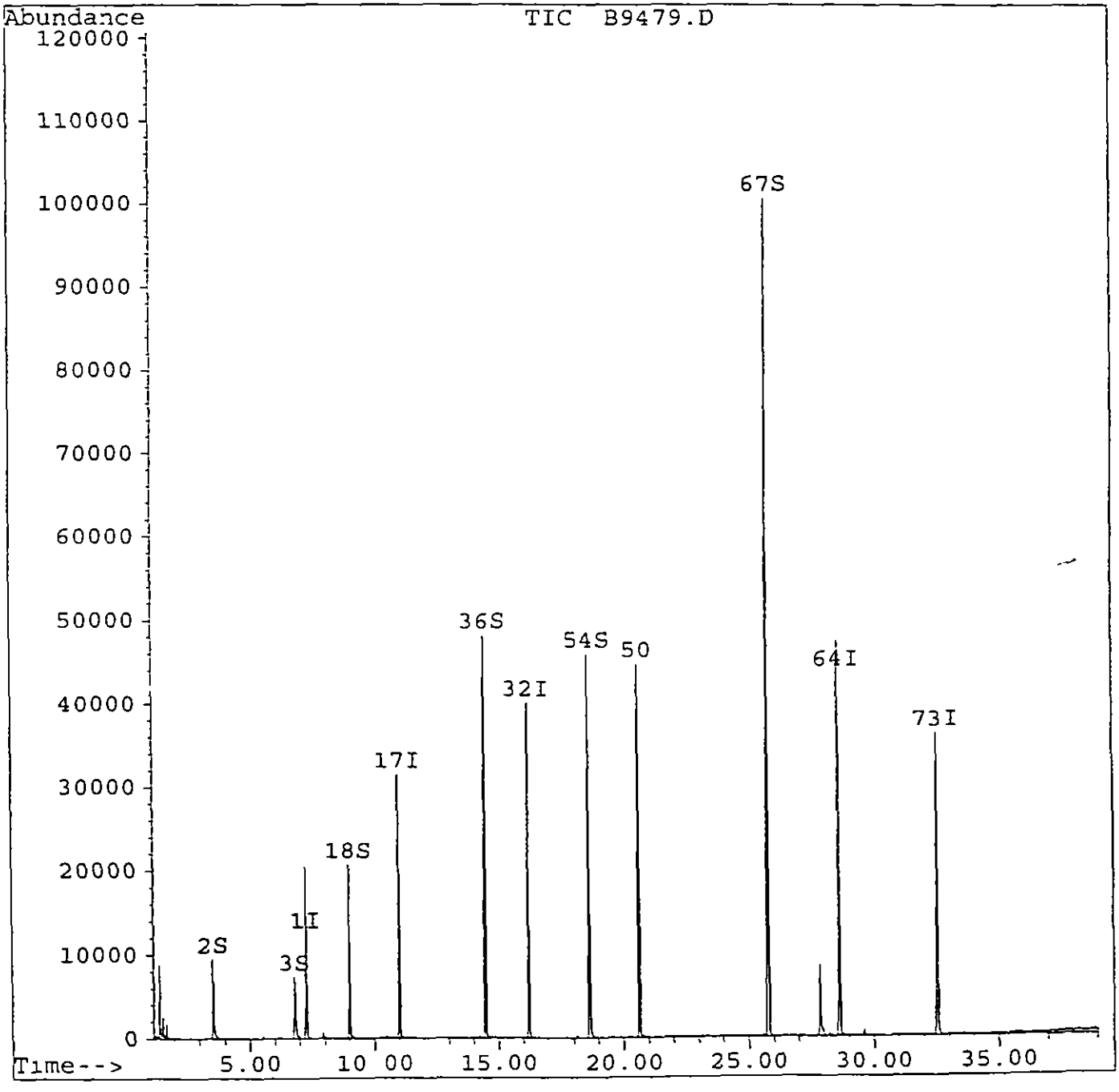
Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 26	152	7690	40 00 ug/mL	-0 02
17) Naphthalene-d8	11 00	136	30820	40.00 ug/mL	-0 04
32) Acenaphthene-d10	16 23	164	19267	40.00 ug/mL	-0 02
50) Phenanthrene-d10	20 64	188	37750	40.00 ug/ml	0 00
64) Chrysene-d12	28 59	240	48903	40 00 ug/mL	-0 03
73) Perylene-d12	32 56	264	37763	40.00 ug/mL	0 00
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	3.55	112	8809	40.62 ug/mL	40 62%
3) Phenol-d5	6 80	99	8566	25.72 ug/mL	25.72%
18) Nitrobenzene-d5	8.99	82	16404	55.88 ug/mL	55.88%
36) 2-Fluorobiphenyl	14.48	172	31019	53 34 ug/mL	53 34%
54) 2,4,6-Tribromophenol	18 64	330	15518	69 50 ug/mL	69 50%
67) Terphenyl-d14	25 80	244	85905	73.17 ug/mL	73 17%
Target Compounds					Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c.\hpchem\1\data2\b9479.d Vial 12
Acq On 26 Dec 95 8 23 pm Operator SCOTTV
Sample . 58313 . . Converted from RTE d Inst . ABNA
Misc : BT Multiplr 1 00
Quant Time Dec 27 11 00 1995

Method . c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12 09·14 1995
Response via : Multiple Level Calibration



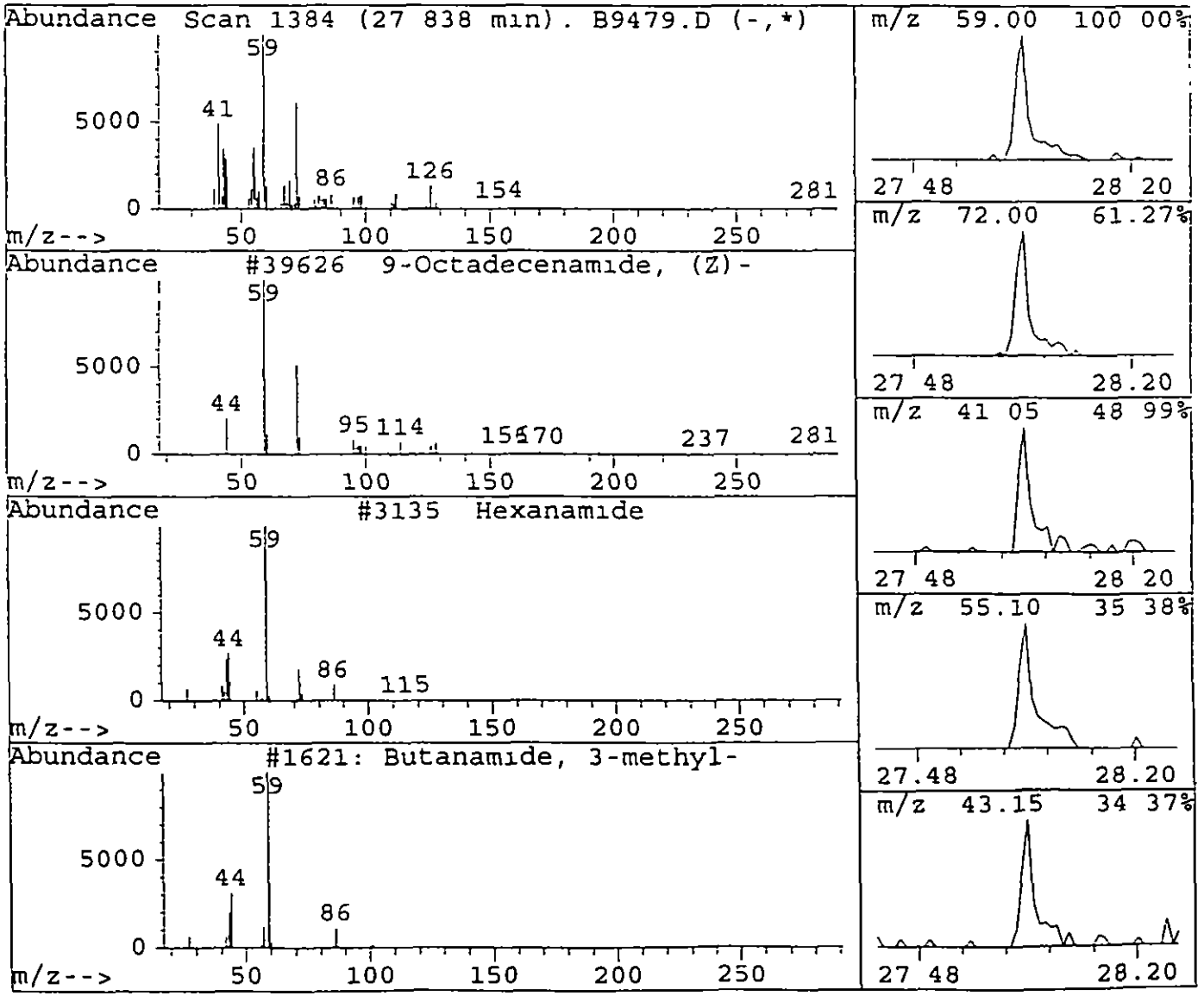
Library Search Compound Report

Data File c:\hpchem\1\data2\b9479 d Vial 12
Acq On 26 Dec 95 8.23 pm Operator SCOTTV
Sample 58313 . Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00

Method c \HPCHEM\1\METHODS\BNACLP M
Title · CLP BNA Calibration
Library . C \DATABASE\NBS75K L

R T	Conc	Area	Relative to ISTD	R T
27.84	6 33 ug/mL	22455	Chrysene-d12	28 59

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	72
2	Hexanamide	3135	000628-02-4	38
3	Butanamide, 3-methyl-	1621	000541-46-8	37
4	Cyclooctanemethanol, .alpha ,.alpha	15325	016624-06-9	35
5	2-Propanone, 1-cyclopentyl-	4580	001122-98-1	32



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO

MB-1 9558316B 2933760

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1 4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO

mw 1 9558316B 29 33760

227

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9558316B
29 3320

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9558316B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID B9482 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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	NONE FOUND			
2				
3				
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Quantitation Report

Data File : c:\hpchem\1\data2\b9482.d Vial: 15
Acq On : 26 Dec 95 10:57 pm Operator: SCOTTV
Sample : 58316 Converted from RTE.d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Dec 27 11.03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12 09.14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7 26	152	7706	40 00	ug/mL	-0.02
17) Naphthalene-d8	11 00	136	32060	40 00	ug/mL	-0.04
32) Acenaphthene-d10	16.23	164	21124	40 00	ug/mL	-0 02
50) Phenanthrene-d10	20.64	188	38478	40.00	ug/ml	0 00
64) Chrysene-d12	28.59	240	50164	40.00	ug/mL	-0.03
73) Perylene-d12	32.54	264	37293	40.00	ug/mL	0.00
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0 00	ug/mL	0 00%
3) Phenol-d5	7.25	99	38	0 11	ug/mL	0 11%
18) Nitrobenzene-d5	9.00	82	20678	67.72	ug/mL	67 72%
36) 2-Fluorobiphenyl	14 48	172	33940	53.24	ug/mL	53.24%
54) 2,4,6-Tribromophenol	0 00	330	0	0.00	ug/mL	0 00%
67) Terphenyl-d14	25.80	244	91013	75 57	ug/mL	75.57%
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

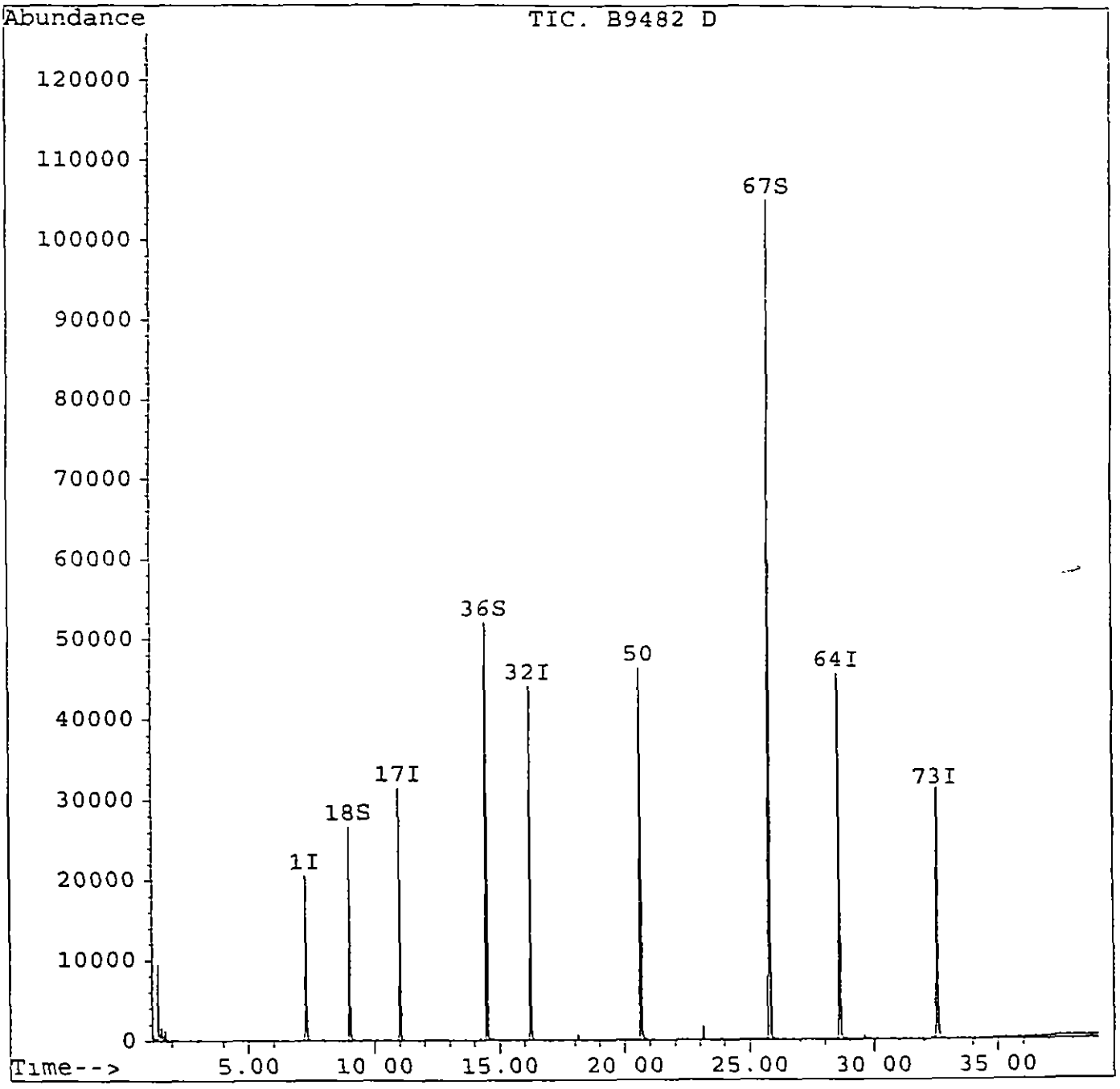
Quantitation Report

Data File : c \hpchem\1\data2\b9482.d
Acq On : 26 Dec 95 10.57 pm
Sample : 58316 . .
Misc .
Quant Time: Dec 27 11·03 1995

Converted from RTE d

Vial 15
Operator· SCOTTV
Inst : ABNA
BT Multiplr: 1 00

Method c.\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09.14 1995
Response via : Multiple Level Calibration



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

231

Lab Name EMSL ANALYTICAL Contract _____

Project No _____ Site _____ Location _____ Group _____

	SAMPLE NO	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	41	37	65						
02	9547000B	56	49	91						
03	46360MS	54	58	110						
04	46360MSD	51	56	121						
05										
06										
07										
08										
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	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name EMSL ANALYTICAL Contract _____

Project No _____ Site _____ Location _____ Group _____

	SAMPLE NO	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK01	43	28	59	58	71	72			
02	9558188B	26	18	33	35	64	59			
03	9558189B	28	20	51	52	73	83			
04	9558190B	29	21	61	56	62	77			
05	9558191B	36	24	52	48	63	64			
06	9558195B	38	27	64	57	66	74			
07	9558196B	40	27	63	60	59	70			
08	SBLK02	45	29	64	58	67	73			
09	9558311B	42	30	62	55	83	67			
10	9558313B	41	26	56	53	70	73			
11	9558314B			64	56		68			
12	9558315B			74	59		75			
13	9558316B			68	53		76			
14	9558317B			46	37		61			
15										
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	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(4-106)
S2 (PHL) = Phenol-d5	(5-87)
S3 (NBZ) = Nitrobenzene-d5	(22-101)
S4 (FBP) = 2-Fluorobiphenyl	(20-94)
S5 (TBP) = 2,4,6-Tribromophenol	(17-126)
S6 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO

SBLK01

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID B9009 D Lab Sample ID BLANK1

Instrument ID ABNA Date Extracted 10/18/95

Matrix (soil/water) WATER Date Analyzed 10/27/95

Level (low/med) Time Analyzed 1421

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9547000B	9547000B	B9010 D	10/27/95
02	46360MS	46360MS	B9011 D	10/27/95
03	46360MSD	46360MSD	B9012 D	10/27/95
04				
05				
06				
07				
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COMMENTS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 231

SBLK01

Lab Name: EMSL ANALYTICAL | Contract: | Group:

Project No: | Site: | Location:

Matrix (soil/water): WATER | Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL) ML | Lab File ID: B9009.D

Level (low/med): | Date Received: 10/13/95

% Moisture: | decanted (Y/N): N | Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) | Date Analyzed: 10/27/95

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	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 235

SBLK01

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID BLANK1

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9009 D

Level (low/med) Date Received 10/13/95

% Moisture decanted (Y/N) N Date Extracted 10/18/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 10/27/95

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
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO: SBLK01

232

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Matrix (soil/water): WATER Lab Sample ID: BLANK1

Sample wt/vol: 1000 0 (g/mL) ML Lab File ID: B9009 D

Level (low/med): Date Received: 10/13/95

% Moisture: decanted (Y/N): N Date Extracted: 10/18/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/27/95

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	6 94	2	J
2				
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Quantitation Report

Data File: c:\hpchem\1\data2\b9009.d
Acq On: 27 Oct 95 2:21 pm
Sample: BLANK
Misc:
Quant Time: Oct 31 15:20 1995

Converted from RTE.d

Vial: 3
Operator: SCOTTV
Inst: ABNA
BT Multiplr: 1.00

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Wed Oct 25 10:20:51 1995
Response via: Multiple Level Calibration

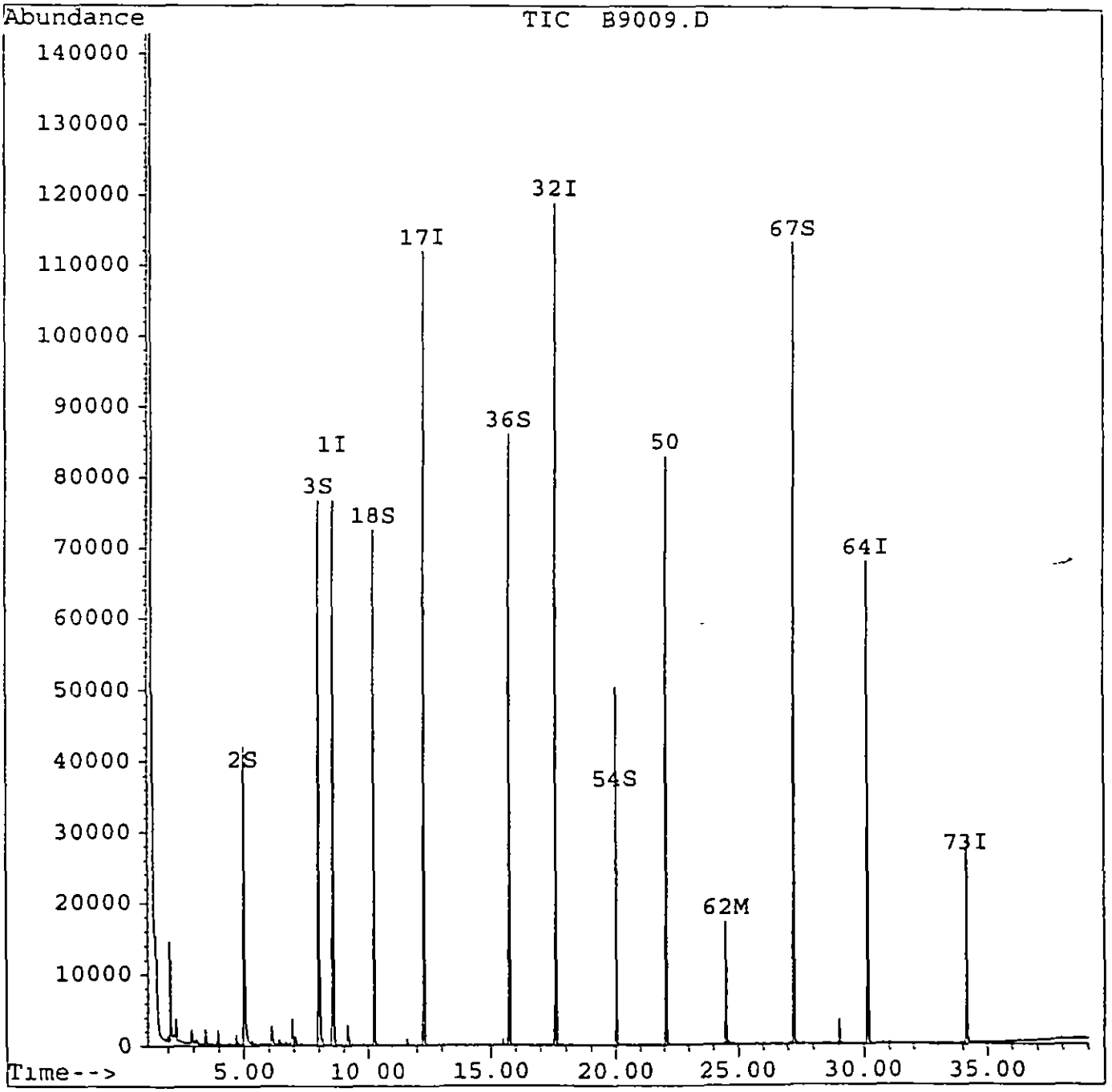
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.59	152	22496	40.00	ug/mL	-0.10
17) Naphthalene-d8	12.31	136	83610	40.00	ug/mL	-0.12
32) Acenaphthene-d10	17.62	164	47426	40.00	ug/mL	-0.11
50) Phenanthrene-d10	22.09	188	61940	40.00	ug/ml	-0.14
64) Chrysene-d12	30.18	240	43279	40.00	ug/mL	-0.11
73) Perylene-d12	34.16	264	19502	40.00	ug/mL	-0.08
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.01	112	31567	44.02	ug/mL	44.02%
3) Phenol-d5	8.01	99	53072	45.61	ug/mL	45.61%
18) Nitrobenzene-d5	10.27	82	46833	41.33	ug/mL	41.33%
36) 2-Fluorobiphenyl	15.77	172	53376	36.90	ug/mL	36.90%
54) 2,4,6-Tribromophenol	20.03	330	7869	40.12	ug/mL	40.12%
67) Terphenyl-d14	27.27	244	69697	64.83	ug/mL	64.83%
Target Compounds						**Qvalue**
62) Di-n-butylphthalate	24.52	149	16902	5.43	ug/mL#	98

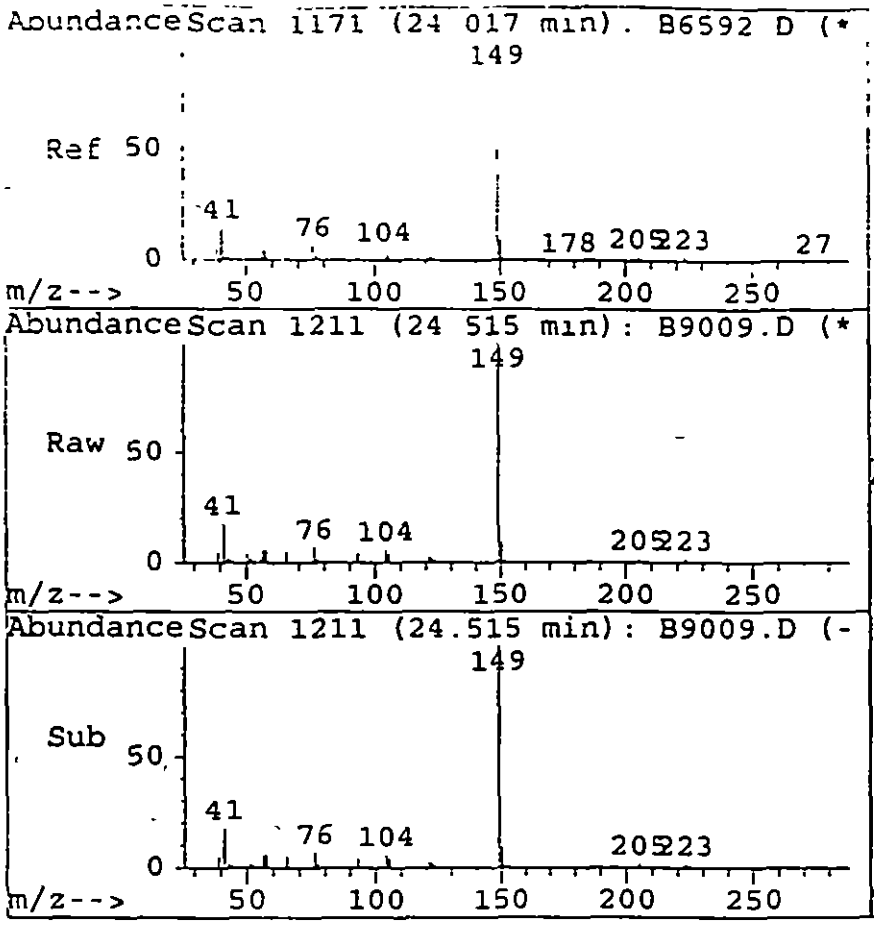
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9009 d Vial 3
Acq On 27 Oct 95 2 21 pm Operator SCOTTV
Sample BLANK Converted from RTE d Inst ABNA
Misc BT Multiplr: 1 00
Quant Time Oct 31 15 20 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10·20:51 1995
Response via : Multiple Level Calibration

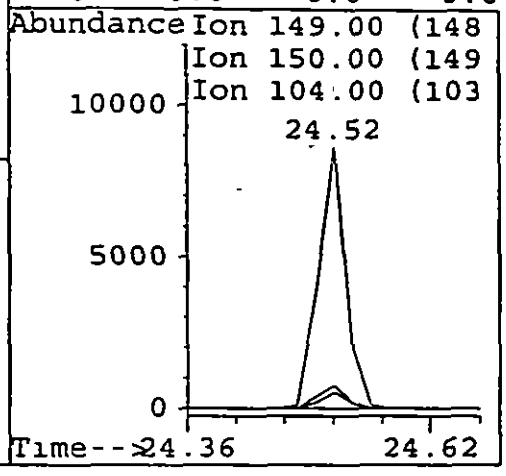




#62
Di-n-butylphthalate
Concen: 5.43 ug/mL
RT. 24.52 min. Scan# 1211
Delta R.T -0.12 min
Lab File. b9009.d
Acq: 27 Oct 95 2 21 pm

Tgt Ion 149 Resp. 16902

Ion	Ratio	Lower	Upper
149	100		
150	8.9	7.3	10.9
104	6.4	3.7	5.5#
0	0.0	0.0	0.0

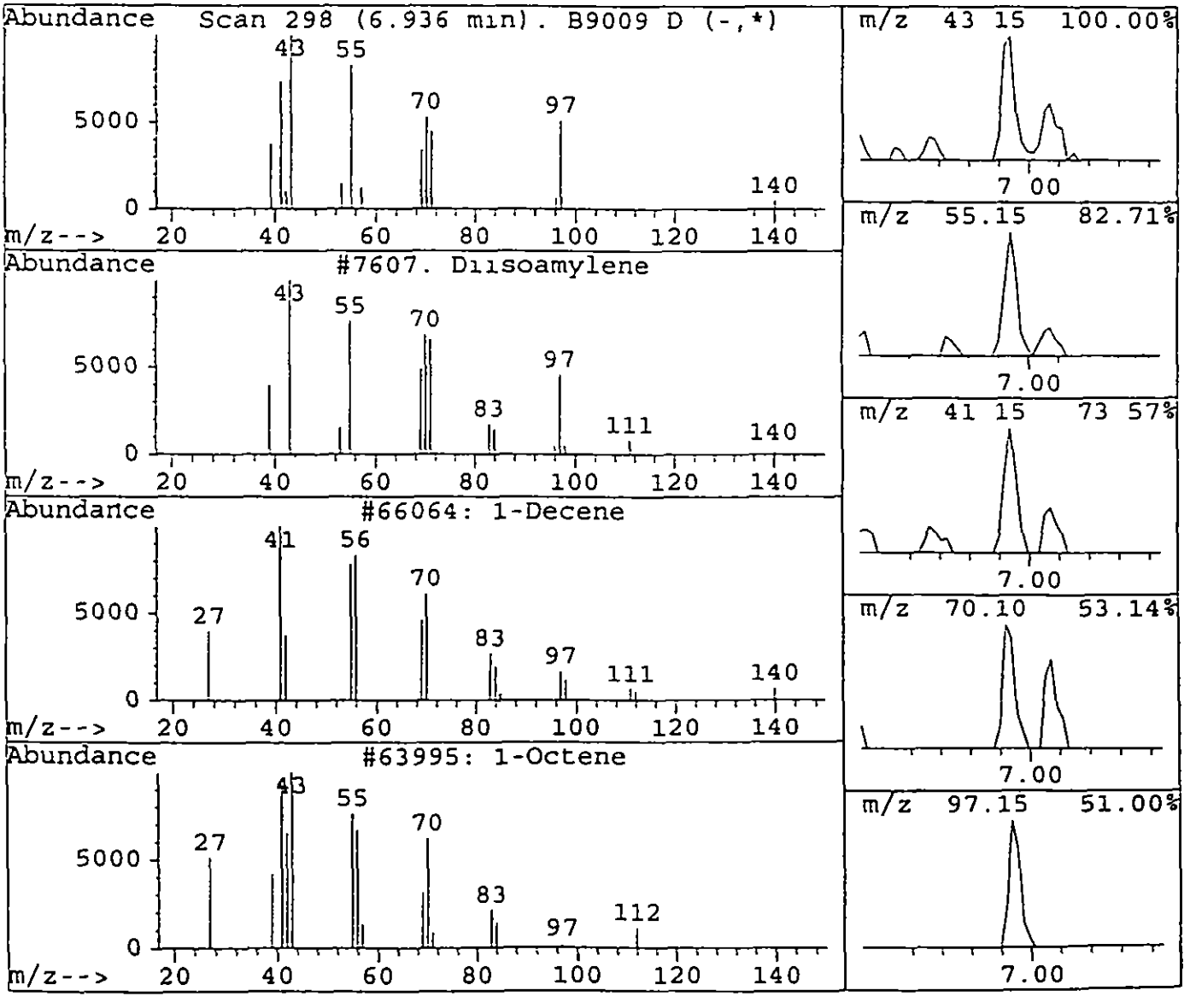


Data File c \hpchem\1\data2\b9009 d Vial. 3
Acq On 27 Oct 95 2 21 pm Operator SCOTTV
Sample BLANK Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Library C \DATABASE\NBS75K.L

R T	Conc	Area	Relative to ISTD	R T.
6 94	2 46 ug/ml	10825	1,4-Dichlorobenzene-d4	8 59

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Diisoamylene	7607	054063-09-1	64
2	1-Decene	66064	000872-05-9	35
3	1-Octene	63995	000111-66-0	35
4	Heptane, 4-methyl-	3096	000589-53-7	25
5	Cyclopentane, 1,2-dimethyl-, cis-	1367	001192-18-3	25



4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO: SBLK02

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Lab File ID: B9477 D Lab Sample ID: BLANK2

Instrument ID: ABNA Date Extracted: 12/23/95

Matrix. (soil/water): WATER Date Analyzed: 12/26/95

Level (low/med): Time Analyzed: 1840

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9558311B	9558311B	B9478 D	12/26/95
02	9558313B	9558313B	B9479 D	12/26/95
03	9558314B	9558314B	B9480 D	12/26/95
04	9558315B	9558315B	B9481 D	12/26/95
05	9558316B	9558316B	B9482 D	12/26/95
06	9558317B	9558317B	B9483 D	12/26/95
07				
08				
09				
10				
11				
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COMMENTS

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 243

SBLK02

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID BLANK2

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9477 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Napnthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 243

SBLK02

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID BLANK2

Sample wt/vol 1000 0 (g/mL ML Lab File ID B9477 D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO **SBLK02**

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID BLANK2

Sample wt/vol 1000.0 (g/mL ML Lab File ID B9477.D

Level (low/med) Date Received

% Moisture decanted (Y/N) N Date Extracted 12/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 12/26/95

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
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
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	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
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO: SBLK02

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Matrix (soil/water): WATER Lab Sample ID: BLANK2

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B9477.D

Level (low/med): Date Received:

% Moisture: decanted (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	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-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO: SBLK02

Lab Name: EMSL ANALYTICAL Contract:

Project No: Site: Location: Group:

Matrix (soil/water): WATER Lab Sample ID: BLANK2

Sample wt/vol: 1000 0 (g/mL) ML Lab File ID: B9477 D

Level (low/med): Date Received:

% Moisture: decanted (Y/N): N Date Extracted: 12/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 12/26/95

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	NONE FOUND			
2				
3				
4				
5				
6				
7				
8				
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Quantitation Report

Data File : c:\hpchem\1\data2\b9477.d
Acq On : 26 Dec 95 6 40 pm
Sample : BLANK.....
Misc :
Quant Time: Dec 27 10:58 1995

Converted from RTE d

Vial: 10
Operator SCOTTV
Inst ABNA
BT Multiplr: 1 00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.26	152	8386	40.00 ug/mL	-0.02
17) Naphthalene-d8	11.00	136	32580	40 00 ug/mL	-0.04
32) Acenaphthene-d10	16.23	164	22116	40 00 ug/mL	-0.02
50) Phenanthrene-d10	20.64	188	39178	40 00 ug/ml	0.00
64) Chrysene-d12	28.59	240	48266	40.00 ug/mL	-0 03
73) Perylene-d12	32.56	264	36878	40.00 ug/mL	0.00
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	3.53	112	10529	44.53 ug/mL	44 53%
3) Phenol-d5	6.78	99	10502	28 92 ug/mL	28.92%
18) Nitrobenzene-d5	9.00	82	19835	63.92 ug/mL	63.92%
36) 2-Fluorobiphenyl	14 48	172	38587	57.81 ug/mL	57.81%
54) 2,4,6-Tribromophenol	18.64	330	15568	67.19 ug/mL	67.19%
67) Terphenyl-d14	25.80	244	85054	73.40 ug/mL	73.40%
Target Compounds					Qvalue

(#) = qualifier out of range (m) = manual integration

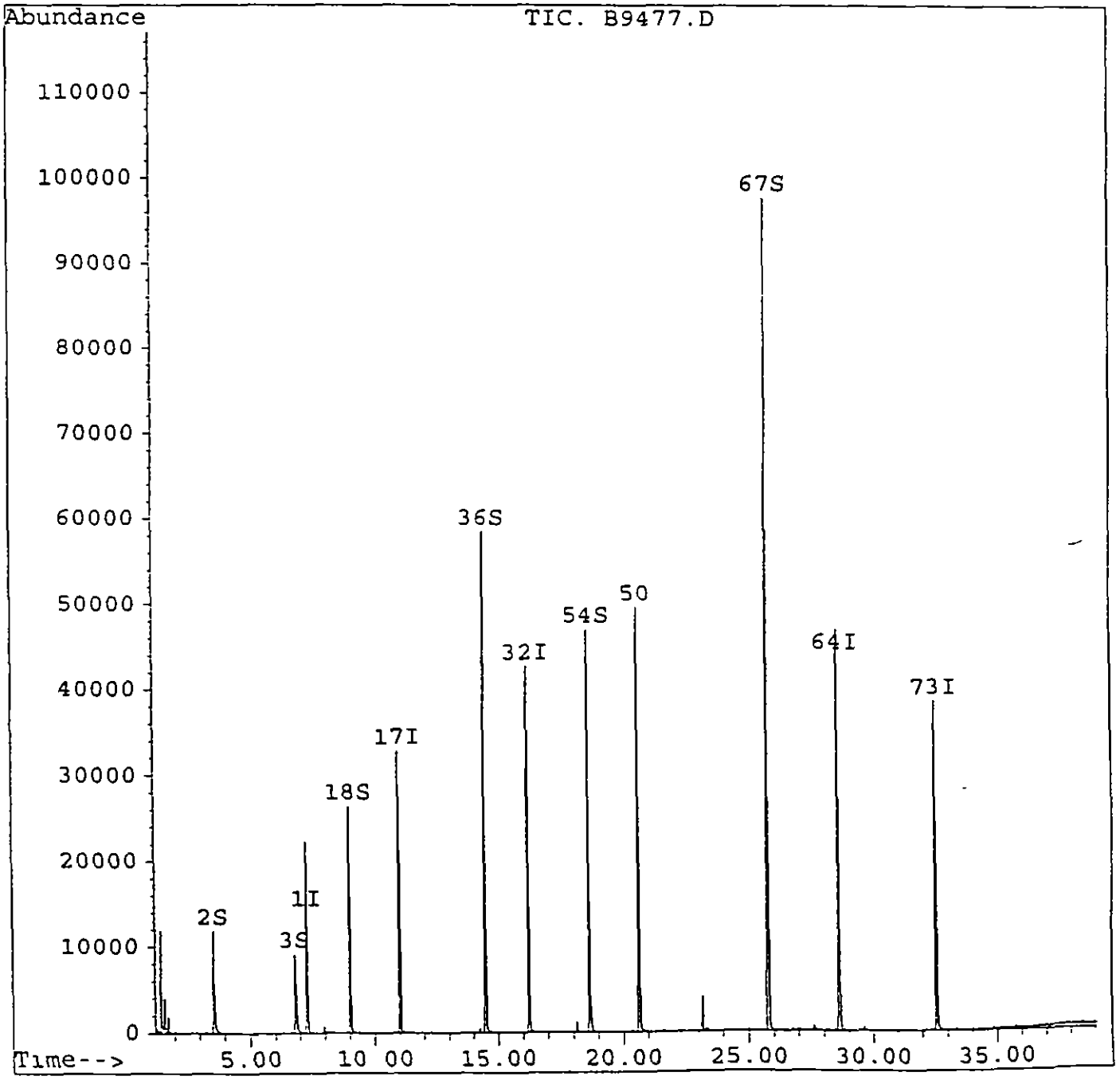
Quantitation Report

Data File : c \hpchem\1\data2\b9477.d
Acq On : 26 Dec 95 6·40 pm
Sample : BLANK... ..
Misc :
Quant Time: Dec 27 10:58 1995

Converted from RTE d

Vial 10
Operator: SCOTTV
Inst : ABNA
BT Multiplr· 1 00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Dec 26 12:09:14 1995
Response via . Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method C:\HPCHEM\1\METHODS\BNACLP.M
Title CLP BNA Calibration
Last Update Wed Nov 22 12:21:54 1995
Response via Initial Calibration

Non-Spiked Sample B8997 D

	Spike Sample	Spike Duplicate Sample
File ID	B9011 D	B9012 D
Sample	46360MS	Converted from RTE data file >B9011.D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.3	100	42	50	41	49	18	100	1-300
Phenol	0.6	100	59	59	59	59	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	57	51	57	51	11	55	12-158
2-Chlorophenol	0.0	100	57	53	57	53	8	29	23-134
1,3-Dichlorobenzene	0.0	100	45	43	45	43	3	42	1-172
1,4-Dichlorobenzene	0.0	100	47	45	47	45	5	32	20-124
1,2-Dichlorobenzene	0.0	100	47	45	47	45	5	31	32-129
bis(2-chloroisopropy	0.0	100	77	72	77	72	7	46	36-166
N-Nitroso-Di-n-propy	0.0	100	51	47	51	47	9	55	1-230
Hexachloroethane	0.0	100	44	41	44	41	7	25	40-113
Nitrobenzene	0.2	100	50	48	50	47	5	39	35-180
Isophorone	0.0	100	48	45	48	45	7	63	21-196
2-Nitrophenol	0.0	100	54	50	54	50	8	35	29-182
2,4-Dimethylphenol	0.0	100	75	84	75	84	11	26	32-119
bis(2-Chloroethoxy)m	0.0	100	56	51	56	51	8	35	33-184
2,4-Dichlorophenol	0.0	100	72	77	72	77	7	26	39-135
1,2,4-Trichlorobenze	0.0	100	49	46	49	46	7	28	44-142
Naphthalene	0.3	100	52	48	51	48	7	30	21-133
Hexachlorobutadiene	0.0	100	52	48	52	48	6	26	24-116
4-Chloro-3-methylphe	0.0	100	74	83	74	83	11	37	22-147
2-Chloronaphthalene	0.0	100	63	61	63	61	3	13	60-118
2,4,6-Trichloropheno	0.0	100	65	73	65	73	12	32	37-144
Dimethylphthalate	0.0	100	11	11	11	11	3	23	1-112
Acenaphthylene	0.0	100	62	63	62	63	2	40	33-145
2,6-Dinitrotoluene	0.0	100	96	99	96	99	3	30	50-158
Acenaphthene	0.0	100	73	74	73	74	1	28	47-145
2,4-Dinitrophenol	0.0	100	54	60	54	60	10	50	1-191
4-Nitrophenol	0.0	100	50	52	50	52	3	47	1-132
2,4-Dinitrotoluene	0.0	100	83	83	83	83	0	22	39-139
Diethylphthalate	0.0	100	20	20	20	20	1	27	1-114
Fluorene	0.0	100	80	83	80	83	4	21	59-121
4-Chlorophenyl-pheny	0.0	100	78	81	78	81	3	33	25-158
4,6-Dinitro-2-methyl	0.1	100	85	87	85	87	2	93	1-181
4-Bromophenyl-phenyl	0.0	100	93	89	93	89	4	23	53-127
Hexachlorobenzene	0.0	100	88	88	88	88	0	25	1-152
Pentachlorophenol	0.0	100	77	81	77	81	5	49	14-176
Phenanthrene	0.1	100	86	94	86	94	9	21	54-120
Anthracene	0.1	100	74	79	74	79	7	32	52-115
Di-n-butylphthalate	20.6	100	53	59	33	38	14	17	1-118
Fluoranthene	0.1	100	75	75	75	75	0	33	26-137
Pyrene	0.2	100	102	101	102	100	2	25	52-115
Butylbenzylphthalate	0.0	100	62	65	62	65	5	23	1-152
Benzo[a]anthracene	0.2	100	84	88	83	88	5	28	33-143

Chrysene	0 3	100	86	92	85	92	8	48	17-168
Bis(2-Ethylhexyl)pht	0 0	100	89	101	89	101	12	41	8-158
Di-n-octylphthalate	0 2	100	74	87	74	86	16	31	4-146
Benzo[b]fluoranthene	0 0	100	71	89	71	89	23	39	24-159
Benzo[k]fluoranthene	0 0	100	71	77	71	77	7	32	11-162
Benzo[a]pyrene	0 0	100	83	88	83	88	7	39	17-163
Indeno[1,2,3-cd]pyre	0 0	100	81	94	81	94	15	45	1-171
Dibenz[a,h]anthracen	0 0	100	70	86	70	86	20	70	1-227
Benzo[g,h,i]perylene	0 0	100	72	86	72	86	17	59	1-219

Quantitation Report

Data File c \hpchem\1\data2\b9011 d
Acq On 27 Oct 95 4 04 pm
Sample 46360MS
Misc
Quant Time Oct 31 15 39 1995

Converted from RTE d

Vial 5
Operator SCOTTV
Inst ABNA
BT Multiplr 1 00

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10 20 51 1995
Response via Multiple Level Calibration

Internal Standards	R T	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8 60	152	24328	40 00 ug/mL	-0 09
17) Naphthalene-d8	12.32	136	97435	40 00 ug/mL	-0 11
32) Acenaphthene-d10	17 64	164	56181	40 00 ug/mL	-0 09
50) Phenanthrene-d10	22 13	188	74786	40 00 ug/ml	-0 10
64) Chrysene-d12	30.18	240	35528	40 00 ug/mL	-0 10
73) Perylene-d12	34.14	264	16536	40 00 ug/mL	-0.10
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	5.07	112	40915	52 76 ug/mL	52 76%
3) Phenol-d5	8.10	99	81492	64 76 ug/mL	64 76%
18) Nitrobenzene-d5	10.29	82	71765	54 35 ug/mL	54.35%
36) 2-Fluorobiphenyl	15 81	172	99873	58 28 ug/mL	58.28%
54) 2,4,6-Tribromophenol	20.10	330	20403	86 16 ug/mL	86.16%
67) Terphenyl-d14	27.26	244	97283	110 24 ug/mL	110.24%
Target Compounds					Qvalue
4) N-nitrosodimethylamine	2.10	74	22456	41.61 ug/ml	100
6) Phenol	8.12	94	70099	59.38 ug/mL	100
7) bis(2-Chloroethyl)ether	12 03	93	82048	56.86 ug/mL	100
8) 2-Chlorophenol	8 06	128	46342	57.17 ug/mL#	83
9) 1,3-Dichlorobenzene	8 39	146	37275	44.83 ug/mL	99
10) 1,4-Dichlorobenzene	8 66	146	39314	46.72 ug/mL	97
11) 1,2-Dichlorobenzene	9 04	146	38547	47 04 ug/mL#	96
12) 2-Methylphenol	9 29	108	5196	6.68 ug/mL	53
13) bis(2-chloroisopropyl)ethe	9 72	45	104911	77.20 ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.12	70	47254	50 85 ug/mL	98
16) Hexachloroethane	9.99	117	23206	43 95 ug/mL#	67
19) Nitrobenzene	10.35	77	62972	49.80 ug/mL#	86
20) Isophorone	11.18	82	128772	48 00 ug/mL#	93
21) 2-Nitrophenol	11 30	139	31651	54.31 ug/mL#	92
22) 2,4-Dimethylphenol	14.60	107	70299	74.63 ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	82048	55.86 ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	51706	71.87 ug/mL#	90
25) 1,2,4-Trichlorobenzene	12.22	180	36372	49.07 ug/mL	95
26) Naphthalene	12.40	128	126554	51 78 ug/mL	98
27) 4-Chloroaniline	12.40	127	15664	13.67 ug/mL#	13
28) Hexachlorobutadiene	12.90	225	20087	51 69 ug/mL	98
29) 4-Chloro-3-methylphenol	14.60	107	70394	74.44 ug/mL	90
30) 2-Chloronaphthalene	15.97	162	96889	62 71 ug/mlm	100
31) 2-Methylnaphthalene	14.60	142	50713	23 94 ug/mL#	16
34) 2,4,6-Trichlorophenol	15.56	196	38970	65 14 ug/mL	97
35) 2,4,5-Trichlorophenol	15.56	196	38970	79 89 ug/mL	97
37) 2-Nitroaniline	18 53	65	4756	4 33 ug/mL#	38
38) Dimethylphthalate	17.26	163	21170	11 02 ug/mL#	13

(#) = qualifier out of range (m) = manual integration

Data File c \hpchem\1\data2\b9011 d Vial 5 252
Acq On 27 Oct 95 4 04 pm Operator SCOTTV
Sample 46360MS Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 31 15 39 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10 20 51 1995
Response via Multiple Level Calibration

	Compound	R T.	QIon	Response	Conc Unit	Qvalue
39)	Acenaphthylene	17 18	152	156148	61 73 ug/mL	97
40)	2,6-Dinitrotoluene	17 35	165	41277	95 56 ug/mL#	79
41)	3-Nitroaniline	19 34	138	1557	3 24 ug/mL#	19
42)	Acenaphthene	17 74	153	105172	73.42 ug/mL	98
43)	2,4-Dinitrophenol	18 11	184	15991	54 29 ug/mL#	85
44)	4-Nitrophenol	18 86	109	16078	50.23 ug/mL#	61
46)	2,4-Dinitrotoluene	18.53	165	52578	82.74 ug/mL#	1
47)	Diethylphthalate	19.46	149	43228	19.78 ug/mL	97
48)	Fluorene	19.34	166	131556	80 24 ug/mL	98
49)	4-Chlorophenyl-phenylether	19.54	204	55916	78 26 ug/mL#	84
51)	4-Nitroaniline	19 34	138	1557	3 62 ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19.73	198	23619	85 19 ug/mL	100
53)	n-Nitrosodiphenylamine	19 94	169	71016	70.01 ug/mL	96
55)	1,2-Diphenylhydrazine (as	19 54	77	69196	20.74 ug/ml	100
56)	4-Bromophenyl-phenylether	20 99	248	32480	92.88 ug/mL#	88
57)	Hexachlorobenzene	20.95	284	38892	87.66 ug/mL#	39
58)	Pentachlorophenol	21.70	266	23340	76.81 ug/mL	99
59)	Phenanthrene	22.20	178	174965	86.09 ug/mL	99
60)	Anthracene	22 36	178	148000	74.15 ug/mLm	99
62)	Di-n-butylphthalate	24 54	149	201030	53.46 ug/mL	99
63)	Fluoranthene	25 81	202	152814	74 83 ug/mL#	53
65)	Benzidine	22 13	184	11493	47 31 ug/ml	100
66)	Pyrene	26 43	202	145327	102 25 ug/mL#	70
68)	Butylbenzylphthalate	29 04	149	68443	61 89 ug/mL#	15
69)	Benzo[a]anthracene	30 17	228	106111	83.59 ug/mL	99
70)	3,3'-Dichlorobenzidine	30 32	252	3672	10 71 ug/mL#	93
71)	Chrysene	30.26	228	65164	85.64 ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.04	149	141688	89.39 ug/mL#	37
74)	Di-n-octylphthalate	32 95	149	174136	74.01 ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	56999	70.62 ug/mL#	89
76)	Benzo[k]fluoranthene	33 28	252	34292	71.37 ug/mLm	89
77)	Benzo[a]pyrene	34 01	252	36949	82.66 ug/mLm	89
78)	Indeno[1,2,3-cd]pyrene	36.69	276	18775	80.91 ug/mL#	25
79)	Dibenz[a,h]anthracene	36 81	278	15952	70.33 ug/mL#	75
80)	Benzo[g,h,i]perylene	37 21	276	15258	72.43 ug/mLm	60

(#) = qualifier out of range (m) = manual integration

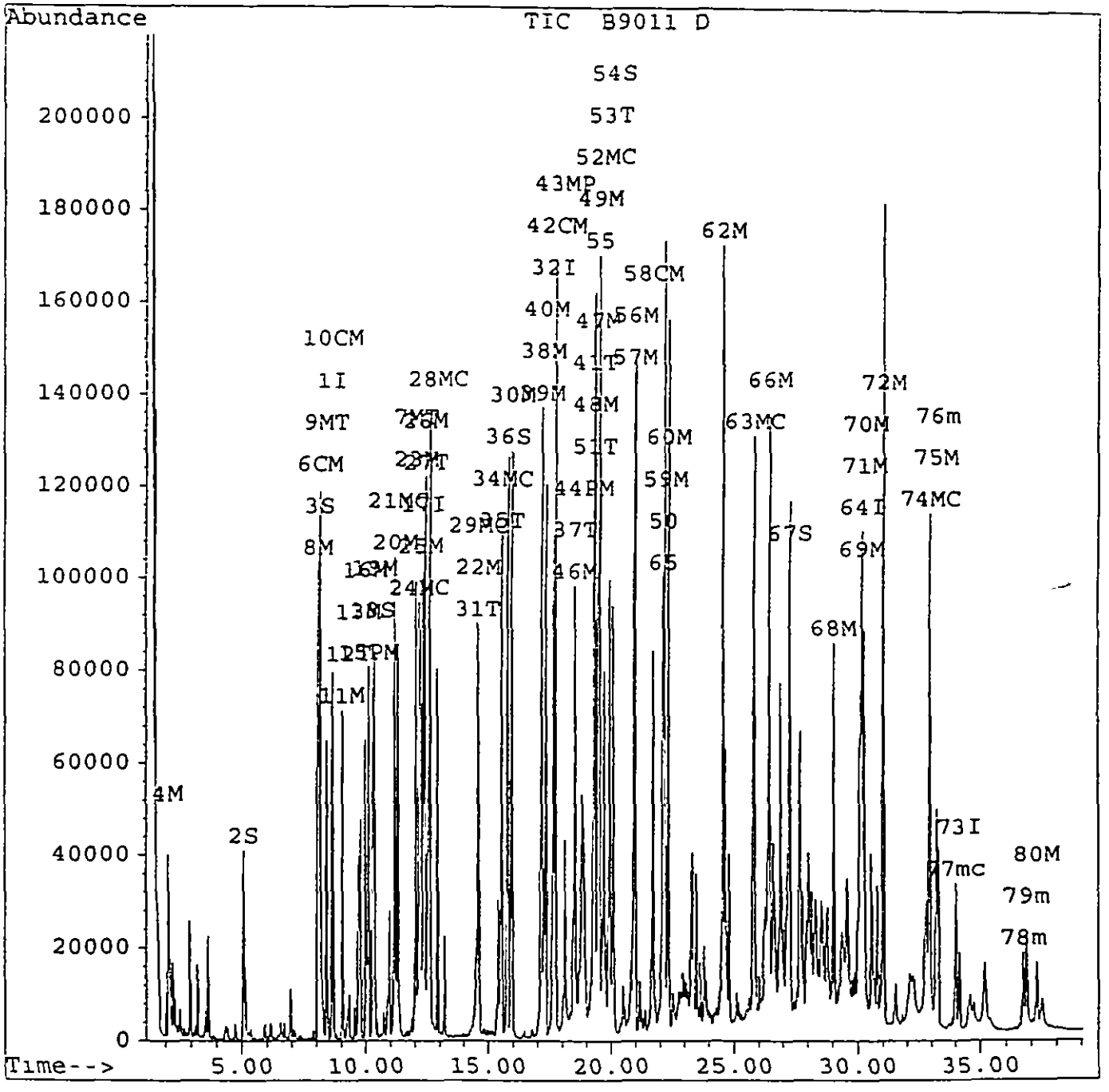
Quantitation Report

Data File c \hpchem\1\data2\b9011 d
Acq On 27 Oct 95 4 04 pm
Sample 46360MS
Misc
Quant Time Oct 31 15 39 1995

Converted from RTE d

Vial 5
Operator SCOTTV
Inst ABNA
BT Multiplr 1 00

Method c \HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration
Last Update Wed Oct 25 10.20 51 1995
Response via . Multiple Level Calibration



Quantitation Report

254

Data File: c:\hpchem\1\data2\b9012.d Vial: 6
Acq On: 27 Oct 95 4:56 pm Operator: SCOTTV
Sample: 46360MSD Converted from RTE.d Inst: ABNA
Misc BT Multiplr: 1.00
Quant Time: Oct 31 15:38 1995

Method: c:\HPCHEM\1\METHODS\BNACLP.M
Title: CLP BNA Calibration
Last Update: Wed Oct 25 10:20:51 1995
Response via: Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.60	152	25002	40.00	ug/mL	-0.09
17) Naphthalene-d8	12.34	136	97241	40.00	ug/mL	-0.09
32) Acenaphthene-d10	17.64	164	55587	40.00	ug/mL	-0.09
50) Phenanthrene-d10	22.13	188	77102	40.00	ug/ml	-0.10
64) Chrysene-d12	30.19	240	28509	40.00	ug/mL	-0.10
73) Perylene-d12	34.15	264	10719	40.00	ug/mL	-0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.07	112	41071	51.53	ug/mL	51.53%
3) Phenol-d5	8.10	99	86409	66.82	ug/mL	66.82%
18) Nitrobenzene-d5	10.29	82	67083	50.90	ug/mL	50.90%
36) 2-Fluorobiphenyl	15.81	172	95217	56.16	ug/mL	56.16%
54) 2,4,6-Tribromophenol	20.10	330	21999	90.11	ug/mL	90.11%
67) Terphenyl-d14	27.29	244	85795	121.15	ug/mL	121.15%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.10	74	27505	49.59	ug/ml	100
6) Phenol	8.13	94	71763	59.15	ug/mL	100
7) bis(2-Chloroethyl)ether	12.03	93	75257	50.75	ug/mL	97
8) 2-Chlorophenol	8.06	128	44078	52.91	ug/mL#	84
9) 1,3-Dichlorobenzene	8.39	146	37044	43.35	ug/mL	96
10) 1,4-Dichlorobenzene	8.66	146	38620	44.66	ug/mL	97
11) 1,2-Dichlorobenzene	9.04	146	37641	44.70	ug/mL	97
12) 2-Methylphenol	9.29	108	5280	6.60	ug/mL	56
13) bis(2-chloroisopropyl)ethe	9.72	45	100159	71.72	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.12	70	44456	46.55	ug/mL#	97
16) Hexachloroethane	9.99	117	22213	40.93	ug/mL#	69
19) Nitrobenzene	10.35	77	59971	47.52	ug/mL	88
20) Isophorone	11.18	82	119927	44.79	ug/mL#	92
21) 2-Nitrophenol	11.30	139	29087	50.01	ug/mL#	93
22) 2,4-Dimethylphenol	14.61	107	78542	83.54	ug/mLm	100
23) bis(2-Chloroethoxy)methane	12.03	93	75257	51.34	ug/mL#	100
24) 2,4-Dichlorophenol	12.18	162	55427	77.20	ug/mL#	92
25) 1,2,4-Trichlorobenzene	12.22	180	33976	45.93	ug/mL	94
26) Naphthalene	12.40	128	117900	48.34	ug/mL	99
27) 4-Chloroaniline	12.40	127	14859	12.99	ug/mL#	9
28) Hexachlorobutadiene	12.90	225	18787	48.44	ug/mL	98
29) 4-Chloro-3-methylphenol	14.61	107	78226	82.88	ug/mL	88
30) 2-Chloronaphthalene	15.96	162	94046	60.99	ug/mlm	100
31) 2-Methylnaphthalene	14.61	142	56412	26.68	ug/mL#	16
34) 2,4,6-Trichlorophenol	15.58	196	43455	73.41	ug/mL	96
35) 2,4,5-Trichlorophenol	15.58	196	43455	90.04	ug/mL	96
37) 2-Nitroaniline	18.53	65	5027	4.62	ug/mL#	36
38) Dimethylphthalate	17.26	163	21488	11.30	ug/mL#	14

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9012 d Vial 6
Acq On 27 Oct 95 4 56 pm Operator SCOTTV
Sample 46360MSD Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 31 15 38 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10 20 51 1995
Response via Multiple Level Calibration

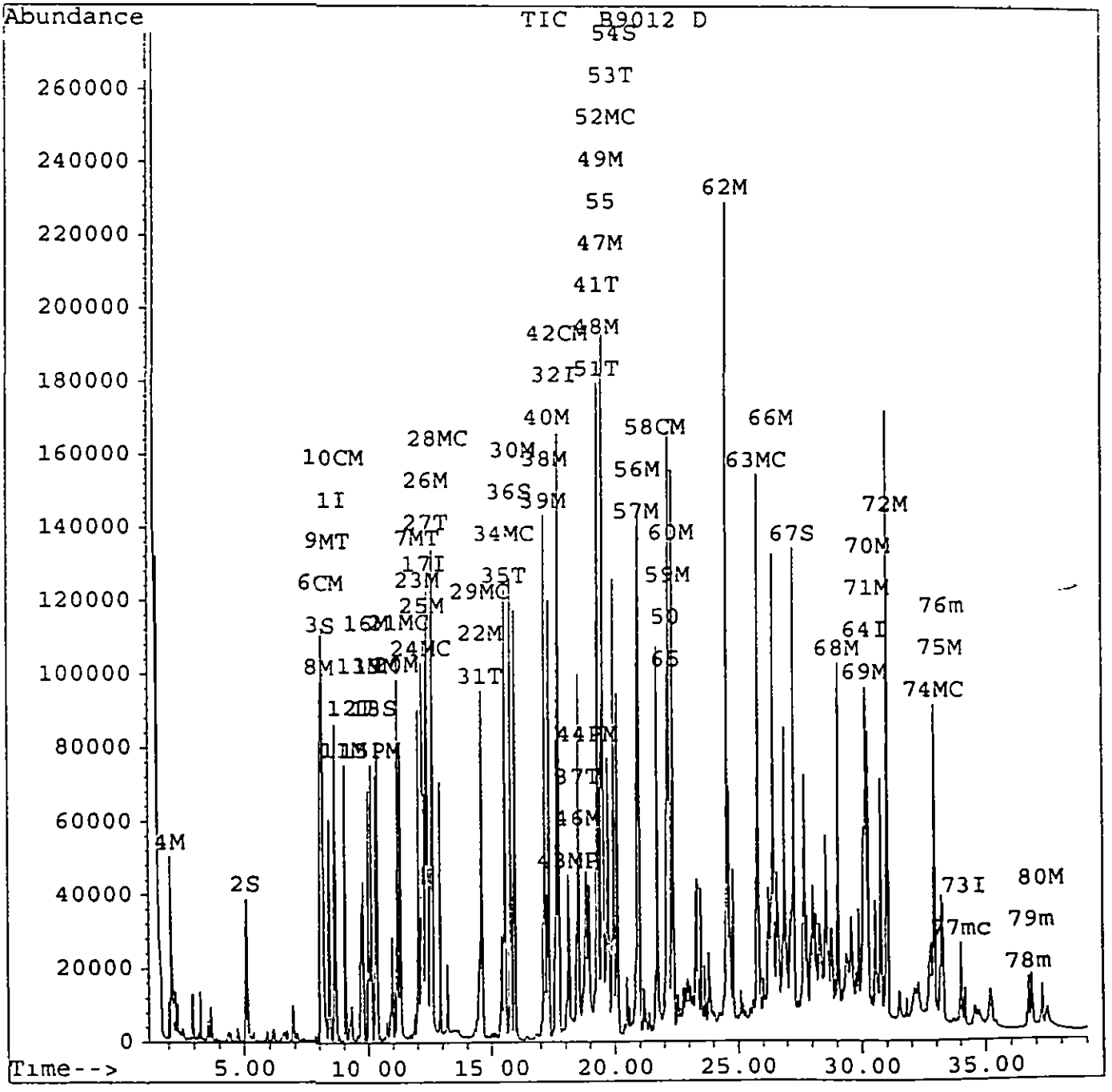
	Compound	R T.	QIon	Response	Conc Unit	Qvalue
39)	Acenaphthylene	17.18	152	157682	63.01 ug/mL	98
40)	2,6-Dinitrotoluene	17.35	165	42117	98 54 ug/mL#	93
41)	3-Nitroaniline	19.34	138	1555	3.27 ug/mL#	19
42)	Acenaphthene	17.74	153	104941	74 04 ug/mL	98
43)	2,4-Dinitrophenol	18.13	184	17570	60.29 ug/mL#	82
44)	4-Nitrophenol	18.96	109	16471	52 01 ug/mL#	60
46)	2,4-Dinitrotoluene	18.53	165	52140	82 92 ug/mL#	1
47)	Diethylphthalate	19.48	149	43087	19 93 ug/mL#	93
48)	Fluorene	19.34	166	134877	83.15 ug/mL	99
49)	4-Chlorophenyl-phenylether	19 54	204	56911	80.50 ug/mL#	86
51)	4-Nitroaniline	19.34	138	1555	3 50 ug/mL#	19
52)	4,6-Dinitro-2-methylphenol	19 73	198	24840	86 90 ug/mL	100
53)	n-Nitrosodiphenylamine	19 96	169	73730	70 51 ug/mL	94
55)	1,2-Diphenylhydrazine (as	19.54	77	71856	20.89 ug/ml	100
56)	4-Bromophenyl-phenylether	20 99	248	32240	89.43 ug/mL#	90
57)	Hexachlorobenzene	20.95	284	40163	87.81 ug/mL#	46
58)	Pentachlorophenol	21.72	266	25232	80.54 ug/mL	99
59)	Phenanthrene	22.20	178	196854	93.95 ug/mL	99
60)	Anthracene	22.36	178	162894	79.16 ug/mLm	99
62)	Di-n-butylphthalate	24.56	149	227050	58.57 ug/mLm	98
63)	Fluoranthene	25.82	202	157448	74 79 ug/mL#	68
65)	Benzidine	22.13	184	12053	61 83 ug/ml	100
66)	Pyrene	26.44	202	114720	100.58 ug/mLm	73
68)	Butylbenzylphthalate	29 07	149	57991	65.35 ug/mLm	1
69)	Benzo[a]anthracene	30 17	228	89943	88 30 ug/mL	98
70)	3,3'-Dichlorobenzidine	30 33	252	3072	11.16 ug/mL#	89
71)	Chrysene	30 27	228	56444	92.44 ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.04	149	127927	100.58 ug/mL#	36
74)	Di-n-octylphthalate	32.93	149	132028	86.56 ug/mL#	100
75)	Benzo[b]fluoranthene	33.20	252	46610	89.08 ug/mL#	86
76)	Benzo[k]fluoranthene	33 28	252	23877	76.66 ug/mLm	86
77)	Benzo[a]pyrene	34.02	252	25611	88.39 ug/mLm	86
78)	Indeno[1,2,3-cd]pyrene	36.70	276	14190	94 34 ug/mL#	28
79)	Dibenz[a,h]anthracene	36.81	278	12632	85.92 ug/mL#	72
80)	Benzo[g,h,i]perylene	37.22	276	11729	85 89 ug/mLm	61

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File c \hpchem\1\data2\b9012 d Vial 6
Acq On 27 Oct 95 4 56 pm Operator SCOTT/
Sample 46360MSD Converted from RTE d Inst ABNA
Misc BT Multiplr 1 00
Quant Time Oct 31 15 38 1995

Method c \HPCHEM\1\METHODS\BNACLP M
Title CLP BNA Calibration
Last Update Wed Oct 25 10 20.51 1995
Response via : Multiple Level Calibration



New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N J A C 7 18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N J A C 7 18, 40 CFR Part 136, and/or SW 846 I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment

Paul Torava

Laboratory Manager (as defined in N J A C 7 18)